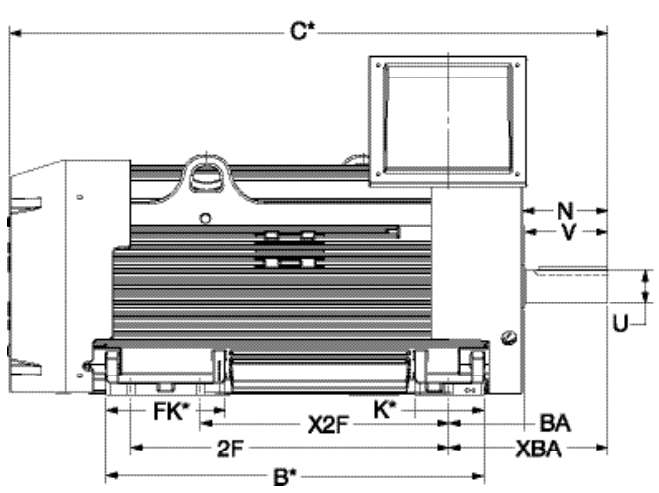
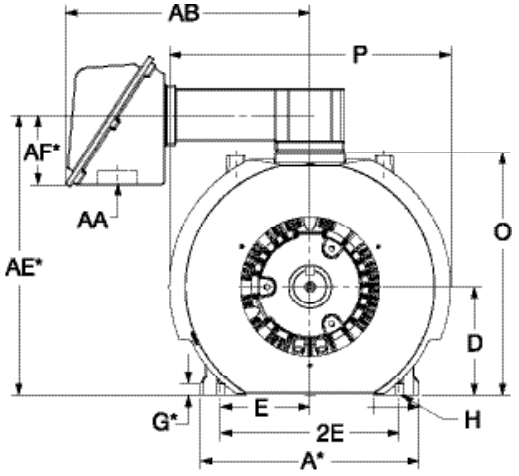
Catalog | 2014

Baldor•Reliance NEMA products Pricing catalog

Power and productivity for a better world™

Large AC Quick Reference Chart





Drawings represent standard Large AC TEFC motors.

*Dimensions are for reference only.

*Contact your local Sales Office for "C" Dimensions.

Dimensions - N, O, P and AB are specific to Baldor•Reliance.

FRAME	D	E	Dual Foot Mount Holes		H	N	O	P	U	V	AA	AB	BA	XBA
			2F	X2F										
L449TS L449T	11	9	32	25	13/16	4.84 8.56	24.49	28.32	2 3/8 3 3/8	4 3/4 8 3/8	4.60	26.86	7 1/2	-
5008S 5008L	12 1/2	10	25	22	15/16	6.77 10.75	26.75	32.38	2 3/8 4 1/8	6 10	-	29.64	-	15 1/2 19 1/2
5010S 5010L	12 1/2	10	32	28	15/16	6.77 10.75	26.75	32.38	2 3/8 4 1/8	6 10	-	29.64	-	15 1/2 19 1/2
5012L	12 1/2	10	40	36	15/16	10.75	26.75	32.38	4 1/8	10	-	29.64	-	19 1/2
5810S 5810L	14 1/2	11 1/2	36	32	1 7/8	7.26 13.94	32.32	36.42	2 3/8 4 1/8	6 1/2 13	-	31.12	-	17 23 11/16

The above chart provides typical Baldor•Reliance motor dimensions.

For more exact dimensional data, please check the specific drawing for each catalog number.

AA dimension shown in chart are Baldor typical values.

Customer to drill hole in terminal box for frames larger than 449.

Dimensions are in inches.

If mounting clearance details are required, consult factory.

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Pricing and Data subject to change without notice.

501 CATALOG NOTES:

Efficiencies – Efficiencies of all 60 Hz motor designs are listed as NEMA nominal at full load (Except the motors designed to meet the Small Motor Rule average efficiencies as specified by the DOE).

Full Load Amps (FLA) – For low voltage amps, double high voltage amps shown, excluding medium voltage amps for 2300/4000 voltage.

Motor Bearings – Motors with ball bearings are suitable for coupled loads. If a load is belted, a roller bearing may be required, contact your local ABB representative if you have questions or need assistance.

Service Factor – NEMA T-frames in TEFC construction have a service factor of 1.15 or greater except where noted. All NEMA U- frame TEFC motors (except explosion-proof) have NEMA open service factors. Fractional horsepower TEFC motors have NEMA open service factors. All Inverter Duty® and Vector Duty® AC motors have 1.0 Service Factors. All DC motors have 1.0 service factors.

Mounting Holes – Most steel band and cast iron foot-mounted motors have dual mounting holes (143T-145T, 182T-184T, etc.)

F1/F2 – All Cast iron motors are built with symmetrical frames which may be converted from F1 to F2 by switching endplates and rotor from end-to-end except for L182T, L184T, L213T, L215T and L449T. TEFC 5000 and 5800 frame motors are field convertible from F1 to F2 via swingarm. Frames with the "L" prefix have standard NEMA base and BA dimensions. Also applies to TC versions of these frame sizes.

SCR Drive Motors – Field Amps listed are for High Voltage Connections with motor at operating temperature.

Modified Motors – Stock motors can be modified to fit a variety of applications. Please see the Mod Express section in this catalog for more information.

Custom Motors – For information on motor designs and capabilities not found in this catalog, please contact your local ABB representative.

IP PROTECTION – ENCLOSURE (1)

Open Motor Enclosures:

IP22 or 23 - Open Drip Proof AC or DC Motors

Totally Enclosed Motor Enclosures * :

IP44 - LV General Purpose AC or DC Motors **

IP54 - MV General Purpose AC Motors

IP55 - Severe Duty AC Motors (ECP)

Crusher, Quarry & Dirty Duty Motors

White Washdown & Paint-Free Motors

IP56 - LV Motors Meeting IEEE 841

Dirty Duty Autophoretic Motors

Super White Washdown Motors

Stainless Steel Motors (non-encapsulated)

IP69K for Water - SSE Stainless Steel Encapsulated Motors

Notes:

(1) Codes are not included on stock motor nameplate as standard.

* Totally Enclosed Motors will meet IP protection level indicated when drain plugs and or T-drains are properly installed.

** IP54 when Drain Fitting Kit #HA5027A03 is installed in the weep holes (48 thru 256T frame motors only)

SUMMARY OF IP PROTECTION NUMBERS

First # Protection Against Solid Objects		Second # Protection Against Liquids	
IP	TESTS		
0	NO PROTECTION	**0**	NO PROTECTION
1	Protection against solid objects up to 50 mm. (E.G. Accidental touch by hands.)	**1**	Protection against vertical drops of water. (E.G. Condensation.
2	Protection against solid objects up to 12 mm. (E.G. Fingers)	**2**	Protection against falling water up to 15 degrees from the vertical.
3	Protection against solid objects over 2.5 mm. (E.G. Tools,Wires)	**3**	Protection against falling water up to 60 degrees from the vertical.
4	Protection against solid objects over 1 mm. (E.G. Tools, Wires, and Small Wires)	**4**	Protection against splashing water from all directions, limited ingress.
5	Protection against dust - limited ingress (No harmful deposits)	**5**	Protection against low pressure jets of water from all directions, limited ingress.
6	Totally protected against all dust.	**6**	Protection against strong jets of water. (E.G. Use on ship decks, limited ingress.)
		7	Protection against immersion.
		8	Protection against submersion.
		9K	Protection against high pressure, high temperature spray of water from all directions

Contact your local ABB representative for clarification, assistance or additional information on any Baldor•Reliance product.

Approvals UL and CSA

Approvals for AC Motors, Explosion Proof, and DC Motors:

File #:		Description:	Description:
E10822	▼	UL Listed Explosion Proof AC Motors	182T - 449T Frames
			5008, 5010, 9540 Frames
			140TY - 440TY Frames - Submersible Water-Sewer Pump motors
			182T - 286T Frames - Shaker Duty motors
		UL Listed Explosion Proof DC Motors	1811AT - 259AT Frames
			327AT - 3610A Frames
			408AT - 409AT Frames
E27506	▲	UL Recognition for Thermally Protected motors	42 - 250 Frames - Subfractional thru 20HP motors
E37609	▲	Special Explosion Proof conduit boxes	
E46145	▲	UL Recognition for DC frames	42 - 184 Frames - Subfractional Motors and Gearmotors
		UL Recognition for NEMA frames	42 - 449 Frames
E54825	▼	UL Recognition for AC frames	180 - 5800 Frames
			L180 - DL2814 Frames
		UL Recognition for DC frames	48 - 4013AT Frames
E6881	▼	UL Listed Explosion Proof DC Motors	56 Frame
E6951	▲	UL Listed Explosion Proof AC/DC Motors	48 - 449 Frames - Subfractional thru 300HP motors
EEV79350	▼	CSAc-us EEV Certification (Energy Efficiency Verification)	1 - 200HP Motors
LR19467	▼	CSA Certified Explosion Proof (Division 1)	140TY - 440TY Frames
			180 - 449T Frames
		CSA c-us Certified Explosion Protected (Division 2)	180 - 449T Frames
LR22553	▲	CSA Certification for Explosion Proof motors	48 - 215 Frames
		CSA c-us Certified Explosion Protected (Division 2)	56 - 364T Frames
LR2262	▲	CSA Certification for DC frames	42 - 184 Frames
		CSA Certification for NEMA frames	42 - 449 Frames
LR36841-7	▲	CSA c-us Certification for AC frames	5000 - 5800 Frames - up to 4160 Volts and a maximum of 900HP (2Pole), 800HP (4Pole) and 700HP (6Pole)
LR40567	▼	CSA c-us Certification for AC frames	L180 - DL2814 Frames - 32-1000HP
		CSA c-us Certification for DC frames	48 - 4013AT Frames - 5-500HP
		CSA c-us Certification for MG Sets	7MG - 80MG Frames - 15-150HP
		CSA c-us Certification for NEMA frames	140TY - 360TY Frames - Submersibe and Immersible motors
LR46877	▼	CSA c-us Certified Explosion Proof (Division 1)	L180 - L440 frames - TEPV Type X Purge Motors
		CSA c-us Certified Explosion Protected (Division 2)	L180 - DL2814 Frames
LR48703	▲	CSA Certification for Explosion Proof motors	
LR52580	▼	CSA Certification for AC frames	447T - 7111 Frames - 500-1500HP
		CSA c-us Certification for Finned AC frames	447T - 7111 Frames - 500-1500HP
		CSA c-us Certification for DC frames	C4412 - B1610 Frames - 100-3000HP
LR53258	▼	CSA c-us Certified Explosion Protected (Division 2)	
LR60344	▼	CSA c-us Certified Explosion Protected (Division 2)	
LR63415	▲	CSA Certification for Explosion Proof motors	
LR6451	▼	CSA c-us Certification for AC frames	5800 - 1000 Frames - 1000-15000HP
LR6771	▼	CSA Certified AC Division 1	
LR78389	▲	CSA EEV Certification (Energy Efficiency Verification)	1-200HP
LR7861	▼	CSA c-us Certification for NEMA frames	180 - 449 Frames - 600HP max.
LR40567	▼	CSA c-us Certification for NEMA frames	180 - 449 Frames - 600HP max.

▼ Motor Designs built at Athens, Gainesville, Kings Mountain and Stratford Plants.

▲ Motor Designs built at Clarksville, Westville, Fort Smith, Ozark, and Columbus Plants.

Department of Energy (DOE) Compliance Certification: CC 010A

Motors for use in Canada meet NRC Canadian Standards for Efficiency.

DC Tachometers — XPY tachometers are UL recognized, file number E109527 and CSA listed file number LR36841-5.

DC SCR Controls and Accessories — Controls with catalog numbers BC138, BC139, BC140, BC140-FBR, BC141, BC142, BC155, BC154, BCWD140, BC160, BC200, BC201, BC202, BC203 and BC204 and accessories BC24-LF, BC145, BC146, BC147, BC151, BC211 and BC212 are UL listed for US and Canada, UL file number E114039. BC153 is UL component recognized for US and Canada. BC254, BC354, BC214, BC215, BC216, BC217, BC218, BC245, BC253, BC258, BC259 are pending – contact manufacturing facility for status. Larger SCR controls Series 19H and 20H are UL and cUL Listed, UL file number E128059. SCR controls Series 29D and 30D are UL and cUL listed, UL file E128059. Reliance DC are Drives UL/cUL Listed, file number E59092.

AC Inverter and Vector Controls — V*S Drives are UL/cUL Listed, file number E128059. Reliance Drives are UL/cUL Listed, file number E59092.

AC Soft Starters — All units are CUL listed, file number E114039 except catalog item S25CA.

UL and CSA Explosion-Proof Classifications

CAUTION! Motors misapplied in hazardous environments can cause a fire or explosion resulting in destruction of property, serious injury or death. Only the end user or a qualified underwriter is to identify and select the proper class, group, division, and temperature code motor to meet the requirements of each installation. An ABB representative can advise what listings and approvals Baldor•Reliance motors carry, but cannot evaluate nor recommend what motors may be suitable for use in hazardous environments.

1. Hazardous Locations — For details on area classification and equipment suitability please consult NFPA70™ National Electric Code® Articles 500-516.
   - Class I Group C — locations are those which contain flammable gas, vapor, combustible liquid produced vapor mixed with air that may burn or explode, either having a maximum experimental safe gap (MESG) value greater than 0.45 mm and less than or equal to 0.75mm or a minimum igniting current ratio (MIC ratio) greater than 0.40 and less than or equal to 0.80. Ethylene is a typical Group C gas. For other substances in this group, please consult NFPA 497.
   - Class I Group D — locations are those which contain flammable gas, vapor, combustible liquid produced vapor mixed with air that may burn or explode, either having a (MESG) value greater than 0.75 mm or a (MIC ratio) greater than 0.80. Propane is a typical Group D gas. For other substances in this group, please consult NFPA 497.
   - Class II Group E — locations with atmospheres containing combustible metal dusts such as aluminum, magnesium and their alloys or other combustible dusts with particle sizes and conductivity that present similar hazards. For other substances and guidance relative to this group, please consult NFPA 499.
   - Class II Group F — locations with atmospheres containing combustible carbonaceous dusts with more than 8% entrapped volatiles. Coal, carbon black, charcoal and coke dust are examples from this group. For other substances and guidance relative to this group, please consult NFPA 499.
   - Class II Group G — locations with atmospheres containing combustible dusts not included in Group E or F, including flour, grain, wood, plastic and chemicals. For other substances and guidance relative to this group, please consult NFPA 499.
2. Class II Temperature Codes are typically the lower of either the ignition temperature of the combustible dust that is present or 165°C. Low surface temperature requirements (higher temperature codes) in Class II F&G require that over temperature protection be used.
   - Class II Explosion-Proof Motors rated 1 1/2 HP or less have internally mounted automatic thermal overloads when indicated by suffix "A". Caution must be observed when applying these to machinery applications to prevent accidental injury should the thermal device automatically reset and restart the motor.
   - Class II Explosion-Proof Motors rated 1 HP and larger without automatic thermal overloads have thermostats in the windings. These thermostats are pilot circuit devices to be connected to the magnetic starter circuit.
3. Motors for use in Class I only locations may be provided without T-stats. In these cases, the T-Code is determined by the maximum external surface temperature of the motor enclosure at the point when the winding burns out. These motors have T-Codes T2A or T2B depending on design, and require special sacrificial insulation. Consult manufacturing facility for the acceptability of a requested T-code for specific designs. When motors for use in Division 1 areas (Class I and/or Class II) are provided with T-stats (Over temperature devices) the over-temperature protection must be utilized. If accepted by the AHJ (Authority Having Jurisdiction) other means of limiting the temperature may be utilized in the application. Such alternate protection means are the responsibility of the end user, and ABB does not accept any responsibility for them.
4. Surface temperatures of Baldor•Reliance Explosion-Proof Motors will not exceed the following UL and CSA maximums under fault conditions. The "T" Code identifies the maximum absolute motor surface temperature that will be developed under all conditions of operation.
   - Division 1 considers external surface temperature and includes overloads and locked rotor conditions.
   - Division 2 considers internal and external surface temperatures during normal operation.

Maximum Surface Temperature	US (NEC 500) CA (CEC Annex J)	US (NEC 505) CA (CEC Section 18)
450° C	T1	T1
300° C	T2	T2
280° C	T2A	-
260° C	T2B	-
230° C	T2C	-
215° C	T2D	-
200° C	T3	T3

Maximum Surface Temperature	US (NEC 500) CA (CEC Annex J)	US (NEC 505) CA (CEC Section 18)
180° C	T3A	-
165° C	T3B	-
160° C	T3C	-
135° C	T4	T4
120° C	T4A	-
100° C	T5	T5
85° C	T6	T6

5. Stock Motors are not suitable for applications in temperatures below -25°C (-13°F). Custom motor designs available for applications in temperatures down to -60C. Contact your ABB representative for further information.
6. All Explosion-Proof motors are supplied with Explosion-Proof UL and CSA approved conduit boxes as standard.
7. Baldor•Reliance AC Explosion Proof Motors are not approved for use on adjustable speed drives. Only Inverter Duty Explosion Proof motors can be used. Custom Explosion proof ratings available, contact your ABB Sales Representative.

Explosion Proof motors in this catalog use the following symbols to designate their Division 1, Class and Group certification capabilities. These assignments are for use with this version of the 501 catalog only.

XP Class & Group Symbol	Description
①	Class I, Group D
②	Class I, Group D, Class II, Group F & G
③	Class I, Group D, Class II, Group E, F & G
④	Class I, Group C & D
⑤	Class I, Group C & D, Class II, Group F & G

Abbreviations: The basic catalog number consists of a letter(s) prefix and several non-significant proceeding numbers. A suffix letter(s) and/or number(s) may also be part of the catalog number. For example L3510 or L3510T. Following is a list of prefix and suffix definitions.

Motors Prefix

AEM	Automotive Motor, Three Phase
AFL	Aeration Fan Motor, Single Phase
AFM	Aeration Fan Motor, Three Phase
ANFL	Auger Fan Motor, Single Phase
AOM	Air Over Motor, Three Phase
AP	Subfractional HP, PM Motor
ASM	Arbor Saw Motor, Three Phase
B	Brake Motor
BN	Brake Motor, TENV enclosure
BTG	Tachometer Generator
C	NEMA C-Face with Base
CD	Wound Field DC Motor NEMA C-Face with Base
CDMG	Lifting Magnet Generator, C-Face
CDP	PM SCR Drive Motor
CDPSWD	Paint Free Washdown PM SCR Drive Motor C-Face with Base
CDPT	PM SCR Drive Motor with Integral Tachometer
CDPWD	Washdown PM SCR Drive Motor NEMA C-Face with Base
CDPX	Explosion Proof PM SCR Drive Motor C-Face with Base
CDX	Explosion Proof Wound Field DC Motor, NEMA C-Face
CEL	Super-E Premium Efficient Motor, Single Phase, C-Face
CEM	Super-E Premium Efficient Motor, Three Phase, C-Face
CFC	Condenser Fan Motor, Permanent Split Capacitor
CFM	Condenser Fan Motor, Three Phase
CHC	Direct Drive Fan Motor, Permanent Split Capacitor
CHL	Direct Drive Fan Motor, Single Phase
CHM	Direct Drive Fan Motor, Three Phase
CJWDM	Washdown Jet Pump, Three Phase, Foot Mounted
CP	Severe Duty Motor
CR	Crusher Duty Motor
CSC	Checkout Stand Motor
CTM	Cooling Tower Motor, Three Phase
CWAM	Dirty Duty - Autophoretic Coating, Three Phase, C-Face
D	Wound Field DC Motor
DDC	Direct Drive, Indoor Blower Motor, Permanent Split Capacitor
DEL	Dairy/Vacuum Pump Motor, Single Phase
E	Super-E Premium Efficient Motor
ECP	Super-E Severe Duty Motor
ECP6	IEEE 661 Motor
ECP8	IEEE 841 Motor
ENCP	Super-E Severe Duty Motor, TENV
ENCP8	IEEE 841 Motor, TENV
FDL	Farm Duty Motor, Single Phase
FDEM	Farm Duty Motor, Three Phase, Premium Efficient, Standard NEMA Frame
FLT	Filter Kit
FM	F-2 Mounted Motor
FVB	Blower Kit
FWDM	Washdown Duty Motor, TEFC, Three Phase
GD	Grain Dryer Centrifugal Fan Motor
GSL	Grain Stirring Motor, Single Phase
HFM	HVAC Duty, F-2 Mounted Connection Box, Three Phase
HIC	Incubator/Hatchery Vent Fan Motor, Permanent Split Capacitor
HM	HVAC Duty Motor, Three Phase
HPM	Hydraulic Pump Motor, Three Phase
IDBRPM	RPMAC Inverter Drive Motor - Laminated Frame, TEBC
IDCSWDM	Inverter Drive Motor, Paint Free Washdown, C-Face with Base
IDDRPM	RPMAC Inverter Drive Motor - Laminated Frame, DPG-FV
IDFRPM	RPMAC Inverter Drive Motor - Laminated Frame, TEFC
IDM	Inverter Drive Motor, TEBC
IDNM	Inverter Drive Motor, TENV
IDNRPM	RPMAC Inverter Drive Motor - Laminated Frame, TENV
IDVSM	VS Master Inverter Drive Motor
IDVSNM	VS Master Inverter Drive Motor, TENV
IDVSWDM	Inverter Drive Motor, Paint Free Washown, C- Face Less Base
IDWNM	Washdown Inverter Drive Motor, TENV
IDXM	Explosion Proof Inverter Drive Motor, TEFC
IDXCM	Explosion Proof Inverter Drive Motor, TEFC, C-Face With Base
IM	Irrigation Drive Motor
IR	Instant Reversing Single Phase Farm Motor
J	56J Stainless Steel Threaded Shaft with Dripcover/ Jet Pump
JM	JM Pump Shaft and Face
JMSSEWDM	All Stainless Encapsulated Super-E Washdown JM Pump Shaft & Face
JMWDM	Washdown Duty Motor with JM Pump Shaft & Face with Base, Three Phase
JP	JP Pump Shaft & Face with Base/ Close Coupled Pump
JPM	JP Pump Shaft and Face with Base, Three Phase / Close Coupled Pump
JS	Square Flange Pump Mount Motors with Threaded Shaft
JWDM	Washdown Jet Pump, Three Phase, Footless
K	Model 34 Diameter Motor with 56 C-Face, Less Base
L	Single Phase Motor
M	Three Phase Motor
MP	Metering Pump Motor, Three Phase
N	Totally Enclosed Non-Ventilated Motor
OF	Oil Field Motor, Design D, High Slip
PCL	Pressure Washer Motor, C-Face with base, Single Phase
PFTG	Tachometer Generator Foot Mount
PL	Pressure Washer Motor, Single Phase
PSC	Permanent Split Capacitor Motor
PTG	Tachometer Generator
R	Repulsion-Start Induction-Run Motor
RBM	High Cycle Brake Motor, Three Phase
RHM	Definite Purpose HVAC Motors, Three Phase
RL	Resilient Base Motor (Cradle Mount), Single Phase
RM	Resilient Base Motor (Cradle Mount), Three Phase
SPM	Synchronous Permanet Magnet Motor
SSEWDM	All Stainless Encapsulated Super-E Washdown Motor, Three Phase
SSEWDFM	All Stainless Encapsulated Super-E Washdown Motor, Three Phase, F-2 Mounted Connection Box
SSFWDM	All Stainless Encapsulated Super-E Washdown Motor, Three Phase
SSWDM	All Stainless Washdown, Three Phase
SWDM	Paint Free Washdown Duty Motor, Three Phase
UCC	Universal Crop Dryer Motor, Permanent Split Capacitor, Open Air Over
UCCE	Universal Crop Dryer Motor, Permanent Split Capacitor, TEAO
UCL	Grain Dryer/Vane Axial Fan, Single Phase, Open Air Over
UCLE	Grain Dryer/Vane Axial Fan, Single Phase, TEAO
UCM	Grain Dryer/Vane Axial Fan, Three Phase, Open Air Over
UCME	Grain Dryer/Vane Axial Fan, Three Phase, TEAO
UH	Unit Handling Motor
UHM	Unit Handling Motor, Three Phase
V	NEMA C-Face Less Base
V2L	Two Compartment Jet Pump Motor C-Face less Base, Single Phase
VEM	Super-E Premium Efficient Motor, Three Phase, C-Face, Less Base
VHECP	Super-E Vertical Pump Motor, Severe Duty - Normal Thrust
VHM	Vertical Pump Motor - Normal Thrust, Three Phase
VLCP	Vertical Pump Motor, Severe Duty - Meduim Thrust
VP	PM SCR Drive Motor with Metric Flange or C-Face
VPCP	Vertical Pump Motor, Severe Duty - High Thrust
WAM	Dirty Duty - Autophoretic Coating, Three Phase
WC	West Coast Fit TCZ
WD	Washdown Duty Motor
WDBM	Washdown Brake Motor, Three Phase
WWDM	Super White Washdown Motor
WWL	Wood Working Motor, Single Phase
YPC	Yoke Pedestal Fan Motor, Permanent Split Capacitor
ZDBRPM	RPMAC Vector Drive Motor - Laminated Frame, TEBC
ZDFRPM	RPMAC Vector Drive Motor - Laminated Frame, TEFC
ZDM	Vector Drive Motor, TEBC
ZDNM	Vector Drive Motor, TENV
ZDNRPM	RPMAC Vector Drive Motor - Laminated Frame, TENV
ZDPM	RPMAC Permanent Magnet Rotor - Laminated Frame
ZDVSCP	VS Master Severe Duty Vector Drive Motor
ZDVSM	VS Master Vector Drive Motor
ZDVSNCP	VS Master Severe Duty Vector Drive Motor, TENV
ZDVSNM	VS Master Vector Drive Motor, TENV
ZDWNM	Washdown Vector Drive Motor, TENV
ZDVSNM	VS Master Vector Drive Motor, TENV
ZDWNM	Washdown Vector Drive Motor, TENV

Controls Prefix

D	Soft Start Control for DC Shunt, Compound, or Definite Purpose Motor

DMG	Lifting Magnet Generator
M	Multipurpose Soft Start Control
RG	Regeneration Resistor Assembly
S	Single Phase Soft Start
T	Torque Control

Gearing Prefix

BK	Single Phase Gearmotor Kit
G	Subfractional HP Gear Motor
DR	Double Reduction Adapter Kit
GC	Subfractional HP Gear Motor Permanent Split Capacitor and Split Phase
GCP	Parallel Shaft Subfractional HP Gear Motor Permanent Split Capacitor and Split Phase
GF	900 Series Reducers
GHF	900 Series Hollow Shaft Reducers
GHH	H50 Hollow Shaft Reducers
GHL	Hollow Shaft Subfractional HP Gear Motor Capacitor Start Induction Run and Capacitor Start Capacitor Run
GHM	Hollow Shaft Subractional HP Gear Motor Three Phase
GIF	Inline Helical Reducers
GLF	900 Series Flanged Coupling Reducers
GLP	Subfractional HP Gear Motor Capacitor Start Induction Run and Capacitor Start Capacitor Run
GM	Subfractional HP Gear Motor Three Phase
GMP	Parallel Shaft Subfractional HP Gear Motor Three Phase
GP	PM Subfractional HP Gear Motor
GPP	PM Parallel Shaft Subfractional HP Gear Motor
GS	900 Series Solid Shaft Reducers
GSF	Universal Series Right Angle Gear Reducers
IDGM	Inverter Drive Subfractional HP Gear Motor
IDGMP	Inverter Drive Parallel Shaft Subfractional HP Gear Motor
SSGF	Stainless Steel 900 Series Flanged Quill Reducers
SSGHF	Stainless Steel 900 Series Hollow Shaft Reducers
WDGF	Washdown 900 Series Flanged Quill Reducers
TA	Torque Arm

Kits & Accessories Prefix

BLW	Blower Kit
BU	Bushing Kit
CBL	Cable Assembly
CC	Corrective Capacitor Bank
EN	Encoder Kit
FCD	Drip Cover Kit
FFC	Fan Cover/Conduit Box Kit
FL	Flange Kit
RBT	Roller Bearing Conversion Kit
RES	Resolver Feedback Kit
TK	Tachometer Mounting Kit

Motors Suffix

/35	Full 140 Frame Band Diameter
/36	Full 180 Frame Band Diameter
-2	120/240V Field
-4	460 Volt Winding
-5	575 Volt Winding
-8	200 Volt Winding
-9	NEMA Design C High Torque Winding
-12	12 Leads
-50	Wound for 50 Hertz Service
-57	230/380-415 Volt Winding
-58	380-415 Volt Y-Start/Delta-Run
-277	277 Volt Winding
-2340	2300/4000 Volt Winding
-AP	Aluminum Process Performance
-PP	Cast Iron Process Performance
-BG	Shaft Ground Motor
-BV	Blower Vented
-C	Listing includes Class I, Group C
-CI	Cast Iron Frame
-D	Dodge D-Series Brake
-G	Aegis Shaft Ground Motor
-I	Explosion-Proof, 1.15 Service Factor
-NL	Non Linear - For VFD use
-P	Partial AC Motor Excludes Pulley Endplate
-S	Dodge Short-Series Brake
-TP	Refrigerator Fan Motor
A	Automatic Thermal Overload
E	New electrical design
L	Long shafted motor with Ball bearings that may be converted to have D.E. Roller bearing.
LR	Long shafted motor with D.E. Roller bearing that may be converted to Ball bearings.
M	Manual Thermal Overload
P	Wound Field DC Motor NEMA “AT” Frame
S	Motor has a short shaft for coupled loads
T	NEMA “T” Frame Dimensions
TP	Feather Picker Motor
TR	NEMA “T” Frame - Roller Bearing
TS	NEMA “T” Frame - Short Shaft
TS	NEMA “T” Frame - Short Shaft

Controls Suffix

-0	IP20- VS1 Drives
-1	NEMA 1 - VS1 Drives
-2	NEMA 1 2- VS1 Drives
-4	NEMA 4- VS1 Drives
-D	Disconnect - VS1MX Drives
-T	Transistor Braking - VS1 Drives

Gearing Suffix

900 Series

A	56C Motor Flange
B	140TC Motor Flange
C	180TC Motor Flange
G	Left Hand Output Shaft
H	Double End Output Shaft
J	Right Hand Output Shaft

Universal Series

A	56C or Right Hand Output Shaft
B	140TC Motor Flange
C	180TC Motor Flange

Grinders Suffix

D	Deluxe
E	Exhaust Guards
W	Wide Design

Single Phase, TEFC, Foot Mounted

1/12 thru 15 Hp

NEMA 42 thru 256T

Applications: Compressors, pumps, fans, farm equipment, conveyors, material handling equipment, machine tools and others.

Features: Heavy gauge steel frames and a heavy duty base seam welded to the frame, ball bearings, a “Snap Action” starting switch and gasketed conduit box and capacitor cover.

kW	Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	“C” Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
	1/12	1800	42	**L3351**	296	K	9.56	15	44	115/230	1	3, 30
	1/8	3600	42	**L3352**	303	K	9.56	15	45	115/230	1.3	3, 30
		1800	42	**L3353**	308	K	9.56	16	47	115/230	1.6	3, 30
	1/6	3600	42	**L3354**	318	K	9.56	16	52	115/230	1.6	3, 30
		1800	42	**L3355**	336	K	9.56	18	51	115/230	1.8	3, 30
			48	**L3400**	335	K	10.72	18	49	115/230	1.9	3, 30
		1200	48	**L3401**	472	K	10.72	23	47	115/230	2.3	3, 30
	1/4	3600	42	**L3356**	340	K	9.56	18	57	115/230	2	3, 30
		1800	48	**EL3403**	420	K	11.35	24	74	115/230	1.3	1, 13, 65
			48	**L3403**	344	K	10.72	20	55	115/230	2.5	3, 30
			48	**L3403M**	394	K	10.72	11	55	115/230	2.5	3, 30
		1200	48	**L3404**	503	K	11.34	25	48	115/230	3.2	3, 30
			56	**L3500**	528	K	12.25	30	52.5	115/230	2.6	3, 30
	1/3	3600	48	**EL3405**	402	K	11.35	27	72	115/208-230	1.6	1, 13, 65
			48	**L3405**	313	K	10.72	21	55	115/208-230	3	3
		1800	48	**L3406**	365	K	10.72	22	60	115/230	3	3, 30
			48	**L3406M**	414	K	10.72	22	60	115/230	3	3, 30
			56	**EL3501**	464	K	11.97	27	77	115/230	1.6	1, 13, 65
			56	**L3501**	353	K	11.34	22	60	115/230	3	3, 30
			56	**L3501M**	414	K	11.34	22	60	115/230	3	3, 30
		1200	48	**L3407**	553	K	11.34	27	54	115/230	3.7	3, 30
			56	**L3502**	553	K	11.97	28	54	115/230	3.7	3, 30
	1/2	3600	48	**L3408**	354	K	10.73	22	66	115/230	3.5	3, 30
			56	**EL3503**	455	K	11.97	23	68	115/230	2.5	12, 65
			56	**L3503**	354	K	11.35	23	66	115/230	3.5	3, 30
		1800	48	**L3409**	405	K	11.34	26	68	115/230	3.7	3, 30
			48	**L3409M**	487	K	11.34	26	68	115/230	3.7	3, 30
			56	**EL3504**	547	K	11.97	30	78.5	115/230	2.3	1, 12, 65
			56	**L3504**	414	K	11.35	27	68	115/230	3.7	3, 30
			56	**L3504A**	495	K	11.97	27	68	115/230	3.7	3, 30
			56	**L3504M**	487	K	11.97	27	68	115/230	3.7	3, 30
		1200	56/56H	**L3505**	784	K	12.91	43	62.5	115/230	3.9	3, 30, 36
	3/4	3600	56	**EL3506**	512	K	11.97	29	72	115/230	3.9	12, 65
			56	**L3506**	399	K	11.97	28	66	115/230	4.8	3, 30
		1800	56	**EL3507**	666	K	13.25	44	82.5	115/208-230	3.2	1, 12, 65
			56	**L3507**	477	K	12.47	33	72	115/230	4.2	30, 65
			56	**L3507A**	598	K	12.47	35	74	115/230	4.1	30, 65
			56	**L3507M**	572	K	12.47	33	74	115/230	4.1	30, 65
		1200	56/56H	**L3508**	907	K	12.93	44	73.5	115/230	3.9	2, 30, 36, 65
			143T	**L3508T**	893	L1	13.29	46	73.5	115/230	3.9	2, 30, 65

[a] See notes on the last page of this catalog.

Single Phase, TEFC, Foot Mounted

kW	Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
	1	3600	56/56H	**EL3509**	591	K	12.93	38	74	115/208-230	4.7	12, 65
			56/56H	**L3509**	462	K	12.93	37	68	115/230	5.9	3, 30, 36
			56/56H	**L3509M**	522	K	12.93	40	66	115/230	6	3, 36
		1800	56/56H	**L3510A**	672	K	12.91	40	67	115/230	6.5	3, 30, 36
			56/56H	**L3510M**	649	K	12.93	38	67	115/230	6.5	3, 30, 36
			56/56H	**EL3510**	765	K	13.81	45	82.5	115/230	4.3	1, 36, 65
			56/56H	**L3510**	541	K	12.93	41	68	115/230	6.4	3, 30, 36
			143T	**L3510T**	552	L1	13.29	39	68	115/230	6.4	3, 30
			143T	**L3510TM**	649	L1	13.31	40	67	115/230	6.5	3, 30
	1 1/2	3600	56/56H	**L3513**	619	K	12.93	41	70	115/230	8	3, 30, 36
			56/56H	**L3513M**	708	K	12.91	46	70	115/230	7.5	2, 3, 36
			143T	**L3513T**	607	L1	13.31	43	70	115/230	8	3, 30
		1800	56/56H	**L3514**	625	K	13.81	49	80	115/230	6.2	30, 36, 65
			56/56H	**L3514A**	797	K	13.81	48	75.5	115/230	8	2, 36, 65
			56/56H	**L3514M**	733	K	13.81	51	75.5	115/208-230	8	2, 36, 65
			56/56H	**EL3514**	871	K	15.18	58	84	115/230	6.3	1, 36, 65
			145T	**EL3514T**	871	L1	15.55	58	84	115/230	6.3	1, 65
			145T	**L3514T**	634	L1	13.30	44	78.5	115/208-230	7	65
			145T	**L3514TM**	733	L1	14.17	49	75.5	115/208-230	8	2, 65
		1200	184T	**L3613T**	1,657	L1	16.56	77	73	115/230	8.2	1, 30, 65
	2	3600	56/56H	**L3515**	790	K	13.79	52	74	115/230	11.5	1, 3, 30, 36
			56/56H	**L3515M**	827	K	13.79	52	74	115/230	11.5	2, 3, 36
			145T	**L3515T**	797	L1	14.19	52	74	115/230	11.5	1, 3, 30
			145T	**EL3515T**	1,022	L1	14.18	65	77	115/208-230	8.3	1, 65
		1800	56HZ	**L3516TM**	1,043	K	13.31	46	82.5	208-230	8.1	1, 57
			145T	**L3516T**	1,013	L1	14.17	51	78.5	115/230	8.8	1, 65
			182T	**L3605T**	905	L1	16.56	68	75.5	115/230	11.5	3, 30
			182T	**L3605TM**	1,104	L1	16.56	73	75	115/230	11	2, 3
			182T	**EL3605T**	1,191	L1	16.56	66	82.5	115/230	8.8	1, 65
	3	3600	182T	**EL3606T**	1,112	L1	16.56	79	82	115/230	12.4	2, 65
			182T	**L3606T**	934	L1	16.56	74	76	115/230	14.5	1, 3, 30
		1800	184T	**EL3609T**	1,390	L1	18.06	89	85.5	230	11.8	1, 65
			184T	**L3609T**	1,065	L1	16.56	80	78	115/230	14	2, 20, 30, 65
			184T	**L3609TM**	1,152	L1	16.54	79	78	115/230	14.5	2, 20
	5	3600	184T	**EL3608T**	1,533	L1	18.06	91	85	230	19.4	2, 20, 65
			184T	**L3608T**	1,285	L1	18.06	88	83	230	19.5	2, 20, 65
			184T	**L3608TM**	1,326	L1	18.05	89	83	230	19.5	2, 20
		1800	184T	**EL3612T**	1,658	L1	18.06	97	86.5	230	19.1	2, 20, 65
			184T	**L3612TM**	1,339	L1	18.05	100	80	230	23	2, 20
			213T	**L3708T**	1,271	L1	19.02	116	84	230	20.5	1, 30, 65
			213T	**L3708TM**	1,493	L1	19.02	135	82	230	21.5	2, 65
	7 1/2	3600	213T	**L3709T**	1,655	L1	17.89	123	83	230	33	2, 30, 65
		1800	215T	**L3710T**	1,679	L1	19.02	134	86.5	230	29	2, 20, 30, 65
	10	3600	215T	**L3711T**	2,029	L1	19.02	148	82	230	40	2, 20, 65
		1800	215T	**L3712T**	2,060	L1	20.52	158	86.5	230	38	2, 20, 65
	15	1800	254T	**L1177T**	5,867	L1	23.28	323	86.5	230	60	2, 20, 65
			256T	**L3912T**	5,269	L1	24.56	303	86.5	208-230	58	

[a] See notes on the last page of this catalog.

Cast Iron Frame

Single Phase, TEFC, C-Face, No Drip Cover

1/6 thru 10 Hp NEMA 56C thru 215TC

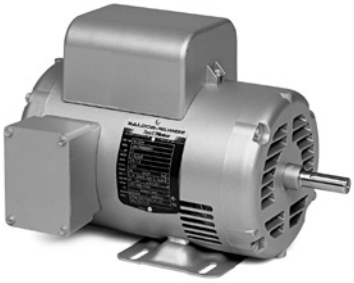
Applications: Pumps, fans, conveyors, machine tools, gear reducers and other applications requiring a NEMA C-face motor.

Features: Pressure cast aluminum end plates with ribbed design for rigidity. Ball bearings with a locked drive end bearing, heavy-gauge steel frame, and gasketed conduit box and capacitor cover.

kW	Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
	C-Face, Foot Mounted											
	1/4	1800	56C	**CL3403**	363	K	11.35	20	55	115/230	2.5	3
	1/3	3600	56C	**CL3405**	362	K	11.35	21	55	115/208-230	3	3
		1800	56C	**CL3501**	379	K	11.35	23	60	115/230	3	3, 30
	1/2	3600	56C	**CL3503**	380	K	11.35	23	66	115/230	3.5	3, 30
		1800	56C	**CL3504**	443	K	11.35	28	68	115/230	3.7	3, 30
	3/4	3600	56C	**CL3506**	423	K	11.97	29	66	115/230	4.8	3, 30
		1800	56C	**CL3507**	529	K	12.47	34	72	115/230	4.2	30, 65
	1	3600	56C	**CL3509**	489	K	12.25	36	68	115/230	5.9	3, 30
		1800	56C	**CL3510**	597	K	13.25	40	68	115/230	6.4	3, 30
	1 1/2	3600	56C	**CL3513**	633	K	13.25	46	70	115/230	7.5	3, 30
		1800	56C	**CL3514**	708	K	14.12	51	80	115/230	6.2	30, 65
	2	3600	56C	**CL3515**	816	K	14.12	50	74	115/230	11.5	1, 3, 30
			145TC	**CL3515T**	823	L1	14.19	53	74	115/230	11.5	1, 3, 30
		1800	145TC	**CL3516TM**	1,052	L1	14.16	53	82.5	208-230	7.9	1
	3	1800	184TC	**CL3619TM**	1,368	L1	16.54	81	81.5	230	13.2	2, 20
	5	3600	184TC	**CL3608TM**	1,482	L1	18.05	92	83	230	19.5	2, 20
		1800	184TC	**CL3612TM**	1,434	L1	18.05	102	80	230	23	2, 20
	10	3600	215TC	**CL3711T**	2,409	L1	19.75	167	82	230	40	2, 20
		1800	215TC	**CL3712T**	2,438	L1	21.25	171	86.5	230	38	2, 20
	C-Face, Footless											
	1/6	1800	56C	**KL3400**	353	K	11.35	19	49	115/230	1.9	3, 30
		1200	56C	**KL3401**	494	K	11.35	24	47	115/230	2.3	3, 30
	1/4	1800	56C	**KL3403**	363	K	11.35	20	55	115/230	2.5	3, 30
	1/3	3600	56C	**KL3405**	335	K	11.35	24	55	115/208-230	3	3
		1800	56C	**VL3501**	372	K	11.35	22	60	115/230	3	3, 30
	1/2	3600	56C	**VL3503**	376	K	11.35	23	66	115/230	3.5	3, 30
		1800	56C	**VL3504**	435	K	11.35	27	68	110/220	3.7	3, 30
		1200	56C	**VL3505**	805	K	13.25	43	62.5	115/230	3.9	3, 30
	3/4	3600	56C	**VL3506**	418	K	11.97	29	66	115/230	4.8	3, 30
			56C	**VL3506A**	462	K	11.97	28	66	115/230	4.8	3
		1800	56C	**VL3507**	498	K	12.47	33	72	115/230	4.2	1, 30, 65
		1200	56C	**VL3508**	926	K	13.25	44	73.5	115/230	3.9	2, 30, 65
	1	3600	56C	**VL3509**	481	K	12.25	36	68	115/230	5.9	3, 30
			56C	**VL3509A**	526	K	13.25	41	66	110/220	6	3
		1800	56C	**VL3510**	571	K	13.25	40	68	115/230	6.4	3, 30
			143TC	**VL3510T**	571	L1	13.29	44	68	115/230	6.4	3, 30
	1 1/2	3600	56C	**VL3513**	626	K	13.25	40	70	115/230	8	3, 30
			143TC	**VL3513T**	665	L1	13.31	41	70	115/230	8	3, 30
		1800	56C	**VL3514**	647	K	14.12	48	80	115/230	6.2	30, 65
			145TC	**VL3514T**	654	L1	14.17	50	80	115/230	6.2	30, 65
	2	3600	56C	**VL3515**	801	K	14.12	50	74	115/230	11.5	1, 3, 30
			145TC	**VL3515T**	816	L1	14.19	51	74	115/230	11.5	1, 3, 30
		1800	182TC	**VL3605T**	1,157	L1	16.55	66	75.5	115/230	11.5	3, 30
	3	3600	182TC	**VL3606T**	1,291	L1	16.55	73	76	115/230	14.5	1, 3, 30
		1800	184TC	**VL3609T**	1,366	L1	16.55	79	78	115/230	14	2, 20, 30, 65

[a] See notes on the last page of this catalog.

Small Motor Rule, Single Phase, Open Drip Proof, Foot Mounted



1/4 thru 2 Hp **NEMA 48 thru 56H**

Applications: Compressors, pumps, conveyors, machine tools, air handling, and others.

Features: Compliant with DOE Small Motor Rule 2010. These Super-E® motors comply with DOE Average Efficiency and have a 3 year warranty.

Note: Required for compliance after March 9, 2015.

kW	Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
	1/4	1800	48	**EL11203**	383	K	9.76	19	68.5	115/230	1.3	1, 65, 13
		1200	48	**EL11204**	456	K	9.76	25	64	115/230	1.45	30
	1/3	3600	48	**EL11205**	404	K	9.76	24	70.5	115/230	1.5	65, 13
		1800	48	**EL11206**	412	K	9.76	27	72.4	115/230	1.7	30
			56	**EL11301**	412	K	10.13	27	72.4	115/230	1.7	1, 65, 13
		1200	56	**EL11302**	487	K	10.13	30	66.6	115/230	2.3	30
	1/2	3600	48	**EL11208**	430	K	9.76	24	72.4	115/230	2.5	30
			56	**EL11303**	430	K	10.13	24	72.4	115/230	2.5	65, 12
		1800	56	**EL11304**	462	K	11.00	32	76.2	115/230	2.35	1, 65, 12
		1200	56/56H	**EL11305**	732	K	11.75	46	76.2	115/230	2.2	30, 36
	3/4	3600	56	**EL11306**	450	K	11.00	39	76.2	115/230	3.3	65, 12
		1800	56	**EL11307**	550	K	12.07	39	81.8	115/230	3.5	1, 65, 12
	1	3600	56	**EL11309**	528	K	12.07	43	82	115/230	3.9	65, 12
		1800	56	**EL11310**	634	K	12.07	44	82.6	115/230	4.2	1, 65
	1 1/2	3600	56H	**EL11313**	600	K	12.62	52	82	115/230	5.9	65
		1800	56H	**EL11319**	755	K	14.00	59	83.8	115/230	6.2	1, 36, 65
	2	3600	56H	**EL11317**	663	K	14.00	66	82.9	115/230	7.8	

[a] See notes on the last page of this catalog.

Single Phase, ODP, Foot Mounted

1/6 thru 10 Hp NEMA 48 thru 215T

Applications: Compressors, pumps, conveyors, machine tools, air handling, and others.

Features: Copper windings, dynamically balanced rotors, ball bearings, heavy-gauge steel frames, and other industrial quality features.

Note: Non-compliant small motors may not be manufactured after March 9, 2015. Pre-existing inventory may be sold or used. Contact local sales representative for new compliant motors.

kW	Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
	1/6	1800	48	**L1200**	279	K	9.13	18	49	115/230	1.9	30, 98
		1200	48	**L1201**	427	K	9.38	23	47	115/230	2.3	30, 98
	1/4	1800	48	**EL1203**	365	K	9.76	23	74	115/230	1.3	1, 65, 13
			48	**L1203**	284	K	9.13	21	59.5	115/230	2.2	30, 98
			48	**L1203M**	326	K	9.13	20	55	115/230	2.5	30, 96
		1200	48	**L1204**	456	K	9.75	25	48	115/230	3.2	30, 98
			56	**L1300**	475	K	10.13	25	48	115/230	3.2	30, 98
	1/3	3600	48	**EL1205**	333	K	9.76	27	72	115/208-230	1.6	65, 13
			48	**L1205**	268	K	9.13	20	55	115/208-230	3	98
		1800	48	**L1206**	326	K	9.13	21	60	115/230	3	30, 98
			48	**L1206M**	367	K	9.13	22	60	115/230	3	30, 96
			56	**EL1301**	431	K	10.13	26	77	115/230	1.6	1, 65, 13
			56	**L1301**	329	K	9.51	21	60	115/230	3	30, 98
			56	**L1301M**	386	K	9.51	22	60	115/230	3	30, 96
		1200	48	**L1207**	487	K	10.63	29	54	115/230	3.7	30, 98
			56	**L1302**	487	K	11.01	28	54	115/230	3.7	30, 98
	1/2	3600	48	**L1208**	296	K	9.13	21	57	115/230	3.7	30, 98
			56	**EL1303**	367	K	10.13	23	68	115/230	2.5	65, 12
			56	**L1303**	296	K	9.51	21	66	115/230	3.5	30, 98
		1800	48	**L1209**	410	K	9.75	26	68	115/230	3.7	30, 98
			48	**L1209M**	455	K	9.38	24	62	115/230	4.2	30, 96
			56	**EL1304**	494	K	11.01	30	78.5	115/230	2.3	1, 65, 12
			56	**L1304**	365	K	10.13	26	68	115/230	3.7	30, 98
			56	**L1304A**	434	K	9.76	24	62	115/230	4.2	30, 96
			56	**L1304M**	455	K	9.76	24	62	115/230	4.2	30, 96
		1200	56/56H	**L1305**	732	K	11.75	34	62	115/230	4.1	30, 36, 98
	3/4	3600	56	**EL1306**	447	K	11.01	29	72	115/230	3.9	65, 12
			56	**L1306**	362	K	12.85	26	72	115/230	4.7	30, 98
			56	**L1306A**	380	K	11.75	28	69	115/230	5.5	96
		1800	56	**EL1307**	608	K	12.06	38	84	115/208-230	3.3	1, 65, 12
			56	**L1307**	450	K	11.51	35	68	115/230	5.1	30, 98
			56	**L1307A**	528	K	11.51	32	68	115/230	5.1	30, 96
			56	**L1307M**	541	K	11.51	32	68	115/230	5.1	30, 96
		1200	56/56H	**L1308**	824	K	11.75	43	68	115/230	5	30, 36, 65, 98
	1	3600	56	**EL1309**	470	K	11.01	32	74	115/208-230	5.1	65, 12
			56	**L1309**	379	K	11.01	31	65	115/230	7.5	30, 98
			56	**L1309A**	404	K	11.01	31	70	115/230	6.6	96
		1800	56/56H	**L1318**	538	K	11.75	43	67	115/230	6.2	30, 36, 98
			56/56H	**L1318M**	586	K	11.75	43	67	115/230	6.2	2, 36, 96
			56	**EL1310**	663	K	12.94	43	84	115/208-230	4.3	1, 65
			56	**L1310**	492	K	11.07	34	66	115/230	6.7	30, 98
			56/56H	**L1310M**	629	K	11.75	36	66	115/230	6.7	30, 36, 96
			143T	**L1318T**	561	L1	12.12	43	67	115/230	6.2	30
			143T	**L1318TM**	586	L1	12.12	42	67	115/230	6.2	2

[a] See notes on the last page of this catalog.

Single Phase, ODP, Foot Mounted

kW	Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
	1 1/2	3600	56/56H	**L1313A**	556	K	11.75	40	68	115/230	9	30, 36, 98
			56H	**EL1313**	658	K	12.25	37	80	115/208-230	6.2	65
			56H	**L1313**	532	K	11.75	40	77	115/230	6.4	30, 36, 65, 98
			143T	**L1313T**	532	L1	11.12	36	70	115/230	8.9	30
		1800	56/56H	**L1319**	634	K	11.75	42	68	115/230	9	30, 36, 98
			56/56H	**L1319M**	707	K	11.75	43	68	115/230	9	36, 98
			56H	**EL1319**	868	K	14.00	50	85.5	115/208-230	6.3	1, 36, 65
			145T	**EL1319T**	839	L1	13.00	50	85.5	115/208-230	6.3	1, 65
			145T	**L1319T**	599	L1	12.12	42	68	115/230	9	30
			145T	**L1321T**	719	L1	13.00	49	70	115/230	10.5	30
			145T	**L1321TM**	780	L1	13.00	48	70	115/208-230	10.5	
	2	3600	56/56H	**L1317**	707	K	11.75	44	70	115/230	13	30, 36, 98
			56/56H	**L1317A**	727	K	11.75	43	70	115/230	12	30, 36, 98
			56H	**EL1317**	875	K	11.75	47	75.5	115/230	9	
			145T	**L1320T**	758	L1	12.12	46	71	115/230	11.5	30, 65
		1800	145T	**L1322T**	733	L1	13.00	49	75.5	115/208-230	10.2	65
			145T	**L1322TM**	798	L1	13.00	45	78.5	115/230	9.2	65
			182T	**EL1405T**	1,014	L1	15.87	65	82.5	115/230	8.8	1, 65
			182T	**L1405T**	752	L1	15.00	66	71	115/230	12	30
	3	3600	182T	**EL1406T**	1,068	L1	15.00	70	81	115/230	12.3	65
			182T	**L1406T**	862	L1	15.00	65	78	115/230	14	30
		1800	184T	**EL1408T**	1,062	L1	16.50	81	85.5	208-230	11.2	1, 65
			184T	**L1408T**	814	L1	15.00	76	78	115/230	16	30, 65
			184T	**L1408TM**	958	L1	15.00	74	78	115/230	16	
	5	3600	184T	**EL1409T**	1,268	L1	15.00	79	81.5	230	20	65
			184T	**L1409T**	1,026	L1	15.00	79	75	230	23	30
		1800	184T	**EL1410T**	1,213	L1	18.00	97	86.5	230	19.1	1, 65
			184T	**L1410T**	962	LS	16.50	81	82.5	230	23	1, 30, 65
			184T	**L1410TM**	1,165	L1	16.50	85	82.5	230	23	1, 30
			184T	**L1430T**	883	L1	16.55	78	84	230	20.6	1, 30, 65
			184T	**L1430TM**	1,165	L1	16.55	82	80	230	24	1, 30, 65
			213T	**L1508T**	1,271	L1	16.32	108	77	230	27	
	7 1/2	3600	213T	**L1509T**	1,585	L1	18.37	94	82.5	230	30	1, 30, 65
		1800	215T	**L1510T**	1,379	L1	17.45	134	85.5	230	31	30, 65
	10	3600	215T	**L1511T**	1,999	L1	17.45	131	83	230	46	1, 30
		1800	215T	**L1512T**	2,013	L1	17.45	132	85.5	230	39	2, 65

[a] See notes on the last page of this catalog.

Single Phase, ODP, C-Face

1/6 thru 5 Hp NEMA 56C thru 184TC

Applications: Pumps, fans, conveyors, machine tools, gear reducers and other applications requiring a NEMA C-face motor.

Features: Pressure cast aluminum end plates with ribbed design for rigidity. Ball bearings with a locked drive end bearing, heavy-gauge steel frame.

Note: Non-compliant small motors may not be manufactured after March 9, 2015. Pre-existing inventory may be sold or used. Contact local sales representative for new compliant motors.

kW	Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
	C-Face, Foot Mounted, No Drip Cover											
	1/3	1800	56C	**CL1301**	369	K	10.10	23	60	115/230	3	30, 98
	1/2	3600	56C	**CL1303**	327	K	10.06	22	66	115/230	3.5	30, 98
		1800	56C	**CL1304**	420	K	10.35	25	62	115/230	4.2	30, 98
	3/4	1800	56C	**CL1307**	481	K	12.06	33	68	115/230	5.1	30, 98
	1	1800	56C	**CL1310**	553	K	11.06	34	66	115/230	6.7	30, 98
	3	1800	184TC	**CL1408TM**	1,012	L1	15.00	80	78	115/230	16	
	5	1800	184TC	**CL1410TM**	1,220	L1	16.50	88	82.5	230	23	1, 30
	C-Face, Footless, Drip Cover											
	1/6	1800	56C	**KL1200**	299	K	11.22	19	49	115/230	1.9	30, 98
	1/4	1800	56C	**KL1203**	304	K	11.22	21	55	115/230	2.5	30, 98
	1/3	3600	56C	**KL1205**	290	K	11.22	21	55	115/208-230	3	98
			56C	**KL1205A**	296	K	11.35	21	55	115/230	3	30, 96
		1800	56C	**VL1301**	350	K	11.22	23	60	115/230	3	30, 98
	1/2	3600	56C	**VL1303**	318	K	11.22	23	66	115/230	3.5	30, 98
		1800	56C	**VL1304**	385	K	11.47	25	62	115/230	4.2	30, 98
		1200	56C	**VL1305**	752	K	13.24	39	62	115/230	4.1	30, 98
	3/4	3600	56C	**VL1306**	380	K	12.85	27	72	115/230	4.7	30, 98
		1800	56C	**VL1307**	470	K	13.22	33	68	115/230	5.1	30, 98
		1200	56C	**VL1308**	843	K	13.24	44	68	115/230	5	30, 98
	1	3600	56C	**VL1309**	400	K	12.72	32	65	115/230	7.5	30, 98
		1800	56C	**VL1310**	512	K	12.24	35	66	115/230	6.7	30, 98
			56C	**VL1318**	556	K	13.24	42	67	115/230	6.2	30, 98
	1 1/2	3600	56C	**VL1313**	553	K	12.73	33	77	115/230	6.4	30, 98
		1800	56C	**VL1319**	654	K	13.24	43	68	115/230	9	30, 98
			145TC	**VL1321T**	740	L1	14.17	48	70	115/230	10.5	30
	2	3600	56C	**VL1317**	727	K	13.24	43	70	115/230	13	30, 98
		1800	145TC	**VL1322T**	754	L1	14.18	49	75.5	115/208-230	10.2	65
	3	3600	182TC	**VL1406T**	916	L1	15.18	61	75.5	115/230	13.6	30, 65
		1800	184TC	**VL1408T**	927	L1	16.55	78	78	115/230	16	30, 65

[a] See notes on the last page of this catalog.

Three Phase, Totally Enclosed, Foot Mounted

1/8 thru 400 Hp **NEMA 42 thru 449T**

Applications: Pumps, compressors, fans, conveyors, machine tools and other general purpose three phase applications.

Features: Suitable for mounting in any position. Ball bearings, heavy-gauge steel and cast-iron frames, gasketed conduit boxes, 1.15 service factor or greater, and low-loss electrical grade lamination steel. Super-E® motors have NEMA Premium® efficiency and 3 year warranty. Motors with TR suffix have roller bearings for heavy belted loads.

Hp	RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1/8	1800	42	TEFC	**M3353**	376	K	9.56	16	44	230/460	0.5	30
1/6	1800	42	TEFC	**M3355**	426	K	9.56	17	62	230/460	0.6	30, 13
	1200	48	TEFC	**M3452**	439	K	10.73	17	57.5	230/460	0.6	30, 13
1/4	1800	48	TEFC	**M3454**	311	K	10.73	19	64	230/460	0.7	30, 13
		48	TENV	**NM3454**	326	K	9.62	20	68	230/460	0.5	1, 30, 13
		56	TENV	**NM3454/35**	524	K	11.06	28	80	230/460	0.4	1, 30, 48
	1200	48	TEFC	**M3455**	489	K	10.73	18	68	230/460	0.7	30, 13
		48	TENV	**NM3455**	450	K	9.62	19	68	230/460	0.7	30
		56	TEFC	**M3531**	484	K	11.35	23	68	230/460	0.7	30, 13
	900	56	TEFC	**M3532**	705	K	12.23	28	57.5	208-230/460	0.8	13
1/3	3600	48	TENV	**M3457**	316	K	9.62	20	72	230/460	0.7	30, 13
	1800	48	TEFC	**M3458**	379	K	10.73	11	68	230/460	0.8	30, 13
		56	TEFC	**M3534**	340	LS	11.35	21	68	230/460	0.8	30, 13
		56	TENV	**NM3534**	365	K	10.25	23	70	230/460	0.7	1, 30, 13
	1200	56	TEFC	**M3535**	544	K	11.35	22	70	230/460	0.9	30, 13
	900	56	TEFC	**M3536**	768	K	12.23	29	59.5	208-230/460	1	13
1/2	3600	48	TEFC	**M3460**	366	K	10.73	19	68	230/460	1	30, 12
		56	TEFC	**M3537**	366	K	11.35	19	68	230/460	1	30, 12
	1800	48	TEFC	**M3461**	444	K	10.73	22	74	230/460	1	30, 12
		56	TEFC	**EM3538**	660	LS	12.23	29	82.5	230/460	0.8	1, 30
		56	TEFC	**M3538**	389	LS	11.35	23	74	230/460	1	30, 12
		56	TEFC	**M3538/35**	501	K	12.23	25	72	208-230/460	1.1	1, 48
		56	TENV	**NM3538**	423	K	10.88	25	75.5	230/460	0.9	1, 30, 12
		56	TENV	**NM3538/35**	511	K	11.06	27	80	230/460	0.8	1, 30, 48
	1200	56	TEFC	**M3539**	586	K	11.35	24	72	230/460	1.2	30
		56	TENV	**NM3539**	644	K	12.06	40	78.5	230/460	1	30
	900	56/56H	TEFC	**M3560**	862	K	12.91	38	70	208-230/460	1.3	36
3/4	3600	48	TEFC	**M3463**	403	K	10.73	21	74	230/460	1.3	30, 12
		56	TEFC	**M3541**	403	K	11.35	21	74	230/460	1.3	30, 12
	1800	48	TEFC	**M3464**	480	K	10.73	30	75.5	208-230/460	1.5	12
		56	TEFC	**M3542**	416	LS	11.35	25	75.5	208-230/460	1.5	12
		56	TENV	**NM3542**	455	K	11.06	29	78.5	230/460	1.4	1, 30, 12
	1200	56/56H	TEFC	**M3543**	598	K	12.84	32	77	208-230/460	1.5	
		143T	TEFC	**M3543T**	598	L1	13.41	33	77	208-230/460	1.5	

[a] See notes on the last page of this catalog.

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Hp	RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1	3600	56	TEFC	**EM3545**	641	K	12.25	37	77	230/460	1.4	1, 12
		56	TEFC	**M3545**	472	K	11.35	23	75.5	230/460	1.8	30, 12
	1800	56	TEFC	**EM3546**	738	LS	12.23	35	85.5	208-230/460	1.5	1
		56	TEFC	**M3546**	433	LS	12.00	30	78.5	208-230/460	1.7	
		56	TEFC	**M3546/35**	523	K	12.23	24	82.5	208-230/460	1.6	1, 48
		56	TENV	**NM3546**	497	K	12.06	39	85.5	208-230/460	1.5	1, 48
		143T	TEFC	**EM3546T**	706	LS	12.31	35	85.5	208-230/460	1.5	1, 30
		143T	TEFC	**EM3581T**	913	L1	12.53	51	85.5	208-230/460	1.5	1
		143T	TENV	**NM3546T**	523	L1	11.13	34	82.5	208-230/460	1.5	1
	1200	56/56H	TEFC	**M3556**	608	K	12.91	37	78.5	208-230/460	1.9	36
		56	TEFC	**EM3556**	841	K	13.23	42	82.5	208-230/460	1.8	1
		145T	TEFC	**EM3556T**	846	L1	13.31	42	82.5	208-230/460	1.8	1
		145T	TEFC	**EM3582T**	1,023	L1	12.53	56	82.5	208-230/460	1.7	1
	900	182T	TEFC	**M3617T**	1,211	L1	15.17	62	74	208-230/460	2.2	30
1 1/2	3600	56	TEFC	**EM3550**	679	K	12.25	35	84	208-230/460	1.9	1
		56	TEFC	**M3550**	515	K	11.97	29	80	208-230/460	2.3	
		143T	TEFC	**EM3550T**	726	L1	12.31	36	84	208-230/460	1.9	1
		143T	TEFC	**EM3583T**	966	L1	12.53	52	84	208-230/460	1.9	1
	1800	56	TEFC	**EM3554**	820	LS	13.23	40	86.5	208-230/460	2.2	1
		56	TEFC	**M3554**	489	LS	12.23	35	81.5	208-230/460	2.3	
		145T	TEFC	**EM3554T**	734	LS	13.31	41	86.5	208-230/460	2.2	1
		145T	TEFC	**EM3584T**	947	L1	12.53	57	86.5	208-230/460	2.3	1
		145T	TENV	**NM3554T**	546	L1	12.12	42	85.5	208-230/460	2.3	1, 48
	1200	56H	TEFC	**M3557**	698	K	13.79	46	80	208-230/460	2.5	2, 20, 36
		182T	TEFC	**EM3607T**	989	L1	16.55	73	87.5	208-230/460	2.4	1
		182T	TEFC	**EM3667T**	1,217	L1	15.24	93	87.5	208-230/460	2.5	1
	900	184T	TEFC	**M3618T**	1,434	L1	18.04	88	77	208-230/460	2.8	2, 20
2	3600	56	TEFC	**EM3555**	747	K	13.25	42	85.5	208-230/460	2.5	1
		56/56H	TEFC	**M3555**	579	K	12.84	35	80	208-230/460	2.9	
		145T	TEFC	**EM3555T**	795	L1	13.31	43	85.5	208-230/460	2.5	1
		145T	TEFC	**EM3586T**	1,014	L1	12.55	59	85.5	208-230/460	2.5	1
	1800	56/56H	TEFC	**M3558**	528	LS	12.91	40	82.5	208-230/460	3	36
		56	TEFC	**EM3558**	867	LS	13.23	46	86.5	208-230/460	2.9	1
		145T	TEFC	**EM3558T**	761	LS	13.31	45	86.5	208-230/460	2.9	1
		145T	TEFC	**EM3587T**	993	L1	12.53	58	86.5	208-230/460	2.9	1
	1200	184T	TEFC	**EM3614T**	1,037	L1	18.05	93	88.5	208-230/460	3.5	1
		184T	TEFC	**EM3664T**	1,237	L1	15.24	109	88.5	230/460	3.2	1
	900	213T	TEFC	**M3702T**	1,816	L1	17.89	102	82.5	208-230/460	3.5	
3	3600	56/56H	TEFC	**M3559**	673	K	12.93	45	82.5	208-230/460	3.8	1, 36
		145T	TEFC	**EM3559T**	871	L1	14.19	49	86.5	208-230/460	3.6	1
		182T	TEFC	**EM3610T**	882	L1	15.14	50	86.5	208-230/460	3.6	1, 30
		182T	TEFC	**EM3660T**	1,096	L1	15.24	84	86.5	208-230/460	3.8	1
	1800	182T	TEFC	**EM3611T**	840	LS	16.55	73	89.5	208-230/460	4.2	1
		182T	TEFC	**EM3661T**	1,127	L1	15.24	97	89.5	208-230/460	4.1	1
	1200	213T	TEFC	**EM3704T**	1,349	L1	19.02	134	89.5	230/460	4.6	1, 30
		213T	TEFC	**EM3764T**	1,541	L1	18.45	173	89.5	208-230/460	4.5	1
	900	215T	TEFC	**M3705T**	1,985	L1	19.01	139	84	208-230/460	5.6	2, 20
5	3600	184T	TEFC	**EM3613T**	978	L1	16.55	75	88.5	230/460	5.9	1, 30
		184T	TEFC	**EM3663T**	1,349	L1	15.24	88	88.5	208-230/460	6.3	1
	1800	184T	TEFC	**EM3615T**	919	LS	18.05	93	89.5	208-230/460	6.7	1
		184T	TEFC	**EM3665T**	1,153	L1	15.24	107	89.5	208-230/460	6.6	1
	1200	215T	TEFC	**EM3708T**	1,524	L1	19.77	154	89.5	208-230/460	7.3	1
		215T	TEFC	**EM3768T**	1,788	L1	18.45	195	89.5	208-230/460	7.4	1
	900	254T	TEFC	**M2280T**	3,159	L1	22.83	229	85.5	208-230/460	8.3	1

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Hp	RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
7 1/2	3600	184T	TEFC	**EM3616T**	1,290	L1	18.05	98	89.5	208-230/460	8.4	1
		213T	TEFC	**EM3709T**	1,465	L1	17.89	116	89.5	208-230/460	9	1
		213T	TEFC	**EM3769T**	1,561	L1	18.45	165	89.5	208-230/460	9	1, 30
	1800	213T	TEFC	**EM3710T**	1,326	LS	19.02	128	91.7	230/460	9.4	1, 30
		213T	TEFC	**EM3770T**	1,504	L1	18.45	170	91.7	230/460	9.5	1, 30
	1200	254T	TEFC	**EM2276T**	2,549	L1	23.28	278	91	230/460	10.7	2, 30
	900	256T	TEFC	**M2401T**	3,483	L1	23.28	270	85.5	208-230/460	14	1
10	3600	215T	TEFC	**EM3711T**	1,485	L1	17.89	120	90.2	208-230/460	11.8	1
		215T	TEFC	**EM3771T**	1,830	L1	18.45	182	90.2	230/460	11.8	1, 30
	1800	215T	TEFC	**EM3714T**	1,497	LS	20.52	162	91.7	208-230/460	12	1
		215T	TEFC	**EM3774T**	1,687	L1	18.45	191	91.7	230/460	12.2	1, 30
	1200	256T	TEFC	**EM2332T**	2,909	L1	23.28	290	91	230/460	14.4	1, 30
	900	284T	TEFC	**M2402T**	4,044	L1	27.76	365	88.5	230/460	13.9	1, 30
15	3600	215T	TEFC	**EM3713T**	2,095	L1	20.52	169	91	208-230/460	17	1
		254T	TEFC	**EM2394T**	2,520	L1	23.28	241	91	230/460	17.5	1, 30
	1800	254T	TEFC	**EM2333T**	2,306	LS	23.28	270	92.4	230/460	18.1	1, 30
	1200	284T	TEFC	**EM4100T**	3,880	L1	27.76	391	91.7	230/460	21	1, 30
	900	286T	TEFC	**M2395T**	5,624	L1	27.76	400	88.5	230/460	21.1	1, 30
20	3600	256T	TEFC	**EM4106T**	2,766	L1	23.28	259	91	230/460	23	1, 30
	1800	256T	TEFC	**EM2334T-12**	2,865	L1	23.28	291	93	230/460	23	1, 30
		256T	TEFC	**EM2334T**	2,796	LS	23.28	289	93	230/460	24	1, 30
	1200	286T	TEFC	**EM4102T**	5,166	L1	27.76	399	91.7	208-230/460	27	1
	900	324T	TEFC	**M4112T**	6,395	L1	30.28	537	89.5	208-230/460	34.1	1
25	3600	256T	TEFC	**EM4118T**	3,226	L1	23.28	305	91.7	230/460	27	1
		284TS	TEFC	**EM4107T**	3,609	L1	24.70	327	91.7	230/460	29	1, 30
	1800	284T	TEFC	**EM4103T**	3,657	LS	27.76	436	93.6	230/460	30	1, 30
		284T	TEFC	**EM4103T-12**	3,742	L1	27.56	600	93.6	230/460	30	1, 25, 30
	1200	324T	TEFC	**EM4111T**	5,845	L1	30.39	445	93	230/460	32	1, 30
	900	326T	TEFC	**M4116T**	7,899	L1	30.28	530	89.5	230/460	37	1
30	3600	286TS	TEFC	**EM4108T**	4,288	L1	24.70	347	91.7	230/460	34	1, 30
	1800	286T	TEFC	**EM4104T**	4,338	LS	27.76	408	93.6	230/460	38	1, 30
		286T	TEFC	**EM4104T-12**	4,356	L1	27.76	425	93.6	230/460	36	1, 25
	1200	326T	TEFC	**EM4117T**	6,753	L1	30.28	604	93	230/460	39	1, 30
	900	364T	TEFC	**M4338T**	8,784	L1	32.84	736	91	230/460	44	1, 30
40	3600	324TS	TEFC	**EM4109T**	5,877	L1	28.78	528	92.4	230/460	46	1, 30
	1800	324T	TEFC	**EM4110T**	5,673	LS	30.28	578	94.1	230/460	48	1, 30
		324T	TEFC	**EM4110T-12**	5,808	L1	30.28	601	94.1	230/460	48	1, 25, 30
	1200	364T	TEFC	**EM4308T**	8,414	L1	33.48	899	94.1	230/460	49.4	1, 30
	900	364T	TEFC	**M4348T**	10,895	L1	33.44	787	91.7	230/460	53.8	1, 30
50	3600	326TS	TEFC	**EM4114T**	6,429	L1	28.78	578	93	208-230/460	56	1
	1800	326T	TEFC	**EM4115T**	6,199	LS	30.28	642	94.5	208-230/460	58	1
		326T	TEFC	**EM4115T-12**	6,338	L1	30.28	652	94.5	230/460	58	1, 25
		326TS	TEFC	**EM4115TS**	6,281	L1	28.78	639	94.5	230/460	58	1
	1200	365T	TEFC	**EM4312T**	10,167	L1	33.48	902	94.1	230/460	61.7	1, 30
	900	405T	TEFC	**M4458T**	13,379	L1	38.04	1095	92.4	230/460	66.2	1
60	3600	364TS	TEFC	**EM4310T**	9,032	L1	31.36	810	95	230/460	65.1	1, 30
	1800	364T	TEFC	**EM4314T**	8,919	LS	33.48	912	95	230/460	67.8	1, 30
		364T	TEFC	**EM4314T-12**	9,136	L1	33.48	850	95	230/460	68	1, 25
		364TS	TEFC	**EM4314TS**	8,938	L1	31.31	907	95	230/460	68	1
	1200	404T	TEFC	**EM4403T**	12,341	L1	38.45	1187	95	230/460	69	1, 30
	900	405T	TEFC	**M4468T**	15,451	L1	38.31	1106	91.7	230/460	77	1
75	3600	365TS	TEFC	**EM4313T**	10,507	L1	31.36	980	94.5	230/460	80.7	1, 30
	1800	365T	TEFC	**EM4316T**	10,429	LS	33.48	955	95.4	230/460	84.9	1, 30
		365T	TEFC	**EM4316T-12**	10,695	L1	33.48	955	95.4	230/460	85.9	1, 25
		365TS	TEFC	**EM4316TS**	10,451	L1	31.31	946	95.4	230/460	85.9	1
	1200	405T	TEFC	**EM4404T**	14,371	L1	38.20	1229	94.5	230/460	86.8	1, 30

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Hp	RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
100	3600	405TS	TEFC	**EM4402T-4**	13,434	L1	35.04	1187	95	460	110	1, 25
	1800	405T	TEFC	**EM4400T**	12,952	LS	38.45	1203	95.4	230/460	112	1
		405T	TEFC	**EM4400T-12**	12,954	L1	38.45	1211	95.4	230/460	112	1, 25
		405TS	TEFC	**EM4400TS**	12,978	L1	35.44	1206	95.4	230/460	112	1
	1200	444T	TEFC	**EM4409T-4**	17,345	L1	44.75	1828	95	460	119	1
125	3600	444TS	TEFC	**EM4412T-4**	16,605	L1	40.83	1901	95	460	137	1
		444TS	TEFC	**EM4912T-4**	16,605	L1	40.98	1539	95	460	137	1, 99
	1800	444T	TEFC	**EM4410T-4**	16,033	LS	44.75	1969	95.4	460	144	1
		444TS	TEFC	**EM4410TS-4**	16,066	L1	44.75	2001	95.4	460	144	1
		444TS	TEFC	**EM4910TS-4**	16,066	L1	40.98	2080	95.4	460	144	1, 99
		444T	TEFC	**EM4410TR-4**	17,261	L1	44.75	1988	95.4	460	144	1, 5
	1200	445T	TEFC	**EM4411T-4**	20,405	L1	44.75	2073	95	460	146	1, 25
		445T	TEFC	**EM4911T-4**	20,405	L1	44.75	1874	95	460	146	1, 99, 25
150	3600	445TS	TEFC	**EM4413T-4**	19,538	L1	40.83	1995	95	460	164	1
	1800	445T	TEFC	**EM4406T-4**	18,443	LS	44.75	1826	95.8	460	169	1, 25
		445TS	TEFC	**EM4406TS-4**	18,481	L1	40.98	2071	95.8	460	169	1
		445T	TEFC	**EM4906T-4**	18,443	LS	44.75	2169	95.8	460	169	1, 25, 99
		445T	TEFC	**EM4406TR-4**	19,708	L1	44.75	1826	95.8	460	169	1, 5
	1200	447T	TEFC	**EM44156T-4**	23,372	L1	48.24	2571	95.8	460	170	1, 25
		447T	TEFC	**EM49156T-4**	23,372	L1	48.24	2000	95.8	460	170	1, 99, 25
200	3600	447TS	TEFC	**EM4416T-4**	23,416	L1	44.48	2355	95.4	460	213	1
		447TS	TEFC	**EM4916T-4**	23,416	L1	44.48	2330	95.4	460	213	1, 99
	1800	447T	TEFC	**EM4407T-4**	23,119	L1	48.24	2497	96.2	460	223	1
		447T	TEFC	**EM4407T-4E**	23,119	L1	48.4	2308	96.2	460	221	1, 56
		447TS	TEFC	**EM4407TS-4**	23,119	L1	44.48	2487	96.2	460	223	1
		447T	TEFC	**EM4907T-4**	23,119	L1	48.24	2517	96.2	460	223	1, 99
		447T	TEFC	**EM4407TR-4**	23,184	L1	48.24	2531	96.2	460	223	1, 5
	1200	449T	TEFC	**EM44206T-4**	28,836	L1	53.24	3017	95.8	460	225	1
		449T	TEFC	**EM49206T-4**	28,836	L1	53.24	3017	95.8	460	225	1, 99
250	3600	449TS	TEFC	**M44252T-4**	31,880	L1	49.48	2569	95.4	460	266	1
	1800	447T	TEFC	**M4408T-4**	26,362	L1	48.24	2477	95	460	286	1, 25
		447T	TEFC	**M4408T-4E**	26,362	L1	48.4	2240	95.4	460	278	1, 25, 56
		447T	TEFC	**M4408TR-4**	26,362	L1	48.24	2510	95	460	286	1, 5, 64
		447TS	TEFC	**M4408TS-4**	26,362	L1	44.48	2449	95	460	286	1, 25
		447T	TEFC	**M4908T-4**	26,362	L1	48.24	2545	95	460	286	1, 25, 99
		447T	TEFC	**M4908TR-4**	26,362	L1	48.24	2510	95	460	286	1, 5, 64, 99
		447TS	TEFC	**M4908TS-4**	26,362	L1	44.48	2500	95	460	286	1, 25, 99
	1200	449T	TEFC	**M44256T-4**	36,660	L1	53.24	2717	95	460	292	1, 25
300	3600	449TS	TEFC	**M44302T-4**	48,699	L1	49.48	2743	95.4	460	324	1
		449TS	TEFC	**M49302T-4**	48,699	L1	49.48	2798	95.4	460	324	1, 99
	1800	449T	TEFC	**M44304T-4**	39,242	L1	53.24	2863	95.4	460	336	1, 25
		449TS	TEFC	**M44304TS-4**	39,242	L1	49.48	2838	95.4	460	336	1, 25
	1200	449T	TEFC	**M44306T-4**	46,794	L1	53.24	2826	95	460	350	1
350	3600	449TS	TEFC	**M44352T-4**	56,256	L1	49.48	2922	95.4	460	370	1, 25
	1800	449T	TEFC	**M44354T-4**	43,600	L1	53.24	2995	95.4	460	392	1, 25
		449TS	TEFC	**M44354TS-4**	43,600	L1	49.48	3130	95.4	460	392	1, 25
		449T	TEFC	**M49354T-4**	43,600	L1	53.24	3026	95.4	460	392	1, 25, 99
		449TS	TEFC	**M49354TS-4**	43,600	L1	49.48	3130	95.4	460	392	1, 25, 99
400	3600	449TS	TEFC	**M44402T-4**	68,390	L1	49.48	2994	95.4	460	423	1, 25
	1800	449T	TEFC	**M44404T-4**	57,021	L1	53.24	3041	95.4	460	448	1, 25

[a] See notes on the last page of this catalog.

Cast Iron Frame

Custom TEFC motors available through 2,250 Hp; Open and WPII custom motors through 15,000 Hp. Contact your ABB Sales Representative.

For Super-E® designs larger than 200 Hp, please see Severe Duty section or contact your ABB representative for a custom design.

Three Phase, Totally Enclosed, C-Face, Foot Mounted

1/4 thru 100 Hp NEMA 56C thru 405TC

Applications: Pumps, fans, conveyors, machine tools, gear reducers and other applications requiring a NEMA C-face motor.

Features: Super-E® motors have NEMA Premium® efficiency and 3 year warranty.

Hp	RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1/4	1800	56C	TENV	**CNM3454/35**	524	K	11.06	31	80	230/460	0.4	1, 30, 48
	1200	56C	TENV	**CNM3531**	666	K	11.06	31	68	208-230/460	0.5	13
1/3	3600	56C	TENV	**CNM3457**	385	K	10.25	21	72	208-230/460	0.7	
	1800	56C	TEFC	**CM3534**	377	LS	11.35	21	68	230/460	0.8	13, 30
1/2	3600	56C	TEFC	**CM3537**	392	K	11.35	20	68	230/460	1	12, 30
	1800	56C	TEFC	**CM3538**	417	LS	11.35	23	74	230/460	1	12, 30
		56C	TENV	**CNM3538/35**	536	K	11.06	28	80	230/460	0.8	1, 30, 48
	1200	56C	TEFC	**CM3539**	612	K	11.35	23	72	230/460	1.2	12, 30
		56C	TENV	**CNM3539**	654	K	12.07	40	78.5	230/460	1	30
3/4	3600	56C	TEFC	**CM3541**	428	K	11.35	22	74	230/460	1.3	12, 30
	1800	56C	TEFC	**CM3542**	443	LS	11.35	26	75.5	208-230/460	1.5	12
		56C	TENV	**CNM3542**	481	K	11.07	31	78.5	230/460	1.4	30
	1200	56C	TEFC	**CM3543**	624	K	12.85	33	77	208-230/460	1.5	
1	3600	56C	TEFC	**CEM3545**	667	K	12.25	33	77	230/460	1.4	1, 12, 30
		56C	TEFC	**CM3545**	498	K	11.35	24	75.5	230/460	1.8	12, 30
	1800	56C	TEFC	**CEM3546**	672	K	12.23	36	85.5	208-230/460	1.5	1
		56C	TEFC	**CM3546**	476	K	12.00	31	78.5	208-230/460	1.7	
		56C	TENV	**CNM3546**	549	K	12.06	40	85.5	208-230/460	1.5	
		143TC	TEFC	**CEM3546T**	741	LS	13.29	36	85.5	208-230/460	1.5	1
		143TC	TEFC	**CEM3581T**	972	L1	13.03	54	85.5	208-230/460	1.5	1
	1200	56C	TEFC	**CM3556**	634	K	12.23	35	78.5	208-230/460	1.9	
		143TC	TEFC	**CEM3556T**	925	L1	13.29	43	82.5	208-230/460	1.8	1
1 1/2	3600	56C	TEFC	**CEM3550**	706	K	13.25	37	84	208-230/460	1.9	
		56C	TEFC	**CM3550**	541	K	12.35	30	80	208-230/460	2.3	
		143TC	TEFC	**CEM3550T**	763	L1	13.29	40	84	208-230/460	1.9	1
		143TC	TEFC	**CEM3583T**	1,073	L1	13.03	55	84	208-230/460	1.9	1
	1800	56C	TEFC	**CEM3554**	742	K	13.23	45	86.5	208-230/460	2.2	1
		56C	TEFC	**CM3554**	518	K	12.23	35	81.5	208-230/460	2.3	
		145TC	TEFC	**CEM3554T**	769	LS	13.29	42	86.5	208-230/460	2.2	1
		145TC	TEFC	**CEM3584T**	1,005	L1	13.03	60	86.5	208-230/460	2.3	1
	1200	56C	TEFC	**CM3557**	723	K	14.10	46	80	208-230/460	2.5	2, 20
		182TC	TEFC	**CEM3607T**	1,072	L1	16.55	77	87.5	208-230/460	2.4	1
2	3600	56C	TEFC	**CEM3555**	773	K	13.25	46	85.5	208-230/460	2.5	1
		56C	TEFC	**CM3555**	605	K	12.85	33	80	208-230/460	2.9	
		56C	TEFC	**CM3555/35**	679	K	13.25	43	84	208-230/460	2.6	1, 48
		145TC	TEFC	**CEM3555T**	831	L1	13.29	44	85.5	208-230/460	2.5	1
		145TC	TEFC	**CEM3586T**	1,076	L1	13.03	60	85.5	208-230/460	2.5	1
	1800	56C	TEFC	**CEM3558**	784	K	14.10	46	86.5	208-230/460	2.9	1
		56C	TEFC	**CM3558**	555	K	13.23	40	82.5	208-230/460	3	
		145TC	TEFC	**CEM3558T**	796	LS	14.17	46	86.5	208-230/460	2.9	1
		145TC	TEFC	**CEM3587T**	1,052	L1	13.03	62	86.5	208-230/460	2.9	1
	1200	184TC	TEFC	**CEM3614T**	1,106	L1	18.05	97	88.5	208-230/460	3.5	1
		184TC	TEFC	**CEM3664T**	1,335	L1	16.00	115	88.5	208-230/460	3.2	1

[a] See notes on the last page of this catalog.

Cast Iron Frame

Three Phase, Totally Enclosed, C-Face, Foot Mounted

Hp	RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
3	3600	56C	TEFC	**CM3559**	699	K	13.25	45	82.5	208-230/460	3.8	1
		145TC	TEFC	**CEM3559T**	927	L1	14.17	52	86.5	208-230/460	3.6	1
		182TC	TEFC	**CEM3610T**	954	L1	15.18	50	86.5	208-230/460	3.6	1
		182TC	TEFC	**CEM3660T**	1,196	L1	16.00	90	86.5	208-230/460	3.8	1
	1800	182TC	TEFC	**CEM3611T**	912	LS	16.55	75	89.5	208-230/460	4.2	1
		182TC	TEFC	**CEM3661T**	1,226	L1	16.00	104	89.5	208-230/460	4.1	1
	1200	213TC	TEFC	**CEM3704T**	1,484	L1	19.76	141	89.5	208-230/460	4.6	1
		213TC	TEFC	**CEM3764T**	1,736	L1	19.20	173	89.5	208-230/460	4.5	1
5	3600	184TC	TEFC	**CEM3613T**	1,051	L1	16.55	78	88.5	230/460	5.9	1
		184TC	TEFC	**CEM3663T**	1,450	L1	16.00	91	88.5	208-230/460	6.3	1
	1800	184TC	TEFC	**CEM3615T**	991	LS	18.05	93	89.5	208-230/460	6.7	1
		184TC	TEFC	**CEM3665T**	1,252	L1	16.00	114	89.5	208-230/460	6.6	1
	1200	215TC	TEFC	**CEM3708T**	1,648	L1	20.51	161	89.5	208-230/460	7.3	1
		215TC	TEFC	**CEM3768T**	1,983	L1	19.20	190	89.5	208-230/460	7.4	1
7 1/2	3600	184TC	TEFC	**CEM3616T**	1,361	L1	18.05	101	89.5	208-230/460	8.4	1
		213TC	TEFC	**CEM3709T**	1,604	L1	18.63	120	89.5	208-230/460	9	1, 30
		213TC	TEFC	**CEM3769T**	1,759	L1	19.20	155	89.5	208-230/460	9	1, 30
	1800	213TC	TEFC	**CEM3710T**	1,460	LS	19.76	134	91.7	208-230/460	9.4	1
		213TC	TEFC	**CEM3770T**	1,703	L1	19.20	170	91.7	230/460	9.5	1, 30
10	3600	215TC	TEFC	**CEM3711T**	1,620	L1	18.63	121	90.2	208-230/460	11.8	1
		215TC	TEFC	**CEM3771T**	2,028	L1	19.20	182	90.2	230/460	11.8	1, 30
	1800	215TC	TEFC	**CEM3714T**	1,629	LS	21.26	165	91.7	208-230/460	12	1
		215TC	TEFC	**CEM3774T**	1,886	L1	19.20	195	91.7	230/460	12.2	1, 30
15	3600	215TC	TEFC	**CEM3713T**	2,229	L1	21.26	182	91	208-230/460	17	1
		254TC	TEFC	**CEM2394T**	3,119	L1	23.78	250	91	230/460	17.5	1, 30
	1800	254TC	TEFC	**CEM2333T**	3,239	LS	23.78	269	92.4	230/460	18.1	1, 30
20	3600	256TC	TEFC	**CEM4106T**	3,365	L1	23.78	265	91	230/460	23	1, 30
	1800	256TC	TEFC	**CEM2334T**	3,409	L1	23.78	298	93	230/460	24	1, 30
25	3600	284TSC	TEFC	**CEM4107T**	4,441	L1	24.71	346	91.7	230/460	27	1, 30
	1800	284TC	TEFC	**CEM4103T**	4,508	L1	27.76	463	93.6	230/460	30	1, 30
30	3600	284TSC	TEFC	**CEM4108T**	4,955	L1	26.39	389	91.7	208-230/460	33	1
	1800	286TC	TEFC	**CEM4104T**	5,194	L1	27.76	422	93.6	230/460	38	1, 30
40	3600	324TSC	TEFC	**CEM4109T**	6,763	L1	28.78	600	92.4	230/460	46	1, 30
	1800	324TC	TEFC	**CEM4110T**	6,619	L1	30.28	578	94.1	230/460	48	1, 30
50	3600	326TSC	TEFC	**CEM4114T**	7,314	L1	28.78	591	93	230/460	56	1, 30
	1800	326TC	TEFC	**CEM4115T**	7,148	L1	30.28	630	94.5	230/460	58	1, 30
60	3600	364TSC	TEFC	**CEM4310T**	9,998	L1	31.31	830	93.6	230/460	67.3	1
	1800	364TC	TEFC	**CEM4314T**	9,966	L1	33.44	915	95	230/460	68	1, 30
75	3600	365TSC	TEFC	**CEM4313T**	11,472	L1	31.31	905	93.6	230/460	83.4	1
	1800	365TC	TEFC	**CEM4316T**	11,485	L1	33.44	907	95.4	230/460	84.9	1, 30
100	1800	405TC	TEFC	**CEM4400T**	14,192	L1	38.32	1360	95.4	230/460	112	1, 30

[a] See notes on the last page of this catalog.

Custom TEFC motors available through 2,250 Hp; Open and WPII custom motors through 15,000 Hp. Contact your ABB Sales Representative.

Cast Iron Frame

Three Phase, Totally Enclosed, C-Face, Footless

1/4 thru 30 Hp

NEMA 56C thru 286TC

Applications: Pumps, fans, conveyors, machine tools, gear reducers and other applications requiring a NEMA C-face motor.

Features: Ball bearings with a locked drive end bearing and heavy-gauge steel or cast iron frame. Super-E® motors have NEMA Premium® efficiency and 3 year warranty.

Hp	RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1/4	1800	56C	TENV	**KENM3454**	513	K	11.06	26	80	230/460	0.4	30
		56C	TEFC	**KM3454**	329	K	11.35	19	64	230/460	0.65	12, 30
		56C	TENV	**KNM3454**	348	K	10.25	18	64	208-230/460	0.65	2, 20
	1200	56C	TEFC	**VM3531**	503	K	11.35	20	68	230/460	0.7	13, 30
1/3	3600	56C	TENV	**KM3457**	336	K	10.25	20	72	230/460	0.7	13, 30
		56C	TENV	**KNM3457/35**	541	K	11.07	29	78.5	230/460	0.5	1, 13, 30, 48
	1800	56C	TENV	**KENM3534**	566	K	11.06	33	80	230/460	0.55	1, 30, 48
		56C	TENV	**KNM3534**	385	K	10.25	23	70	208-230/460	0.7	2
		56C	TEFC	**VM3534**	356	LS	11.35	21	68	230/460	0.8	13, 30
	1200	56C	TENV	**KENM3535**	832	K	11.07	35	81.5	230/460	0.6	1, 30, 48
		56C	TEFC	**VM3535**	565	K	11.35	22	70	230/460	0.9	13, 30
1/2	3600	56C	TEFC	**VM3537**	386	K	11.35	20	68	230/460	1	12, 30
		56C	TENV	**VNM3537**	543	K	11.07	32	77	230/460	0.8	1, 12, 48
	1800	56C	TEFC	**VEM3538**	695	LS	12.23	31	82.5	230/460	0.77	1, 12, 30, 48
		56C	TENV	**VENM3538**	641	K	11.06	32	84	230/460	0.9	30
		56C	TEFC	**VM3538**	408	LS	11.35	23	74	230/460	1	12, 30
		56C	TENV	**VNM3538**	444	K	10.25	22	74	208-230/460	1	2, 20
	1200	56C	TEFC	**VM3539**	606	K	11.35	24	72	230/460	1.2	12, 30
3/4	3600	56C	TEFC	**VM3541**	422	K	11.35	21	74	230/460	1.3	12, 30
		56C	TENV	**VNM3541**	580	K	11.07	36	84	208-230/460	1	12, 48
	1800	56C	TEFC	**VEM3542**	738	LS	12.23	35	84	230/460	1.14	1, 12
		56C	TENV	**VENM3542**	700	L1	11.07	33	84	230/460	1.14	1, 30, 48
		56C	TEFC	**VM3542**	434	LS	11.35	26	75.5	208-230/460	1.5	12
		56C	TENV	**VNM3542**	450	K	11.75	31	75	230/460	1.3	12, 30
	1200	56C	TEFC	**VM3543**	620	K	12.85	32	77	208-230/460	1.5	
		143TC	TEFC	**VM3543T**	620	L1	13.41	33	77	208-230/460	1.5	
1	3600	56C	TEFC	**VEM3545**	663	K	12.24	32	77	230/460	1.4	1, 12, 30
		56C	TEFC	**VM3545**	494	K	11.35	23	75.5	230/460	1.8	12, 30
	1800	56C	TEFC	**VEM3546**	760	LS	12.23	36	85.5	208-230/460	1.5	1
		56C	TEFC	**VEM3581**	968	K	12.47	52	85.5	208-230/460	1.5	1
		56C	TEFC	**VM3546**	453	LS	12.00	31	78.5	208-230/460	1.7	
		56C	TENV	**VNM3546**	531	K	12.06	40	85.5	208-230/460	1.45	1, 48
		143TC	TEFC	**VEM3546T**	775	LS	12.29	36	85.5	208-230/460	1.5	1
		143TC	TEFC	**VEM3581T**	968	L1	13.03	54	85.5	208-230/460	1.5	1
		143TC	TENV	**VENM3546T**	706	L1	12.12	40	85.5	208-230/460	1.45	1, 48
		143TC	TENV	**VENM3581T**	1,011	L1	11.36	56	85.5	208-230/460	1.45	1, 48
		143TC	TEFC	**VM3546T**	551	LS	12.29	34	82.5	208-230/460	1.56	
	1200	56C	TEFC	**VEM3556**	861	K	13.23	43	82.5	208-230/460	1.8	1
		56C	TEFC	**VM3556**	632	K	12.23	36	78.5	208-230/460	1.9	
		145TC	TEFC	**VM3556T**	742	L1	13.39	41	80	208-230/460	1.82	
1 1/2	3600	56C	TEFC	**VEM3550**	699	K	12.24	35	84	208-230/460	1.9	1
		56C	TEFC	**VM3550**	537	K	11.97	30	80	208-230/460	2.3	
		143TC	TEFC	**VM3550T**	623	L1	12.29	37	82.5	208-230/460	2.1	
	1800	56C	TEFC	**VEM3554**	845	LS	13.23	42	86.5	208-230/460	2.2	1
		56C	TEFC	**VM3554**	509	LS	12.23	36	81.5	208-230/460	2.3	
		145TC	TEFC	**VEM3554T**	809	LS	13.29	41	86.5	208-230/460	2.2	1
		145TC	TEFC	**VEM3584T**	970	L1	13.03	60	86.5	208-230/460	2.3	1
		145TC	TEFC	**VM3554T**	561	LS	13.29	38	84	208-230/460	2.4	
	1200	56C	TEFC	**VM3557**	722	K	14.10	48	80	208-230/460	2.45	2, 20
		145TC	TEFC	**VM3557T**	775	L1	15.56	63	85.5	208-230/460	2.7	2, 20

[a] See notes on the last page of this catalog. Cast Iron Frame

Three Phase, Totally Enclosed, C-Face, Footless

Hp	RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
2	3600	56C	TEFC	**VEM3555**	767	K	13.24	43	85.5	208-230/460	2.5	1
		56C	TEFC	**VM3555**	598	K	12.85	33	80	208-230/460	2.9	
		143TC	TEFC	**VM3555T**	710	L1	13.29	43	84	208-230/460	2.6	
	1800	56C	TEFC	**VEM3558**	891	LS	13.23	46	86.5	208-230/460	2.9	1
		56C	TEFC	**VM3558**	546	LS	13.23	41	82.5	208-230/460	3	
		145TC	TEFC	**VEM3558T**	832	LS	13.29	47	86.5	208-230/460	2.9	1
		145TC	TEFC	**VEM3587T**	1,045	L1	13.03	59	86.5	208-230/460	2.9	1
		145TC	TEFC	**VM3558T**	589	LS	13.29	41	84	208-230/460	3.1	
	1200	184TC	TEFC	**VM3614T**	938	L1	16.55	75	86.5	208-230/460	3.4	
		184TC	TEFC	**VM3664T**	1,213	L1	15.98	100	86.5	208-230/460	3.3	1
3	3600	56C	TEFC	**VM3559**	693	K	13.23	46	82.5	208-230/460	3.8	1
		145TC	TEFC	**VM3559T**	810	L1	14.17	48	85.5	208-230/460	3.7	1
		182TC	TEFC	**VEM3610T**	938	L1	15.18	50	86.5	208-230/460	3.6	1
		182TC	TEFC	**VM3610T**	887	L1	15.18	53	85.5	208-230/460	3.7	1
	1800	56C	TEFC	**VM3561**	726	K	14.10	51	85.5	208-230/460	4.1	1
		145TC	TEFC	**VM3561T**	784	L1	15.56	60	87.5	208-230/460	4.2	1
		182TC	TEFC	**VEM3611T**	958	LS	16.55	73	89.5	208-230/460	4.2	1
		182TC	TEFC	**VEM3661T**	1,209	L1	16.00	98	89.5	208-230/460	4.1	1
		182TC	TEFC	**VM3611T**	711	LS	16.55	63	87.5	208-230/460	4.2	1
		182TC	TEFC	**VM3661T**	1,146	L1	15.98	96	87.5	208-230/460	4.4	1
	1200	213TC	TEFC	**VM3704T**	1,230	L1	18.63	109	87.5	208-230/460	4.6	1
5	3600	184TC	TEFC	**VEM3613T**	1,035	L1	16.55	75	88.5	230/460	5.9	1
		184TC	TEFC	**VM3613T**	1,010	L1	16.55	70	87.5	208-230/460	5.8	1
		184TC	TEFC	**VM3663T**	1,389	L1	15.99	90	87.5	208-230/460	5.9	1
	1800	184TC	TEFC	**VEM3615T**	1,051	LS	18.05	88	89.5	208-230/460	6.7	1
		184TC	TEFC	**VEM3665T**	1,237	L1	16.00	109	89.5	208-230/460	6.6	1
		184TC	TEFC	**VM3615T**	814	LS	16.55	77	87.5	208-230/460	6.8	1
		184TC	TEFC	**VM3665T**	1,163	L1	15.98	100	87.5	208-230/460	6.9	1
	1200	215TC	TEFC	**VM3708T**	1,455	L1	19.76	129	87.5	208-230/460	7.5	1
7 1/2	3600	184TC	TEFC	**VM3616T**	1,215	L1	18.05	88	88.5	208-230/460	8.7	2, 20
		213TC	TEFC	**VM3709T**	1,527	L1	18.56	93	88.5	208-230/460	8.7	1
	1800	213TC	TEFC	**VEM3710T**	1,438	L1	19.76	129	91.7	208-230/460	9.4	1
		213TC	TEFC	**VEM3770T**	1,680	L1	19.20	170	91.7	230/460	9.5	1, 30
		213TC	TEFC	**VM3710T**	1,086	LS	18.63	114	89.5	208-230/460	10.1	1
		213TC	TEFC	**VM3770T**	1,609	L1	19.25	164	89.5	208-230/460	10.3	1
10	3600	215TC	TEFC	**VM3711T**	1,588	L1	18.63	114	89.5	208-230/460	12	1
	1800	215TC	TEFC	**VEM3714T**	1,607	L1	21.26	165	91.7	208-230/460	12	1
		215TC	TEFC	**VEM3774T**	1,864	L1	19.20	197	91.7	230/460	12.2	1, 30
		215TC	TEFC	**VM3714T**	1,293	LS	19.76	131	89.5	208-230/460	13.5	1, 20
		215TC	TEFC	**VM3774T**	1,717	L1	19.25	169	89.5	208-230/460	13	1
	1200	256TC	TEFC	**VM2332T**	2,685	L1	23.80	283	89.5	230/460	14.4	1, 30
15	3600	215TC	TEFC	**VM3713T**	1,983	L1	20.51	160	90.2	208-230/460	17.3	2, 20
		254TC	TEFC	**VM2394T**	2,779	L1	20.32	225	90.2	208-230/460	17.2	1
	1800	254TC	TEFC	**VM2333T**	2,515	LS	23.32	236	91	208-230/460	18.5	1
20	3600	256TC	TEFC	**VM4106T**	3,009	L1	23.32	255	90.2	208-230/460	23	1
	1800	256TC	TEFC	**VM2334T**	2,944	LS	23.32	240	91	230/460	25	1, 30
25	3600	284TSC	TEFC	**VM4107T**	3,862	L1	22.40	300	91	230/460	28	1, 30
	1800	284TC	TEFC	**VM4103T**	3,693	LS	23.65	322	92.4	230/460	30	1, 30
30	3600	286TSC	TEFC	**VM4108T**	4,139	L1	22.40	313	91	208-230/460	34	1
	1800	286TC	TEFC	**VM4104T**	3,765	LS	27.76	418	92.4	230/460	37	1, 30

[a] See notes on the last page of this catalog.

Cast Iron Frame

Small Motor Rule, Three Phase, Open Drip Proof, Foot Mounted

1/4 thru 3 Hp NEMA 48 thru 56H

Applications: Pumps, compressors, fans, conveyors, machine tools and other general purpose three phase applications.

Features: Compliant with U.S. Department Of Energy Small Motor Rule 2010. These Super-E® motors comply with DOE Average Efficiency and have a 3 year warranty.

Note: Required for compliance after March 9, 2015.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1/4	1800	48	**EM30003**	427	K	9.62	21	69.5	230/460	0.5	30
	1200	56	**EM31101**	472	K	10.25	24	67.5	230/460	0.7	30
1/3	3600	48	**EM30006**	448	K	9.62	22	69.5	230/460	0.6	30
	1800	56	**EM31104**	451	K	10.25	24	73.4	230/460	0.7	30
	1200	56	**EM31105**	494	K	10.88	27	71.4	230/460	0.9	30
1/2	3600	48	**EM30009**	482	K	9.62	24	73.4	230/460	0.8	30
		56	**EM31107**	482	K	10.25	24	73.4	230/460	0.8	30
	1800	48	**EM30010**	497	K	11.12	31	78.2	230/460	0.8	30
		56	**EM31108**	497	K	11.75	31	78.2	230/460	0.8	30
	1200	56	**EM31109**	543	K	11.75	34	75.3	230/460	1	30
3/4	3600	56	**EM31111**	480	K	10.25	24	76.8	230/460	1.2	30
	1800	56	**EM31112**	547	K	11.07	35	81.5	230/460	1	
	1200	56	**EM31153**	668	K	12.07	39	81.7	230/460	1.3	
1	3600	56	**EM31115**	492	K	10.88	27	77	230/460	1.6	1
	1800	56	**EM31116**	576	K	11.07	37	83.5	230/460	1.45	
	1200	56H	**EM31156**	842	K	11.75	41	82.5	230/460	1.8	36
1 1/2	3600	56	**EM31120**	508	K	11.07	34	84	230/460	2	
	1800	56	**EM31154**	631	K	12.07	41	86.5	230/460	2.2	
	1200	56/56H	**EM31159**	810	K	14.00	54	84	230/460	2.6	36
2	3600	56	**EM31155**	572	K	12.07	43	85.5	230/460	2.6	
	1800	56H	**EM31157**	662	K	11.75	45	86.5	230/460	2.9	36
3	3600	56/56H	**EM31158**	641	K	12.63	50	85.5	230-460	3.7	36

[a] See notes on the last page of this catalog.

Three Phase, Open Drip Proof, Foot Mounted

1/4 thru 450 Hp NEMA 48 thru 449T

Applications: Pumps, compressors, fans, conveyors, machine tools and other general purpose three phase applications.

Features: Copper windings, ball bearings and heavy duty steel or cast iron frames. Super-E® motors have NEMA Premium® efficiency and 3 year warranty.

Note: Non-compliant small motors may not be manufactured after March 9, 2015. Pre-existing inventory may be sold or used. Contact local sales representative for new compliant motors.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1/4	1800	48	**M3003**	292	K	9.13	18	64	230/460	0.7	13, 30, 98
	1200	48	**M3004**	472	K	9.13	19	68	230/460	0.7	13, 30, 98
		56	**M3101**	472	K	9.50	19	68	230/460	0.7	13, 30, 98
1/3	3600	48	**M3006**	296	K	9.13	19	72	230/460	0.7	13, 30, 98
	1800	48	**M3007**	313	K	9.13	20	68	230/460	0.8	13, 30, 98
		56	**M3104**	300	LS	9.50	20	68	230/460	0.8	13, 30, 98
	1200	48	**M3008**	462	K	9.13	21	70	230/460	0.9	13, 30, 98
		56	**M3105**	494	K	10.25	21	70	230/460	0.9	13, 30, 98
1/2	3600	48	**M3009**	313	K	9.13	18	68	230/460	1	12, 30, 98
		56	**M3107**	313	K	9.50	19	68	230/460	1	12, 30, 98
	1800	48	**M3010**	393	K	9.13	22	74	230/460	1	12, 30, 98
		56	**M3108**	341	LS	9.50	22	74	230/460	1	12, 30, 98
		56	**M3108A**	464	K	10.25	22	74	230/460	1	12, 30, 96
	1200	48	**M3011**	511	K	9.38	23	72	230/460	1.2	12, 30, 98
		56	**M3109**	543	K	11.25	22	72	230/460	1.2	12, 30, 98
	900	56	**M3160**	825	K	12.07	38	70	208-230/460	1.3	
3/4	3600	48	**M3012**	376	K	9.13	20	74	230/460	1.3	12, 30, 98
		56	**M3111**	368	K	9.50	20	74	230/460	1.3	12, 30, 98
	1800	48	**M3013**	437	K	9.75	25	75.5	208-230/460	1.5	12, 98
		56	**M3112**	381	LS	10.12	26	75.5	208-230/460	1.5	12, 98
		56	**M3112A**	507	K	11.25	26	74	230/460	1.5	12, 30, 96
	1200	56	**M3153**	586	K	12.25	31	77	208-230/460	1.5	98
		143T	**M3153T**	586	L1	12.32	33	77	208-230/460	1.5	
1	3600	56	**EM3115**	548	K	11.06	28	80	208-230/460	1.5	1, 12
		56	**M3115**	426	K	9.50	23	75.5	230/460	1.8	12, 30, 98
	1800	56	**M3116**	429	LS	11.75	28	78.5	208-230/460	1.7	98
		56	**M3116A**	564	K	11.75	28	78.5	208-230/460	2	96
		143T	**EM3116T**	711	LS	11.12	34	85.5	208-230/460	1.5	1
	1200	56/56H	**M3156**	623	K	11.75	36	77	208-230/460	1.7	36, 98
		145T	**EM3156T**	727	L1	11.62	36	82.5	208-230/460	1.8	1
	900	182T	**M3216T**	1,036	L1	13.62	60	74	208-230/460	2.2	30
1 1/2	3600	56	**M3120**	476	K	11.00	29	80	208-230/460	2.3	98
		143T	**EM3120T**	612	L1	11.12	33	84	208-230/460	2	1
	1800	56	**M3154**	496	LS	12.25	34	77	208-230/460	2.8	98
		56	**M3154A**	563	K	11.07	34	81.5	208-230/460	2.3	98
		145T	**EM3154T**	743	LS	11.62	37	86.5	230/460	2.2	1, 30
	1200	56/56H	**M3159**	708	K	11.75	41	75.5	230/460	2.5	36, 98
		182T	**EM3207T**	851	L1	15.00	66	86.5	208-230/460	2.5	1
	900	184T	**M3220T**	1,259	L1	15.00	68	75.5	208-230/460	3	1
2	3600	56	**M3155**	555	K	11.00	31	80	208-230/460	2.9	98
		143T	**EM3155T**	718	L1	11.62	41	85.5	208-230/460	2.5	1
	1800	145T	**EM3157TA**	825	L1	12.13	44	86.5	208-230/460	2.9	
		56/56H	**M3157**	517	LS	11.75	38	80	208-230/460	3.07	36, 98
		145T	**EM3157T**	796	LS	12.12	40	86.5	230/460	2.9	1
	1200	184T	**EM3215T**	870	L1	16.50	79	87.5	208-230/460	3.4	1
	900	213T	**M3303T**	1,554	L1	16.32	112	85.5	208-230/460	3.5	

[a] See notes on the last page of this catalog.

Three Phase, Open Drip Proof, Foot Mounted

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
3	3600	56/56H	**M3158**	572	K	11.75	41	80	208-230/460	4	36, 98
		145T	**EM3158T**	727	L1	13.00	46	85.5	230/460	3.8	1, 30
	1800	182T	**EM3211T**	858	LS	15.00	69	89.5	230/460	4.2	1, 30
		182T	**EM3211TA**	967	L1	15.00	65	89.5	208-230/460	4.4	1
	1200	213T	**EM3305T**	1,107	L1	16.32	119	88.5	208-230/460	4.5	1, 30
	900	215T	**M3306T**	1,791	L1	17.45	137	86.5	208-230/460	5.2	
5	3600	182T	**EM3212T**	794	L1	13.62	61	86.5	208-230/460	6	1
	1800	184T	**EM3218T**	940	LS	16.50	84	89.5	208-230/460	6.6	1
		184T	**EM3218TA**	1,023	L1	16.50	84	89.5	208-230/460	6.6	1
	1200	215T	**EM3309T**	1,451	L1	17.45	139	89.5	208-230/460	7.4	1
	900	254T	**M2504T**	2,503	L1	21.69	220	87.5	230/460	8	
7 1/2	3600	184T	**EM3219T**	1,259	L1	15.00	74	88.5	208-230/460	8.6	1
	1800	213T	**EM3311T**	1,381	LS	16.32	115	91	208-230/460	9.7	1
	1200	254T	**EM2506T**	1,739	L1	23.19	239	90.2	230/460	11	1, 30
	900	256T	**M2508T**	3,133	L1	23.19	232	88.5	208-230/460	12.7	1
10	3600	213T	**EM3312T**	1,440	L1	16.32	121	89.5	208-230/460	12	1
	1800	215T	**EM3313T**	1,672	LS	17.45	128	91.7	230/460	12.5	1, 30
	1200	256T	**EM2511T**	2,263	L1	23.19	255	91.7	230/460	14.3	1, 30
15	3600	215T	**EM3314T**	2,045	L1	16.32	124	90.2	230/460	17.5	1, 30
	1800	254T	**EM2513T**	2,367	LS	21.69	211	93	230/460	17.7	1, 30
		254T	**EM2513T-CI**	2,253	L1	20.63	238	93	230/460	17.8	1, 30
	1200	284T	**EM2524T**	3,051	L1	23.81	278	91.7	230/460	20.5	1, 30
20	3600	254T	**EM2514T**	2,402	L1	21.69	191	91	230/460	23.5	1, 30
	1800	256T	**EM2515T**	2,597	L1	21.69	225	93	230/460	23.5	1, 30
		256T	**EM2515T-12**	2,647	L1	21.69	225	93	230/460	23.5	1, 25, 30
		256T	**EM2515T-CI**	2,831	L1	22.38	281	93	230/460	24	1, 30
	1200	286T	**EM2528T**	3,713	L1	23.81	302	92.4	230/460	27	1, 30
25	3600	256T	**EM2516T**	2,884	L1	21.69	222	91.7	230/460	28	1, 30
	1800	284T	**EM2531T**	3,166	L1	25.06	327	93.6	230/460	30	1, 30
		284T	**EM2531T-12**	3,227	L1	25.06	307	93.6	230/460	30	1, 25, 30
		284T	**EM2531T-CI**	3,451	L1	23.44	382	93.6	230/460	31	1, 30
	1200	324T	**EM2532T**	4,485	L1	27.69	411	93	208-230/460	34	1
30	3600	284TS	**EM2534T**	3,404	L1	22.44	308	91.7	208-230/460	35	1
	1800	286T	**EM2535T**	3,462	L1	25.06	336	94.1	230/460	35	1, 30
		286T	**EM2535T-12**	3,532	L1	25.06	339	94.1	230/460	35	1, 25, 30
		286T	**EM2535T-CI**	3,773	L1	24.94	340	94.1	230/460	35	1, 30
	1200	326T	**EM2536T**	4,678	L1	28.69	463	93.6	230/460	38	1, 30
40	3600	286TS	**EM2538T**	4,385	L1	22.44	329	92.4	208-230/460	46	1
		286TS	**EM2538T-CI**	4,780	L1	23.57	402	92.4	208-230/460	46	1
	1800	324T	**EM2539T**	4,516	L1	27.19	392	94.1	230/460	49	1, 30
		324T	**EM2539T-12**	4,606	L1	27.19	397	94.1	230/460	47	1, 25, 30
		324T	**EM2539T-CI**	4,923	L1	26.13	538	94.1	230/460	46	1, 30
	1200	364T	**EM2540T**	6,327	L1	29.81	598	94.1	230/460	51	1, 30
		364T	**EM2540T-CI**	6,664	L1	29.70	801	94.1	230/460	49.4	1, 30
50	3600	324TS	**EM2542T**	4,776	L1	25.69	394	93	208-230/460	56	1
		324TS	**EM2542T-CI**	5,416	L1	24.62	548	93	208-230/460	56	1
	1800	326T	**EM2543T**	4,983	L1	27.69	467	94.5	230/460	57	1, 30
		326T	**EM2543T-12**	5,089	L1	27.69	468	94.5	230/460	61	1, 25, 30
		326T	**EM2543T-CI**	5,433	L1	27.63	570	94.5	230/460	57	1
		326TS	**EM2543TS-12**	5,089	L1	26.19	469	94.5	230/460	61	1, 25, 30
	1200	365T	**EM2544T**	7,641	L1	33.72	762	94.1	230/460	62	1, 30
		365T	**EM2544T-CI**	8,068	L1	29.70	722	94.1	230/460	60.3	1
60	3600	326TS	**EM2546T**	6,043	L1	25.19	458	93.6	230/460	68	1
	1800	364T	**EM2547T**	6,274	L1	30.69	615	95	230/460	68	1, 30
		364T	**EM2547T-12**	6,406	L1	30.69	620	95	230/460	68	1, 25, 30
		364T	**EM2547T-CI**	6,838	L1	29.70	745	95	230/460	69.5	1
		364TS	**EM2547TS-12**	6,406	L1	28.56	613	95	230/460	68	1, 25, 30
	1200	404T	**EM2548T**	9,413	L1	34.47	888	94.5	230/460	76	1
		404T	**EM2548T-4CI**	10,242	L1	34.00	1009	95	460	70.4	1

[a] See notes on the last page of this catalog.

Cast Iron Frame

Three Phase, Open Drip Proof, Foot Mounted

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
75	3600	364TS	**EM2549T**	7,926	L1	25.81	502	93.6	230/460	82	1
	1800	365T	**EM2551T**	7,701	L1	33.72	744	95	230/460	87	1, 30
		365T	**EM2551T-12**	7,861	L1	33.72	758	95	230/460	85	1, 25
		365T	**EM2551T-CI**	8,392	L1	29.70	762	95	230/460	86.5	1
		365TS	**EM2551TS-12**	7,861	L1	31.59	749	95	230/460	85	1, 25
	1200	405T	**EM2552T-4**	11,403	L1	34.00	1067	95	460	86.9	1, 25
100	3600	365TS	**EM2550T**	8,473	L1	27.81	562	93.6	230/460	110	1
	1800	404T	**EM2555T**	8,959	L1	34.47	930	95.4	230/460	118	1
		404T	**EM2555T-12**	9,139	L1	36.97	946	95.4	230/460	118	1, 25
		404T	**EM2555T-4**	8,959	L1	36.97	896	95.4	460	115	1, 25
		404T	**EM2555T-CI**	9,765	L1	34.00	1038	95.4	230/460	115	1
		404TS	**EM2555TS-12**	9,139	L1	33.97	941	95.4	230/460	118	1, 25
	1200	444T	**EM2583T-4**	12,551	L1	39.56	1455	95	460	116	1, 25
125	3600	404TS	**EM2554T-4**	10,633	L1	31.85	894	94.1	460	143	1, 25
		404TS	**EM2554T-4CI**	12,687	L1	31.00	997	95	460	143	1
	1800	405T	**EM2559T-4**	10,991	L1	34.47	955	95.4	460	143	1, 25
		405T	**EM2559T-4CI**	11,978	L1	34.00	1118	95.4	460	141	1
		405TS	**EM2559TS-4**	10,991	L1	34.97	1238	95.4	460	143	1, 25
	1200	445T	**EM2557T-4**	13,555	L1	39.71	1513	95	460	146	1, 25
150	3600	405TS	**EM2556T-4**	13,117	L1	31.85	980	94.1	460	166	1, 25
	1800	444T	**EM2558T-4**	12,208	L1	39.71	1528	96.2	460	170	1, 25
		444TS	**EM2558TS-4**	12,208	L1	35.96	1519	96.2	460	170	1
	1200	445T	**EM2560T-4**	15,963	L1	39.71	1572	95.4	460	175	1, 25
200	3600	444TS	**EM2562T-4**	14,864	L1	35.88	1364	95.4	460	221	1, 25
	1800	445T	**EM2563T-4**	15,256	L1	39.56	1625	95.8	460	222	1, 25
	1200	447T	**EM2564T-4**	20,984	L1	43.06	1827	95.4	460	232	1, 25
250	3600	445TS	**M2565T-4**	15,162	L1	35.81	1389	94.5	460	286	1, 25
	1800	447T	**EM25254T-4**	17,108	L1	43.06	2036	96.2	460	275	1, 25
		445T	**M2566T-4**	15,095	L1	39.56	1633	95.4	460	274	1, 25
300	3600	445TS	**M2568T-4**	23,699	L1	35.81	1456	95	460	345	1, 25
	1800	447T	**M25694T-4**	23,052	L1	43.06	1990	95.4	460	344	1, 25
		449T	**EM25694T-4**	26,089	L1	48.06	2226	96.2	460	330	1, 25
350	3600	445TS	**M2571T-4**	27,121	L1	35.81	1565	95	460	398	1, 25
		449TS	**M25352T-4**	27,121	L1	44.31	2269	96.5	460	367	1, 25, 63
	1800	449T	**M2572T-4**	26,796	L1	48.06	2332	96.2	460	382	1, 25, 63
400	3600	449TS	**M25402T-4**	31,819	L1	44.31	2155	96.2	460	431	1, 25, 63
	1800	449T	**M25404T-4**	29,082	L1	48.06	2413	96.2	460	437	1, 25, 63
450	3600	449TS	**M25452T-4**	35,038	L1	44.31	2132	96.2	460	494	1, 25, 63
	1800	449T	**M25454T-4**	32,890	L1	48.06	2479	96.2	460	507	2, 20, 25, 63

[a] See notes on the last page of this catalog.

Custom TEFC motors available through 2,250 Hp; Open and WPII custom motors through 15,000 Hp. Contact your ABB Sales Representative.

Cast Iron Frame

Three Phase, Open Drip Proof, C-Face, Foot Mounted

1/3 thru 100 Hp **NEMA 56C thru 404TC**

Applications: Pumps, fans, conveyors, machine tools, gear reducers.

Features: Pressure cast aluminum end plates with ribbed design for rigidity, ball bearings, locked drive end bearing, heavy gauge steel frame. Super-E® motors have NEMA Premium® efficiency and 3 year warranty.

Note: Non-compliant small motors may not be manufactured after March 9, 2015. Pre-existing inventory may be sold or used. Contact local sales representative for new compliant motors.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1/3	1800	56C	**CM3104**	326	K	10.10	21	68	230/460	0.8	30, 98
1/2	3600	56C	**CM3107**	340	K	10.10	20	68	230/460	1	30, 98
	1800	56C	**CM3108**	369	K	10.10	23	74	230/460	1	30, 98
3/4	1800	56C	**CM3112**	416	K	10.73	27	75.5	208-230/460	1.5	98
1	1800	143TC	**CEM3116T**	667	L1	11.62	35	85.5	208-230/460	1.5	1
1 1/2	1800	145TC	**CEM3154T**	687	L1	11.62	37	86.5	230/460	2.2	1, 30
2	3600	56C	**CM3155**	603	K	11.60	33	80	208-230/460	2.9	98
	1800	145TC	**CEM3157T**	733	L1	12.12	41	86.5	230/460	2.9	1, 30
3	3600	145TC	**CEM3158T**	764	L1	13.00	46	85.5	208-230/460	3.8	1
	1800	182TC	**CEM3211T**	866	L1	15.00	71	89.5	230/460	4.2	1, 30
5	3600	182TC	**CEM3212T**	862	L1	13.62	64	86.5	208-230/460	6	1
	1800	184TC	**CEM3218T**	909	L1	16.50	87	89.5	208-230/460	6.6	1
7 1/2	3600	184TC	**CEM3219T**	1,381	L1	15.00	77	88.5	208-230/460	8.6	1
	1800	213TC	**CEM3311T**	1,367	L1	17.06	118	91	208-230/460	9.7	1
10	3600	213TC	**CEM3312T**	1,595	L1	17.06	121	89.5	208-230/460	12	1
	1800	215TC	**CEM3313T**	1,622	L1	18.19	133	91.7	208-230/460	12.5	1
15	3600	215TC	**CEM3314T**	2,199	L1	17.06	128	90.2	230/460	17.5	1, 30
	1800	254TC	**CEM2513T**	2,399	L1	21.69	213	93	208-230/460	17.7	1
20	3600	254TC	**CEM2514T**	2,722	L1	21.69	194	91	230/460	23.5	1, 30
	1800	256TC	**CEM2515T**	2,921	L1	21.69	231	93	230/460	23.5	1, 30
25	3600	256TC	**CEM2516T**	3,205	L1	21.69	219	91.7	230/460	28	1, 30
	1800	284TC	**CEM2531T**	3,742	L1	25.06	336	93.6	230/460	30	1, 30
30	1800	286TC	**CEM2535T**	4,037	L1	25.06	355	94.1	230/460	35	1, 30
40	1800	324TC	**CEM2539T**	5,318	L1	26.69	460	94.1	230/460	47	1, 30
50	1800	326TC	**CEM2543T**	5,788	L1	27.69	494	94.5	230/460	57	1, 30
60	1800	364TC	**CEM2547T**	7,198	L1	30.69	632	95	230/460	68	1, 30
75	1800	365TC	**CEM2551T**	8,625	L1	33.72	771	95	230/460	87	1
100	1800	404TC	**CEM2555T**	9,982	L1	36.97	945	95.4	230/460	118	1

[a] See notes on the last page of this catalog.

Three Phase, Open Drip Proof, C-Face, Footless

1/4 thru 30 Hp NEMA 56C thru 284TC

Applications: Pumps, fans, conveyors, machine tools, gear reducers and other applications requiring a NEMA C-face motor.

Features: Pressure cast aluminum end plates with ribbed design for rigidity. Ball bearings with a locked drive end bearing and heavy-gauge steel frames.

Note: Non-compliant small motors may not be manufactured after March 9, 2015. Pre-existing inventory may be sold or used. Contact local sales representative for new compliant motors.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1/4	1800	56C	**KM3003**	311	K	11.35	19	64	230/460	0.65	30, 98
1/3	3600	56C	**KM3006**	318	K	11.22	20	72	230/460	0.7	30, 98
	1800	56C	**VM3104**	320	LS	11.22	21	68	230/460	0.8	30, 98
1/2	3600	56C	**VM3107**	335	K	11.22	19	68	230/460	1	30, 98
	1800	56C	**VM3108**	363	LS	11.22	23	74	230/460	1	30, 98
	1200	56C	**VM3109**	564	K	12.35	25	72	230/460	1.2	30, 98
3/4	3600	56C	**VM3111**	471	K	11.22	22	74	230/460	1.3	30, 98
	1800	56C	**VM3112**	401	LS	11.84	26	75.5	208-230/460	1.5	98
	1200	56C	**VM3153**	606	K	13.35	32	77	208-230/460	1.5	98
		143TC	**VM3153T**	606	L1	13.41	32	77	208-230/460	1.5	
1	3600	56C	**VM3115**	446	K	11.22	24	75.5	230/460	1.8	30, 98
	1800	56C	**VM3116**	450	LS	12.35	29	78.5	208-230/460	1.7	1, 98
		143TC	**VM3116T**	488	LS	12.30	33	82.5	208-230/460	1.56	1
	1200	145TC	**VM3156T**	680	L1	13.30	40	80	208-230/460	1.88	
1 1/2	3600	56C	**VM3120**	496	K	12.72	30	80	208-230/460	2.3	98
		143TC	**VM3120T**	572	L1	12.25	34	82.5	208-230/460	2	
	1800	56C	**VM3154**	517	LS	13.22	35	77	208-230/460	2.8	98
		145TC	**VM3154T**	569	LS	12.30	36	84	208-230/460	2.4	
	1200	145TC	**VM3159T**	741	L1	15.55	59	84	208-230/460	2.6	
2	3600	56C	**VM3155**	577	K	13.22	33	80	208-230/460	2.9	98
		143TC	**VM3155T**	631	L1	13.30	32	84	208-230/460	2.5	
	1800	56C	**VM3157**	535	LS	13.24	38	80	208-230/460	3.07	98
		145TC	**VM3157T**	586	LS	13.30	40	84	208-230/460	3.15	
	1200	184TC	**VM3215T**	772	L1	16.55	70	85.5	230/460	3.6	30
3	3600	56C	**VM3158**	592	K	13.24	42	80	208-230/460	4	98
		145TC	**VM3158T**	671	L1	13.30	46	84	208-230/460	3.7	
	1800	145TC	**VM3161T**	687	L1	15.55	56	86.5	208-230/460	4.1	1
		182TC	**VM3211T**	644	L1	16.55	64	86.5	208-230/460	4.1	1
	1200	213TC	**VM3305T**	981	L1	18.68	99	86.5	208-230/460	4.6	1
5	3600	182TC	**VM3212T**	726	L1	16.55	74	85.5	208-230/460	6.2	
	1800	184TC	**VM3218T**	705	L1	16.55	71	87.5	208-230/460	7.2	
	1200	215TC	**VM3309T**	1,289	L1	18.68	121	87.5	208-230/460	7.6	
7 1/2	3600	184TC	**VM3219T**	891	L1	16.55	70	87.5	208-230/460	8.7	
	1800	213TC	**VM3311T**	1,040	L1	18.68	115	88.5	208-230/460	10.1	
10	3600	213TC	**VM3312T**	1,276	L1	18.68	109	88.5	208-230/460	12.4	
	1800	215TC	**VM3313T**	1,246	L1	18.68	119	89.5	208-230/460	13.4	
15	3600	215TC	**VM3314T**	1,807	L1	18.68	119	89.5	208-230/460	18	1
	1800	254TC	**VM2513T**	1,944	L1	21.17	155	91	208-230/460	19	
20	3600	254TC	**VM2514T**	2,402	L1	20.42	147	90.2	208-230/460	24	1
	1800	256TC	**VM2515T**	2,422	L1	23.37	197	91.7	230/460	24	30
25	3600	254TC	**VM2516T**	2,838	LS	22.00	200	91	230/460	29	30
	1800	284TC	**VM2531T**	3,087	L1	26.53	267	91.7	230/460	31	30
30	3600	284TSC	**VM2534T**	3,213	L1	24.15	252	91	230/460	34	30

[a] See notes on the last page of this catalog.

F-2 Mount, Three Phase, TEFC and ODP, Foot Mounted

1 thru 100 Hp **NEMA 143T thru 444T**

Applications: Pumps, compressors, fans, conveyors, machine tools and other applications requiring three phase F-2 mounted motors.

Features: Copper windings, ball bearings, heavy-gauge steel frame with base seam-welded. Super-E® motors have NEMA Premium® efficiency and 3 year warranty.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
Totally Enclosed Fan Cooled											
1	1800	143T	**EFM3546T**	706	L1	12.31	35	85.5	208-230/460	1.5	1
1 1/2	1800	145T	**EFM3554T**	734	L1	13.31	41	86.5	208-230/460	2.2	1
2	1800	145T	**EFM3558T**	758	L1	13.31	41	86.5	208-230/460	2.9	1
3	3600	182T	**EFM3610T**	882	L1	15.14	73	86.5	208-230/460	3.6	1
	1800	182T	**EFM3611T**	841	L1	16.55	73	89.5	208-230/460	4.2	1
5	3600	184T	**EFM3613T**	978	L1	16.55	91	88.5	230/460	5.9	1
	1800	184T	**EFM3615T**	920	L1	18.06	91	89.5	208-230/460	6.7	1
7 1/2	3600	213T	**EFM3709T**	1,465	L1	17.91	128	89.5	208-230/460	9	1
	1800	213T	**EFM3710T**	1,331	L1	19.01	128	91.7	208-230/460	9.4	1
10	3600	215T	**EFM3711T**	1,485	L1	17.91	165	90.2	208-230/460	11.8	1
	1800	215T	**EFM3714T**	1,495	L1	20.51	165	91.7	208-230/460	12	1
15	3600	254T	**EFM2394T**	2,520	L1	23.16	256	91	230/460	17.5	1,30
	1800	254T	**EFM2333T**	2,306	L1	23.16	256	92.4	230/460	18.1	1, 30
	1200	284T	**EFM4100T**	3,880	L1	27.76	391	91.7	230/460	21	1,30
20	1800	256T	**EFM2334T**	2,794	L1	23.16	276	93	230/460	24	1, 30
	1200	286T	**EFM4102T**	5,166	L1	27.76	420	91.7	208-230/460	27	1
25	1800	284T	**EFM4103T**	3,652	L1	27.76	394	93.6	230/460	30	1, 30
30	1800	286T	**EFM4104T**	4,337	L1	27.76	437	93.6	230/460	36	1, 30
40	1800	324T	**EFM4110T**	5,673	L1	30.28	572	94.1	230/460	48	1, 30
	1200	364T	**EFM4308T**	8,414	L1	33.44	908	94.1	230/460	49.4	1,30
50	3600	326TS	**EFM4114T**	6,429	L1	28.78	578	93	208-230/460	56	1
	1800	326T	**EFM4115T**	6,199	L1	30.28	640	94.5	208-230/460	58	1
	1200	365T	**EFM4312T**	10,167	L1	33.44	902	94.1	230/460	61.7	1,30
60	1800	364T	**EFM4314T**	8,919	L1	33.44	800	95	230/460	68	30
	1200	404T	**EFM4403T**	12,341	L1	38.06	1164	95	230/460	69	1,30
75	1800	365T	**EFM4316T**	10,429	L1	33.44	840	95.4	230/460	84.9	30
	1200	405T	**EFM4404T**	14,371	L1	38.06	1217	95	230/460	86.9	1,30
100	1800	405T	**EFM4400T**	12,952	L1	38.31	1160	95.4	230/460	112	
	1200	444T	**EFM4409T-4**	17,345	L1	44.75	1625	95	460	119	1
Open Drip Proof											
1	1800	145T	**EFM3116T**	621	L1	11.12	35	85.5	208-230/460	1.5	1
1 1/2	1800	145T	**EFM3154T**	649	L1	11.62	38	86.5	230/460	2.2	1
2	1800	145T	**EFM3157T**	696	L1	12.12	40	86.5	230/460	2.9	1
3	1800	182T	**EFM3211T**	750	L1	15.00	68	89.5	230/460	4.2	1
5	3600	182T	**EFM3212T**	794	L1	13.62	84	86.5	208-230/460	6	1
	1800	184T	**EFM3218T**	822	L1	16.50	84	89.5	208-230/460	6.6	1
7 1/2	3600	184T	**EFM3219T**	1,259	L1	15.00	114	88.5	208-230/460	8.6	1
	1800	213T	**EFM3311T**	1,207	L1	16.32	114	91	230/460	9.7	1, 30
10	3600	213T	**EFM3312T**	1,440	L1	16.32	125	89.5	208-230/460	12	1
	1800	215T	**EFM3313T**	1,461	L1	17.45	125	91.7	230/460	12.5	1, 30
15	3600	215T	**EFM3314T**	2,045	L1	16.32	214	90.2	230/460	17.5	1
	1800	254T	**EFM2513T**	2,069	L1	21.69	214	93	230/460	17.7	1, 30
20	1800	256T	**EFM2515T**	2,597	L1	21.69	226	93	230/460	23.5	1, 30
25	1800	284T	**EFM2531T**	3,166	L1	25.06	313	93.6	230/460	30	1, 30
30	1800	286T	**EFM2535T**	3,462	L1	25.06	339	94.1	230/460	35	1, 30
40	1800	324T	**EFM2539T**	4,516	L1	27.19	392	94.1	230/460	49	1, 30
50	1800	326T	**EFM2543T**	4,983	L1	27.69	547	94.5	230/460	57	1, 30
60	1800	364T	**EFM2547T**	6,274	L1	30.69	622	95	230/460	68	1, 30

[a] See notes on the last page of this catalog. Cast Iron Frame

Three Phase, Totally Enclosed, 460 & 230/460 Volts, Foot Mounted

1 thru 800 Hp **NEMA 143T thru 500S** **IP55**

Applications: Petro-chemical plants, mines, quarries, foundries, pulp and paper plants, waste management facilities, chemical plants, and other processing industry applications requiring protection against corrosion caused by severe environmental operating conditions.

Features (143T-L449T): Totally enclosed cast iron construction, Premium insulation system, Sealed frame fits, Gasketed conduit box, V-Ring shaft slinger, Stainless Steel nameplates, Corrosion resistant epoxy finish and Corrosion resistant hardware. Super-E® severe duty motors have NEMA Premium® efficiency, Class F insulation, 1.15 service factor and 3 year warranty. Positive lubrication system (PLS) on 250 frames and larger. Motors are marked for Division 2/Zone 2, Class I locations. Inverter Ready design with speed range and Inverter T. Code nameplate information, see chart at the back of severe duty section for specific motor information.

Features (5010-500S frames): Cast iron frame, end shields and inner caps, carbon steel fan cover and air deflector, ground lug in the conduit box, specially formulated modified epoxy paint with UV protection, stainless steel breather and drain, V-Ring shaft slinger, epoxy coating on the rotor OD, stator ID and windings, oversized main conduit box, 3.5 pu Surge withstand, insulated bearings and provisions for bearing RTD's. Severe duty motors have high efficiency (95% or higher). Stock motors include a 3 year warranty, 100 ohm platinum winding RTD's and space heaters. The "S" shafts are for coupled loads and are not convertible to roller bearings. The "L" shafts are ball bearing and convertible to roller bearing. Belted duty "LR" shafts are roller bearing and convertible to ball bearing. All shafts are Class II material. Motors are marked for Division 2/Zone 2, Class I locations. Inverter Ready design with speed range and Inverter T. Code nameplate information. Please contact manufacturer for T. Code and Speed ranges for specific ratings.

Hp	RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1	3600	143T	TEFC	**ECP3580T**	1,012	SD	12.95	59	84	208-230/460	1.4	1
		143T	TEFC	**ECP3580T-4**	1,012	SD	12.95	59	84	460	1.4	1
		143T	TENV	**ENCP3580T-4**	954	SD	11.38	55	84	460	1.3	1
	1800	143T	TEFC	**ECP3581T**	1,044	SD	12.95	64	87.5	208-230/460	1.5	1
		143T	TEFC	**ECP3581T-4**	1,044	SD	12.95	61	87.5	460	1.5	1
		143T	TENV	**ENCP3581T-4**	1,004	SD	11.36	56	87.5	460	1.5	1
	1200	145T	TEFC	**ECP3582T**	1,153	SD	12.95	68	82.5	208-230/460	1.7	1
		145T	TEFC	**ECP3582T-4**	1,153	SD	12.95	69	82.5	460	1.7	1
	900	182T	TEFC	**ECP3687T-4**	1,619	SD	15.93	103	78.5	460	2	1
1 1/2	3600	143T	TEFC	**ECP3583T**	1,080	SD	12.95	67	85.5	208-230/460	2	1
		143T	TEFC	**ECP3583T-4**	1,080	SD	12.95	67	85.5	460	2	1
	1800	145T	TEFC	**ECP3584T**	1,063	SD	12.95	69	88.5	208-230/460	2.1	1
		145T	TEFC	**ECP3584T-4**	1,063	SD	12.95	72	88.5	460	2.1	1
	1200	182T	TEFC	**ECP3667T**	1,349	SD	15.93	108	87.5	208-230/460	2.5	1
		182T	TEFC	**ECP3667T-4**	1,349	SD	15.93	108	87.5	460	2.5	1
	900	184T	TEFC	**ECP3668T-4**	2,015	SD	15.93	110	80	460	3.2	1
2	3600	145T	TEFC	**ECP3586T**	1,130	SD	12.95	74	86.5	208-230/460	2.5	1
		145T	TEFC	**ECP3586T-4**	1,130	SD	12.95	74	86.5	460	2.5	1
	1800	145T	TEFC	**ECP3587T**	1,110	SD	12.95	75	88.5	208-230/460	2.8	1
		145T	TEFC	**ECP3587T-4**	1,110	SD	12.95	73	88.5	460	2.8	1
	1200	184T	TEFC	**ECP3664T**	1,366	SD	15.93	116	88.5	230/460	3.15	1
		184T	TEFC	**ECP3664T-4**	1,366	SD	15.93	120	88.5	460	3.2	1
	900	213T	TEFC	**ECP3772T-4**	2,541	SD	19.50	179	85.5	460	3.8	1

[a] See notes on the last page of this catalog.

Cast Iron Frame

All ratings are 1.15 service factor at 40°C ambient.

All ratings meet the intent of IEEE-45 for weather protection, and are suitable for use in a 50°C ambient with a 1.0 service factor.

FOR OTHER 208-230/460 VOLT REQUIREMENTS, PLEASE SEE DIRTY DUTY MOTORS.

Three Phase, Totally Enclosed, 460 & 230/460 Volts, Foot Mounted

Hp	RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
3	3600	182T	TEFC	**ECP3660T**	1,336	SD	15.93	104	88.5	230/460	3.4	1, 30
		182T	TEFC	**ECP3660T-4**	1,336	SD	15.93	106	88.5	460	3.4	1
	1800	182T	TEFC	**ECP3661T**	1,404	SD	15.93	113	89.5	230/460	4.1	1
		182T	TEFC	**ECP3661T-4**	1,404	SD	15.93	112	89.5	460	4.1	1
	1200	213T	TEFC	**ECP3764T**	1,971	SD	19.50	185	90.2	230/460	4.5	1, 30
		213T	TEFC	**ECP3764T-4**	1,971	SD	19.50	209	89.5	460	4.5	1
	900	215T	TEFC	**ECP3775T-4**	2,755	SD	19.50	203	85.5	460	5.2	1
5	3600	184T	TEFC	**ECP3663T**	1,644	SD	15.93	114	90.2	230/460	5.7	1, 30
		184T	TEFC	**ECP3663T-4**	1,644	SD	15.93	114	89.5	460	5.7	1
	1800	184T	TEFC	**ECP3665T**	1,429	SD	15.93	118	89.5	208-230/460	6.6	1
		184T	TEFC	**ECP3665T-4**	1,429	SD	15.93	119	89.5	460	6.6	1
	1200	215T	TEFC	**ECP3768T**	1,998	SD	19.50	212	90.2	230/460	7.3	1, 30
		215T	TEFC	**ECP3768T-4**	1,998	SD	19.50	227	90.2	460	7.3	1
	900	254T	TEFC	**ECP2280T-4**	4,385	SD	24.78	327	87.5	460	8.4	1
7 1/2	3600	213T	TEFC	**ECP3769T**	2,145	SD	19.50	169	91.7	230/460	8.6	1
		213T	TEFC	**ECP3769T-4**	2,145	SD	19.50	173	91.7	460	8.6	1
	1800	213T	TEFC	**ECP3770T**	1,799	SD	19.50	170	91.7	230/460	9.5	1
		213T	TEFC	**ECP3770T-4**	1,799	SD	19.50	170	91.7	460	9.5	1
	1200	254T	TEFC	**ECP2276T**	2,858	SD	24.78	335	91	230/460	10.7	1, 30
		254T	TEFC	**ECP2276T-4**	2,858	SD	24.78	337	91	460	10.7	1
	900	256T	TEFC	**ECP2401T-4**	5,014	SD	24.78	347	86.5	460	12.2	1
10	3600	215T	TEFC	**ECP3771T**	2,284	SD	19.50	203	92.4	230/460	11	1
		215T	TEFC	**ECP3771T-4**	2,284	SD	19.50	215	92.4	460	11	1
	1800	215T	TEFC	**ECP3774T**	2,154	SD	19.50	231	92.4	230/460	12.5	1
		215T	TEFC	**ECP3774T-4**	2,154	SD	19.50	211	92.4	460	12.5	1
	1200	256T	TEFC	**ECP2332T**	3,713	SD	24.78	348	91.7	230/460	14.2	1, 30
		256T	TEFC	**ECP2332T-4**	3,713	SD	24.78	347	91.7	460	14.2	1
	900	284T	TEFC	**ECP2402T-4**	5,849	SD	27.93	468	90.2	460	14.4	1
15	3600	254T	TEFC	**ECP2294T**	2,922	SD	24.78	300	91.7	230/460	17.2	1, 30
		254T	TEFC	**ECP2394T-4**	2,922	SD	24.78	297	91.7	460	17.2	1
	1800	254T	TEFC	**ECP2333T**	2,745	SD	24.78	314	92.4	230/460	18.1	1, 30
		254T	TEFC	**ECP2333T-4**	2,745	SD	24.78	294	92.4	460	18.1	1
	1200	284T	TEFC	**ECP4100T**	4,257	SD	27.93	449	93	230/460	19.7	1, 30
		284T	TEFC	**ECP4100T-4**	4,257	SD	27.93	448	93	460	19.8	1
	900	286T	TEFC	**ECP2395T-4**	7,807	SD	27.93	479	88.5	460	21.5	1
20	3600	256T	TEFC	**ECP4106T**	3,408	SD	24.78	324	92.4	230/460	22	1, 30
		256T	TEFC	**ECP4106T-4**	3,408	SD	24.78	328	92.4	460	23	1
	1800	256T	TEFC	**ECP2334T**	2,944	SD	24.78	334	93	230/460	24	1, 30
		256T	TEFC	**ECP2334T-4**	2,944	SD	24.78	333	93	460	24	1
	1200	286T	TEFC	**ECP4102T**	5,784	SD	27.93	480	93	230/460	26	1
		286T	TEFC	**ECP4102T-4**	5,784	SD	27.93	467	93	460	26	1
	900	324T	TEFC	**ECP4112T-4**	8,900	SD	30.27	600	90.2	460	30	1
25	3600	284TS	TEFC	**ECP4107T**	4,096	SD	26.56	396	91.7	230/460	28	1, 30
		284TS	TEFC	**ECP4107T-4**	4,096	SD	26.56	410	91.7	460	28	1
	1800	284T	TEFC	**ECP4103T**	3,852	SD	27.93	431	93.6	230/460	30	1, 30
		284T	TEFC	**ECP4103T-4**	3,852	SD	27.93	437	93.6	460	29	1
	1200	324T	TEFC	**ECP4111T**	6,044	SD	30.27	604	93	230/460	32	1, 30
		324T	TEFC	**ECP4111T-4**	6,044	SD	30.27	608	93	460	32	1
	900	326T	TEFC	**ECP4124T-4**	11,114	SD	30.27	620	90.2	460	37	1
30	3600	286TS	TEFC	**ECP4108T**	4,993	SD	26.56	430	91.7	230/460	33	1
		286TS	TEFC	**ECP4108T-4**	4,993	SD	26.56	424	91.7	460	33	1
	1800	286T	TEFC	**ECP4104T**	4,574	SD	27.93	467	94.1	230/460	36	1, 30
		286T	TEFC	**ECP4104T-4**	4,574	SD	27.93	470	94.1	460	36	1
	1200	326T	TEFC	**ECP4117T**	7,791	SD	30.27	621	93	230/460	39	1, 30
		326T	TEFC	**ECP4117T-4**	7,791	SD	30.27	633	93	460	39	1
	900	364T	TEFC	**ECP4113T-4**	11,752	SD	33.44	813	92.4	460	39	1

[a] See notes on the last page of this catalog.

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FOR OTHER 208-230/460 VOLT REQUIREMENTS, PLEASE SEE DIRTY DUTY MOTORS.

Cast Iron Frame

Three Phase, Totally Enclosed, 460 & 230/460 Volts, Foot Mounted

Hp	RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
40	3600	324TS	TEFC	**ECP4109T**	6,859	SD	28.78	552	93.6	230/460	45	1
		324TS	TEFC	**ECP4109T-4**	6,859	SD	28.78	566	93	460	46	1
	1800	324T	TEFC	**ECP4110T**	5,984	SD	30.27	618	94.5	230/460	46	1, 30
		324T	TEFC	**ECP4110T-4**	5,984	SD	30.27	626	94.5	460	46	1
	1200	364T	TEFC	**ECP4308T**	9,710	SD	33.49	918	94.1	230/460	49.4	1
		364T	TEFC	**ECP4308T-4**	9,710	SD	33.49	889	94.1	460	49.4	1
	900	365T	TEFC	**ECP4315T-4**	13,513	SD	33.44	900	93	460	52	1
50	3600	326TS	TEFC	**ECP4114T**	7,188	SD	28.78	619	93	230/460	56	1, 30
		326TS	TEFC	**ECP4114T-4**	7,188	SD	28.78	610	94.1	460	56	1
	1800	326T	TEFC	**ECP4115T**	7,024	SD	30.27	641	94.5	230/460	58	1, 30
		326T	TEFC	**ECP4115T-4**	7,024	SD	30.27	668	94.5	460	58	1
	1200	365T	TEFC	**ECP4312T**	10,343	SD	33.49	928	94.1	230/460	61.7	1
		365T	TEFC	**ECP4312T-4**	10,343	SD	33.49	920	94.1	460	61.7	1
	900	404T	TEFC	**ECP4417T-4**	16,652	SD	38.20	1216	93	460	63	1
60	3600	364TS	TEFC	**ECP4310T**	10,431	SD	31.37	929	95	230/460	65.1	1
		364TS	TEFC	**ECP4310T-4**	10,431	SD	31.37	882	95	460	65.1	1
	1800	364T	TEFC	**ECP4314T**	9,414	SD	33.49	933	95	230/460	68	1
		364T	TEFC	**ECP4314T-4**	9,414	SD	33.49	941	95	460	68	1
	1200	404T	TEFC	**ECP4403T**	14,128	SD	38.32	1281	95	230/460	69	1
		404T	TEFC	**ECP4403T-4**	14,128	SD	38.32	1331	95	460	69	1
		404T	TEFC	**ECP4403TR-4**	14,842	SD	38.20	1331	94.5	460	67.3	1
	900	405T	TEFC	**ECP4418T-4**	19,529	SD	38.20	1375	93	460	76	1
75	3600	365TS	TEFC	**ECP4313T**	11,661	SD	31.37	1004	94.5	230/460	80.7	1
		365TS	TEFC	**ECP4313T-4**	11,661	SD	31.37	990	94.5	460	80.7	1
	1800	365T	TEFC	**ECP4316T**	11,000	SD	33.49	958	95.4	230/460	85.9	1
		365T	TEFC	**ECP4316T-4**	11,000	SD	33.49	962	95.4	460	84.9	1
		365T	TEFC	**ECP4316TR-4**	11,625	SD	33.49	962	95.4	460	84.9	1, 5
	1200	405T	TEFC	**ECP4404T**	17,194	SD	38.32	1275	95	230/460	86.9	1
		405T	TEFC	**ECP4404T-4**	17,194	SD	38.32	1334	94.5	460	86.8	1
		405T	TEFC	**ECP4404TR-4**	17,908	SD	38.32	1334	94.5	460	86.8	1, 5
	900	444T	TEFC	**ECP4419T-4**	24,111	SD	44.75	1815	95.4	460	89.3	1
100	3600	405TS	TEFC	**ECP4402T**	14,657	SD	35.31	1283	95	230/460	110	1
		405TS	TEFC	**ECP4402T-4**	14,657	SD	35.31	1272	95	460	110	1
	1800	405T	TEFC	**ECP4400T-4**	14,439	SD	38.32	1296	95.4	460	112	1
		405T	TEFC	**ECP4400TR-4**	15,153	SD	38.32	1296	95.4	460	112	1, 5
		405TS	TEFC	**ECP4400TS-4**	14,439	SD	35.32	1304	95.4	460	112	1
	1200	444T	TEFC	**ECP4409T-4**	18,912	SD	44.75	1625	95	460	119	1
		444T	TEFC	**ECP4409TR-4**	20,140	SD	44.75	1625	95	460	119	1, 5
	900	445T	TEFC	**ECP4420T-4**	28,143	SD	44.75	1905	93.6	460	125	1
125	3600	444TS	TEFC	**ECP4412T**	17,223	SD	40.83	1957	95	230/460	138	1
		444TS	TEFC	**ECP4412T-4**	17,223	SD	40.83	1901	95	460	137	1
	1800	444T	TEFC	**ECP4410T-4**	17,070	SD	44.75	1950	95.4	460	144	1
		444T	TEFC	**ECP4410TR-4**	18,298	SD	44.75	1950	95.4	460	144	1, 5
		444T	TEFC	**ECP4410T-4E**	17,070	SD	44.62	1757	95.8	460	139	1, 56
	1200	445T	TEFC	**ECP4411T-4**	21,365	SD	44.75	2146	95	460	146	1
		445T	TEFC	**ECP4411TR-4**	22,593	SD	44.75	2146	95	460	146	1, 5
	900	447T	TEFC	**ECP4421T-4**	30,823	SD	48.24	2330	95	460	149	1
150	3600	445TS	TEFC	**ECP4413T-4**	20,191	SD	40.83	2017	95	460	164	1
	1800	445T	TEFC	**ECP4406T-4**	19,997	SD	44.75	2190	95.8	460	169	1
		445T	TEFC	**ECP4406TR-4**	21,225	SD	44.75	2190	95.8	460	169	1, 5
		445T	TEFC	**ECP4906T-4**	19,997	SD	44.75	1826	95.8	460	169	1, 99
	1200	447T	TEFC	**ECP44156T-4**	24,088	SD	48.24	2546	95.8	460	170	1
		447T	TEFC	**ECP44156TR-4**	25,315	SD	48.24	2585	95.8	460	170	1, 5
	900	449T	TEFC	**ECP4422T-4**	35,415	SD	53.24	3051	95	460	188	1

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FOR OTHER 208-230/460 VOLT REQUIREMENTS, PLEASE SEE DIRTY DUTY MOTORS.
Cast Iron Frame

Three Phase, Totally Enclosed, 460 & 230/460 Volts, Foot Mounted

Hp	RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
200	3600	447TS	TEFC	**ECP4416T-4**	23,908	SD	44.48	2436	96.2	460	213	1
	1800	447T	TEFC	**ECP4407T-4**	24,056	SD	48.24	2545	96.2	460	223	1
		447T	TEFC	**ECP4407T-4E**	24,056	SD	48.40	2347	96.2	460	221	1, 56
		447T	TEFC	**ECP4407TR-4**	25,282	SD	48.24	2621	96.2	460	223	1, 5
		447TS	TEFC	**ECP4407TS-4**	24,056	SD	44.48	2573	96.2	460	223	1
		447TS	TEFC	**ECP4907TS-4**	24,056	SD	44.48	2591	96.2	460	223	1, 99
	1200	449T	TEFC	**ECP44206T-4**	31,553	SD	53.24	3120	95.8	460	225	1
		449T	TEFC	**ECP44206TR-4**	32,779	SD	53.24	3091	95.8	460	225	1, 5
	900	449T	TEFC	**ECP4423T-4**	44,951	SD	53.24	3179	95	460	248	1
250	3600	449TS	TEFC	**ECP44252T-4**	36,560	SD	49.48	2633	95.8	460	269	1
	1800	449T	TEFC	**ECP4408T-4**	30,527	SD	53.24	2972	96.2	460	276	1
		449T	TEFC	**ECP4408TR-4**	31,753	SD	53.24	3048	96.2	460	276	1, 5
	1200	449T	TEFC	**ECP44256T-4**	44,018	SD	53.24	3090	96.2	460	283	1
		449T	TEFC	**ECP44256TR-4**	45,244	SD	53.24	3093	95.8	460	287	1, 5
	900	L449T	TEFC	**ECP49258T-4**	54,429	SD	60.13	3225	95	460	288	1, 99
300	3600	449TS	TEFC	**ECP44302T-4**	53,433	SD	49.48	2789	96.2	460	318	1
	1800	449T	TEFC	**ECP44304T-4**	42,075	SD	53.24	3092	96.2	460	334	1
		449T	TEFC	**ECP44304TR-4**	43,302	SD	53.24	3048	96.2	460	334	1, 5
	1200	L449T	TEFC	**ECP49306T-4**	44,454	SD	60.13	3125	95.8	460	340	1, 99
	900	L449T	TEFC	**ECP49308T-4**	65,528	SD	60.21	3315	95	460	378	14, 99
350	3600	449TS	TEFC	**ECP44352T-4**	64,135	SD	49.48	2965	95.8	460	370	1
		449TS	TEFC	**ECP49352T-4**	64,135	SD	49.48	2998	95.8	460	370	1, 99
	1800	L449T	TEFC	**ECP49354T-4**	50,488	SD	60.21	3543	96.2	460	384	1, 99
	1200	5010	TEFC	**CP50356LR-4**	85,043	LM	71.42	5060	95.3	460	399	1, 5, 48
	900	5012	TEFC	**CP50358LR-4**	86,801	LM	79.44	5867	95.3	460	450	1, 5, 48
400	3600	449TS	TEFC	**ECP44402T-4**	75,034	SD	49.48	3091	96.2	460	421	1
		5010	TEFC	**CP50402S-4**	80,892	LM	67.14	4850	95.8	460	439	1, 48
	1800	L449T	TEFC	**ECP49404T-4**	63,060	SD	60.21	3682	96.2	460	435	1, 64, 99
	1200	5012	TEFC	**CP50406LR-4**	91,978	LM	79.44	5867	95.5	460	455	1, 5, 48
	900	5012	TEFC	**CP50408LR-4**	92,256	LM	79.44	5867	95.4	460	501	1, 5, 48
450	3600	5010	TEFC	**ECP50452S-4**	83,253	LM	67.45	4871	94.8	460	494	1, 48
	1800	5010	TEFC	**CP50454L-4**	76,700	LM	71.14	5400	95.8	460	511	1, 27, 48
	1200	5012	TEFC	**CP50456LR-4**	96,916	LM	79.44	6000	95.5	460	511	1, 5, 48
	900	5012	TEFC	**CP50458LR-4**	114,806	LM	79.44	6000	95.4	460	580	1, 5, 7, 48
500	3600	5010	TEFC	**CP50502S-4**	85,246	LM	67.14	4850	95.8	460	545	1, 48
	1800	5010	TEFC	**CP50504L-4**	80,768	LM	71.14	5550	96.2	460	574	1, 27, 48
	1200	5012	TEFC	**CP50506LR-4**	101,595	LM	79.44	6069	95.6	460	564	1, 5, 48
	900	5012	TEFC	**CP50508LR-4**	120,606	LM	79.44	6069	95.7	460	670	1, 5, 7, 48
600	3600	5010	TEFC	**CP50602S-4**	89,698	LM	67.14	4850	95.4	460	646	1, 48
	1800	5012	TEFC	**CP50604L-4**	84,911	LM	79.42	5809	95.7	460	675	1, 27, 48
	1200	5012	TEFC	**CP50606LR-4**	121,254	LM	79.44	6069	95.9	460	667	1, 5, 7, 48
	900	5810	TEFC	**CP58608LR-4**	135,379	LM	83.30	10000	95.9	460	774	1, 5, 48
700	3600	5810	TEFC	**CP58702S-4**	120,277	LM	86.07	10000	95.9	460	754	1, 48
	1800	5012	TEFC	**CP50704S-4**	88,771	LM	79.42	5867	95.9	460	783	1, 27, 48
	1200	5810	TEFC	**CP58706LR-4**	140,075	LM	83.30	10000	96.2	460	781	1, 5, 48
	900	5810	TEFC	**CP58708LR-4**	186,010	LM	83.30	10000	95.8	460	894	1, 5, 7, 48
800	3600	5810	TEFC	**CP58802S-4**	128,522	LM	86.07	10000	96.7	460	863	1, 48
	1800	5012	TEFC	**CP50804S-4**	94,325	LM	90.97	6100	95.9	460	892	1, 27, 48
	1200	5810	TEFC	**CP58806LR-4**	183,854	LM	83.30	10000	96.2	460	903	1, 5, 7, 48
	900	500	TEFC	**CP500808LR-4**	218,488	LM	120.18	18500	95.9	460	1033	1, 5, 7, 48

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FOR OTHER 208-230/460 VOLT REQUIREMENTS, PLEASE SEE DIRTY DUTY MOTORS.

Cast Iron Frame

Three Phase, Totally Enclosed, 575 Volts, Foot Mounted

1 thru 200 Hp **NEMA 143T thru 447T** **IP55**

Applications: Designed for 600V distibution systems for use in Petro-chemical plants, mines, quarries, foundries, pulp and paper plants, waste management facilities, chemical plants, and other processing industry applications requiring protection against corrosion caused by severe environmental operating conditions.

Features: Totally enclosed cast iron construction, Premium insulation system, Sealed frame fits, Gasketed conduit box, V-Ring shaft slinger, Stainless Steel nameplates, Corrosion resistant epoxy finish and Corrosion resistant hardware. Super-E® severe duty motors have NEMA Premium® efficiency, Class F insulation, 1.15 service factor and 3 year warranty. Positive lubrication system (PLS) on 250 frames and larger. Motors are marked for Division 2/Zone 2, Class I locations. Inverter Ready design with speed range and Inverter T. Code nameplate information, see chart on at the back of severe duty section for specific motor information.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1	3600	143T	**ECP3580T-5**	950	SD	12.95	61	84	575	1.1	1
	1800	143T	**ECP3581T-5**	1,044	SD	12.95	65	87.5	575	1.2	1
1 1/2	1800	145T	**ECP3584T-5**	1,063	SD	12.95	71	88.5	575	1.7	1
2	1800	145T	**ECP3587T-5**	1,110	SD	12.95	75	88.5	575	2.3	1
3	3600	182T	**ECP3660T-5**	1,336	SD	15.93	107	88.5	575	2.7	1
	1800	182T	**ECP3661T-5**	1,404	SD	15.93	113	89.5	575	3.3	1
	1200	213T	**ECP3764T-5**	1,971	SD	19.50	211	90.2	575	3.6	1
5	3600	184T	**ECP3663T-5**	1,644	SD	15.93	111	89.5	575	4.6	1
	1800	184T	**ECP3665T-5**	1,429	SD	15.93	118	89.5	575	5.3	1
	1200	215T	**ECP3768T-5**	1,998	SD	19.50	196	90.2	575	5.8	1
7 1/2	3600	213T	**ECP3769T-5**	2,145	SD	19.50	169	91.7	575	6.9	1
	1800	213T	**ECP3770T-5**	1,799	SD	19.50	170	91.7	575	7.5	1
	1200	254T	**ECP2276T-5**	2,858	SD	24.78	333	91.7	575	8.7	1
10	3600	215T	**ECP3771T-5**	2,284	SD	19.50	182	92.4	575	8.9	1
	1800	215T	**ECP3774T-5**	2,154	SD	19.50	231	92.4	575	10	1
	1200	256T	**ECP2332T-5**	3,713	SD	24.78	347	91.7	575	11.5	1
15	3600	254T	**ECP2394T-5**	2,922	SD	24.78	239	91.7	575	13.8	1
	1800	254T	**ECP2333T-5**	2,745	SD	24.78	297	92.4	575	14.5	1
	1200	284T	**ECP4100T-5**	4,257	SD	27.93	446	93	575	15.9	1
20	3600	256T	**ECP4106T-5**	3,408	SD	24.78	310	91.7	575	17.8	1
	1800	256T	**ECP2334T-5**	2,944	SD	24.78	325	93	575	19.2	1
	1200	286T	**ECP4102T-5**	5,784	SD	27.93	478	93	575	20.6	1
25	1800	284T	**ECP4103T-5**	3,852	SD	27.93	424	93.6	575	23	1
	1200	324T	**ECP4111T-5**	6,044	SD	30.27	612	93	575	25.7	1
30	1800	286T	**ECP4104T-5**	4,574	SD	27.93	467	94.1	575	29	1
40	1800	324T	**ECP4110T-5**	5,984	SD	30.27	623	94.5	575	36.8	1
50	1800	326T	**ECP4115T-5**	7,024	SD	30.27	652	94.5	575	45	1
60	1800	364T	**ECP4314T-5**	9,414	SD	33.49	936	95	575	54.4	1
75	1800	365T	**ECP4316T-5**	11,000	SD	33.49	966	95.4	575	68.7	1
100	1800	405T	**ECP4400T-5**	14,439	SD	38.32	1305	95.4	575	89.6	1
125	1800	444T	**ECP4410T-5**	17,070	SD	44.75	2054	95.4	575	115	1
		444T	**ECP4410T-5E**	17,070	SD	44.62	1764	95.4	575	112	1, 56
		444T	**ECP4910T-5**	17,070	SD	44.75	2054	95.4	575	115	1, 99
150	1800	445T	**ECP4406T-5**	19,997	SD	44.75	2175	95.8	575	135	1
		445T	**ECP4906T-5**	19,997	SD	44.75	1826	95.8	575	135	1, 99
200	1800	447T	**ECP4407T-5**	24,056	SD	48.24	2570	96.2	575	178	1
		447T	**ECP4907T-5**	24,056	SD	48.24	2676	96.2	575	178	1, 99

[a] See notes on the last page of this catalog.

All ratings are 1.15 service factor at 40°C ambient.

All ratings meet the intent of IEEE-45 for weather protection, and are suitable for use in a 50°C ambient with a 1.0 service factor.

Cast Iron Frame

Three Phase, Totally Enclosed, 460 & 230/460 Volts, C-Face

1 thru 200 Hp NEMA 56C thru 447TC IP55

Applications: Petro-chemical plants, mines, quarries, foundries, pulp and paper plants, waste management facilities, chemical plants, and other processing industry applications requiring protection against corrosion caused by severe environmental operating conditions.

Features: Totally enclosed cast iron construction, Premium insulation system, Sealed frame fits, Gasketed conduit box, V-Ring shaft slinger, Stainless Steel nameplates, Corrosion resistant epoxy finish and Corrosion resistant hardware. Super-E® severe duty motors have NEMA Premium® efficiency, Class F insulation, 1.15 service factor and 3 year warranty. Positive lubrication system (PLS) on 250 frames and larger. C-Face Footless models include Drip Cover. Motors are marked for Division 2/Zone 2, Class I locations. Inverter Ready design with speed range and Inverter T. Code nameplate information, see chart at the back of severe duty section for specific motor information.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
C-Face, Foot Mounted											
1	1800	143TC	**CECP3581T**	1,099	SD	13.38	67	87.5	208-230/460	1.5	1
	1200	145TC	**CECP3582T**	1,211	SD	13.38	75	82.5	208-230/460	1.7	1
1 1/2	1800	145TC	**CECP3584T**	1,121	SD	13.38	72	88.5	208-230/460	2.1	1
	1200	182TC	**CECP3667T**	1,407	SD	16.68	99	87.5	208-230/460	2.5	1
2	1800	145TC	**CECP3587T**	1,166	SD	13.38	76	88.5	208-230/460	2.8	1
	1200	184TC	**CECP3664T**	1,422	SD	16.68	113	88.5	230/460	3.15	1
3	3600	182TC	**CECP3660T**	1,436	SD	16.68	112	88.5	230/460	3.4	1, 30
	1800	182TC	**CECP3661T**	1,505	SD	16.68	114	89.5	208-230/460	4.1	1
	1200	213TC	**CECP3764T**	2,072	SD	20.24	187	90.2	230/460	4.5	1, 30
5	3600	184TC	**CECP3663T**	1,744	SD	16.68	121	90.2	230/460	5.7	1, 30
	1800	184TC	**CECP3665T**	1,529	SD	16.68	130	89.5	208-230/460	6.6	1
	1200	215TC	**CECP3768T**	2,098	SD	20.24	226	90.2	230/460	7.3	1, 30
7 1/2	3600	213TC	**CECP3769T**	2,345	SD	20.24	173	91.7	230/460	8.6	1
	1800	213TC	**CECP3770T**	2,000	SD	20.24	170	91.7	230/460	9.5	1
	1200	254TC	**CECP2276T**	3,059	SD	25.18	305	91	230/460	10.7	1, 30
10	3600	215TC	**CECP3771T**	2,482	SD	20.24	203	92.4	230/460	11	1, 30
	1800	215TC	**CECP3774T**	2,354	SD	20.24	231	92.4	230/460	12.5	1
	1200	256TC	**CECP2332T**	3,913	SD	25.18	323	91.7	230/460	14.2	1, 30
15	3600	254TC	**CECP2294T**	3,505	SD	25.28	307	91.7	230/460	17.2	1, 30
	1800	254TC	**CECP2333T**	3,344	SD	25.18	297	92.4	230/460	18.1	1, 30
		254TC	**CECP2333T-4**	3,344	SD	25.18	296	92.4	460	18.1	1
	1200	284TC	**CECP4100T**	4,856	SD	27.93	435	93	230/460	19.7	1, 30
20	3600	256TC	**CECP4106T**	3,991	SD	25.28	333	92.4	230/460	22	1, 30
	1800	256TC	**CECP2334T**	3,544	SD	25.18	339	93	230/460	24	1, 30
		256TC	**CECP2334T-4**	3,544	SD	25.18	336	93	460	24	1
	1200	286TC	**CECP4102T**	6,384	SD	27.93	460	93	230/460	26	1
25	3600	284TSC	**CECP4107T**	4,868	SD	26.56	396	91.7	230/460	28	1, 30
	1800	284TC	**CECP4103T-4**	4,684	SD	27.93	440	93.6	460	30.5	1
		286TC	**CECP4103T**	4,684	SD	27.93	449	93.6	230/460	30	1, 30
	1200	324TC	**CECP4111T**	6,876	SD	30.28	626	93	230/460	32	1, 30
30	3600	286TSC	**CECP4108T**	5,766	SD	26.56	454	91.7	230/460	33	1
	1800	286TC	**CECP4104T**	5,406	SD	27.93	478	94.1	230/460	36	1, 30
		286TC	**CECP4104T-4**	5,406	SD	27.93	475	93.6	460	35	1
	1200	326TC	**CECP4117T**	8,623	SD	30.28	640	93	230/460	39	1, 30
40	3600	324TSC	**CECP4109T**	7,751	SD	28.78	571	93.6	230/460	45	1
	1800	324TC	**CECP4110T**	6,901	SD	30.28	628	94.5	230/460	46	1, 30
	1200	364TC	**CECP4308T**	10,627	SD	33.44	908	94.1	230/460	49.4	1
50	3600	326TSC	**CECP4114T**	8,079	SD	28.78	639	93	230/460	56	1, 30
	1800	326TC	**CECP4115T**	7,941	SD	30.28	656	94.5	230/460	58	1, 30
	1200	365TC	**CECP4312T**	11,260	SD	33.44	908	94.1	230/460	61.7	1
100	1800	405TC	**CECP4400T-4**	15,928	SD	38.20	1388	95.4	460	112	1
150	1800	445TC	**CECP4406T-4**	22,059	SD	44.75	2138	96.2	460	165	1
200	1800	447TC	**CECP4407T-4**	26,536	SD	48.24	2455	96.2	460	221	1

[a] See notes on the last page of this catalog. All ratings are 1.15 service factor at 40°C ambient. Cast Iron Frame
All ratings meet the intent of IEEE-45 for weather protection, and are suitable for use in a 50°C ambient with a 1.0 service factor.

Three Phase, Totally Enclosed, 460 & 230/460 Volts, C-Face

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
C-Face, Footless											
1	3600	56C	**VECP3580-4**	1,001	SD	14.50	60	84	460	1.4	1
	1800	56C	**VECP3581**	1,094	SD	14.50	66	87.5	208-230/460	1.5	1
		56C	**VECP3581-4**	1,094	SD	14.50	66	87.5	460	1.5	1
		143TC	**VECP3581T**	1,094	SD	14.57	67	87.5	208-230/460	1.5	1
		143TC	**VECP3581T-4**	1,094	SD	14.57	66	87.5	460	1.5	1
	1200	145TC	**VECP3582T**	1,205	SD	14.57	69	82.5	208-230/460	1.7	1
1 1/2	3600	143TC	**VECP3583T-4**	1,129	SD	14.57	67	85.5	460	2	1
	1800	145TC	**VECP3584T**	1,112	SD	14.57	71	88.5	208-230/460	2.1	1
		145TC	**VECP3584T-4**	1,112	SD	14.57	70	88.5	460	2.1	1
	1200	182TC	**VECP3667T**	1,431	SD	16.98	103	87.5	208-230/460	2.5	1
2	3600	145TC	**VECP3586T-4**	1,182	SD	14.57	74	86.5	460	2.5	1
	1800	145TC	**VECP3587T**	1,158	SD	14.57	75	88.5	208-230/460	2.8	1
		145TC	**VECP3587T-4**	1,158	SD	14.57	75	88.5	460	2.8	1
	1200	184TC	**VECP3664T**	1,451	SD	16.98	114	88.5	230/460	3.2	1
3	3600	182TC	**VECP3660T-4**	1,419	SD	16.98	103	88.5	460	3.4	1
	1800	182TC	**VECP3661T**	1,487	SD	16.98	112	89.5	230/460	4.1	1
		182TC	**VECP3661T-4**	1,487	SD	16.98	105	90.2	460	4.1	1
	1200	213TC	**VECP3764T**	2,140	SD	21.36	165	90.2	230/460	4.5	1, 30
5	3600	184TC	**VECP3663T-4**	1,727	SD	16.98	108	89.5	460	5.7	1
	1800	184TC	**VECP3665T**	1,513	SD	16.98	119	89.5	208-230/460	6.6	1
		184TC	**VECP3665T-4**	1,513	SD	16.98	119	89.5	460	6.6	1
	1200	215TC	**VECP3768T**	2,165	SD	21.36	225	90.2	230/460	7.3	1, 30
7 1/2	3600	213TC	**VECP3769T-4**	2,313	SD	21.36	173	91.7	460	8.6	1
	1800	213TC	**VECP3770T**	1,966	SD	21.36	170	91.7	230/460	9.5	1
		213TC	**VECP3770T-4**	1,966	SD	21.36	170	91.7	460	9.5	1
	1200	254TC	**VECP2276T**	3,392	SD	27.40	338	91	230/460	10.7	1, 30
10	3600	215TC	**VECP3771T-4**	2,450	SD	21.36	203	92.4	460	11	1
	1800	215TC	**VECP3774T**	2,322	SD	21.36	231	92.4	230/460	12.5	1
		215TC	**VECP3774T-4**	2,322	SD	21.36	231	92.4	460	12.5	1
	1200	256TC	**VECP2332T**	4,246	SD	27.40	348	91.7	230/460	14.2	1, 30
15	1800	254TC	**VECP2333T**	3,279	SD	27.40	314	92.4	230/460	18.1	1, 30
		254TC	**VECP2333T-4**	3,279	SD	27.40	303	92.4	460	18.1	1
	1200	284TC	**VECP4100T**	5,006	SD	30.68	503	93	230/460	19.7	1, 30
20	1800	256TC	**VECP2334T**	3,476	SD	27.40	338	93	230/460	24	1, 30
		256TC	**VECP2334T-4**	3,476	SD	27.40	365	93	460	24	1
	1200	286TC	**VECP4102T**	6,534	SD	30.68	528	93	230/460	26	1
25	1800	284TC	**VECP4103T**	4,602	SD	30.68	483	93.6	230/460	30	1, 30
	1200	324TC	**VECP4111T**	6,877	SD	33.03	636	93	230/460	32	1, 30

[a] See notes on the last page of this catalog.

All ratings are 1.15 service factor at 40°C ambient.

All ratings meet the intent of IEEE-45 for weather protection, and are suitable for use in a 50°C ambient with a 1.0 service factor.

Cast Iron Frame

IEEE 841, Three Phase, Totally Enclosed, 460 Volts

1 thru 250 Hp **NEMA 143T thru 449T** **IP56**

Applications: Petro-chemical, pulp and paper, cement, aggregate mining and other process industries requiring premium efficient motors designed, manufactured and tested to exceed IEEE 841-2009 TEFC motor standards for extreme severe duty service.

Features: Meets and/or exceeds all requirements of IEEE Std. 841-2009 including: Totally enclosed cast iron construction, Lower vibration design, Inpro Seals and Positive Lubrication System with oversize bearings on both ends, Stainless Steel nameplates, Terminal lugs on motor leads, Corrosion resistant epoxy finish, NEMA Premium efficiency, Class F insulation with a Class B temperature Rise, 1.15 service factor and 5 year warranty. Final test and vibration results provided with motor. Motors are marked for Div.2/Zone 2, Class I locations and are designed to meet 200° C @ 1.0 Service Factor. Inverter Ready design with speed range and Inverter T. Code nameplate information, see chart at the back of severe duty section for specific motor information.

Hp	RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
Foot Mounted												
1	3600	143T	TEFC	**ECP83580T-4**	1,043	SD	12.88	60	84	460	1.4	1
		143T	TENV	**ENCP83580T-4**	994	SD	11.37	56	84	460	1.3	1
	1800	143T	TEFC	**ECP83581T-4**	1,145	SD	12.88	69	87.5	460	1.5	1
		143T	TENV	**ENCP83581T-4**	1,087	SD	11.37	60	87.5	460	1.5	1
	1200	145T	TEFC	**ECP83582T-4**	1,228	SD	12.88	69	82.5	460	1.7	1
1 1/2	3600	143T	TEFC	**ECP83583T-4**	1,120	SD	12.88	69	85.5	460	2	1
	1800	145T	TEFC	**ECP83584T-4**	1,165	SD	12.87	73	88.5	460	2.1	1
	1200	182T	TEFC	**ECP83667T-4**	1,414	SD	15.93	114	87.5	460	2.5	1
2	3600	145T	TEFC	**ECP83586T-4**	1,229	SD	12.88	78	86.5	460	2.4	1
	1800	145T	TEFC	**ECP83587T-4**	1,217	SD	12.87	78	88.5	460	2.8	1
	1200	184T	TEFC	**ECP83664T-4**	1,537	SD	15.93	130	88.5	460	3.2	1
3	3600	182T	TEFC	**ECP83660T-4**	1,465	SD	15.93	116	88.5	460	3.4	1
	1800	182T	TEFC	**ECP83661T-4**	1,541	SD	15.93	116	89.5	460	4.1	1
	1200	213T	TEFC	**ECP83764T-4**	2,143	SD	19.50	165	89.5	460	4.5	1
5	3600	184T	TEFC	**ECP83663T-4**	1,805	SD	15.93	132	89.5	460	5.6	1
	1800	184T	TEFC	**ECP83665T-4**	1,570	SD	15.93	127	89.5	460	6.6	1
	1200	215T	TEFC	**ECP83768T-4**	2,215	SD	19.50	193	89.5	460	7.1	1
7 1/2	3600	213T	TEFC	**ECP83769T-4**	2,356	SD	19.50	179	91.7	460	8.6	1
	1800	213T	TEFC	**ECP83770T-4**	1,978	SD	19.50	199	91.7	460	9.5	1
	1200	254T	TEFC	**ECP82276T-4**	3,195	SD	24.78	343	91	460	10.5	1
10	3600	215T	TEFC	**ECP83771T-4**	2,508	SD	19.50	225	91	460	11.3	1
	1800	215T	TEFC	**ECP83774T-4**	2,342	SD	19.50	231	91.7	460	12.2	1
	1200	256T	TEFC	**ECP82332T-4**	4,079	SD	24.78	359	91.7	460	14.1	1
15	3600	254T	TEFC	**ECP82394T-4**	3,264	SD	24.78	308	91.7	460	17	1
	1800	254T	TEFC	**ECP82333T-4**	3,015	SD	24.78	317	92.4	460	17.6	1
	1200	284T	TEFC	**ECP84100T-4**	4,712	SD	27.93	447	92.4	460	20	1
20	3600	256T	TEFC	**ECP84106T-4**	3,742	SD	24.78	328	91.7	460	22	1
	1800	256T	TEFC	**ECP82334T-4**	3,260	SD	24.78	350	93	460	23.1	1
	1200	286T	TEFC	**ECP84102T-4**	6,350	SD	27.93	442	92.4	460	25	1
25	3600	284TS	TEFC	**ECP84107T-4**	4,575	SD	26.56	430	91.7	460	28.5	1
	1800	284T	TEFC	**ECP84103T-4**	4,228	SD	27.93	441	93.6	460	29	1
	1200	324T	TEFC	**ECP84111T-4**	6,692	SD	30.66	638	93	460	32	1
30	3600	286TS	TEFC	**ECP84108T-4**	5,480	SD	26.56	442	91.7	460	33	1
	1800	286T	TEFC	**ECP84104T-4**	4,979	SD	27.93	545	93.6	460	35	1
	1200	326T	TEFC	**ECP84117T-4**	8,709	SD	30.66	637	93	460	38.6	1
40	3600	324TS	TEFC	**ECP84109T-4**	7,498	SD	29.16	626	92.4	460	44	1
	1800	324T	TEFC	**ECP84110T-4**	6,629	SD	30.66	629	94.1	460	46	1
	1200	364T	TEFC	**ECP84308T-4**	10,662	SD	33.49	927	94.1	460	49.4	1

[a] See notes on the last page of this catalog.

All ratings are 1.15 service factor at 40°C ambient.

All ratings meet the intent of IEEE-45 for weather protection, and are suitable for use in a 50°C ambient with a 1.0 service factor.

Cast Iron Frame

IEEE 841, Three Phase, Totally Enclosed, 460 Volts

Hp	RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
50	3600	326TS	TEFC	**ECP84114T-4**	7,821	SD	29.16	623	93	460	55	1
	1800	326T	TEFC	**ECP84115T-4**	7,783	SD	30.66	679	94.5	460	57	1
	1200	365T	TEFC	**ECP84312T-4**	11,355	SD	33.49	928	94.1	460	61.7	1
60	3600	364TS	TEFC	**ECP84310T-4**	11,558	SD	31.37	905	95	460	65.1	1
	1800	364T	TEFC	**ECP84314T-4**	10,335	SD	33.49	913	95	460	68	1
	1200	404T	TEFC	**ECP84403T-4**	14,718	SD	38.32	1271	95	460	69	1
75	3600	365TS	TEFC	**ECP84313T-4**	12,802	SD	31.37	1045	94.5	460	80.7	1
	1800	365T	TEFC	**ECP84316T-4**	12,019	SD	33.49	971	95.4	460	85.9	1
	1200	405T	TEFC	**ECP84404T-4**	17,827	SD	38.20	1327	94.5	460	86.8	1
100	3600	405TS	TEFC	**ECP84402T-4**	15,341	SD	35.19	1330	95	460	110	1
	1800	405T	TEFC	**ECP84400T-4**	16,043	SD	38.32	1299	95.4	460	112	1
	1200	444T	TEFC	**ECP84409T-4**	19,609	SD	44.75	1940	95	460	119	1
		444T	TEFC	**ECP84909T-4**	19,609	SD	44.75	1933	95	460	119	1, 99
125	3600	444TS	TEFC	**ECP84412T-4**	17,941	SD	40.98	1968	95	460	137	1
		444TS	TEFC	**ECP84412T-4E**	17,941	SD	40.88	1679	95.4	460	137	1, 56
		444TS	TEFC	**ECP84912T-4**	17,941	SD	40.98	1968	95	460	137	1, 99
	1800	444T	TEFC	**ECP84410T-4**	18,198	SD	44.75	2020	95.4	460	144	1
		444T	TEFC	**ECP84410T-4E**	18,198	SD	44.62	1746	95.8	460	139	1, 56
		444T	TEFC	**ECP84910T-4**	18,198	SD	44.75	1779	95.4	460	144	1, 99
	1200	445T	TEFC	**ECP84411T-4**	22,257	SD	44.75	2083	95	460	146	1
150	3600	445TS	TEFC	**ECP84413T-4**	20,617	SD	40.98	2053	95	460	164	1
		445TS	TEFC	**ECP84413T-4E**	20,617	SD	40.88	1910	96.2	460	164	1, 56
		445TS	TEFC	**ECP84913T-4**	20,617	SD	40.98	2049	95	460	164	1, 99
	1800	445T	TEFC	**ECP84406T-4**	21,521	SD	44.75	2184	95.8	460	169	1
		445T	TEFC	**ECP84906T-4**	21,521	SD	44.75	2175	95.8	460	169	1, 99
	1200	447T	TEFC	**ECP844156T-4**	24,739	SD	48.24	2536	95.8	460	170	1
		447T	TEFC	**ECP844156TR-4**	25,964	SD	48.24	2615	95.8	460	170	1, 5
		447T	TEFC	**ECP849156T-4**	24,739	SD	48.24	2598	95.8	460	170	1, 99
		447T	TEFC	**ECP849156TR-4**	25,964	SD	48.24	2615	95.8	460	170	1, 5, 99
200	3600	447TS	TEFC	**ECP84416T-4**	27,256	SD	44.48	2433	96.2	460	213	1
	1800	447T	TEFC	**ECP84407T-4**	25,892	SD	48.24	2582	96.2	460	223	1
		447T	TEFC	**ECP84407TR-4**	27,119	SD	48.24	2676	96.2	460	223	1, 5
	1200	449T	TEFC	**ECP844206T-4**	32,865	SD	53.24	3125	95.8	460	225	1
		449T	TEFC	**ECP844206TR-4**	34,092	SD	53.24	3108	95.8	460	225	1, 5
		449T	TEFC	**ECP849206T-4**	32,865	SD	53.24	3085	95.8	460	225	1, 99
		449T	TEFC	**ECP849206TR-4**	34,092	SD	53.24	3108	95.8	460	225	1, 5, 99
250	3600	449TS	TEFC	**ECP844252T-4**	43,915	SD	49.48	2790	96.2	460	266	1
		449TS	TEFC	**ECP849252T-4**	43,915	SD	49.48	2798	96.2	460	266	1, 99
	1800	449T	TEFC	**ECP84408T-4**	33,052	SD	53.24	2959	96.2	460	276	1
		449T	TEFC	**ECP84408TR-4**	34,246	SD	53.24	2995	96.2	460	276	1, 5
		449T	TEFC	**ECP84908T-4**	33,052	SD	53.24	2971	96.2	460	276	1, 99
		449T	TEFC	**ECP84908TR-4**	34,246	SD	53.24	2995	96.2	460	276	1, 5, 99
	1200	449T	TEFC	**ECP844256T-4**	46,128	SD	53.24	3125	95.8	460	287	1
C-Face, Foot Mounted												
1	3600	143TC	TEFC	**CECP83580T-4**	1,087	SD	13.38	63	84	460	1.4	1
		143TC	TENV	**CENCP83580T-4**	1,039	SD	12.00	61	84	460	1.3	1
	1800	143TC	TEFC	**CECP83581T-4**	1,190	SD	13.38	71	87.5	460	1.5	1
		143TC	TENV	**CENCP83581T-4**	1,130	SD	12.00	64	87.5	460	1.5	1
	1200	145TC	TEFC	**CECP83582T-4**	1,273	SD	13.38	69	82.5	460	1.7	1
1 1/2	3600	143TC	TEFC	**CECP83583T-4**	1,164	SD	13.38	71	85.5	460	2	1
	1800	145TC	TEFC	**CECP83584T-4**	1,212	SD	13.38	75	88.5	460	2.1	1
	1200	182TC	TEFC	**CECP83667T-4**	1,461	SD	16.69	108	87.5	460	2.5	1
2	3600	145TC	TEFC	**CECP83586T-4**	1,277	SD	13.38	80	86.5	460	2.4	1
	1800	145TC	TEFC	**CECP83587T-4**	1,262	SD	13.38	78	88.5	460	2.8	1
	1200	184TC	TEFC	**CECP83664T-4**	1,681	SD	16.69	120	88.5	460	3.2	1

[a] See notes on the last page of this catalog.

All ratings are 1.15 service factor at 40°C ambient.

All ratings meet the intent of IEEE-45 for weather protection, and are suitable for use in a 50°C ambient with a 1.0 service factor.

Cast Iron Frame

IEEE 841, Three Phase, Totally Enclosed, 460 Volts

Hp	RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
C-Face, Foot Mounted (continued)												
3	3600	182TC	TEFC	**CECP83660T-4**	1,552	SD	16.69	121	88.5	460	3.4	1
	1800	182TC	TEFC	**CECP83661T-4**	1,644	SD	16.69	120	89.5	460	4.1	1
	1200	213TC	TEFC	**CECP83764T-4**	2,246	SD	20.23	209	89.5	460	4.5	1
5	3600	184TC	TEFC	**CECP83663T-4**	1,886	SD	16.69	139	89.5	460	5.6	1
	1800	184TC	TEFC	**CECP83665T-4**	1,653	SD	16.69	131	89.5	460	6.6	1
	1200	215TC	TEFC	**CECP83768T-4**	2,298	SD	20.23	227	89.5	460	7.1	1
7 1/2	3600	213TC	TEFC	**CECP83769T-4**	2,445	SD	20.23	179	91.7	460	8.6	1
	1800	213TC	TEFC	**CECP83770T-4**	2,094	SD	20.23	178	91.7	460	9.5	1
	1200	254TC	TEFC	**CECP82276T-4**	3,311	SD	25.28	337	91	460	10.5	1
10	3600	215TC	TEFC	**CECP83771T-4**	2,595	SD	20.23	225	91	460	11.3	1
	1800	215TC	TEFC	**CECP83774T-4**	2,531	SD	20.23	231	91.7	460	12.2	1
	1200	256TC	TEFC	**CECP82332T-4**	4,268	SD	25.28	347	91.7	460	14.1	1
15	3600	254TC	TEFC	**CECP82394T-4**	3,549	SD	25.28	306	91.7	460	17	1
	1800	254TC	TEFC	**CECP82333T-4**	3,465	SD	25.28	316	92.4	460	17.6	1
	1200	284TC	TEFC	**CECP84100T-4**	5,162	SD	27.93	448	92.4	460	20	1
20	3600	256TC	TEFC	**CECP84106T-4**	4,025	SD	25.28	328	91.7	460	22	1
	1800	256TC	TEFC	**CECP82334T-4**	3,666	SD	25.28	356	93	460	23.1	1
	1200	286TC	TEFC	**CECP84102T-4**	6,756	SD	27.93	467	92.4	460	25	1
25	3600	284TSC	TEFC	**CECP84107T-4**	5,490	SD	26.56	433	91.7	460	28.5	1
	1800	284TC	TEFC	**CECP84103T-4**	5,145	SD	27.93	452	93.6	460	29	1
	1200	324TC	TEFC	**CECP84111T-4**	7,609	SD	30.66	608	93	460	32	1
30	3600	286TSC	TEFC	**CECP84108T-4**	6,395	SD	26.56	442	91.7	460	33	1
	1800	286TC	TEFC	**CECP84104T-4**	5,892	SD	27.93	485	93.6	460	35	1
	1200	326TC	TEFC	**CECP84117T-4**	9,622	SD	30.66	633	93	460	38.6	1
40	3600	324TSC	TEFC	**CECP84109T-4**	8,505	SD	29.16	640	92.4	460	44	1
	1800	324TC	TEFC	**CECP84110T-4**	7,637	SD	30.66	638	94.1	460	46	1
	1200	364TC	TEFC	**CECP84308T-4**	11,670	SD	33.44	889	94.1	460	49.4	1
50	3600	324TSC	TEFC	**CECP84114T-4**	8,831	SD	29.16	670	93	460	55	1
	1800	326TC	TEFC	**CECP84115T-4**	8,790	SD	30.66	683	94.5	460	57	1
	1200	365TC	TEFC	**CECP84312T-4**	12,362	SD	33.44	920	94.1	460	61.7	1
60	3600	364TSC	TEFC	**CECP84310T-4**	12,655	SD	31.37	899	95	460	65.1	1
	1800	364TC	TEFC	**CECP84314T-4**	11,434	SD	33.49	906	95	460	68	1
75	3600	365TSC	TEFC	**CECP84313T-4**	13,898	SD	31.37	992	95	460	80.7	1
	1800	365TC	TEFC	**CECP84316T-4**	13,119	SD	33.49	992	95.4	460	85.9	1
C-Face, Footless												
1	3600	143TC	TENV	**VENCP83580T-4**	985	SD	12.00	56	84	460	1.3	1
	1800	143TC	TENV	**VENCP83581T-4**	1,063	SD	12.00	58	87.5	460	1.5	1
1 1/2	3600	143TC	TEFC	**VECP83583T-4**	1,153	SD	14.56	75	85.5	460	2	1
	1800	145TC	TEFC	**VECP83584T-4**	1,199	SD	14.56	76	88.5	460	2.1	1
2	3600	145TC	TEFC	**VECP83586T-4**	1,264	SD	14.56	83	86.5	460	2.4	1
	1800	145TC	TEFC	**VECP83587T-4**	1,250	SD	14.56	79	88.5	460	2.8	1
3	3600	182TC	TEFC	**VECP83660T-4**	1,536	SD	16.69	116	88.5	460	3.4	1
	1800	182TC	TEFC	**VECP83661T-4**	1,628	SD	16.69	116	89.5	460	4.1	1
5	3600	184TC	TEFC	**VECP83663T-4**	1,871	SD	16.69	130	89.5	460	5.6	1
	1800	184TC	TEFC	**VECP83665T-4**	1,637	SD	16.69	131	89.5	460	6.6	1
7 1/2	3600	213TC	TEFC	**VECP83769T-4**	2,414	SD	20.24	179	91.7	460	8.6	1
	1800	213TC	TEFC	**VECP83770T-4**	2,062	SD	20.24	211	91.7	460	9.5	1
10	3600	215TC	TEFC	**VECP83771T-4**	2,563	SD	20.24	225	91	460	11.3	1
	1800	215TC	TEFC	**VECP83774T-4**	2,499	SD	20.24	231	91.7	460	12.2	1
15	3600	254TC	TEFC	**VECP82394T-4**	3,403	SD	25.28	293	91.7	460	17	1
	1800	254TC	TEFC	**VECP82333T-4**	3,318	SD	25.28	311	92.4	460	17.6	1
20	3600	256TC	TEFC	**VECP84106T-4**	3,879	SD	25.28	319	91.7	460	22	1
	1800	256TC	TEFC	**VECP82334T-4**	3,517	SD	25.28	355	93	460	23.1	1

[a] See notes on the last page of this catalog.

All ratings are 1.15 service factor at 40°C ambient.

All ratings meet the intent of IEEE-45 for weather protection, and are suitable for use in a 50°C ambient with a 1.0 service factor.

Cast Iron Frame

IEEE 841, Three Phase, TEFC, 575 Volts, Foot Mounted

1 thru 250 Hp **NEMA 143T thru 449T** **IP56**

Applications: Designed for 600V distibution systems for use in Petro-chemical, pulp and paper, cement, aggregate mining and other process industries requiring premium efficient motors designed, manufactured and tested to exceed IEEE 841-2009 TEFC motor standards for extreme severe duty service.

Features: Meets and/or exceeds all requirements of IEEE Std. 841-2009 including: Totally enclosed cast iron construction, Lower vibration design, Inpro Seals and Positive Lubrication System with oversize bearings on both ends, Stainless Steel nameplates, Terminal lugs on motor leads, Corrosion resistant epoxy finish, NEMA Premium efficiency, Class F insulation with a Class B temperature Rise, 1.15 service factor and 5 year warranty. Final test and vibration results provided with motor. Motors are marked for Div.2/Zone 2, Class I locations and are designed to meet 200° C @ 1.0 Service Factor. Inverter Ready design with speed range and Inverter T. Code nameplate information, see chart at the back of severe duty section for specific motor information.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
					Foot Mounted						
1	3600	143T	**ECP83580T-5**	1,043	SD	12.88	53	84	575	1.1	1
	1800	143T	**ECP83581T-5**	1,145	SD	12.87	67	87.5	575	1.2	1
	1200	145T	**ECP83582T-5**	1,228	SD	12.88	69	82.5	575	1.4	1
1 1/2	3600	143T	**ECP83583T-5**	1,120	SD	12.88	71	85.5	575	1.6	1
	1800	145T	**ECP83584T-5**	1,165	SD	12.87	73	88.5	575	1.7	1
	1200	182T	**ECP83667T-5**	1,414	SD	15.93	112	87.5	575	2	1
2	3600	145T	**ECP83586T-5**	1,161	SD	12.88	79	86.5	575	1.9	1
	1800	145T	**ECP83587T-5**	1,217	SD	12.87	77	88.5	575	2.3	1
	1200	184T	**ECP83664T-5**	1,537	SD	15.93	128	88.5	575	2.5	1
3	3600	182T	**ECP83660T-5**	1,465	SD	15.93	116	88.5	575	2.7	1
	1800	182T	**ECP83661T-5**	1,541	SD	15.93	118	89.5	575	3.3	1
	1200	213T	**ECP83764T-5**	2,143	SD	19.50	211	89.5	575	3.6	1
5	3600	184T	**ECP83663T-5**	1,805	SD	15.93	130	89.5	575	4.5	1
	1800	184T	**ECP83665T-5**	1,570	SD	15.93	127	89.5	575	5.3	1
	1200	215T	**ECP83768T-5**	2,215	SD	19.50	226	89.5	575	5.7	1
7 1/2	3600	213T	**ECP83769T-5**	2,356	SD	19.50	179	91.7	575	6.9	1
	1800	213T	**ECP83770T-5**	1,978	SD	19.50	199	91.7	575	7.6	1
	1200	254T	**ECP82276T-5**	3,352	SD	24.78	348	91.7	575	8.4	1
10	3600	215T	**ECP83771T-5**	2,508	SD	19.50	225	90.2	575	9	1
	1800	215T	**ECP83774T-5**	2,342	SD	19.50	231	91.7	575	9.8	1
	1200	256T	**ECP82332T-5**	4,079	SD	24.78	355	91.7	575	11.4	1
15	3600	254T	**ECP82394T-5**	3,264	SD	24.78	305	91.7	575	13.8	1
	1800	254T	**ECP82333T-5**	3,015	SD	24.78	318	92.4	575	14.1	1
	1200	284T	**ECP84100T-5**	4,712	SD	27.93	445	92.4	575	15.6	1
20	3600	256T	**ECP84106T-5**	3,742	SD	24.78	324	91.7	575	17.8	1
	1800	256T	**ECP82334T-5**	3,260	SD	24.78	361	93	575	19	1
	1200	286T	**ECP84102T-5**	6,350	SD	27.93	443	92.4	575	21	1
25	3600	284TS	**ECP84107T-5**	4,575	SD	26.56	429	91.7	575	22.8	1
	1800	284T	**ECP84103T-5**	4,228	SD	27.93	443	93.6	575	23	1
	1200	324T	**ECP84111T-5**	6,692	SD	30.66	623	93	575	25.4	1
30	3600	286TS	**ECP84108T-5**	5,480	SD	26.56	422	91.7	575	26.6	1
	1800	286T	**ECP84104T-5**	4,979	SD	27.93	480	93.6	575	28	1
	1200	326T	**ECP84117T-5**	8,709	SD	30.66	635	93	575	30.9	1
40	3600	324TS	**ECP84109T-5**	7,498	SD	29.16	624	92.4	575	35	1
	1800	324T	**ECP84110T-5**	6,629	SD	30.66	635	94.5	575	37	1
	1200	364T	**ECP84308T-5**	10,662	SD	33.49	922	94.1	575	39.5	1
50	3600	326TS	**ECP84114T-5**	7,821	SD	29.16	662	93	575	44	1
	1800	326T	**ECP84115T-5**	7,783	SD	30.66	653	94.5	575	45	1
	1200	365T	**ECP84312T-5**	11,355	SD	33.49	924	94.1	575	49.3	1

[a] See notes on the last page of this catalog.

Cast Iron Frame

All ratings meet the intent of IEEE-45 for weather protection, and are suitable for use in a 50°C ambient with a 1.0 service factor.

IEEE 841, Three Phase, TEFC, 575 Volts, Foot Mounted

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
60	3600	364TS	**ECP84310T-5**	11,558	SD	31.37	932	95	575	52	1
	1800	364T	**ECP84314T-5**	10,335	SD	33.49	937	95	575	54.4	1
	1200	404T	**ECP84403T-5**	14,718	SD	38.20	1275	95	575	55.2	1
75	3600	365TS	**ECP84313T-5**	12,802	SD	31.37	998	95	575	64.5	1
	1800	365T	**ECP84316T-5**	12,019	SD	33.49	985	95.4	575	68.7	1
	1200	405T	**ECP84404T-5**	17,827	SD	38.32	1283	94.5	575	69.4	1
100	3600	405TS	**ECP84402T-5**	15,341	SD	35.31	1287	95	575	88	1
	1800	405T	**ECP84400T-5**	16,043	SD	38.20	1304	95.4	575	89.6	1
	1200	444T	**ECP84409T-5**	19,609	SD	44.75	1885	95	575	92	1
125	3600	444TS	**ECP84412T-5**	17,941	SD	40.98	1799	95.4	575	109	1
		444TS	**ECP84412T-5E**	17,941	SD	40.88	1740	95.4	575	109	1, 56
	1800	444T	**ECP84410T-5**	18,198	SD	44.75	1915	95.8	575	111	1
		444T	**ECP84410T-5E**	18,198	SD	44.62	1802	95.8	575	111	1, 56
	1200	445T	**ECP84411T-5**	22,257	SD	44.75	2000	95.4	575	114	1
150	3600	445TS	**ECP84413T-5**	20,617	SD	40.98	2062	96.2	575	131	1
	1800	445T	**ECP84406T-5**	21,521	SD	44.75	1886	96.2	575	132	1
		445T	**ECP84406T-5E**	21,521	SD	44.62	1879	96.2	575	132	1, 56
	1200	447T	**ECP844156TR-5**	25,964	SD	48.24	2595	95.8	575	136	1, 5
		447T	**ECP849156TR-5**	25,964	SD	48.24	2000	95.8	575	136	1, 5, 99
200	3600	447TS	**ECP84416T-5**	27,256	SD	44.48	2182	96.2	575	177	1
	1800	447T	**ECP84407T-5**	25,892	SD	48.24	2606	96.2	575	178	1
		447T	**ECP84407TR-5**	27,119	SD	48.24	2618	96.2	575	178	1, 5
		447T	**ECP84907T-5**	25,892	SD	48.24	2676	96.2	575	178	1, 99
		447T	**ECP84907TR-5**	27,119	SD	48.24	2676	96.2	575	178	1, 5, 99
	1200	449T	**ECP844206TR-5**	34,092	SD	53.24	3100	95.8	575	180	1, 5
250	3600	449TS	**ECP844252T-5**	43,915	SD	49.48	2784	96.2	575	212	1
		449TS	**ECP849252T-5**	43,915	SD	49.48	2595	96.2	575	212	1, 99
	1800	449T	**ECP84408T-5**	33,052	SD	53.24	2932	96.2	575	220	1
		449T	**ECP84408TR-5**	34,246	SD	53.24	2732	96.2	575	220	1, 5
		449T	**ECP84908T-5**	33,052	SD	53.24	2941	96.2	575	220	1, 99
		449T	**ECP84908TR-5**	34,246	SD	53.24	2677	96.2	575	220	1, 5, 99
C-Face, Foot Mounted											
1	1800	143TC	**CECP83581T-5**	1,190	SD	13.38	71	87.5	575	1.2	1
2	1800	145TC	**CECP83587T-5**	1,262	SD	13.38	80	88.5	575	2.3	1
3	1800	182TC	**CECP83661T-5**	1,644	SD	16.69	111	89.5	575	3.3	1
5	1800	184TC	**CECP83665T-5**	1,653	SD	16.69	131	89.5	575	5.3	1
7 1/2	1800	213TC	**CECP83770T-5**	2,094	SD	20.23	211	91.7	575	7.6	1
10	1800	215TC	**CECP83774T-5**	2,531	SD	20.23	231	91.7	575	9.8	1
15	1800	254TC	**CECP82333T-5**	3,465	SD	25.28	309	92.4	575	14.1	1
20	1800	256TC	**CECP82334T-5**	3,666	SD	25.28	357	93	575	19	1
25	1800	284TC	**CECP84103T-5**	5,145	SD	27.93	444	93.6	575	23	1
30	1800	286TC	**CECP84104T-5**	5,892	SD	27.93	487	93.6	575	28	1
40	1800	324TC	**CECP84110T-5**	7,637	SD	30.66	670	94.5	575	36.8	1
50	1800	326TC	**CECP84115T-5**	8,790	SD	30.66	663	94.5	575	45	1

[a] See notes on the last page of this catalog.

Cast Iron Frame

All ratings meet the intent of IEEE-45 for weather protection, and are suitable for use in a 50°C ambient with a 1.0 service factor.

661XL / IEEE 841, Three Phase, TEFC, 460 Volts, Foot Mounted

5 thru 75 Hp **NEMA 184T thru 365T** **IP56**

Applications: Petroleum, chemical and other industries with belt driven heat exchangers requiring premium efficient motors designed to API 661 standards of 40,000 hours bearing life.

Features: Meets and/or exceeds all the requirements of IEEE Std. 841-2009 with the exception of Mobilith Grease which is required for best performance of the Roller Bearing design. Standard features include vertical lifting provisions for shaft up and shaft down mounting, cast iron construction, Inpro Seals on both end of the motor, Positive Lubrication System, NEMA Premium efficiency, Stainless Steel nameplates, Corrosion resistant epoxy finish, Class F insulation with a Class B temperature Rise, 1.15 service factor and 5 year warranty. Final test and vibration results provided with motor. Motors are marked for Div.2/Zone 2, Class I locations and are designed to meet 200° C @ 1.0 Service Factor. Inverter Ready design with speed range and Inverter T. Code nameplate information, see chart at the back of severe duty section for specific motor information.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
5	1800	184T	**ECP63665T-4**	1,570	SD	15.93	128	89.5	460	6.6	1
7 1/2	1800	213T	**ECP63770TR-4**	2,248	SD	19.49	195	91.7	460	9.5	1, 5
10	1800	215T	**ECP63774TR-4**	2,611	SD	19.49	231	91.7	460	12.2	1, 5
15	1800	254T	**ECP62333TR-4**	3,372	SD	24.88	314	92.4	460	17.6	1, 5
20	1800	256T	**ECP62334TR-4**	3,617	SD	24.88	761	93	460	23.1	1, 5
25	1800	284T	**ECP64103TR-4**	4,676	SD	28.01	461	93.6	460	30.5	1, 5
30	1800	286T	**ECP64104TR-4**	5,426	SD	28.01	487	93.6	460	35	1, 5
40	1800	324T	**ECP64110TR-4**	7,198	SD	30.76	636	94.1	460	46	1, 5
50	1800	326T	**ECP64115TR-4**	8,354	SD	30.76	687	94.5	460	57	1, 5
60	1800	364T	**ECP64314TR-4**	10,960	SD	33.48	936	95	460	68	1, 5
75	1800	365T	**ECP64316TR-4**	12,644	SD	33.48	976	95.4	460	85.9	1, 5

[a] See notes on the last page of this catalog.

Cast Iron Frame

All ratings meet the intent of IEEE-45 for weather protection, and are suitable for use in a 50°C ambient with a 1.0 service factor.

Quarry Duty Motors, Three Phase, TEFC, Design C, High Torque

2 thru 75 Hp **NEMA 145T thru 365T** **IP55**

Applications: Conveyors, gear reducers and applications requiring NEMA Design C torques.

Features: High torque NEMA Design C electrical designs, Totally enclosed fan cooled heavy-gauge steel and cast-iron frames, gasketed conduit boxes with NPT entry, Corrosion resistant epoxy finish, Shaft slingers, Class F insulation with a Class B temperature rise, 1.15 service factor.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
Foot Mounted											
2	1800	145T	**M3558T-9**	597	SD	13.31	41	84	230/460	3.1	1, 30
3	1800	182T	**M3611T-9**	700	SD	16.54	66	87.5	208-230/460	4.5	1
5	1800	184T	**M3615T-9**	808	SD	18.05	83	87.5	208-230/460	7.1	1
7 1/2	1800	213T	**M3710T-9**	1,027	SD	17.89	120	89.5	230/460	10.3	1, 30
10	1800	215T	**M3714T-9**	1,195	SD	19.01	136	89.5	230/460	13.9	1
15	1800	254T	**M2333T-9**	2,110	SD	23.28	260	91	208-230/460	18.7	1
20	1800	256T	**M2334T-9**	2,546	SD	23.28	268	91	208-230/460	25.5	1
25	1800	284T	**M4103T-9**	3,158	SD	27.76	415	92.4	208-230/460	29	1
30	1800	286T	**M4104T-9**	3,730	SD	27.76	423	92.4	208-230/460	35	1
40	1800	324T	**M4110T-9**	4,948	SD	30.28	632	93	208-230/460	47	1
50	1800	326T	**M4115T-9**	5,122	SD	30.28	633	93	208-230/460	59	1
60	1800	364T	**M4314T-9**	9,016	SD	33.44	876	94.1	230/460	70.2	1
75	1800	365T	**M4316T-9**	9,729	SD	33.44	911	94.5	230/460	87.9	1
C-Face, Footless											
3	1800	182TC	**VM3661T-9**	1,077	SD	15.98	97	87.5	208-230/460	4.4	1

[a] See notes on the last page of this catalog.

Cast Iron Frame

Crusher Motors, Three Phase, TEFC, 460 Volt, Foot Mounted

75 thru 350 Hp **NEMA 404T thru 449T** **IP55**

Applications: Belt-driven rock crushers, pellet mills, and other applications requiring motors rated for severe duty service and high starting torques.

Features: High torque NEMA Design A electrical design exceeds NEMA Design C locked rotor, pull up and breakdown torques. Totally enclosed fan cooled cast iron construction with pulley end roller bearings and high strength steel shaft for belted loads only. Not suitable for direct coupled loads. Sealed frame fits, Gasketed conduit box, Corrosion resistant epoxy finish. Class F insulation, 1.15 Service Factor. Stainless steel nameplate and corrosion resistant hardware. Super-E® motors have NEMA Premium® efficiency and 3 year warranty.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
75	1200	404T	**ECR4404TR-4**	16,137	SD	38.31	1272	94.5	460	91	1,5
100	1800	405T	**ECR4400TR-4**	12,216	SD	38.31	1403	95.4	460	115	1,5
	1200	444T	**ECR4409TR-4**	16,669	SD	44.75	2141	95	460	119	1,5
		444T	**ECR4909TR-4**	16,669	SD	44.75	2141	95	460	119	1, 99,5
125	1800	444T	**ECR4410TR-4**	15,544	SD	44.75	2075	95.4	460	149	1,5
		444T	**ECR4910TR-4**	15,544	SD	44.75	1964	95.4	460	149	1, 99,5
	1200	445T	**ECR4411TR-4**	18,831	SD	48.24	2271	95	460	148	1,5
		445T	**ECR4911TR-4**	18,831	SD	48.24	2271	95	460	148	1, 99,5
150	1800	445T	**ECR4406TR-4**	18,205	SD	48.24	2184	95.8	460	180	1,5
	1200	447T	**ECR44156TR-4**	21,231	SD	53.24	3125	95.8	460	172	1,5
200	1800	447T	**ECR4407TR-4**	21,907	SD	53.24	2831	96.2	460	232	1,5
		447T	**ECR4907TR-4**	21,907	SD	53.24	2694	96.2	460	232	1, 99,5
	1200	449T	**ECR44206TR-4**	27,805	SD	53.24	3165	95.8	460	232	1,5
250	1800	447T	**CR4408TR-4**	26,090	SD	48.24	2405	95.4	460	284	1,5
	1200	449T	**CR44256TR-4**	36,933	SD	53.24	2839	95.4	460	295	1,5
300	1800	449T	**CR44304TR-4**	35,303	SD	53.24	2645	95.4	460	353	1,5
	1200	L449T	**CR49306TR-4**	48,040	SD	60.21	3683	95.8	460	371	1, 99,5
350	1800	449T	**CR44354TR-4**	41,906	SD	53.24	2925	95.8	460	404	1,5

[a] See notes on the last page of this catalog.

Cast Iron Frame

Oil Field Pump, Three Phase, TEFC and ODP, Design D, Foot Mounted

3 thru 150 Hp NEMA 213T thru 449T

Applications: Beam pumping units, punch presses and other high cyclic load applications requiring high torque and high slip.

Features: High slip Nema Design D electrical designs. Open Drip Proof enclosures available with heavy-gauge steel and cast iron frames. Totally enclosed Fan cooled cast iron construction enclosures. F-2 position conduit box. Rodent screens on open motors, Severe Duty features on Totally enclosed motors. Shaft slinger, Normally closed thermostats, Corrosion resistant epoxy finish.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
Totally Enclosed Fan Cooled, 230/460/796 VAC											
3	1200	213T	**0F3764T**	2,314	SD	19.32	164	80	230/460/796	3.1	1
5	1200	215T	**0F3768T**	2,565	SD	19.32	196	80	230/460/796	4.4	1
7 1/2	1200	254T	**0F2276T**	3,127	SD	23.25	249	84	230/460/796	7.5	1
10	1200	256T	**0F2332T**	3,482	SD	23.25	280	84	230/460/796	9	1
15	1200	284T	**0F4100T**	5,553	SD	27.56	415	87.5	230/460/796	11.6	1
20	1200	286T	**0F4102T**	6,709	SD	27.56	451	87.5	230/460/796	15	1
25	1200	324T	**0F4111T**	8,096	SD	30.27	579	87.5	230/460/796	19	1
Totally Enclosed Fan Cooled, 460/796 VAC											
30	1200	326T	**0F4117T**	9,817	SD	30.27	611	88.5	460/796	22.5	1
40	1200	365T	**0F4308T**	10,877	SD	33.44	928	89.5	460/796	28	1
50	1200	404T	**0F4312T**	14,089	SD	38.16	1316	89.5	460/796	33.9	1
60	1200	405T	**0F4403T**	17,426	SD	38.16	1407	90.2	460/796	40.5	1
75	1200	444T	**0F4404T**	18,899	SD	40.98	1850	88.5	460/796	51.5	1
		444T	**0F4904T**	18,899	SD	40.98	1850	88.5	460/796	51.5	1, 99
100	1200	445T	**0F4409T**	24,566	SD	48.24	2609	90.2	460/796	67.6	1
		445T	**0F4909T**	24,566	SD	48.24	2609	90.2	460/796	67.6	1, 99
125	1200	447T	**0F4411T**	31,535	SD	53.24	2830	91	460/796	83.7	1
		447T	**0F4911T**	31,535	SD	53.24	2830	91	460/796	83.7	1, 99
150	1200	449T	**0F44156T**	37,249	SD	53.24	3227	91.7	460/796	99.9	1
		449T	**0F49156T**	37,249	SD	53.24	3227	91.7	460/796	99.9	1, 99
Open Drip Proof, 230/460/796 VAC											
3	1200	213T	**0F3303T**	1,414	SD	18.13	92	81.5	230/460/796	3.1	2
5	1200	215T	**0F3305T**	1,876	SD	18.13	127	82.5	230/460/796	4.7	2
7 1/2	1200	254T	**0F3307T**	2,339	SD	24.18	209	81.5	230/460/796	7.2	2
		254T	**0F3407T**	2,565	SD	20.63	270	84	230/460/796	7.2	1
10	1200	256T	**0F3310T**	2,834	SD	24.18	234	82.5	230/460/796	9.2	2
		256T	**0F3410T**	2,997	SD	22.38	280	84	230/460/796	9	1
15	1200	284T	**0F3315T**	3,975	SD	26.31	288	85.5	230/460/796	13	1
		284T	**0F3415T**	4,200	SD	23.44	336	85.5	230/460/796	13.3	1
20	1200	286T	**0F3320T**	4,762	SD	26.31	323	84	230/460/796	17.2	1
		286T	**0F3420T**	4,982	SD	24.94	372	86.5	230/460/796	16.8	1
25	1200	324T	**0F3325T**	6,119	SD	29.18	437	85.5	230/460/796	20	1
		324T	**0F3425T**	6,510	SD	26.13	517	85.5	230/460/796	20	1
Open Drip Proof, 460/796 VAC											
30	1200	326T	**0F3330T**	7,444	SD	29.18	444	85.5	460/796	24	1
		326T	**0F3430T**	7,873	SD	27.63	537	85.5	460/796	24	1
40	1200	365T	**0F3340T**	9,483	SD	29.94	550	88.5	460/796	32.5	1
		365T	**0F3440T**	10,052	SD	29.70	714	87.5	460/796	28.4	1
50	1200	404T	**0F3350T**	11,088	SD	34.00	914	87.5	460/796	36.7	1
60	1200	404T	**0F3360T**	12,458	SD	34.00	1051	89.5	460/796	41.3	1
75	1200	404T	**0F3375T**	14,703	SD	34.00	1158	89.5	460/796	50.8	1
100	1200	445T	**0F33100T**	15,621	SD	39.56	1658	89.5	460/796	69.9	1
125	1200	449T	**0F33125T**	19,802	SD	48.06	2380	91	460	145	1

[a] See notes on the last page of this catalog. Cast Iron Frame

Custom TEFC motors available through 2,250 Hp; Open and WPII custom motors through 15,000 Hp. Contact your local ABB Sales Representative.

Dirty Duty, Three Phase, TEFC

1/2 thru 15 Hp **NEMA 56 thru 254T** **IP55**

Applications: Petro-chemical plants, mines, quarries, foundries, pulp and paper plants, waste management facilities, chemical plants and other processing industry applications requiring protection against corrosion caused by severe environmental operating conditions.

Features: Totally enclosed fan cooled frame, Stainless steel shaft extensions, designed to meet the intent of IEEE-45 for weather protection, suitable for use in 50 Degree C ambient with a 1.0 service factor. Super-E® Dirty Duty motors have NEMA Premium® efficiency and 3 year warranty.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
Foot Mounted, No Drip Cover											
1/2	1800	56	**M8001**	586	SD	11.35	27	74	230/460	0.5	1, 30
3/4	1800	56	**M8002**	744	SD	11.35	30	75.5	230/460	1.5	1, 30
1	1800	56	**M8003**	814	SD	12.85	35	78.5	208-230/460	1.7	1
		143T	**EM8003T**	1,150	SD	12.75	58	85.5	208-230/460	1.5	1
1 1/2	1800	145T	**EM8004T**	1,186	SD	12.75	64	86.5	208-230/460	2.3	1
2	1800	145T	**EM8005T**	1,209	SD	12.75	65	86.5	208-230/460	2.9	1
3	1800	182T	**EM8006T**	1,440	SD	15.93	108	89.5	208-230/460	4.1	1
5	1800	184T	**EM8007T**	1,579	SD	15.93	119	89.5	208-230/460	6.6	1
7 1/2	1800	213T	**EM8008T**	1,840	SD	19.50	170	91.7	208-230/460	9.5	1
10	1800	215T	**EM8009T**	2,373	SD	19.50	231	91.7	208-230/460	12.2	1
15	1800	254T	**EM8010T**	3,237	SD	23.54	264	92.4	208-230/460	18.1	1
C-Face, Foot Mounted, No Drip Cover											
1/2	3600	56C	**CM8537**	611	SD	11.34	26	68	230/460	1	1, 30
	1800	56C	**CM8001**	637	SD	11.34	29	74	230/460	0.5	1, 30
	1200	56C	**CM8539**	829	SD	11.34	30	72	230/460	1.2	1, 30
3/4	1800	56C	**CM8002**	795	SD	11.34	33	75.5	230/460	1.5	1
	1200	56C	**CM8543**	977	SD	12.84	38	77	208-230/460	1.5	1
1	1800	56C	**CM8003**	865	SD	12.84	38	78.5	208-230/460	1.7	1
	1200	56C	**CM8556**	1,043	SD	12.24	43	78.5	208-230/460	1.9	1
1 1/2	1800	56C	**CM8004**	947	SD	12.24	42	81.5	208-230/460	2.3	1
C-Face, Footless, No Drip Cover											
1/2	3600	56C	**VM8537**	599	SD	11.35	25	68	230/460	0.5	1, 30
	1800	56C	**VM8001**	612	SD	11.35	28	74	230/460	0.5	1, 30
		56C	**VM8001-5**	612	SD	11.35	27	74	575	0.8	1
3/4	3600	56C	**VM8541**	757	SD	11.35	27	74	230/460	1.3	1
	1800	56C	**VM8002**	771	SD	11.35	31	75.5	230/460	1.5	1, 30
		56C	**VM8002-5**	771	SD	11.35	27	75.5	575	1.2	1
1	3600	56C	**VM8012**	760	SD	11.35	28	75.5	230/460	1.8	1, 30
	1800	56C	**VM8003**	829	SD	12.85	37	78.5	208-230/460	1.7	1
		143TC	**VEM8003T-5**	1,198	SD	13.25	59	85.5	575	1.2	1
		143TC	**VM8003T**	937	SD	13.25	58	82.5	208-230/460	1.6	1
		143TC	**VM8003T-5**	937	SD	13.25	56	82.5	575	1.2	1
1 1/2	3600	56C	**VM8550**	900	SD	12.24	38	82.5	208-230/460	2.1	1
	1800	56C	**VM8004**	884	SD	12.24	42	81.5	208-230/460	2.3	1
		145TC	**VEM8004T-5**	1,243	SD	13.25	65	86.5	575	1.8	1
		145TC	**VM8004T**	919	SD	13.25	62	84	208-230/460	2.4	1
		145TC	**VM8004T-5**	919	SD	13.25	66	84	575	1.9	1
2	3600	56C	**VM8016**	954	SD	12.69	63	78.5	208-230/460	2.7	1
		145TC	**VM8016T**	1,030	SD	13.25	67	84	208-230/460	2.6	1
	1800	56C	**VM8005**	898	SD	12.69	62	82.5	208-230/460	3	1
		145TC	**VEM8005T-5**	1,291	SD	13.25	60	86.5	575	2.3	1
		145TC	**VM8005T**	969	SD	13.25	64	84	208-230/460	3.1	1
		145TC	**VM8005T-5**	969	SD	13.25	69	84	575	2.5	1

[a] See notes on the last page of this catalog.
Dirty duty not recommended for a chlorine atmosphere.
Cast Iron Frame

Dirty Duty, Three Phase, TEFC

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
C-Face, Footless, No Drip Cover (continued)											
3	3600	145TC	**VM8559T**	1,125	SD	13.25	74	85.5	208-230/460	3.7	1
	1800	182TC	**VM8006T**	1,319	SD	15.24	97	87.5	208-230/460	4.1	1
5	1800	184TC	**VM8007T**	1,475	SD	16.69	113	87.5	208-230/460	6.9	8
7 1/2	1800	213TC	**VM8008T**	1,902	SD	20.06	164	89.5	208-230/460	10.3	1
10	1800	215TC	**VM8024T**	2,138	SD	20.06	169	89.5	208-230/460	13	8

[a] See notes on the last page of this catalog.
Dirty duty not recommended for a chlorine atmosphere.
Cast Iron Frame

Dirty Duty, Autophoretic, Three Phase, 230/460 Volts, C-Face, Foot Mounted

1/2 thru 10 Hp **NEMA 56C thru 256TC** **IP56**

Applications: The most severe and corrosive applications, those which use intense high-pressure washdown, and marine applications. Corrosion-resistant autophoretic coating on steel and cast-iron components.

Features: Corrosion-resistant autophoretic coating on steel and cast iron components, stainless steel shaft extension, non-contact rotating labyrinth shaft seal on drive and fan ends, threaded drain ports, stainless steel plugs, gasketed and sealed conduit box, IP56 enclosure. Class F insulated motor with 1.15 service factor. Motors meet the intent of IEEE 45 for weather protection and are suitable for use in a 50° ambient with a 1.0 service factor. Super-E® motors have NEMA Premium® efficiency and 3 year warranty.

Hp	RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1/2	1800	56C	TENV	**CWAM3538**	715	SD	11.05	34	80	208-230/460	0.8	1, 12, 60
3/4	1800	56C	TENV	**CWAM3542**	825	SD	11.05	37	78.5	230/460	1.4	1, 12, 30, 60
1	3600	56C	TEFC	**CWAM3545**	851	SD	12.28	39	74	208-230/460	1.6	1, 12
	1800	56C	TENV	**CWAM3546**	854	SD	11.05	41	82.5	208-230/460	1.5	1, 60
		143TC	TENV	**CWAM3546T**	854	SD	12.12	42	82.5	208-230/460	1.5	1, 60
	1200	56C	TEFC	**CWAM3556**	1,101	SD	12.28	45	78.5	208-230/460	1.9	1
1 1/2	3600	56C	TEFC	**CWAM3550**	953	SD	13.28	42	75.5	208-230/460	2.3	1
	1800	145TC	TENV	**CWAM3554T**	894	SD	12.12	48	85.5	208-230/460	2.3	1, 60
	1200	56C	TEFC	**CWAM3557**	1,248	SD	14.16	55	80	208-230/460	2.5	1
2	3600	56C	TEFC	**CWAM3555**	1,048	SD	13.28	38	78.5	208-230/460	2.7	1
	1800	56C	TEFC	**CWAM3558**	1,101	SD	13.28	49	84	208-230/460	3.1	1, 60
		145TC	TEFC	**CEWAM3558T**	1,343	SD	13.35	52	86.5	208-230/460	2.9	1
3	3600	145TC	TEFC	**CEWAM3559T**	1,450	SD	14.23	59	86.5	208-230/460	3.6	1
	1800	182TC	TEFC	**CEWAM3611T**	1,577	SD	16.60	90	89.5	208-230/460	4.2	1
	1200	213TC	TEFC	**CEWAM3704T**	2,075	SD	19.76	154	89.5	208-230/460	4.6	1
5	3600	184TC	TEFC	**CEWAM3613T**	1,602	SD	16.60	97	88.5	208-230/460	5.6	1
	1800	184TC	TEFC	**CEWAM3615T**	1,785	SD	18.10	108	89.5	208-230/460	6.7	1
	1200	215TC	TEFC	**CEWAM3708T**	2,599	SD	20.51	181	89.5	208-230/460	7.2	1
7 1/2	3600	213TC	TEFC	**CEWAM3709T**	2,387	SD	18.63	138	89.5	208-230/460	9	1
	1800	213TC	TEFC	**CEWAM3710T**	2,358	SD	19.76	146	91.7	208-230/460	9.4	1
10	3600	215TC	TEFC	**CEWAM3711T**	2,408	SD	18.63	138	90.2	208-230/460	11.8	1
	1800	215TC	TEFC	**CEWAM3714T**	2,601	SD	21.26	185	91.7	208-230/460	12	1

[a] See notes on the last page of this catalog.

Dirty Duty, Autophoretic, Three Phase, 230/460 Volts, C-Face, Footless

1/2 thru 10 Hp **NEMA 56C thru 215TC** **IP56**

Applications: The most severe and corrosive applications, those which use intense high-pressure washdown, and marine applications. Corrosion-resistant autophoretic coating on steel and cast-iron components.

Features: Corrosion-resistant autophoretic coating on steel and cast iron components, stainless steel shaft extension, non-contact rotating labyrinth shaft seal on drive and fan ends, threaded drain ports, stainless steel plugs, gasketed and sealed conduit box, IP56 enclosure. Class F insulated motor with 1.15 service factor. Motors meet the intent of IEEE 45 for weather protection and are suitable for use in a 50° ambient with a 1.0 service factor.

Hp	RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1/2	1800	56C	TENV	**VWAM3538**	707	SD	11.05	35	80	208-230/460	0.8	1, 12, 60
3/4	1800	56C	TENV	**VWAM3542**	818	SD	11.05	37	78.5	208-230/460	1.4	1, 12, 60
1	1800	56C	TENV	**VWAM3546**	849	SD	11.05	41	82.5	208-230/460	1.5	1, 60
		143TC	TENV	**VWAM3546T**	849	SD	11.13	41	82.5	208-230/460	1.5	1, 60
1 1/2	1800	56C	TENV	**VWAM3554**	890	SD	12.05	48	85.5	208-230/460	2.3	1, 60
		145TC	TENV	**VWAM3554T**	890	SD	12.13	49	85.5	208-230/460	2.3	1, 60
2	1800	56C	TEFC	**VWAM3558**	1,095	SD	13.28	47	82.5	208-230/460	3	1
		145TC	TEFC	**VWAM3558T**	1,182	SD	13.35	47	84	208-230/460	3.1	1
3	1800	182TC	TEFC	**VWAM3611T**	1,431	SD	16.60	86	87.5	208-230/460	4.5	1
5	1800	184TC	TEFC	**VWAM3615T**	1,668	SD	16.60	91	87.5	208-230/460	6.8	1
7 1/2	1800	213TC	TEFC	**VWAM3710T**	2,038	SD	18.63	131	89.5	208-230/460	10.1	1
10	1800	215TC	TEFC	**VWAM3714T**	2,324	SD	19.76	147	89.5	208-230/460	13.5	1

[a] See notes on the last page of this catalog.

Division 2 Capabilities

The following list of Severe Duty motors are marked for Division 2, Class I, Group A,B,C,D for Sine Wave and Inverter Power. They also include Equivalent Zone markings for Class I, Zone 2, Groups IIA, IIB, IIC for Sine Wave and Inverter Power.

Division 2 Temp Codes are provided in the standard format per the NEC Article 500 requirements. Equivalent Zone Temp Codes are provided in the "T=°C" format because NEC Article 505 does not allow all T Codes permitted by NEC 500. Inverter Temp Codes are provided in the "T=°C" format because they apply to both the Equivalent Zone (NEC 505) requirements and NEC 500 requirements. Please reference the following table for Temperature and Temp Code values.

Maximum Surface Temperature	US (NEC 500) CA (CEC Annex J)	US (NEC 505) CA (CEC Section 18)
450° C	T1	T1
300° C	T2	T2
280° C	T2A	-
260° C	T2B	-
230° C	T2C	-
215° C	T2D	-
200° C	T3	T3

Maximum Surface Temperature	US (NEC 500) CA (CEC Annex J)	US (NEC 505) CA (CEC Section 18)
180° C	T3A	-
165° C	T3B	-
160° C	T3C	-
135° C	T4	T4
120° C	T4A	-
100° C	T5	T5
85° C	T6	T6

	Sine Wave, 1.15 S.F.		Inverter Power, 1.0 S.F.			
Catalog Number	Sine Wave Temp Code	Equivalent Zone Temp Code T = °C	Inverter Temp Code T = °C	V.T. Speed Range (Hz)	C.T. Speed Range (Hz)	CHP Speed Range (Hz)
CECP2276T	T3C	160°C	180°C	0-60	0-60	60-90
CECP2294T	T3C	160°C	180°C	3-60	6-60	60-90
CECP2332T	T3C	160°C	180°C	0-60	0-60	60-90
CECP2333T	T3C	160°C	180°C	0-60	0-60	60-90
CECP2333T-4	T3C	160°C	180°C	0-60	0-60	60-90
CECP2334T	T3C	160°C	180°C	0-60	0-60	60-90
CECP2334T-4	T3C	160°C	180°C	0-60	0-60	60-90
CECP3581T	T4	135°C	135°C	0-60	0-60	60-90
CECP3582T	T4	135°C	135°C	0-60	0-60	60-90
CECP3584T	T4	135°C	135°C	0-60	0-60	60-90
CECP3587T	T4	135°C	135°C	0-60	0-60	60-90
CECP3660T	T3C	160°C	160°C	3-60	6-60	60-90
CECP3661T	T3C	160°C	160°C	0-60	0-60	60-90
CECP3663T	T3B	165°C	160°C	3-60	6-60	60-90
CECP3664T	T3C	160°C	160°C	0-60	0-60	60-90
CECP3665T	T3B	165°C	160°C	0-60	0-60	60-90
CECP3667T	T3C	160°C	160°C	0-60	0-60	60-90
CECP3764T	T3C	160°C	160°C	0-60	0-60	60-90
CECP3768T	T3C	160°C	160°C	0-60	0-60	60-90
CECP3769T	T3C	160°C	160°C	3-60	6-60	60-90
CECP3770T	T3C	160°C	160°C	0-60	0-60	60-90
CECP3771T	T3C	160°C	160°C	3-60	6-60	60-90
CECP3774T	T3A	180°C	160°C	0-60	0-60	60-90
CECP4100T	T3C	160°C	180°C	0-60	0-60	60-90
CECP4102T	T3C	160°C	180°C	0-60	0-60	60-90
CECP4103T	T3C	160°C	180°C	0-60	0-60	60-90
CECP4103T-4	T3C	160°C	180°C	0-60	0-60	60-90
CECP4104T	T3C	160°C	180°C	0-60	0-60	60-90
CECP4104T-4	T3C	160°C	180°C	0-60	0-60	60-90
CECP4106T	T3	200°C	200°C	3-60	6-60	60-90
CECP4107T	T3	200°C	200°C	3-60	6-60	60-90
CECP4108T	T3	200°C	200°C	3-60	6-60	60-90
CECP4109T	T3	200°C	200°C	3-60	6-60	60-90
CECP4110T	T3	200°C	200°C	0-60	0-60	60-90
CECP4111T	T3	200°C	200°C	0-60	0-60	60-90
CECP4114T	T3	200°C	200°C	3-60	6-60	60-90
CECP4115T	T3	200°C	200°C	0-60	0-60	60-90
CECP4117T	T3	200°C	200°C	0-60	0-60	60-90
CECP4308T	T3A	180°C	180°C	0-60	6-60	60-90
CECP4312T	T3A	180°C	180°C	0-60	6-60	60-90
CECP82276T-4	T3C	160°C	180°C	0-60	0-60	60-90
CECP82332T-4	T3C	160°C	180°C	0-60	0-60	60-90
CECP82333T-4	T3C	160°C	180°C	0-60	0-60	60-90
CECP82333T-5	T3C	160°C	180°C	0-60	0-60	60-90
CECP82334T-4	T3C	160°C	180°C	0-60	0-60	60-90
CECP82334T-5	T3C	160°C	180°C	0-60	0-60	60-90

	Sine Wave, 1.15 S.F.		Inverter Power, 1.0 S.F.			
Catalog Number	Sine Wave Temp Code	Equivalent Zone Temp Code T = °C	Inverter Temp Code T = °C	V.T. Speed Range (Hz)	C.T. Speed Range (Hz)	CHP Speed Range (Hz)
CECP82394T-4	T3C	160°C	180°C	3-60	6-60	60-90
CECP83580T-4	T4	135°C	135°C	3-60	6-60	60-90
CECP83581T-4	T4	135°C	135°C	0-60	0-60	60-90
CECP83581T-5	T4	135°C	135°C	0-60	0-60	60-90
CECP83582T-4	T4	135°C	135°C	0-60	0-60	60-90
CECP83583T-4	T4	135°C	135°C	3-60	6-60	60-90
CECP83584T-4	T4	135°C	135°C	0-60	0-60	60-90
CECP83586T-4	T4	135°C	135°C	3-60	6-60	60-90
CECP83587T-4	T4	135°C	135°C	0-60	0-60	60-90
CECP83587T-5	T4	135°C	135°C	0-60	0-60	60-90
CECP83660T-4	T3C	160°C	160°C	3-60	6-60	60-90
CECP83661T-4	T3C	160°C	160°C	0-60	0-60	60-90
CECP83661T-5	T3C	160°C	160°C	0-60	0-60	60-90
CECP83663T-4	T3C	160°C	160°C	3-60	6-60	60-90
CECP83664T-4	T3C	160°C	160°C	0-60	0-60	60-90
CECP83665T-4	T3A	180°C	160°C	0-60	0-60	60-90
CECP83665T-5	T3A	180°C	160°C	0-60	0-60	60-90
CECP83667T-4	T3C	160°C	160°C	0-60	0-60	60-90
CECP83764T-4	T3C	160°C	160°C	0-60	0-60	60-90
CECP83768T-4	T3C	160°C	160°C	0-60	0-60	60-90
CECP83769T-4	T3C	160°C	160°C	3-60	6-60	60-90
CECP83770T-4	T3C	160°C	160°C	0-60	0-60	60-90
CECP83770T-5	T3C	160°C	160°C	0-60	0-60	60-90
CECP83771T-4	T3C	160°C	160°C	3-60	6-60	60-90
CECP83774T-4	T3	200°C	160°C	0-60	0-60	60-90
CECP83774T-5	T3B	165°C	160°C	0-60	0-60	60-90
CECP84100T-4	T3C	160°C	180°C	0-60	0-60	60-90
CECP84102T-4	T3C	160°C	180°C	0-60	0-60	60-90
CECP84103T-4	T3C	160°C	180°C	0-60	0-60	60-90
CECP84103T-5	T3C	160°C	180°C	0-60	0-60	60-90
CECP84104T-4	T3C	160°C	180°C	0-60	0-60	60-90
CECP84104T-5	T3C	160°C	180°C	0-60	0-60	60-90
CECP84106T-4	T3	200°C	200°C	3-60	6-60	60-90
CECP84107T-4	T3	200°C	200°C	3-60	6-60	60-90
CECP84108T-4	T3	200°C	200°C	3-60	6-60	60-90
CECP84109T-4	T3	200°C	200°C	3-60	6-60	60-90
CECP84110T-4	T3	200°C	200°C	0-60	0-60	60-90
CECP84110T-5	T3	200°C	200°C	0-60	0-60	60-90
CECP84111T-4	T3	200°C	200°C	0-60	0-60	60-90
CECP84114T-4	T3	200°C	200°C	3-60	6-60	60-90
CECP84115T-4	T3	200°C	200°C	0-60	0-60	60-90
CECP84115T-5	T3	200°C	200°C	0-60	0-60	60-90
CECP84117T-4	T3	200°C	200°C	0-60	0-60	60-90
CECP84308T-4	T3A	180°C	180°C	0-60	6-60	60-90
CECP84310T-4	T3	200°C	200°C	0-60	6-60	60-90
CECP84312T-4	T3A	180°C	180°C	0-60	6-60	60-90

Division 2 Capabilities continued

Catalog Number	Sine Wave, 1.15 S.F.		Inverter Power, 1.0 S.F.			
	Sine Wave Temp Code	Equivalent Zone Temp Code T = °C	Inverter Temp Code T = °C	V.T. Speed Range (Hz)	C.T. Speed Range (Hz)	CHP Speed Range (Hz)
CECP84313T-4	T2D	215°C	200°C	0-60	15-60	60-90
CECP84314T-4	T3	200°C	200°C	0-60	10-60	60-90
CECP84316T-4	T3	200°C	200°C	0-60	15-60	60-90
CENCP83580T-4	T3C	160°C	160°C	3-60	6-60	60-90
CENCP83581T-4	T4	135°C	135°C	0-60	0-60	60-90
CP58608LR-4	T3A	180°C	180°C	0-60	6-60	60-90
CP58706LR-4	T3A	180°C	180°C	0-60	6-60	60-90
CP58708LR-4	T3A	180°C	180°C	0-60	6-60	60-90
CP58806LR-4	T3A	180°C	180°C	0-60	6-60	60-90
CP500808LR-4	T3A	180°C	180°C	0-60	6-60	60-90
CP50356LR-4	T3A	180°C	180°C	0-60	6-60	60-90
CP50358LR-4	T3A	180°C	180°C	0-60	6-60	60-90
CP50402S-4	T3	200°C	200°C	0-60	0-60	60-90
CP50406LR-4	T3A	180°C	180°C	0-60	6-60	60-90
CP50408LR-4	T3A	180°C	180°C	0-60	6-60	60-90
CP50456LR-4	T3A	180°C	180°C	0-60	6-60	60-90
CP50458LR-4	T3A	180°C	180°C	0-60	6-60	60-90
CP50504L-4	T3A	180°C	180°C	0-60	6-60	60-90
CP50506LR-4	T3A	180°C	180°C	0-60	6-60	60-90
CP50508LR-4	T3A	180°C	180°C	0-60	6-60	60-90
CP50602S-4	T3	200°C	(1)	(1)	(1)	(1)
CP50604L-4	T3A	180°C	(1)	(1)	(1)	(1)
CP50606LR-4	T3A	180°C	(1)	(1)	(1)	(1)
CP50704S-4	T3A	180°C	(1)	(1)	(1)	(1)
CP50804S-4	T3A	180°C	(1)	(1)	(1)	(1)
CP58702S-4	T3A	180°C	180°C	0-60	6-60	60-90
CP58802S-4	T3	200°C	200°C	0-60	0-60	60-90
ECP2276T	T3C	160°C	180°C	0-60	0-60	60-90
ECP2276T-4	T3C	160°C	180°C	0-60	0-60	60-90
ECP2276T-5	T3C	160°C	180°C	0-60	0-60	60-90
ECP2280T-4	T3C	160°C	180°C	0-60	0-60	60-90
ECP2294T	T3C	160°C	180°C	3-60	6-60	60-90
ECP2332T	T3C	160°C	180°C	0-60	0-60	60-90
ECP2332T-4	T3C	160°C	180°C	0-60	0-60	60-90
ECP2332T-5	T3C	160°C	180°C	0-60	0-60	60-90
ECP2333T	T3C	160°C	180°C	0-60	0-60	60-90
ECP2333T-4	T3C	160°C	180°C	0-60	0-60	60-90
ECP2333T-5	T3C	160°C	180°C	0-60	0-60	60-90
ECP2334T	T3C	160°C	180°C	0-60	0-60	60-90
ECP2334T-4	T3C	160°C	180°C	0-60	0-60	60-90
ECP2334T-5	T3C	160°C	180°C	0-60	0-60	60-90
ECP2394T-4	T3C	160°C	180°C	3-60	6-60	60-90
ECP2394T-5	T3C	160°C	180°C	3-60	6-60	60-90
ECP2395T-4	T3	200°C	200°C	0-60	0-60	60-90
ECP2401T-4	T3C	160°C	200°C	0-60	0-60	60-90
ECP2402T-4	T3A	180°C	180°C	0-60	0-60	60-90
ECP3580T	T4	135°C	135°C	3-60	6-60	60-90
ECP3580T-4	T4	135°C	135°C	3-60	6-60	60-90
ECP3580T-5	T4	135°C	135°C	3-60	6-60	60-90
ECP3581T	T4	135°C	135°C	0-60	0-60	60-90
ECP3581T-4	T4	135°C	135°C	0-60	0-60	60-90
ECP3581T-5	T4	135°C	135°C	0-60	0-60	60-90
ECP3582T	T4	135°C	135°C	0-60	0-60	60-90
ECP3582T-4	T4	135°C	135°C	0-60	0-60	60-90
ECP3583T	T4	135°C	135°C	3-60	6-60	60-90
ECP3583T-4	T4	135°C	135°C	3-60	6-60	60-90
ECP3584T	T4	135°C	135°C	0-60	0-60	60-90
ECP3584T-4	T4	135°C	135°C	0-60	0-60	60-90
ECP3584T-5	T4	135°C	135°C	0-60	0-60	60-90
ECP3586T	T4	135°C	135°C	3-60	6-60	60-90
ECP3586T-4	T4	135°C	135°C	3-60	6-60	60-90
ECP3587T	T4	135°C	135°C	0-60	0-60	60-90
ECP3587T-4	T4	135°C	135°C	0-60	0-60	60-90
ECP3587T-5	T4	135°C	135°C	0-60	0-60	60-90
ECP3660T	T3C	160°C	160°C	3-60	6-60	60-90
ECP3660T-4	T3C	160°C	160°C	3-60	6-60	60-90
ECP3660T-5	T3C	160°C	160°C	3-60	6-60	60-90
ECP3661T	T3C	160°C	160°C	0-60	0-60	60-90
ECP3661T-4	T3C	160°C	160°C	0-60	0-60	60-90
ECP3661T-5	T3C	160°C	160°C	0-60	0-60	60-90
ECP3663T	T3B	165°C	160°C	3-60	6-60	60-90
ECP3663T-4	T3C	160°C	160°C	0-60	0-60	60-90
ECP3663T-5	T3C	160°C	160°C	0-60	0-60	60-90
ECP3664T	T3C	160°C	160°C	0-60	0-60	60-90
ECP3664T-4	T3C	160°C	160°C	0-60	0-60	60-90
ECP3665T	T3B	165°C	160°C	0-60	0-60	60-90
ECP3665T-4	T3A	180°C	160°C	0-60	0-60	60-90
ECP3665T-5	T3A	180°C	160°C	0-60	0-60	60-90
ECP3667T	T3C	160°C	160°C	0-60	0-60	60-90
ECP3667T-4	T3C	160°C	160°C	0-60	0-60	60-90
ECP3668T-4	T3A	180°C	200°C	3-60	6-60	60-90
ECP3687T-4	T3B	165°C	160°C	3-60	6-60	60-90
ECP3764T	T3C	160°C	160°C	0-60	0-60	60-90
ECP3764T-4	T3C	160°C	160°C	0-60	0-60	60-90
ECP3764T-5	T3C	160°C	160°C	0-60	0-60	60-90
ECP3768T	T3C	160°C	160°C	0-60	0-60	60-90
ECP3768T-4	T3C	160°C	160°C	0-60	0-60	60-90
ECP3768T-5	T3C	160°C	160°C	0-60	0-60	60-90
ECP3769T	T3C	160°C	160°C	3-60	6-60	60-90
ECP3769T-4	T3C	160°C	160°C	3-60	6-60	60-90
ECP3769T-5	T3C	160°C	160°C	3-60	6-60	60-90
ECP3770T	T3C	160°C	160°C	0-60	0-60	60-90
ECP3770T-4	T3C	160°C	160°C	0-60	0-60	60-90
ECP3770T-5	T3C	160°C	160°C	0-60	0-60	60-90
ECP3771T	T3C	160°C	160°C	3-60	6-60	60-90
ECP3771T-4	T3A	180°C	180°C	3-60	6-60	60-90
ECP3771T-5	T3A	180°C	180°C	3-60	6-60	60-90
ECP3772T-4	T3C	160°C	160°C	3-60	6-60	60-90
ECP3774T	T3A	180°C	160°C	0-60	0-60	60-90
ECP3774T-4	T3A	180°C	160°C	0-60	0-60	60-90
ECP3774T-5	T3A	180°C	160°C	0-60	0-60	60-90
ECP3775T-4	T3C	160°C	160°C	3-60	6-60	60-90
ECP4100T	T3C	160°C	180°C	0-60	0-60	60-90
ECP4100T-4	T3C	160°C	180°C	0-60	0-60	60-90
ECP4100T-5	T3C	160°C	180°C	0-60	0-60	60-90
ECP4102T	T3C	160°C	180°C	0-60	0-60	60-90
ECP4102T-4	T3C	160°C	180°C	0-60	0-60	60-90
ECP4102T-5	T3C	160°C	180°C	0-60	0-60	60-90
ECP4103T	T3C	160°C	180°C	0-60	0-60	60-90
ECP4103T-4	T3C	160°C	180°C	0-60	0-60	60-90
ECP4103T-5	T3C	160°C	180°C	0-60	0-60	60-90
ECP4104T	T3C	160°C	180°C	0-60	0-60	60-90
ECP4104T-4	T3C	160°C	180°C	0-60	0-60	60-90
ECP4104T-5	T3C	160°C	180°C	0-60	0-60	60-90
ECP4106T	T3	200°C	200°C	3-60	6-60	60-90
ECP4106T-4	T3	200°C	200°C	3-60	6-60	60-90
ECP4106T-5	T3	200°C	200°C	3-60	6-60	60-90
ECP4107T	T3	200°C	200°C	3-60	6-60	60-90
ECP4107T-4	T3	200°C	200°C	3-60	6-60	60-90
ECP4108T	T3	200°C	200°C	3-60	6-60	60-90
ECP4108T-4	T3	200°C	200°C	3-60	6-60	60-90
ECP4109T	T3	200°C	200°C	3-60	6-60	60-90
ECP4109T-4	T3	200°C	200°C	3-60	6-60	60-90
ECP4110T	T3	200°C	200°C	0-60	0-60	60-90
ECP4110T-4	T3	200°C	200°C	0-60	0-60	60-90
ECP4110T-5	T3	200°C	200°C	0-60	0-60	60-90
ECP4111T	T3	200°C	200°C	0-60	0-60	60-90
ECP4111T-4	T3	200°C	200°C	0-60	0-60	60-90
ECP4111T-5	T3	200°C	200°C	0-60	0-60	60-90
ECP4112T-4	T3	200°C	200°C	0-60	0-60	60-90
ECP4113T-4	T3	200°C	200°C	0-60	6-60	60-90
ECP4114T	T3	200°C	200°C	3-60	6-60	60-90
ECP4114T-4	T3	200°C	200°C	3-60	6-60	60-90
ECP4115T	T3	200°C	200°C	0-60	0-60	60-90
ECP4115T-4	T3	200°C	200°C	0-60	0-60	60-90
ECP4115T-5	T3	200°C	200°C	0-60	0-60	60-90

NOTE: (1) Please contact manufacturer for specific data for this rating

Division 2 Capabilities continued

Catalog Number	Sine Wave, 1.15 S.F.		Inverter Power, 1.0 S.F.			
	Sine Wave Temp Code	Equivalent Zone Temp Code T = °C	Inverter Temp Code T = °C	V.T. Speed Range (Hz)	C.T. Speed Range (Hz)	CHP Speed Range (Hz)
ECP4117T	T3	200°C	200°C	0-60	0-60	60-90
ECP4117T-4	T3	200°C	200°C	0-60	0-60	60-90
ECP4124T-4	T3	200°C	200°C	3-60	6-60	60-90
ECP4308T	T3A	180°C	180°C	0-60	6-60	60-90
ECP4308T-4	T3A	180°C	180°C	0-60	6-60	60-90
ECP4310T	T3	200°C	200°C	0-60	6-60	60-90
ECP4310T-4	T3	200°C	200°C	0-60	6-60	60-90
ECP4312T	T3A	180°C	180°C	0-60	6-60	60-90
ECP4312T-4	T3A	180°C	180°C	0-60	6-60	60-90
ECP4313T	T3	200°C	200°C	0-60	10-60	60-90
ECP4313T-4	T3	200°C	200°C	0-60	10-60	60-90
ECP4314T	T3	200°C	200°C	0-60	10-60	60-90
ECP4314T-4	T3	200°C	200°C	0-60	10-60	60-90
ECP4314T-5	T3	200°C	200°C	0-60	10-60	60-90
ECP4315T-4	T3C	160°C	180°C	0-60	6-60	60-90
ECP4316T	T3	200°C	200°C	0-60	30-60	60-90
ECP4316T-4	T3	200°C	200°C	0-60	30-60	60-90
ECP4316T-5	T3	200°C	200°C	0-60	30-60	60-90
ECP4316TR-4	T3	200°C	200°C	0-60	30-60	60-90
ECP4400T-4	T2D	215°C	215°C	0-60	10-60	60-90
ECP4400T-5	T2D	215°C	215°C	0-60	10-60	60-90
ECP4400TR-4	T2D	215°C	215°C	0-60	10-60	60-90
ECP4400TS-4	T2D	215°C	215°C	0-60	10-60	60-90
ECP4402T	T3	200°C	200°C	0-60	6-60	60-90
ECP4402T-4	T3	200°C	200°C	0-60	6-60	60-90
ECP4403T	T3A	180°C	180°C	0-60	6-60	60-90
ECP4403T-4	T3A	180°C	180°C	0-60	6-60	60-90
ECP4403TR-4	T3	200°C	200°C	0-60	10-60	60-90
ECP4404T	T3	200°C	200°C	0-60	10-60	60-90
ECP4404T-4	T3	200°C	200°C	0-60	10-60	60-90
ECP4404TR-4	T3	200°C	200°C	0-60	10-60	60-90
ECP4406T-4	T3	200°C	200°C	0-60	15-60	60-90
ECP4406T-5	T3	200°C	200°C	0-60	15-60	60-90
ECP4406TR-4	T3	200°C	200°C	0-60	15-60	60-90
ECP4407T-4	T3	200°C	200°C	0-60	30-60	60-90
ECP4407T-5	T3	200°C	200°C	0-60	30-60	60-90
ECP4407TR-4	T3	200°C	200°C	0-60	30-60	60-90
ECP4407TS-4	T3	200°C	200°C	0-60	30-60	60-90
ECP4408T-4	T3	200°C	200°C	0-60	30-60	60-90
ECP4408TR-4	T3	200°C	200°C	0-60	30-60	60-90
ECP4409T-4	T3	200°C	200°C	0-60	15-60	60-90
ECP4409TR-4	T3	200°C	200°C	0-60	15-60	60-90
ECP4410T-4	T3	200°C	200°C	0-60	10-60	60-90
ECP4410T-5	T3	200°C	200°C	0-60	10-60	60-90
ECP4410TR-4	T3	200°C	200°C	0-60	10-60	60-90
ECP4411T-4	T3	200°C	200°C	0-60	15-60	60-90
ECP4411TR-4	T3	200°C	200°C	0-60	15-60	60-90
ECP4412T	T3	200°C	200°C	0-60	15-60	60-90
ECP4412T-4	T3	200°C	200°C	0-60	15-60	60-90
ECP4413T-4	T3	200°C	200°C	0-60	10-60	60-90
ECP44156T-4	T3	200°C	200°C	0-60	15-60	60-90
ECP44156TR-4	T3	200°C	200°C	0-60	15-60	60-90
ECP4416T-4	T3	200°C	200°C	0-60	30-60	60-90
ECP4417T-4	T3C	160°C	200°C	3-60	6-60	60-90
ECP4418T-4	T3A	180°C	180°C	0-60	6-60	60-90
ECP4419T-4	T3	200°C	200°C	0-60	10-60	60-90
ECP44206T-4	T3	200°C	200°C	0-60	30-60	60-90
ECP44206TR-4	T3	200°C	200°C	0-60	30-60	60-90
ECP4420T-4	T3	200°C	200°C	0-60	15-60	60-90
ECP4421T-4	T3	200°C	200°C	0-60	30-60	60-90
ECP4422T-4	T3	200°C	200°C	0-60	15-60	60-90
ECP4423T-4	T2C	230°C	230°C	0-60	30-60	60-90
ECP44252T-4	T2C	230°C	230°C	0-60	30-60	60-90
ECP44256T-4	T2C	230°C	230°C	0-60	30-60	60-90
ECP44256TR-4	T2C	230°C	230°C	0-60	30-60	60-90
ECP44302T-4	T2C	230°C	230°C	0-60	30-60	60-90
ECP44304T-4	T2C	230°C	230°C	0-60	30-60	60-90
ECP44304TR-4	T2C	230°C	230°C	0-60	30-60	60-90

Catalog Number	Sine Wave, 1.15 S.F.		Inverter Power, 1.0 S.F.			
	Sine Wave Temp Code	Equivalent Zone Temp Code T = °C	Inverter Temp Code T = °C	V.T. Speed Range (Hz)	C.T. Speed Range (Hz)	CHP Speed Range (Hz)
ECP44352T-4	T2C	230°C	230°C	0-60	30-60	60-90
ECP44402T-4	T2C	230°C	230°C	0-60	30-60	60-90
ECP49306T-4	T2C	230°C	230°C	0-60	30-60	60-90
ECP49354T-4	T2C	230°C	230°C	0-60	30-60	60-90
ECP49404T-4	T2C	230°C	230°C	0-60	30-60	60-90
ECP50452S-4	T2D	215°C	215°C	0-60	10-60	60-90
ECP50454L-4	T3A	180°C	160°C	0-60	0-60	60-90
ECP50502S-4	T2C	230°C	230°C	0-60	30-60	60-90
ECP62333TR-4	T3C	160°C	180°C	0-60	0-60	60-90
ECP62334TR-4	T3C	160°C	180°C	0-60	0-60	60-90
ECP63665T-4	T3A	180°C	160°C	0-60	0-60	60-90
ECP63770TR-4	T3C	160°C	160°C	0-60	0-60	60-90
ECP63774TR-4	T3	200°C	160°C	0-60	0-60	60-90
ECP64103TR-4	T3C	160°C	180°C	0-60	0-60	60-90
ECP64104TR-4	T3C	160°C	180°C	0-60	0-60	60-90
ECP64110TR-4	T3	200°C	200°C	0-60	0-60	60-90
ECP64115TR-4	T3	200°C	200°C	0-60	0-60	60-90
ECP64314TR-4	T3	200°C	200°C	0-60	10-60	60-90
ECP64316TR-4	T3	200°C	200°C	0-60	15-60	60-90
ECP82276T-4	T3C	160°C	180°C	0-60	0-60	60-90
ECP82276T-5	T3C	160°C	180°C	0-60	0-60	60-90
ECP82332T-4	T3C	160°C	180°C	0-60	0-60	60-90
ECP82332T-5	T3C	160°C	180°C	0-60	0-60	60-90
ECP82333T-4	T3C	160°C	180°C	0-60	0-60	60-90
ECP82333T-5	T3C	160°C	180°C	0-60	0-60	60-90
ECP82334T-4	T3C	160°C	180°C	0-60	0-60	60-90
ECP82334T-5	T3C	160°C	180°C	0-60	0-60	60-90
ECP82394T-4	T3C	160°C	180°C	3-60	6-60	60-90
ECP82394T-5	T3C	160°C	180°C	3-60	6-60	60-90
ECP83580T-4	T4	135°C	135°C	3-60	6-60	60-90
ECP83580T-5	T4	135°C	135°C	3-60	6-60	60-90
ECP83581T-4	T4	135°C	135°C	0-60	0-60	60-90
ECP83581T-5	T4	135°C	135°C	0-60	0-60	60-90
ECP83582T-4	T4	135°C	135°C	0-60	0-60	60-90
ECP83582T-5	T4	135°C	135°C	0-60	0-60	60-90
ECP83583T-4	T4	135°C	135°C	3-60	6-60	60-90
ECP83583T-5	T4	135°C	135°C	3-60	6-60	60-90
ECP83584T-4	T4	135°C	135°C	0-60	0-60	60-90
ECP83584T-5	T4	135°C	135°C	0-60	0-60	60-90
ECP83586T-4	T4	135°C	135°C	3-60	6-60	60-90
ECP83586T-5	T4	135°C	135°C	3-60	6-60	60-90
ECP83587T-4	T4	135°C	135°C	0-60	0-60	60-90
ECP83587T-5	T4	135°C	135°C	0-60	0-60	60-90
ECP83660T-4	T3C	160°C	160°C	3-60	6-60	60-90
ECP83660T-5	T3C	160°C	160°C	3-60	6-60	60-90
ECP83661T-4	T3C	160°C	160°C	0-60	0-60	60-90
ECP83661T-5	T3C	160°C	160°C	0-60	0-60	60-90
ECP83663T-4	T3C	160°C	160°C	3-60	6-60	60-90
ECP83663T-5	T3C	160°C	160°C	3-60	6-60	60-90
ECP83664T-4	T3C	160°C	160°C	0-60	0-60	60-90
ECP83664T-5	T3C	160°C	160°C	0-60	0-60	60-90
ECP83665T-4	T3A	180°C	160°C	0-60	0-60	60-90
ECP83665T-5	T3A	180°C	160°C	0-60	0-60	60-90
ECP83667T-4	T3C	160°C	160°C	0-60	0-60	60-90
ECP83667T-5	T3C	160°C	160°C	0-60	0-60	60-90
ECP83764T-4	T3C	160°C	160°C	0-60	0-60	60-90
ECP83764T-5	T3C	160°C	160°C	0-60	0-60	60-90
ECP83768T-4	T3C	160°C	160°C	0-60	0-60	60-90
ECP83768T-5	T3C	160°C	160°C	0-60	0-60	60-90
ECP83769T-4	T3C	160°C	160°C	3-60	6-60	60-90
ECP83769T-5	T3C	160°C	160°C	3-60	6-60	60-90
ECP83770T-4	T3C	160°C	160°C	0-60	0-60	60-90
ECP83770T-5	T3C	160°C	160°C	0-60	0-60	60-90
ECP83771T-4	T3C	160°C	160°C	3-60	6-60	60-90
ECP83771T-5	T3C	160°C	180°C	3-60	6-60	60-90
ECP83774T-4	T3	200°C	160°C	0-60	0-60	60-90
ECP83774T-5	T3B	165°C	160°C	0-60	0-60	60-90
ECP84100T-4	T3C	160°C	180°C	0-60	0-60	60-90

NOTE: (1) Please contact manufacturer for specific data for this rating

Division 2 Capabilities continued

Catalog Number	Sine Wave, 1.15 S.F.		Inverter Power, 1.0 S.F.			
	Sine Wave Temp Code	Equivalent Zone Temp Code T = °C	Inverter Temp Code T = °C	V.T. Speed Range (Hz)	C.T. Speed Range (Hz)	CHP Speed Range (Hz)
ECP84100T-5	T3C	160°C	180°C	0-60	0-60	60-90
ECP84102T-4	T3C	160°C	180°C	0-60	0-60	60-90
ECP84102T-5	T3C	160°C	180°C	0-60	0-60	60-90
ECP84103T-4	T3C	160°C	180°C	0-60	0-60	60-90
ECP84103T-5	T3C	160°C	180°C	0-60	0-60	60-90
ECP84104T-4	T3C	160°C	180°C	0-60	0-60	60-90
ECP84104T-5	T3C	160°C	180°C	0-60	0-60	60-90
ECP84106T-4	T3	200°C	200°C	3-60	6-60	60-90
ECP84106T-5	T3	200°C	200°C	3-60	6-60	60-90
ECP84107T-4	T3	200°C	200°C	3-60	6-60	60-90
ECP84107T-5	T3	200°C	200°C	3-60	6-60	60-90
ECP84108T-4	T3	200°C	200°C	3-60	6-60	60-90
ECP84108T-5	T3	200°C	200°C	3-60	6-60	60-90
ECP84109T-4	T3	200°C	200°C	3-60	6-60	60-90
ECP84109T-5	T3	200°C	200°C	3-60	6-60	60-90
ECP84110T-4	T3	200°C	200°C	0-60	0-60	60-90
ECP84110T-5	T3	200°C	200°C	0-60	0-60	60-90
ECP84111T-4	T3	200°C	200°C	0-60	0-60	60-90
ECP84111T-5	T3	200°C	200°C	0-60	0-60	60-90
ECP84114T-4	T3	200°C	200°C	3-60	6-60	60-90
ECP84114T-5	T3	200°C	200°C	3-60	6-60	60-90
ECP84115T-4	T3	200°C	200°C	0-60	0-60	60-90
ECP84115T-5	T3	200°C	200°C	0-60	0-60	60-90
ECP84117T-4	T3	200°C	200°C	0-60	0-60	60-90
ECP84117T-5	T3	200°C	200°C	0-60	0-60	60-90
ECP84308T-4	T3A	180°C	180°C	0-60	6-60	60-90
ECP84308T-5	T3A	180°C	180°C	0-60	6-60	60-90
ECP84310T-4	T3	200°C	200°C	0-60	6-60	60-90
ECP84310T-5	T3	200°C	200°C	0-60	6-60	60-90
ECP84312T-4	T3A	180°C	180°C	0-60	6-60	60-90
ECP84312T-5	T3A	180°C	180°C	0-60	6-60	60-90
ECP84313T-4	T2D	215°C	200°C	0-60	15-60	60-90
ECP84313T-5	T2D	215°C	200°C	0-60	15-60	60-90
ECP84314T-4	T3	200°C	200°C	0-60	10-60	60-90
ECP84314T-5	T3	200°C	200°C	0-60	10-60	60-90
ECP84316T-4	T3	200°C	200°C	0-60	15-60	60-90
ECP84316T-5	T3	200°C	200°C	0-60	15-60	60-90
ECP84400T-4	T2D	215°C	215°C	0-60	10-60	60-90
ECP84400T-5	T2D	215°C	215°C	0-60	10-60	60-90
ECP84402T-4	T2D	215°C	200°C	0-60	10-60	60-90
ECP84402T-5	T2D	215°C	200°C	0-60	10-60	60-90
ECP84403T-4	T3	200°C	200°C	0-60	10-60	60-90
ECP84403T-5	T3	200°C	200°C	0-60	10-60	60-90
ECP84404T-4	T3	200°C	200°C	0-60	10-60	60-90
ECP84404T-5	T3	200°C	200°C	0-60	10-60	60-90
ECP84406T-4	T3	200°C	200°C	0-60	15-60	60-90
ECP84406T-5	T3	200°C	200°C	0-60	15-60	60-90
ECP84407T-4	T3	200°C	200°C	0-60	30-60	60-90
ECP84407T-5	T3	200°C	200°C	0-60	30-60	60-90
ECP84407TR-4	T3	200°C	200°C	0-60	30-60	60-90
ECP84407TR-5	T3	200°C	200°C	0-60	30-60	60-90
ECP84408T-4	T3	200°C	200°C	0-60	30-60	60-90
ECP84408T-5	T3	200°C	200°C	0-60	30-60	60-90
ECP84408TR-4	T3	200°C	200°C	0-60	30-60	60-90
ECP84408TR-5	T3	200°C	200°C	0-60	30-60	60-90
ECP84409T-4	T3	200°C	200°C	0-60	15-60	60-90
ECP84409T-5	T3B	165°C	200°C	0-60	6-60	60-90
ECP84410T-4	T3	200°C	200°C	0-60	10-60	60-90
ECP84410T-5	T3	200°C	200°C	0-60	10-60	60-90
ECP84411T-4	T3	200°C	200°C	0-60	15-60	60-90
ECP84411T-5	T3	200°C	200°C	0-60	15-60	60-90
ECP84412T-4	T3	200°C	200°C	0-60	15-60	60-90
ECP84412T-5	T3	200°C	200°C	0-60	30-60	60-90
ECP84413T-4	T3	200°C	200°C	0-60	10-60	60-90
ECP84413T-5	T3	200°C	200°C	0-60	10-60	60-90
ECP844156T-4	T3	200°C	200°C	0-60	15-60	60-90
ECP844156TR-4	T3	200°C	200°C	0-60	15-60	60-90
ECP844156TR-5	T3	200°C	200°C	0-60	15-60	60-90

Catalog Number	Sine Wave, 1.15 S.F.		Inverter Power, 1.0 S.F.			
	Sine Wave Temp Code	Equivalent Zone Temp Code T = °C	Inverter Temp Code T = °C	V.T. Speed Range (Hz)	C.T. Speed Range (Hz)	CHP Speed Range (Hz)
ECP84416T-4	T3	200°C	200°C	0-60	30-60	60-90
ECP84416T-5	T2C	230°C	230°C	0-60	30-60	60-90
ECP844206T-4	T3	200°C	200°C	0-60	30-60	60-90
ECP844206TR-4	T3	200°C	200°C	0-60	30-60	60-90
ECP844206TR-5	T3	200°C	200°C	0-60	30-60	60-90
ECP844252T-4	T2D	215°C	215°C	0-60	30-60	60-90
ECP844252T-5	T2C	230°C	230°C	0-60	30-60	60-90
ECP844256T-4	T2D	215°C	215°C	0-60	30-60	60-90
ENCP3580T-4	T3C	160°C	160°C	3-60	6-60	60-90
ENCP3581T-4	T4	135°C	135°C	0-60	0-60	60-90
ENCP83580T-4	T3C	160°C	160°C	3-60	6-60	60-90
ENCP83581T-4	T4	135°C	135°C	0-60	0-60	60-90
VECP2276T	T3C	160°C	180°C	0-60	0-60	60-90
VECP2332T	T3C	160°C	180°C	0-60	0-60	60-90
VECP2333T	T3C	160°C	180°C	0-60	0-60	60-90
VECP2333T-4	T3C	160°C	180°C	0-60	0-60	60-90
VECP2334T	T3C	160°C	180°C	0-60	0-60	60-90
VECP2334T-4	T3C	160°C	180°C	0-60	0-60	60-90
VECP3580-4	T4	135°C	135°C	3-60	6-60	60-90
VECP3581	T4	135°C	135°C	0-60	0-60	60-90
VECP3581-4	T4	135°C	135°C	0-60	0-60	60-90
VECP3581T	T4	135°C	135°C	0-60	0-60	60-90
VECP3581T-4	T4	135°C	135°C	0-60	0-60	60-90
VECP3582T	T4	135°C	135°C	0-60	0-60	60-90
VECP3583T-4	T4	135°C	135°C	3-60	6-60	60-90
VECP3584T	T4	135°C	135°C	0-60	0-60	60-90
VECP3584T-4	T4	135°C	135°C	0-60	0-60	60-90
VECP3586T-4	T4	135°C	135°C	3-60	6-60	60-90
VECP3587T	T4	135°C	135°C	0-60	0-60	60-90
VECP3587T-4	T4	135°C	135°C	0-60	0-60	60-90
VECP3660T-4	T3C	160°C	160°C	3-60	6-60	60-90
VECP3661T	T3C	160°C	160°C	0-60	0-60	60-90
VECP3661T-4	T3C	160°C	160°C	0-60	0-60	60-90
VECP3663T-4	T3C	160°C	160°C	0-60	0-60	60-90
VECP3664T	T3C	160°C	160°C	0-60	0-60	60-90
VECP3665T	T3B	165°C	160°C	0-60	0-60	60-90
VECP3665T-4	T3A	180°C	160°C	0-60	0-60	60-90
VECP3667T	T3C	160°C	160°C	0-60	0-60	60-90
VECP3764T	T3C	160°C	160°C	0-60	0-60	60-90
VECP3768T	T3C	160°C	160°C	0-60	0-60	60-90
VECP3769T-4	T3C	160°C	160°C	3-60	6-60	60-90
VECP3770T	T3C	160°C	160°C	0-60	0-60	60-90
VECP3770T-4	T3C	160°C	160°C	0-60	0-60	60-90
VECP3771T-4	T3A	180°C	180°C	3-60	6-60	60-90
VECP3774T	T3A	180°C	160°C	0-60	0-60	60-90
VECP3774T-4	T3A	180°C	160°C	0-60	0-60	60-90
VECP4100T	T3C	160°C	180°C	0-60	0-60	60-90
VECP4102T	T3C	160°C	180°C	0-60	0-60	60-90
VECP4103T	T3C	160°C	180°C	0-60	0-60	60-90
VECP4111T	T3	200°C	200°C	0-60	0-60	60-90
VECP82333T-4	T3C	160°C	180°C	0-60	0-60	60-90
VECP82334T-4	T3C	160°C	180°C	0-60	0-60	60-90
VECP82394T-4	T3C	160°C	180°C	3-60	6-60	60-90
VECP83583T-4	T4	135°C	135°C	3-60	6-60	60-90
VECP83584T-4	T4	135°C	135°C	0-60	0-60	60-90
VECP83586T-4	T4	135°C	135°C	3-60	6-60	60-90
VECP83587T-4	T4	135°C	135°C	0-60	0-60	60-90
VECP83660T-4	T3C	160°C	160°C	3-60	6-60	60-90
VECP83661T-4	T3C	160°C	160°C	0-60	0-60	60-90
VECP83663T-4	T3C	160°C	160°C	3-60	6-60	60-90
VECP83665T-4	T3A	180°C	160°C	0-60	0-60	60-90
VECP83769T-4	T3C	160°C	160°C	3-60	6-60	60-90
VECP83770T-4	T3C	160°C	160°C	0-60	0-60	60-90
VECP83771T-4	T3C	160°C	160°C	3-60	6-60	60-90
VECP83774T-4	T3	200°C	160°C	0-60	0-60	60-90
VECP84106T-4	T3	200°C	200°C	3-60	6-60	60-90
VENCP83580T-4	T3C	160°C	160°C	3-60	6-60	60-90
VENCP83581T-4	T4	135°C	135°C	0-60	0-60	60-90

Medium Voltage, Three Phase, 2300/4000 Volts, TEFC, Foot Mounted

250 thru 1000 Hp **449 thru 5810** **IP54**

Applications: Pumps, compressors, fans, blowers and other general purpose applications. Suitable for use on VFD 2:1 CT, 10:1 VT* centrifugal loads.

Features: High efficiency, cast iron frame, end shields and inner caps, fiberglass fan cover and air deflector, ground lug in the conduit box, DE shaft slinger and insulated non-drive end bearing. Stock motors include 100 ohm platinum winding RTD's, provision for bearing RTD's and space heaters. The "S" and "TS" shafts are for coupled loads and are not convertible to roller bearings. The "L" and "T" shafts are ball bearing and convertible to roller bearing. Belted duty "LR" shafts are roller bearing and convertible to ball bearing. Paint is specially formulated modified epoxy coating with UV protection. CSA approved.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
250	3600	449	**EM44252TS-2340**	33,234	LG	49.49	2338	95.0	2300/4000	32.8	1
	1800	L449	**EM44254T-2340**	36,300	LG	60.21	2694	95.0	2300/4000	32.4	1
	1200	5010	**M50256LR-2340**	41,964	LG	71.42	3683	94.6	2300/4000	34.0	1, 5
300	3600	L449	**EM44302TS-2340**	40,255	LG	56.48	3149	94.3	2300/4000	38.8	1
	1800	L449	**EM44304T-2340**	36,979	LG	60.21	3676	95.0	2300/4000	39.1	1
	1200	5010	**M50306LR-2340**	43,298	LG	71.42	3683	94.7	2300/4000	40.3	1, 5
350	3600	5010	**EM50352S-2340**	43,766	LG	67.45	4780	95.0	2300/4000	45.2	1
	1800	5008	**EM50354L-2340**	44,000	LG	60.44	5325	95.0	2300/4000	45.5	1
	1200	5010	**M50356LR-2340**	49,383	LG	71.42	5060	94.8	2300/4000	46.5	1, 5
400	3600	5010	**EM50402S-2340**	48,213	LG	67.45	4780	95.0	2300/4000	50.4	1
	1800	5010	**EM50404L-2340**	47,745	LG	71.42	5325	95.3	2300/4000	52.4	1
	1200	5012	**EM50406LR-2340**	54,064	LG	79.44	5867	95.0	2300/4000	52.9	1, 5
450	3600	5010	**EM50452S-2340**	56,872	LG	67.45	4871	95.2	2300/4000	56.7	1
	1800	5010	**EM50454L-2340**	51,957	LG	71.42	5540	95.5	2300/4000	58.8	1
	1200	5012	**EM50456LR-2340**	62,021	LG	79.44	6000	95.1	2300/4000	59.5	1, 5
500	3600	5010	**EM50502S-2340**	62,021	LG	67.45	4920	95.4	2300/4000	63.0	1, 9
	1800	5012	**EM50504L-2340**	59,681	LG	79.42	5750	95.5	2300/4000	65.2	1
	1200	5012	**EM50506LR-2340**	70,915	LG	79.44	6069	95.3	2300/4000	64.4	1, 5, 7
600	3600	5010	**EM50602S-2340**	67,872	LG	79.00	5071	95.6	2300/4000	75.1	1, 7, 9
	1800	5012	**EM50604L-2340**	70,213	LG	79.42	5809	95.8	2300/4000	77.8	1
	1200	5810	**EM58606LR-2340**	78,404	LG	90.81	9460	95.7	2300/4000	78.9	1, 5
700	3600	5810	**M58702S-2340**	71,851	LG	95.59	8045	95.2	2300/4000	89.4	1, 9
	1800	5012	**EM50704L-2340**	77,234	LG	79.42	5867	96.1	2300/4000	90.4	1
800	3600	5810	**EM58802S-2340**	89,362	LG	95.59	8280	95.5	2300/4000	102.9	1, 9
	1800	5012	**EM50804L-2340**	89,872	LG	90.97	6100	95.8	2300/4000	102.2	1, 7, 9
900	1800	5810	**EM58904L-2340**	94,553	LG	90.81	10000	96.2	2300/4000	115.4	1
1000	1800	5810	**EM581004L-2340**	108,596	LG	102.27	10500	96.1	2300/4000	128.9	1, 9

[a] See notes on the last page of this catalog.

Cast Iron Frame

* For use on VFD, it is highly recommended to insulate the drive end bearing and add a shaft grounding system in order to address concerns regarding shaft currents that may be imposed upon the motor by a VFD as defined in NEMA MG1, Part 31.4.4.3.
Motor is suitable for use on inverter only in conjunction with an isolation transformer or other common mode voltage elimination.
1.0 Service Factor and Class F rise when used on VFD..

All ratings are 1.00 service factor, Class B rise and 1.15 service factor, Class F rise at 40°C ambient.

Custom TEFC motors available through 2,250 Hp; Open and WPII custom motors through 20,000 Hp.

Baldor•Reliance Large AC Motor Capabilities Overview

Large AC Motor product offering is vast and extends well beyond NEMA frames to ratings as high as 20,000 Hp and as low as 300 RPM. This includes an extensive range of proven cast iron and fabricated steel motors well suited for both General Purpose and Custom (critical service) applications.

Note the following charts which apply to motors meeting these NEMA standards:

- 650% Inrush current
- Equal or greater than NEMA, Part 20 design torques (as described by NEMA for Above NEMA Motors)
- Standard NEMA voltage for each horsepower rating
- Minimum 90% Reduced Voltage Start
- NEMA specified (or less) load inertia applied to the motor shaft
- Inverter powered capabilities limited to Variable Torque loads
- Altitude below 3300 feet (above sea level)
- Operating ambient of 40°C (or lower)
- Horizontal foot mounted
- Centrifugal loads
- Direct coupled

The list of Baldor•Reliance Custom design capabilities and features is even more impressive.
Please contact a an ABB sales representative office for details.

Open Motors

Output (Hp)	Speed (RPM)											
	2	4	6	8	10	12	14	16	18	20	22	24
150	447	447	449	449	5008	5010	5808					
200	449	447	449	5006	5008	5010	5808					
250	449	449	5006	5006	5010	5808	5808	6811			9240	9240
300	449	449	5006	5008	5010	5808	5810	6811	8040	9240	9240	9240
350	449	449	5006	5010	5808	5808	5810	6811	8040	9240	9240	9240
400	449	5006	5008	5010	5808	5810	5812	6811	8040	9240	9240	10840
450	449	5008	5010	5012	5808	5810	5812	6811	8040	9240	9240	10840
500	5008	5008	5010	5012	5808	5812	5812	6813	8040	9240	10840	10840
600	5008	5008	5010	5808	5810	5812	6813	6813	9240	9240	10840	10840
700	5010	5010	5012	5810	5812	5812	6813	8040	9240	9240	10840	10840
800	5808	5010	5810	5810	5812	6811	6813	8040	9240	9240	10840	10840
900	5808	5012	5810	5812	5812	6813	8040	8040	9240	10840	10840	10840
1000	5808	5012	5810	5812	6813	6813	8040	9240	9240	10840	10840	10840
1250	5810	5810	5812	5812	6813	8040	8040	9240	9240	10840	10840	12440
1500	5810	5810	5812	6811	6813	8040	9240	9240	9240	10840	12440	12440
1750	5810	5812	6811	6813	8040	8040	9240	9240	10840	10840	12440	12440
2000	5812	5812	6813	6813	8040	8040	9240	9240	10840	12440	12440	900
2250	5812	6811	6813	8040	8040	9240	9240	10840	10840	12440	900	900
2500	5812	6811	6813	8040	9240	9240	9240	10840	10840	900	900	900
2750	6811	6813	8040	8040	9240	9240	10840	10840	12440	900	900	
3000	6811	6813	8040	9240	9240	9240	10840	10840	12440	900	900	
3500	6813	6813	8040	9240	9240	10840	10840	10840	900	900		
4000	6813	8040	8040	9240	10840	10840	10840	12440	900			
4500	630	8040	9240	9240	10840	10840	10840	12440	900			
5000	630	8040	9240	10840	10840	10840	12440	900				
5500	630	9240	9240	10840	10840	10840	12440	900				
6000	630	9240	10840	10840	10840	12440	900					
7000	630	10840	10840	10840	10840	12440	900					
8000		10840	10840	10840	12440	900						
9000		10840	10840	12440	12440	900						
10000		10840	12440	12440	900							
11000		12440	12440	900	900							
12000		12440	900	900								
13000		12440	900	900								
14000		12440	900									
15000		12440	900									
16000		900										
18000		900										
20000		900										

Important Notes:

- Charts are based on designs in accordance with NEMA MG1:20.
- Enhanced cooling blower systems (provided on the motor) may be required depending on application requirements.
- Slower speed, higher pole count designs are available upon request.

Cast Frames Fabricated Steel Frames

Closed Motors

Output (Hp)	Speed (RPM)											
	2	4	6	8	10	12	14	16	18	20	22	24
100			447									
125	449	447	449									
150	449	447	449	5008	5010							
200	449	449	449L	5008	5010	5012						
250	449	449L	449L	5010	5012	5012	6811	6811	8040	9240	9240	9240
300	449L	449L	5010	5010	5012	400J	500S	6811	8040	9240	9240	9240
350	449L	449L	5012	5012	400J	500S	500S	6811	8040	9240	9240	10840
400	5010	5010	5012	5012	400J	500S	500S	6811	8040	9240	9240	10840
450	5010	5010	5012	5012	400J	500S	500S	6813	8040	9240	10840	10840
500	5010	5012	5810	5012	400J	500S	500S	6813	9240	9240	10840	10840
600	5010	5012	5810	5810	500S	500S	500S	8040	9240	9240	10840	10840
700	5810	5012	5810	400J	500S	500M	500M	8040	9240	10840	10840	10840
800	5810	5012	400J	500S	500M	500M	8040	9240	9240	10840	10840	10840
900	500M	5810	500S	500S	500M	500M	8040	9240	9240	10840	10840	12440
1000	500M	5810	500S	500S	500S	8040	8040	9240	9240	10840	10840	12440
1250	500M	400J	500S	500M	6813	8040	9240	9240	9240	10840	12440	12440
1500	500M	500M	500M	500M	8040	8040	9240	9240	10840	10840	12440	12440
1750	6811	500M	500M	8040	8040	8040	9240	10840	10840	12440	900	900
2000	6811	500M	8040	8040	8040	9240	9240	10840	10840	900	900	900
2250	6811	500M	8040	8040	9240	9240	10840	10840	12440	900	900	
2500	6813	6813	8040	9240	9240	9240	10840	10840	12440	900	900	
2750	6813	6813	8040	9240	9240	10840	10840	10840	900	900		
3000	6813	6813	8040	9240	9240	10840	10840	12440	900	900		
3500	630	8040	8040	9240	10840	10840	10840	12440	900			
4000	630	8040	9240	10840	10840	10840	12440	900				
4500	630	9240	9240	10840	10840	10840	12440	900				
5000	630	9240	10840	10840	10840	12440	900					
5500	630	10840	10840	10840	10840	12440	900					
6000	630	10840	10840	10840	12440	900						
7000		10840	10840	12440	12440	900						
8000		10840	12440	12440	900							
9000		12440	12440	900	900							
10000		12440	900	900								
11000		12440	900	900								
12000		12440	900									
13000		12440	900									
14000		900										
15000		900										
16000		900										

Important Notes:

- Charts are based on designs in accordance with NEMA MG1:20.
- Fabricated steel frames are TEAAC enclosure.
- Enhanced cooling blower systems (provided on the motor) may be required depending on application requirements.
- Slower speed, higher pole count designs are available upon request.

Single Phase, Totally Enclosed, Foot Mounted

1/2 thru 1 1/2 Hp **NEMA 56 thru 145T** **IP55**

Applications: Single phase food processing applications where motors receive washdown on a regular basis.

Features: 300 series stainless steel hardware, moisture sealant on bolt heads, between frame and endplates. Neoprene gaskets. Double sealed ball bearings. Lip and V-Ring seal on drive end. Stainless steel shaft extension. Electrostatically applied epoxy finish over autophoretic primer. Class F insulation.

Hp	RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1/2	1800	56	TEFC	**WDL3504**	592	WD	12.23	34	68	115/230	3.7	1, 12, 30
3/4	1800	56	TEFC	**WDL3507**	693	WD	12.23	35	68	115/230	5.5	1, 12, 30
1	1800	56	TEFC	**WDL3510**	801	WD	13.23	40	67	115/230	6.4	1, 30
	1800	143T	TEFC	**WDL3510T**	823	WD	13.30	41	67	115/230	6.4	1, 30
1 1/2	1800	145T	TEFC	**WDL3514T**	987	WD	14.18	49	80	115/230	6.2	1, 30

[a] See notes on the last page of this catalog.

Single Phase, Totally Enclosed, C-Face

1/2 thru 1 1/2 Hp **NEMA 56C** **IP55**

Applications: Single phase food processing applications where motors receive washdown on a regular basis.

Features: 300 series stainless steel hardware, moisture sealant on bolt heads, between frame and endplates. Neoprene gaskets. Double sealed ball bearings. Lip and V-Ring seal on drive end. Stainless steel shaft extension. Electrostatically applied epoxy finish over autophoretic primer. Class F insulation.

Hp	RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
Foot Mounted												
1/2	1800	56C	TEFC	**CWDL3504**	620	WD	12.23	35	68	115/230	3.7	1, 12, 30
3/4	1800	56C	TEFC	**CWDL3507**	721	WD	12.23	36	68	115/230	5.5	1, 12, 30
1	3600	56C	TEFC	**CWDL3509**	676	WD	12.23	37	68	115/230	5.9	1, 12, 30
	1800	56C	TEFC	**CWDL3510**	829	WD	13.23	41	67	115/230	6.4	1, 30
1 1/2	3600	56C	TEFC	**CWDL3513**	835	WD	13.23	41	70	115/230	8	1, 30
	1800	56C	TEFC	**CWDL3514**	993	WD	14.12	50	80	115/230	6.2	1, 30
Footless												
1/2	1800	56C	TEFC	**VWDL3504**	594	WD	12.25	35	68	115/230	3.7	1, 12, 30
3/4	1800	56C	TEFC	**VWDL3507**	698	WD	12.25	36	68	115/230	5.5	1, 12, 30
1	1800	56C	TEFC	**VWDL3510**	799	WD	13.25	42	67	115/230	6.4	1, 30
1 1/2	1800	56C	TEFC	**VWDL3514**	959	WD	14.10	48	80	115/230	6.2	1, 30

[a] See notes on the last page of this catalog.

Three Phase, Totally Enclosed, Foot Mounted

1/2 thru 20 Hp **NEMA 56C thru 256T** **IP55**

Applications: Food processing and other applications where motors receive washdown on a regular basis.

Features: 300 series stainless steel hardware, moisture sealant on bolt heads, between frame and endplates. Neoprene gaskets. Double sealed ball bearings. Lip and V-Ring seal on drive end. Stainless steel shaft extension. Electrostatically applied epoxy finish over autophoretic primer. Class F insulation. Super-E® motors have NEMA Premium® efficiency and 3 year warranty.

Hp	RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1/2	1800	56	TENV	**WDM3538**	621	WD	11.06	27	80	230/460	0.8	1, 12, 30
3/4	1800	56	TENV	**WDM3542**	664	WD	11.06	30	78.5	230/460	1.4	1, 12, 30
1	1800	56	TENV	**WDM3546**	674	WD	11.06	33	82.5	208-230/460	1.5	1
		143T	TENV	**EWDM3546T**	927	WD	12.12	39	85.5	208-230/460	1.5	1
		143T	TENV	**WDM3546T**	696	WD	11.12	34	82.5	208-230/460	1.5	1
1 1/2	1800	145T	TENV	**EWDM3554T**	1,019	WD	13.00	49	86.5	208-230/460	2.1	1
		145T	TENV	**WDM3554T**	760	WD	12.12	40	85.5	208-230/460	2.3	1
2	1800	145T	TEFC	**EWDM3558T**	1,196	WD	13.29	46	86.5	208-230/460	2.9	1
3	1800	182T	TEFC	**EWDM3611T**	1,493	WD	16.54	73	89.5	208-230/460	4.2	1
5	1800	184T	TEFC	**EWDM3615T**	1,699	WD	18.04	90	89.5	208-230/460	6.7	1
7 1/2	1800	213T	TEFC	**EWDM3710T**	2,127	WD	19.04	129	91.7	230/460	9.4	1, 30
10	1800	215T	TEFC	**EWDM3714T**	2,317	WD	20.54	165	91.7	230/460	12	1
15	1800	254T	TEFC	**EWDM23933T**	4,997	WD	23.57	253	92.4	230/460	18	1, 30
20	1800	256T	TEFC	**EWDM23934T**	5,823	WD	23.57	280	93	208-230/460	24	1

[a] See notes on the last page of this catalog.

Three Phase, Totally Enclosed, C-Face, Foot Mounted

1/3 thru 20 Hp **NEMA 56C thru 256TC** **IP55**

Applications: Food processing and other applications where motors receive washdown on a regular basis.

Features: 300 series stainless steel hardware, moisture sealant on bolt heads, between frame and endplates. Neoprene gaskets. Double sealed ball bearings. Lip and V-Ring seal on drive end. Stainless steel shaft extension. Electrostatically applied epoxy finish over autophoretic primer. Class F insulation. Super-E® motors have NEMA Premium® efficiency and 3 year warranty.

Hp	RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1/3	3600	56C	TENV	**CWDM3457**	514	WD	10.25	20	72	208-230/460	0.7	1
	1800	56C	TENV	**CWDM3534**	541	WD	11.06	33	75.5	208-230/460	0.7	1
1/2	3600	56C	TENV	**CWDM3537**	604	WD	11.07	29	70	208-230/460	0.9	1, 12
	1800	56C	TENV	**CWDM3538**	654	WD	11.06	28	80	230/460	0.8	1, 12, 30
	1200	56C	TENV	**CWDM3539**	826	WD	12.06	37	78.5	208-230/460	1	1, 12
3/4	3600	56C	TENV	**CWDM3541**	633	WD	11.07	35	80	230/460	1.1	1, 12, 30
	1800	56C	TENV	**CWDM3542**	709	WD	11.07	29	78.5	230/460	1.4	1, 12, 30
	1200	56C	TENV	**CWDM3543**	997	WD	12.94	46	80	208-230/460	1.4	1
1	3600	56C	TEFC	**CEWDM3545**	1,039	WD	12.24	33	77	230/460	1.4	1, 12
		56C	TENV	**CWDM3545**	749	WD	11.07	33	75.5	230/460	1.6	12, 30
	1800	56C	TENV	**CEWDM3546**	1,044	WD	12.06	41	85.5	208-230/460	1.5	
		56C	TENV	**CWDM3546**	760	WD	11.06	34	82.5	208-230/460	1.5	1
		143TC	TENV	**CEWDM3546T**	1,065	WD	12.13	37	85.5	208-230/460	1.5	
		143TC	TENV	**CWDM3546T**	782	WD	12.12	36	82.5	208-230/460	1.5	1
	1200	56C	TEFC	**CEWDM3556**	1,172	WD	13.24	43	82.5	208-230/460	1.8	1
		56C	TEFC	**CWDM3556**	963	WD	12.24	36	78.5	208-230/460	1.9	1
1 1/2	3600	56C	TENV	**CEWDM3550**	1,068	WD	12.07	46	85.5	208-230/460	2	1
		56C	TENV	**CWDM3550**	782	WD	12.94	50	82.5	208-230/460	2.1	1
	1800	56C	TEFC	**CWDM3554**	800	WD	12.24	36	81.5	208-230/460	2.3	1
		145TC	TENV	**CEWDM3554T**	1,115	WD	13.00	48	86.5	208-230/460	2.1	1
		145TC	TENV	**CWDM3554T**	823	WD	12.12	43	85.5	208-230/460	2.3	
	1200	56C	TEFC	**CWDM3557**	1,020	WD	14.12	46	80	208-230/460	2.5	
2	3600	56HCY	TEFC	**CEWDM3555**	1,155	WD	13.24	35	85.5	208-230/460	2.5	1
		56HCY	TEFC	**CWDM3555**	885	WD	13.59	39	80	208-230/460	2.8	1
		145TC	TEFC	**CEWDM3555T**	1,178	WD	13.28	45	85.5	208-230/460	2.5	1
	1800	56C	TEFC	**CWDM3558**	883	WD	13.24	40	82.5	208-230/460	3	1
		145TC	TEFC	**CEWDM3558T**	1,229	WD	13.28	46	86.5	208-230/460	2.9	1
		145TC	TENV	**CEWDNM3558T**	1,200	WD	14.37	54	88.5	208-230/460	2.7	1
	1200	184TC	TEFC	**CEWDM3614T**	1,441	WD	18.04	93	88.5	208-230/460	3.5	1
3	3600	145TC	TEFC	**CEWDM3559T**	1,451	WD	14.17	60	86.5	208-230/460	3.6	1
		182TC	TEFC	**CEWDM3610T**	1,368	WD	15.18	57	86.5	208-230/460	3.6	1
	1800	182TC	TEFC	**CEWDM3611T**	1,614	WD	16.54	78	89.5	208-230/460	4.2	1
	1200	213TC	TEFC	**CEWDM3704T**	1,899	WD	19.78	136	89.5	208-230/460	4.6	1
5	3600	184TC	TEFC	**CEWDM3613T**	1,920	WD	16.54	80	88.5	208-230/460	5.9	1
	1800	184TC	TEFC	**CEWDM3615T**	1,829	WD	18.04	96	89.5	208-230/460	6.7	1
	1200	215TC	TEFC	**CEWDM3708T**	2,249	WD	20.53	161	89.5	208-230/460	7.3	1
7 1/2	3600	184TC	TEFC	**CEWDM3616T**	2,282	WD	18.04	101	89.5	208-230/460	8.4	1
		213TC	TEFC	**CEWDM3709T**	2,705	WD	18.64	143	89.5	208-230/460	9	1
	1800	213TC	TEFC	**CEWDM3710T**	2,314	WD	19.78	132	91.7	230/460	9.4	1, 30
	1200	254TC	TEFC	**CEWDM22976T**	3,861	WD	23.57	280	91	208-230/460	11	1
10	3600	215TC	TEFC	**CEWDM3711T**	2,977	WD	18.64	122	90.2	208-230/460	11.8	1
	1800	215TC	TEFC	**CEWDM3714T**	2,630	WD	21.27	165	91.7	230/460	12	1
	1200	256TC	TEFC	**CEWDM23932T**	4,389	WD	23.57	289	91	208-230/460	15.1	1
15	3600	215TC	TEFC	**CEWDM3713T**	3,741	WD	21.26	170	91	208-230/460	17	1
		254TC	TEFC	**CEWDM23994T**	5,255	WD	21.94	188	91	230/460	16.6	1, 30
	1800	254TC	TEFC	**CEWDM23933T**	5,172	WD	23.57	256	92.4	230/460	18	1, 30
20	3600	256TC	TEFC	**CEWDM41906T**	6,031	WD	23.57	274	91	230/460	23	1
	1800	256TC	TEFC	**CEWDM23934T**	5,998	WD	23.57	283	93	208-230/460	24	1

[a] See notes on the last page of this catalog.

Three Phase, Totally Enclosed, C-Face, Footless

1/3 thru 10 Hp **NEMA 56C thru 215TC** **IP55**

Applications: Food processing and other applications where motors receive washdown on a regular basis.

Features: 300 series stainless steel hardware, moisture sealant on bolt heads, between frame and endplates. Neoprene gaskets. Double sealed ball bearings. Lip and V-Ring seal on drive end. Stainless steel shaft extension. Electrostatically applied epoxy finish over autophoretic primer. Class F insulation. Super-E® motors have NEMA Premium® efficiency and 3 year warranty.

Hp	RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1/3	3600	56C	TENV	**VWDM3457**	493	WD	10.26	20	72	208-230/460	0.7	1
	1800	56C	TENV	**VWDM3534**	519	WD	11.06	33	75.5	208-230/460	0.7	1
1/2	1800	56C	TENV	**VEWDM3538**	868	WD	11.06	20	84	208-230/460	0.9	
		56C	TEFC	**VFWDM3538**	678	WD	12.24	29	80	230/460	0.8	1, 12, 30
		56C	TENV	**VWDM3538**	649	WD	11.06	29	80	230/460	0.8	1, 12, 30
3/4	1800	56C	TENV	**VEWDM3542**	955	WD	11.06	32	84	230/460	1.1	1, 12
		56C	TEFC	**VFWDM3542**	733	WD	12.24	31	78.5	230/460	1.4	1, 12, 30
		56C	TENV	**VWDM3542**	705	WD	11.06	33	80	230/460	1.2	1, 12
1	1800	56C	TENV	**VEWDM3546**	1,034	WD	12.06	40	85.5	208-230/460	1.5	
		56C	TENV	**VWDM3546**	755	WD	11.06	35	82.5	208-230/460	1.5	1
		143TC	TEFC	**VEFWDM3546T**	1,070	WD	12.30	36	85.5	208-230/460	1.5	1
		143TC	TENV	**VEWDM3546T**	1,042	WD	12.12	40	85.5	208-230/460	1.5	
		143TC	TENV	**VWDM3546T**	776	WD	11.12	34	82.5	208-230/460	1.5	1
1 1/2	1800	56C	TENV	**VEWDM3554**	1,110	WD	12.94	48	86.5	208-230/460	2.1	1
		56C	TENV	**VWDM3554**	795	WD	12.07	41	85.5	208-230/460	2.3	
		145TC	TEFC	**VEFWDM3554T**	1,148	WD	13.28	43	86.5	208-230/460	2.2	1
		145TC	TENV	**VEWDM3554T**	1,119	WD	13.00	48	86.5	208-230/460	2.1	1
		145TC	TENV	**VWDM3554T**	815	WD	12.13	43	85.5	208-230/460	2.3	
2	1800	56C	TEFC	**VEWDM3558**	1,181	WD	13.22	46	86.5	208-230/460	2.9	1
		56C	TEFC	**VWDM3558**	844	WD	13.22	40	82.5	208-230/460	3	1
		145TC	TEFC	**VEWDM3558T**	1,204	WD	13.28	47	86.5	208-230/460	2.9	1
		145TC	TEFC	**VWDM3558T**	926	WD	13.28	41	84	208-230/460	3.1	1
3	3600	56C	TEFC	**VWDM3559**	1,084	WD	14.12	49	85.5	208-230/460	3.7	1
	1800	145TC	TEFC	**VWDM3561T**	1,323	WD	15.53	60	87.5	208-230/460	4.2	1
		182TC	TEFC	**VEWDM3611T**	1,513	WD	16.54	73	89.5	208-230/460	4.2	1
		182TC	TEFC	**VWDM3611T**	1,217	WD	16.56	62	87.5	208-230/460	4.2	1
5	1800	184TC	TEFC	**VEWDM3615T**	1,715	WD	18.05	89	89.5	208-230/460	6.7	1
		184TC	TEFC	**VWDM3615T**	1,520	WD	16.54	76	87.5	208-230/460	6.8	1
7 1/2	1800	213TC	TEFC	**VEWDM3710T**	2,294	WD	19.78	121	91.7	230/460	9.4	1, 30
		213TC	TEFC	**VWDM3710T**	1,737	WD	18.63	110	89.5	208-230/460	10.1	1
10	1800	215TC	TEFC	**VEWDM3714T**	2,465	WD	21.27	165	91.7	208-230/460	12	1
		215TC	TEFC	**VWDM3714T**	1,981	WD	19.78	129	89.5	208-230/460	13.5	1

[a] See notes on the last page of this catalog.

Three Phase, Totally Enclosed, C-Face, 575V

1/2 thru 20 Hp **NEMA 56C thru 256TC** **IP55**

Applications: Food processing and other applications where motors receive washdown on a regular basis.

Features: 300 series stainless steel hardware, moisture sealant on bolt heads, between frame and endplates. Neoprene gaskets. Double sealed ball bearings. Lip and V-Ring seal on drive end. Stainless steel shaft extension. Electrostatically applied epoxy finish over autophoretic primer. Class F insulation. Super-E® motors have NEMA Premium® efficiency and 3 year warranty.

Hp	RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
Foot Mounted												
1/2	1800	56C	TENV	**CWDM3538-5**	654	WD	11.07	26	80	575	0.7	1, 12
3/4	1800	56C	TENV	**CWDM3542-5**	709	WD	11.06	35	78.5	575	1.1	1, 12
1	1800	56C	TENV	**CEWDM3546-5**	1,044	WD	12.06	39	85.5	575	1.2	
		56C	TENV	**CWDM3546-5**	760	WD	11.06	35	82.5	575	1.2	1
		143TC	TENV	**CEWDM3546T-5**	1,065	WD	12.12	38	85.5	575	1.2	
1 1/2	1800	56C	TEFC	**CWDM3554-5**	800	WD	13.24	40	84	575	1.9	1
		145TC	TENV	**CEWDM3554T-5**	1,115	WD	13.00	46	86.5	575	1.7	1
		145TC	TENV	**CWDM3554T-5**	823	WD	12.12	42	85.5	575	1.8	
2	1800	56C	TEFC	**CWDM3558-5**	883	WD	13.24	39	84	575	2.5	1
		145TC	TEFC	**CEWDM3558T-5**	1,229	WD	13.28	46	86.5	575	2.3	1
3	3600	145TC	TEFC	**CEWDM3559T-5**	1,451	WD	14.17	52	86.5	575	2.9	1
	1800	182TC	TEFC	**CEWDM3611T-5**	1,614	WD	16.54	77	89.5	575	3.3	1
5	3600	184TC	TEFC	**CEWDM3613T-5**	1,920	WD	16.54	70	88.5	575	4.7	1
	1800	184TC	TEFC	**CEWDM3615T-5**	1,829	WD	18.04	94	89.5	575	5.3	1
7 1/2	1800	213TC	TEFC	**CEWDM3710T-5**	2,314	WD	19.78	195	91.7	575	7.6	1
10	1800	215TC	TEFC	**CEWDM3714T-5**	2,630	WD	21.27	165	91.7	575	9.6	1
15	1800	254TC	TEFC	**CEWDM23933T-5**	5,172	WD	23.57	258	92.4	575	14.5	1
20	1800	256TC	TEFC	**CEWDM23934T-5**	5,998	WD	23.57	289	93	575	19	1
Footless												
1/2	1800	56C	TENV	**VWDM3538-5**	649	WD	11.06	28	80	575	0.7	1, 12
3/4	1800	56C	TENV	**VWDM3542-5**	705	WD	11.06	32	80	575	0.9	1, 12
1	1800	56C	TENV	**VWDM3546-5**	755	WD	11.06	33	82.5	575	1.2	1
1 1/2	1800	145TC	TENV	**VWDM3554T-5**	815	WD	12.12	42	85.5	575	1.8	
2	1800	145TC	TEFC	**VWDM3558T-5**	926	WD	13.28	41	84	575	2.5	1

[a] See notes on the last page of this catalog.

Feather Picker Motor, Three Phase, TEFC, Encapsulated, Design C, Foot Mounted

1 1/2 thru 3 Hp **NEMA 145T thru 184TZ** **IP56**

Applications: Poultry processing plants. Designed for use on equipment used to remove feathers from poultry.

Features: Labyrinth seal on each end of motor provides an added level of protection from washdown spray. Motor windings are epoxy encapsulated for added moisture protection. Moisture resistant insulation system. Top mounted F-3 conduit box for easy connections. Neoprene gaskets. Stainless steel shaft extension, external hardware and nameplate. Double sealed ball bearings with moisture-resistant grease.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1 1/2	1200	145TY	**WDM3553TP-9**	1,316	WD	15.62	45	85.5	208-230/460	2.7	1
2	1800	145T	**WDM3558TP-9**	1,185	WD	13.37	41	84	230/460	3.1	1, 30
	1200	184TZ	**WDM3663TP-9**	1,477	WD	16.29	90	86.5	230/460	3.4	1, 30
3	1800	145T	**WDM3561TP-9**	1,455	WD	15.62	63	87.5	230/460	4	1, 30
		145TY	**WDM3563TP-9**	1,455	WD	15.62	63	87.5	230/460	4	1, 30

[a] See notes on the last page of this catalog.

Feather Picker Motor, Three Phase, TEFC, Encapsulated, Design C, C-Face Foot Mounted

3 Hp **NEMA 145TC** **IP56**

Applications: Poultry processing plants. Designed for use on equipment used to remove feathers from poultry.

Features: Labyrinth seal on each end of motor provides an added level of protection from washdown spray. Motor windings are epoxy encapsulated for added moisture protection. Moisture resistant insulation system. Top mounted F-3 conduit box for easy connections. Neoprene gaskets. Stainless steel shaft extension, external hardware and nameplate. Double sealed ball bearings with moisture-resistant grease.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
3	1800	145TC	**CWDM3561TP-9**	1,493	WD	15.62	66	87.5	230/460	4	1, 30

[a] See notes on the last page of this catalog.

Super White Washdown Three Phase, TEFC, C-Face, Foot Mounted

1 thru 20 Hp **NEMA 56C thru 256TC** **IP56**

Applications: Wet or humid environments in food and beverage processing facilities in which equipment is cleaned on a regular basis.

Features: Labyrinth seal on each end of motor provides an added level of protection from washdown spray, same size bearings on each end of motor, easily removable drain plugs, 300 series stainless steel shaft and hardware, lead-sealing neoprene gaskets. Class F insulated motor with 1.15 service factor or higher that operates within class "B" temperature limits at rated horsepower. All models are NEMA Premium® Efficient, Super-E® designs with 3 year warranty.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1	3600	56C	**CEWWDM3545**	1,112	WD	12.35	34	77	230/460	1.4	1, 12
	1800	56C	**CEFWWDM3546**	1,146	WD	12.35	37	85.5	208-230/460	1.5	1
		143TC	**CEFWWDM3546T**	1,170	WD	13.28	38	85.5	208-230/460	1.5	1
1.5	3600	56C	**CEFWWDM3550**	1,230	WD	13.35	46	85.5	208-230/460	2	1
	1800	145TC	**CEFWWDM3554T**	1,253	WD	13.28	43	86.5	208-230/460	2.2	1
2	3600	56HCY	**CEWWDM3555**	1,236	WD	13.32	41	85.5	208-230/460	2.5	1
		145TC	**CEWWDM3555T**	1,261	WD	13.28	41	85.5	208-230/460	2.5	1
	1800	145TC	**CEWWDM3558T**	1,316	WD	13.28	48	86.5	208-230/460	2.9	1
3	3600	145TC	**CEWWDM3559T**	1,553	WD	14.17	61	86.5	208-230/460	3.6	1
		182TC	**CEWWDM3610T**	1,464	WD	16.54	75	88.5	208-230/460	3.4	1
	1800	182TC	**CEWWDM3611T**	1,727	WD	16.54	81	89.5	208-230/460	4.2	1
5	3600	184TC	**CEWWDM3613T**	2,055	WD	16.54	83	88.5	208-230/460	5.9	1
	1800	184TC	**CEWWDM3615T**	1,958	WD	18.04	97	89.5	208-230/460	6.7	1
7.5	3600	184TC	**CEWWDM3616T**	2,442	WD	18.04	104	89.5	208-230/460	8.4	1
		213TC	**CEWWDM3709T**	2,895	WD	18.64	121	89.5	208-230/460	9	1
	1800	213TC	**CEWWDM3710T**	2,476	WD	19.78	127	91.7	230/460	9.4	1, 30
10	3600	215TC	**CEWWDM3711T**	3,186	WD	18.64	118	90.2	208-230/460	11.8	1
	1800	215TC	**CEWWDM3714T**	2,815	WD	21.27	165	91.7	230/460	12	1
15	3600	215TC	**CEWWDM3713T**	4,003	WD	21.26	169	91	208-230/460	17	1
		254TC	**CEWWDM23994T**	5,623	WD	23.57	240	91	230/460	16.7	1
	1800	254TC	**CEWWDM23933T**	5,535	WD	23.57	255	92.4	230/460	18	1, 30
20	3600	256TC	**CEWWDM41906T**	6,454	WD	23.57	260	91	230/460	23	1
	1800	256TC	**CEWWDM23934T**	6,418	WD	23.57	286	93	208-230/460	24	1

[a] See notes on the last page of this catalog.

Washdown Lead Connection Kits

Wirenut Kit
WD5600A01SP*

Sleeving Kits
WD5601A01SP & A02SP

Applications: Food processing and other applications where motors are exposed to moisture and humidity.

Features: Choice of silicone injected wirenuts (WD5600A01SP*) or lead sleeving kits (WD5601A01SP & A02SP). These kits provide an extra level of protection against moisture ingress which can be common in food processing applications.

Catalog Number	List Price	Mult. Sym.	Wire Range	Aprx. Wt. (lb)
WD5600A01SP	35	A8	#22 - #8 AWG	1
WD5601A01SP	15	A8	#18 - #14 AWG	1
WD5601A02SP	20	A8	#12 - #10 AWG	1

*WD5600A01SP is provided as standard for SSE Stainless Encapsulated Motors

Brake Motor, Three Phase, Totally Enclosed, C-Face, Foot Mounted

1/2 thru 5 Hp **NEMA 56C thru 184TC** **IP55**

Applications: Food processing and other applications where motors receive washdown on a regular basis.

Features: Class F insulated motor with 1.15 service factor or higher that operates within class "B" temperature limits at rated horsepower. Standard NEMA BA dimension, 300 series stainless steel hardware, moisture sealant on bolt heads, between frame and end plates. Neoprene gaskets. Power off manual release. Resets automatically. Motors have NEMA Premium® Efficiency and are inverter-ready. 230/460V brakes are connected in conduit box allowing for separate connection when used with an inverter.

Hp	RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Brake Rating [b]	Notes [a]
1/2	1800	56C	TENV	**CEWDBM3538**	2,025	WD	15.31	42	84	208-230/460	0.9	3	12, 41
3/4	1800	56C	TENV	**CEWDBM3542**	2,188	WD	15.31	42	84	230/460	1.1	6	12, 30, 41
1	1800	56C	TENV	**CEWDBM3546**	2,246	WD	16.31	50	85.5	208-230/460	1.5	6	41
		143TC	TENV	**CEWDBM3546T**	2,269	WD	16.81	51	85.5	208-230/460	1.5	6	41
1 1/2	1800	145TC	TENV	**CEWDBM3554T**	2,444	WD	18.14	61	86.5	208-230/460	2.1	10	41
2	1800	145TC	TEFC	**CEWDBM3558T**	2,487	WD	18.56	60	86.5	208-230/460	2.9	10	41
3	1800	182TC	TEFC	**CEWDBM3611T**	3,009	WD	21.80	93	89.5	208-230/460	4.2	15	41
5	1800	184TC	TEFC	**CEWDBM3615T**	3,635	WD	23.30	110	89.5	208-230/460	6.7	25	42

[a] See notes on the last page of this catalog.
[b] Brake torque rating in lb-ft.

Jet Pump, Three Phase, TEFC, C-Face

3/4 thru 3 Hp **NEMA 56J** **IP55**

Applications: Industrial pumping applications in wet or humid environments, especially in food and beverage processing facilities in which equipment is cleaned on a regular basis.

Features: 300 series stainless steel shaft and hardware. Contact lip seal and V-ring slinger on drive end, easily removable drain plugs for thorough drainage, neoprene gaskets, precision die cast aluminum rotor coated with epoxy primer. Double-sealed ball bearings with moisture-resistant grease. White epoxy exterior paint.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
Footless											
3/4	3600	56J	**JWDM3463**	634	WD	12.73	33	68	208-230/460	1.4	1
1	3600	56J	**JWDM3545**	769	WD	12.73	35	72	208-230/460	2	1
1 1/2	3600	56J	**JWDM3550**	802	WD	12.73	38	75.5	208-230/460	2.4	1
2	3600	56J	**JWDM3555**	905	WD	13.73	43	80	230/460	2.7	30
3	3600	56J	**JWDM3559**	1,109	WD	13.73	48	82.5	208-230/460	3.8	1
Foot Mounted											
3/4	3600	56J	**CJWDM3463**	639	WD	12.72	33	68	208-230/460	1.4	1
1	3600	56J	**CJWDM3545**	774	WD	12.72	35	72	208-230/460	2	1
1 1/2	3600	56J	**CJWDM3550**	807	WD	12.72	38	75.5	208-230/460	2.4	1
2	3600	56J	**CJWDM3555**	910	WD	13.73	43	80	230/460	2.7	30
3	3600	56J	**CJWDM3559**	1,114	WD	13.73	48	82.5	208-230/460	3.8	1

[a] See notes on the last page of this catalog.

Close-Coupled Pump, Three Phase, Totally Enclosed

1 thru 15 Hp **NEMA 143JM thru 215JM** **IP55**

Applications: Commercial and industrial water pumps, food processing and applications in which equipment is cleaned on a regular basis.

Features: Over-sized ball bearings with locked drive end construction for minimum shaft movement. Moisture sealant on bolt heads, between frame and endplates. Neoprene gaskets. Contact lip seal and V-ring slinger on drive end. Stainless steel shaft extension. Electrostatic epoxy coating.

Hp	RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1	1800	143JM	TENV	**JMWDM3546T**	954	WD	14.25	39	82.5	208-230/460	1.5	1
1 1/2	3600	143JM	TEFC	**JMWDM3550T**	998	WD	15.43	42	82.5	208-230/460	2.1	1
	1800	145JM	TENV	**JMWDM3554T**	998	WD	14.25	46	85.5	208-230/460	2.3	2
2	3600	145JM	TEFC	**JMWDM3555T**	1,110	WD	15.43	47	84	208-230/460	2.6	1
	1800	145JM	TEFC	**JMWDM3558T**	1,044	WD	15.43	45	84	208-230/460	3.1	1
3	3600	145JM	TEFC	**JMWDM3559T**	1,249	WD	16.34	53	85.5	208-230/460	3.7	1
	1800	182JM	TEFC	**JMWDM3611T**	1,249	WD	18.22	67	87.5	208-230/460	4.2	1
5	3600	184JM	TEFC	**JMWDM3613T**	1,601	WD	18.05	79	87.5	208-230/460	5.8	1
	1800	184JM	TEFC	**JMWDM3615T**	1,398	WD	18.05	89	87.5	208-230/460	6.8	1
7 1/2	3600	184JM	TEFC	**JMWDM3616T**	1,814	WD	19.55	96	88.5	208-230/460	8.7	1
	1800	213JM	TEFC	**JMWDM3710T**	1,787	WD	19.78	125	89.5	208-230/460	10.1	1
10	3600	215JM	TEFC	**JMWDM3711T**	2,438	WD	19.78	134	89.5	208-230/460	11.5	1
	1800	215JM	TEFC	**JMWDM3714T**	2,257	WD	20.91	136	89.5	208-230/460	13.5	1
15	3600	215JM	TEFC	**JMWDM3713T**	2,904	WD	21.66	160	90.2	208-230/460	17	1

[a] See notes on the last page of this catalog.

SSE Super-E Stainless Steel, Close-Coupled Pump, Three Phase, Totally Enclosed, Encapsulated

1 thru 10 Hp **NEMA 143JM thru 215JM** **IP56** **IP69K for Water**

Applications: Commercial and industrial water pumps, food processing and applications that expose the motor to high pressure washdown.

Features: Stainless steel motor frame, endplates, conduit box, shaft and base. Moisture resistant insulation system. Endplate rabbets have O-ring seals. Conduit box is welded to the motor frame. Patented bearing seal to protect motor bearings. Epoxy encapsulation, Class H insulation. Laser etched nameplate. NEMA Premium® efficiency. 3 year warranty.

Hp	RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1	1800	143JM	TENV	**JMSSEWDM3546T**	1,805	WD	14.94	62	87.5	208-230/460	1.5	
1 1/2	3600	143JM	TENV	**JMSSEWDM3550T**	1,809	WD	15.82	68	85.5	208-230/460	1.8	
	1800	145JM	TEFC	**JMSSEWDM3554T**	1,820	WD	16.96	69	88.5	208-230/460	2.2	
2	3600	145JM	TEFC	**JMSSEWDM3555T**	2,138	WD	16.96	72	86.5	208-230/460	2.5	
	1800	145JM	TEFC	**JMSSEWDM3558T**	2,168	WD	18.34	74	88.5	208-230/460	2.7	
3	3600	145JM	TEFC	**JMSSEWDM3559T**	2,568	WD	18.34	83	86.5	208-230/460	3.7	
	1800	182JM	TEFC	**JMSSEWDM3611T**	2,696	WD	19.73	108	89.5	230/460	4.2	30
5	3600	184JM	TEFC	**JMSSEWDM3613T**	2,904	WD	18.23	104	89.5	208-230/460	5.6	
	1800	184JM	TEFC	**JMSSEWDM3615T**	2,924	WD	19.73	121	89.5	208-230/460	6.5	
7 1/2	3600	213JM	TEFC	**JMSSEWDM3709T**	3,423	WD	21.56	184	91	208-230/460	8.3	
	1800	213JM	TEFC	**JMSSEWDM3710T**	3,487	WD	22.75	135	91.7	208-230/460	9.5	
10	3600	215JM	TEFC	**JMSSEWDM3711T**	3,838	WD	22.75	154	91.7	208-230/460	10.6	
	1800	215JM	TEFC	**JMSSEWDM3714T**	4,049	WD	24.19	187	92.4	208-230/460	12.5	

[a] See notes on the last page of this catalog.

Paint-Free, Three Phase, Totally Enclosed, C-Face

1/2 thru 10 Hp **NEMA 56C thru 215TC** **IP55**

Applications: Food processing, packaging and outdoor applications.

Features: Sealed ball bearings with moisture-resistant grease. Rotating non-contact labyrinth seal on output shaft extension. Moisture resistant insulation system. Neoprene gaskets. Special processed cast endplates. 300 series stainless steel motor frame, base, shaft and hardware. No exterior paint. Super-E® motors have NEMA Premium® efficiency and 3 year warranty.

Hp	RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
Foot Mounted												
1/2	3600	56C	TENV	**CSWDM3537**	731	WD	11.06	29	70	208-230/460	0.9	2
	1800	56C	TENV	**CSWDM3538**	715	WD	11.06	27	80	230/460	0.8	1, 12, 30
	1200	56C	TENV	**CSWDM3539**	1,000	WD	12.06	38	78.5	208-230/460	1	1, 12
3/4	3600	56C	TENV	**CSWDM3541**	767	WD	11.06	36	80	208-230/460	1.1	1, 12
	1800	56C	TENV	**CSWDM3542**	825	WD	11.06	30	78.5	230/460	1.4	1, 12, 30
	1200	56C	TENV	**CSWDM3543**	1,207	WD	12.94	47	81.5	208-230/460	1.4	
1	3600	56C	TENV	**CSWDM3545**	907	WD	11.06	27	82.5	208-230/460	1.3	1, 12
	1800	56C	TENV	**CESWDM3546**	1,150	WD	12.06	40	85.5	208-230/460	1.5	
		56C	TENV	**CSWDM3546**	854	WD	11.06	34	82.5	208-230/460	1.5	1
		143TC	TENV	**CSWDM3546T**	854	WD	12.12	35	82.5	208-230/460	1.5	1
	1200	56C	TEFC	**CSWDM3556**	1,166	WD	12.24	45	77	208-230/460	1.7	
1 1/2	3600	56C	TENV	**CSWDM3550**	947	WD	12.94	51	82.5	208-230/460	2.1	
	1800	56C	TENV	**CSWDM3554**	894	WD	12.06	42	85.5	208-230/460	2.3	
		145TC	TENV	**CESWDM3554T**	1,205	WD	13.00	50	86.5	208-230/460	2.1	1
		145TC	TENV	**CSWDM3554T**	894	WD	12.12	42	85.5	208-230/460	2.3	
	1200	56C	TEFC	**CSWDM3557**	1,234	WD	14.12	47	80	208-230/460	2.5	
2	3600	145TC	TEFC	**CESWDM3555T**	1,427	WD	14.16	52	86.5	208-230/460	2.5	1
	1800	56C	TEFC	**CSWDM3558**	1,101	WD	13.24	44	86.5	208-230/460	2.9	1
		145TC	TEFC	**CESWDM3558T**	1,479	WD	15.54	56	88.5	208-230/460	2.8	1
3	3600	145TC	TEFC	**CESWDM3559T**	1,756	WD	15.54	62	86.5	208-230/460	3.6	1
	1800	182TC	TEFC	**CESWDM3611T**	1,809	WD	16.56	79	89.5	208-230/460	4	1
5	3600	184TC	TEFC	**CESWDM3613T**	2,227	WD	18.06	88	90.2	208-230/460	5.7	
	1800	184TC	TEFC	**CESWDM3615T**	2,105	WD	18.06	92	89.5	208-230/460	6.7	1
7 1/2	3600	213TC	TEFC	**CESWDM3709T**	2,811	WD	18.68	134	91	208-230/460	8.3	
	1800	213TC	TEFC	**CESWDM3710T**	2,590	WD	19.81	135	91.7	230/460	9.5	1
10	3600	215TC	TEFC	**CESWDM3711T**	3,116	WD	19.81	154	91.7	208-230/460	10.6	
	1800	215TC	TEFC	**CESWDM3714T**	2,947	WD	21.31	165	91.7	230/460	12	1
Footless												
1/2	1800	56C	TENV	**VSWDM3538**	707	WD	11.06	28	80	230/460	0.8	1, 12, 30
3/4	1800	56C	TENV	**VSWDM3542**	818	WD	11.06	31	78.5	230/460	1.4	1, 12, 30
1	1800	56C	TENV	**VESWDM3546**	1,095	WD	12.06	39	85.5	208-230/460	1.5	
		56C	TENV	**VSWDM3546**	849	WD	11.06	34	82.5	208-230/460	1.5	1
		143TC	TENV	**VSWDM3546T**	849	WD	11.12	34	82.5	208-230/460	1.5	1
1 1/2	1800	56C	TENV	**VESWDM3554**	1,192	WD	12.95	47	86.5	208-230/460	2.1	1
		56C	TENV	**VSWDM3554**	890	WD	12.06	41	85.5	208-230/460	2.3	
		145TC	TENV	**VESWDM3554T**	1,192	WD	13.00	49	86.5	208-230/460	2.1	1
		145TC	TENV	**VSWDM3554T**	890	WD	12.12	42	85.5	208-230/460	2.3	
2	1800	145TC	TEFC	**VESWDM3558T**	1,361	WD	15.56	55	88.5	208-230/460	2.8	1
		145TC	TEFC	**VSWDM3558T**	1,093	WD	13.31	42	84	208-230/460	3.1	1

[a] See notes on the last page of this catalog.

Stainless Steel, Three Phase, Totally Enclosed, C-Face, Foot Mounted

1/3 thru 20 Hp **NEMA 56C thru 256TC** **IP56**

Applications: Food processing, packaging, outdoor and highly corrosive environments.

Features: All external surfaces are 300 series stainless steel: motor frame, endplates, conduit box, shaft and base. Moisture resistant insulation system. Four condensate drains in each endplate. Endplate rabbets sealed and conduit box gasketed. Labyrinth seals each end. Especially effective in highly corrosive environments where paint or other finishes do not hold up. Super-E® motors have NEMA Premium® efficiency and 3 year warranty.

Hp	RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
230/460 Volt												
1/3	3600	56C	TENV	**CSSWDM3457**	1,054	WD	11.09	33	74	208-230/460	0.6	1
	1800	56C	TENV	**CSSWDM3534**	1,109	WD	11.09	33	75.5	208-230/460	0.7	1
1/2	3600	56C	TENV	**CSSWDM3537**	1,245	WD	11.09	36	70	208-230/460	0.9	1
	1800	56C	TENV	**CSSWDM3538**	1,336	WD	11.09	37	80	208-230/460	0.9	1, 12
3/4	3600	56C	TENV	**CSSWDM3541**	1,287	WD	11.09	43	80	230/460	1.1	1, 12, 30
	1800	56C	TENV	**CSSWDM3542**	1,383	WD	11.09	42	82.5	208-230/460	1.1	1, 12
1	3600	56C	TENV	**CSSWDM3545**	1,411	WD	11.09	40	82.5	230/460	1.3	1, 12, 30
	1800	56C	TENV	**CSSWDM3546**	1,420	WD	11.09	47	85.5	208-230/460	1.5	
		143TC	TEFC	**CESSWDM3546T**	1,426	WD	13.42	52	87.5	208-230/460	1.5	1
1 1/2	3600	56C	TENV	**CESSWDM3550**	1,419	WD	12.97	56	85.5	208-230/460	1.8	1
		143TC	TENV	**CESSWDM3550T**	1,431	WD	13.23	60	85.5	208-230/460	1.8	1
	1800	56C	TEFC	**CSSWDM3554**	1,452	WD	13.34	49	84	208-230/460	2.4	1
		145TC	TEFC	**CESSWDM3554T**	1,453	WD	13.42	55	87.5	208-230/460	2.1	1
2	3600	145TC	TEFC	**CESSWDM3555T**	1,734	WD	14.30	64	86.5	208-230/460	2.5	1
	1800	56C	TEFC	**CSSWDM3558**	1,765	WD	13.34	54	86.5	208-230/460	2.9	1
		145TC	TEFC	**CESSWDM3558T**	1,746	WD	15.67	64	88.5	208-230/460	2.8	1
3	3600	145TC	TEFC	**CESSWDM3559T**	2,089	WD	15.67	74	86.5	208-230/460	3.7	1
		182TC	TEFC	**CESSWDM3610T**	2,231	WD	16.82	90	88.5	208-230/460	3.7	1
	1800	182TC	TEFC	**CESSWDM3611T**	2,041	WD	18.32	94	89.5	230/460	4.2	1, 30
5	3600	184TC	TEFC	**CESSWDM3613T**	2,374	WD	18.32	106	90.2	230/460	5.7	30
	1800	184TC	TEFC	**CESSWDM3615T**	2,297	WD	18.32	112	89.5	230/460	6.5	
7 1/2	3600	213TC	TEFC	**CESSWDM3709T**	2,786	WD	19.03	166	91	230/460	8.3	1, 30
	1800	213TC	TEFC	**CESSWDM3710T**	2,873	WD	20.16	137	91.7	230/460	9.5	1
10	3600	215TC	TEFC	**CESSWDM3711T**	3,109	WD	20.16	184	91.7	208-230/460	10.6	1
	1800	215TC	TEFC	**CESSWDM3714T**	3,169	WD	21.66	190	92.4	230/460	12.5	1, 30
15	3600	254TC	TEFC	**CESSWDM23994T**	6,345	WD	24.67	293	91	208-230/460	16.5	1
	1800	254TC	TEFC	**CESSWDM23933T**	6,245	WD	24.67	293	92.4	230/460	17.7	1, 30
20	3600	256TC	TEFC	**CESSWDM41906T**	7,283	WD	24.67	312	91	230/460	21.5	1
	1800	256TC	TEFC	**CESSWDM23934T**	7,242	WD	24.67	299	93	230/460	23.4	
575 Volt												
1/2	1800	56C	TENV	**CSSWDM3538-5**	1,336	WD	11.09	37	80	575	0.7	1, 12
3/4	1800	56C	TENV	**CSSWDM3542-5**	1,383	WD	11.09	41	82.5	575	0.9	1, 12
1	1800	56C	TENV	**CSSWDM3546-5**	1,420	WD	11.09	46	85.5	575	1.2	
		143TC	TEFC	**CESSWDM3546T-5**	1,426	WD	13.42	51	87.5	575	1.3	1
1 1/2	1800	56C	TEFC	**CSSWDM3554-5**	1,452	WD	13.34	48	84	575	1.9	1
		145TC	TEFC	**CESSWDM3554T-5**	1,453	WD	13.42	56	87.5	575	1.7	1
2	1800	56C	TEFC	**CSSWDM3558-5**	1,765	WD	15.59	62	88.5	575	2.2	1
		145TC	TEFC	**CESSWDM3558T-5**	1,746	WD	15.67	64	88.5	575	2.2	1
3	3600	145TC	TEFC	**CESSWDM3559T-5**	2,089	WD	15.67	73	86.5	575	2.9	1
	1800	182TC	TEFC	**CESSWDM3611T-5**	2,041	WD	16.82	92	89.5	575	3.4	1
5	3600	184TC	TEFC	**CESSWDM3613T-5**	2,374	WD	18.32	106	90.2	575	4.6	
	1800	184TC	TEFC	**CESSWDM3615T-5**	2,297	WD	18.32	112	89.5	575	5.2	

[a] See notes on the last page of this catalog.

Stainless Steel, Three Phase, Totally Enclosed, C-Face, Footless

1/3 thru 5 Hp **NEMA 56C thru 184TC** **IP56**

Applications: Food processing, packaging, outdoor and highly corrosive environments.

Features: All external surfaces are 300 series stainless steel: motor frame, endplates, conduit box, shaft and base. Moisture resistant insulation system. Four condensate drains in each endplate. Endplate rabbets sealed and conduit box gasketed. Labyrinth seals each end. Especially effective in highly corrosive environments where paint or other finishes do not hold up.

Hp	RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1/3	3600	56C	TENV	**VSSWDM3457**	1,023	WD	11.09	33	74	208-230/460	0.6	1
	1800	56C	TENV	**VSSWDM3534**	1,078	WD	11.09	33	75.5	208-230/460	0.7	1
1/2	3600	56C	TENV	**VSSWDM3537**	1,215	WD	11.09	37	70	208-230/460	0.9	1
	1800	56C	TEFC	**VSSFWDM3538**	1,383	WD	12.34	40	80	208-230/460	0.9	1, 12
		56C	TENV	**VSSWDM3538**	1,308	WD	11.09	40	84	230/460	0.9	1, 12, 30
3/4	3600	56C	TENV	**VSSWDM3541**	1,262	WD	11.09	41	80	230/460	1.1	1, 12, 30
	1800	56C	TEFC	**VSSFWDM3542**	1,428	WD	12.34	44	82.5	208-230/460	1.1	1
		56C	TENV	**VSSWDM3542**	1,356	WD	11.09	42	82.5	208-230/460	1.1	1
1	3600	56C	TENV	**VSSWDM3545**	1,383	WD	11.09	41	82.5	230/460	1.3	1, 12, 30
	1800	56C	TEFC	**VSSFWDM3546**	1,466	WD	13.34	50	85.5	208-230/460	1.5	
		56C	TENV	**VSSWDM3546**	1,393	WD	11.09	46	85.5	208-230/460	1.5	
1 1/2	3600	56C	TENV	**VSSWDM3550**	1,401	WD	12.09	49	85.5	230/460	2	30
	1800	145TC	TEFC	**VSSWDM3554T**	1,537	WD	13.42	46	84	208-230/460	2.4	1
2	3600	145TC	TEFC	**VSSWDM3555T**	1,856	WD	14.30	57	84	208-230/460	2.6	1
	1800	145TC	TEFC	**VSSWDM3558T**	1,876	WD	13.42	52	86.5	208-230/460	2.9	1
3	3600	145TC	TEFC	**VSSWDM3559T**	2,238	WD	14.30	60	85.5	230/460	3.7	1, 30
	1800	145TC	TEFC	**VSSWDM3561T**	1,991	WD	15.67	63	87.5	208-230/460	4	
		182TC	TEFC	**VSSWDM3611T**	2,128	WD	16.82	87	87.5	208-230/460	4.5	1
5	3600	184TC	TEFC	**VSSWDM3613T**	2,433	WD	16.82	94	87.5	208-230/460	5.7	1
	1800	184TC	TEFC	**VSSWDM3615T**	2,451	WD	18.32	107	87.5	208-230/460	6.5	1

[a] See notes on the last page of this catalog.

SSE Super-E Stainless Steel, Three Phase, Totally Enclosed, C-Face, Foot Mounted, Encapsulated

1/2 thru 15 Hp **NEMA 56C thru 215TC** IP56 IP69K for Water

Applications: Food processing, packaging, outdoor and highly corrosive environments, which expose the motor to high pressure washdown.

Features: Class H insulated motor with 1.15 service factor or higher. All external surfaces are 300 series stainless steel: motor frame, endplates, conduit box, shaft and base. Moisture resistant insulation system. Endplate rabbets have O-ring seals to band. Conduit box and base fully welded; no crevices to trap contaminants. Patented bearing seal to protect motor bearings, inside and out. Epoxy encapsulation prevents any moisture from reaching the windings as well as potting the passage between the band and the conduit box. Nameplate information is laser etched on the band. Especially effective in highly corrosive environments where paint or other finishes do not hold up. NEMA Premium® efficiency and 3-year warranty.

Hp	RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
F1 Mounting												
1/2	3600	56C	TENV	**CSSEWDM3537**	1,412	WD	11.75	46	84	208-230/460	0.7	
	1800	56C	TENV	**CSSEWDM3538**	1,433	WD	11.75	50	84	230/460	0.9	12, 30
	1200	56C	TENV	**CSSEWDM3539**	1,721	WD	12.75	37	77	208-230/460	0.9	
3/4	3600	56C	TENV	**CSSEWDM3541**	1,459	WD	11.75	53	86.5	208-230/460	1	
	1800	56C	TENV	**CSSEWDM3542**	1,481	WD	12.75	58	84	208-230/460	1.3	
	1200	56C	TENV	**CSSEWDM3543**	1,769	WD	13.63	63	82.5	208-230/460	1.3	
1	3600	56C	TENV	**CSSEWDM3545**	1,532	WD	12.75	59	82.5	208-230/460	1.4	
	1800	56C	TENV	**CSSEWDM3546**	1,547	WD	12.75	59	87.5	208-230/460	1.5	
		143TC	TENV	**CSSEWDM3546T**	1,560	WD	12.80	59	87.5	208-230/460	1.5	
	1200	56C	TEFC	**CSSEWDM3556**	1,829	WD	16.13	73	84	208-230/460	1.7	
1 1/2	3600	56C	TENV	**CSSEWDM3550**	1,552	WD	13.63	62	85.5	208-230/460	1.8	
		143TC	TENV	**CSSEWDM3550T**	1,565	WD	13.68	63	85.5	208-230/460	1.8	
	1800	56C	TEFC	**CSSEWDM3554**	1,559	WD	14.75	66	88.5	230/460	2.2	30
		145TC	TEFC	**CSSEWDM3554T**	1,574	WD	14.81	68	88.5	230/460	2.2	30
2	3600	56C	TEFC	**CSSEWDM3555**	1,857	WD	14.75	68	86.5	208-230/460	2.5	
		145TC	TEFC	**CSSEWDM3555T**	1,870	WD	14.81	71	86.5	208-230/460	2.5	
	1800	56C	TEFC	**CSSEWDM3558**	1,884	WD	16.13	72	88.5	208-230/460	2.7	
		145TC	TEFC	**CSSEWDM3558T**	1,897	WD	16.19	73	88.5	208-230/460	2.7	
	1200	184TC	TEFC	**CSSEWDM3614T**	2,251	WD	19.25	125	88.5	230/460	3.5	
3	3600	145TC	TEFC	**CSSEWDM3559T**	2,267	WD	16.19	81	86.5	208-230/460	3.7	
	1800	182TC	TEFC	**CSSEWDM3611T**	2,283	WD	19.25	112	89.5	230/460	4.2	30
5	3600	184TC	TEFC	**CSSEWDM3613T**	2,474	WD	17.75	108	89.5	208-230/460	5.6	
	1800	184TC	TEFC	**CSSEWDM3615T**	2,493	WD	19.25	124	89.5	208-230/460	6.5	
7 1/2	3600	213TC	TEFC	**CSSEWDM3709T**	3,104	WD	20.43	178	91	208-230/460	8.3	
	1800	213TC	TEFC	**CSSEWDM3710T**	3,168	WD	21.62	189	91.7	230/460	9.5	30
10	3600	215TC	TEFC	**CSSEWDM3711T**	3,520	WD	21.62	202	91.7	208-230/460	10.6	
	1800	215TC	TEFC	**CSSEWDM3714T**	3,730	WD	23.06	187	92.4	208-230/460	12.5	
15	3600	215TC	TEFC	**CSSEWDM3713T**	5,279	WD	23.06	187	91.7	230/460	17	30
F2 Mounting												
1	1800	143TC	TENV	**CSSEWDFM3546T**	1,560	WD	12.80	60	87.5	208-230/460	1.5	
1 1/2	1800	145TC	TEFC	**CSSEWDFM3554T**	1,574	WD	14.81	62	88.5	230/460	2.2	30
2	1800	145TC	TEFC	**CSSEWDFM3558T**	1,897	WD	16.19	73	88.5	208-230/460	2.7	
3	1800	182TC	TEFC	**CSSEWDFM3611T**	2,283	WD	19.25	111	89.5	230/460	4.2	30
5	1800	184TC	TEFC	**CSSEWDFM3615T**	2,493	WD	19.25	122	89.5	208-230/460	6.5	

[a] See notes on the last page of this catalog.

SSE Super-E Stainless Steel, Three Phase, Totally Enclosed, C-Face, Footless, Encapsulated

1/2 thru 2 Hp **NEMA 56C thru 145TC** IP56 IP69K for Water

Applications: Food processing, packaging, outdoor and highly corrosive environments, which expose the motor to high pressure washdown.

Features: Class H insulated motor with 1.15 service factor or higher. All external surfaces are 300 series stainless steel: motor frame, endplates, conduit box, shaft and base. Moisture resistant insulation system. Endplate rabbets have O-ring seals to band. Conduit box is welded to the motor frame. Patented bearing seal to protect motor bearings, inside and out. Epoxy encapsulation prevents any moisture from reaching the windings as well as potting the passage between the band and the conduit box. Nameplate information is laser etched on the band. Especially effective in highly corrosive environments where paint or other finishes do not hold up. NEMA Premium® efficiency and 3-year warranty.

Hp	RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1/2	3600	56C	TENV	**VSSEWDM3537**	1,344	WD	11.75	49	84	208-230/460	0.7	
	1800	56C	TEFC	**VSSEFWDM3538**	1,395	WD	12.88	49	84	208-230/460	0.9	
		56C	TENV	**VSSEWDM3538**	1,367	WD	11.75	49	84	208-230/460	0.9	
3/4	3600	56C	TENV	**VSSEWDM3541**	1,393	WD	11.75	54	86.5	208-230/460	1	
	1800	56C	TEFC	**VSSEFWDM3542**	1,443	WD	13.88	54	84	230/460	1.3	
		56C	TENV	**VSSEWDM3542**	1,415	WD	12.75	53	84	230/460	1.3	
	1200	56C	TENV	**VSSEWDM3543**	1,703	WD	13.63	61	82.5	208-230/460	1.3	
1	3600	56C	TENV	**VSSEWDM3545**	1,465	WD	12.75	57	82.5	208-230/460	1.4	
	1800	56C	TEFC	**VSSEFWDM3546**	1,509	WD	13.88	59	87.5	208-230/460	1.5	
		143TC	TEFC	**VSSEFWDM3546T**	1,522	WD	13.94	59	87.5	208-230/460	1.5	
		56C	TENV	**VSSEWDM3546**	1,480	WD	12.75	58	87.5	208-230/460	1.5	
		143TC	TENV	**VSSEWDM3546T**	1,494	WD	12.80	58	87.5	208-230/460	1.5	
	1200	56C	TEFC	**VSSEWDM3556**	1,763	WD	16.13	72	84	208-230/460	1.7	
1 1/2	3600	56C	TENV	**VSSEWDM3550**	1,485	WD	13.63	66	85.5	208-230/460	1.8	
		143TC	TENV	**VSSEWDM3550T**	1,499	WD	13.61	66	85.5	208-230/460	1.8	
	1800	56C	TEFC	**VSSEWDM3554**	1,493	WD	14.75	66	88.5	230/460	2.2	30
		145TC	TEFC	**VSSEWDM3554T**	1,507	WD	14.81	66	88.5	230/460	2.2	30
2	3600	145TC	TEFC	**VSSEWDM3555T**	1,805	WD	14.81	70	86.5	208-230/460	2.5	
	1800	56C	TEFC	**VSSEWDM3558**	1,818	WD	16.13	71	88.5	208-230/460	2.7	
		145TC	TEFC	**VSSEWDM3558T**	1,831	WD	16.19	71	88.5	208-230/460	2.7	

[a] See notes on the last page of this catalog.

SSE Super-E Stainless Steel, Three Phase, 575V, Totally Enclosed, C-Face, Foot Mounted, Encapsulated

1/2 thru 5 Hp **NEMA 56C thru 184TC** **IP56** **IP69K for Water**

Applications: Food processing, packaging, outdoor and highly corrosive environments, which expose the motor to high pressure washdown.

Features: Class H insulated motor with 1.15 service factor or higher. All external surfaces are 300 series stainless steel: motor frame, endplates, conduit box, shaft and base. Moisture resistant insulation system. Endplate rabbets have O-ring seals to band. Conduit box and base fully welded; no crevices to trap contaminants. Patented bearing seal to protect motor bearings, inside and out. Epoxy encapsulation prevents any moisture from reaching the windings as well as potting the passage between the band and the conduit box. Nameplate information is laser etched on the band. Especially effective in highly corrosive environments where paint or other finishes do not hold up. NEMA Premium® efficiency and 3-year warranty.

Hp	RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1/2	3600	56C	TENV	**CSSEWDM3537-5**	1,412	WD	11.75	35	84	575	0.6	
	1800	56C	TENV	**CSSEWDM3538-5**	1,433	WD	11.75	35	84	575	0.7	12
3/4	1800	56C	TENV	**CSSEWDM3542-5**	1,481	WD	12.75	40	84	575	1	
1	1800	56C	TENV	**CSSEWDM3546-5**	1,547	WD	12.75	43	87.5	575	1.2	
		143TC	TENV	**CSSEWDM3546T-5**	1,560	WD	12.80	43	87.5	575	1.2	
1 1/2	1800	56C	TEFC	**CSSEWDM3554-5**	1,559	WD	14.75	62	86.5	575	1.7	
		145TC	TEFC	**CSSEWDM3554T-5**	1,574	WD	14.81	64	86.5	575	1.7	
2	1800	56C	TEFC	**CSSEWDM3558-5**	1,884	WD	16.13	72	88.5	575	2.2	
		145TC	TEFC	**CSSEWDM3558T-5**	1,897	WD	16.19	72	88.5	575	2.2	
3	3600	145TC	TEFC	**CSSEWDM3559T-5**	2,267	WD	16.19	81	86.5	575	2.9	
	1800	182TC	TEFC	**CSSEWDM3611T-5**	2,283	WD	19.25	112	89.5	575	3.3	
5	3600	184TC	TEFC	**CSSEWDM3613T-5**	2,474	WD	17.75	110	89.5	575	4.5	
	1800	184TC	TEFC	**CSSEWDM3615T-5**	2,493	WD	19.25	125	89.5	575	5.1	

[a] See notes on the last page of this catalog.

Inverter Motor, Paint Free, Three Phase, Totally Enclosed, C-Face

1/2 thru 10 Hp **NEMA 56C thru 215TC** **IP55**

Applications: Conveyors, pumps and other equipment in food processing and severe environments where motors receive washdown on a regular basis.

Features: Includes all the advantages of our standard “Paint Free” washdown duty motors. Specifically designed and built for use on adjustable speed drives. For adjustable speed applications not requiring full torque at zero speed. Not encoder adaptable. 1.00 Service Factor. Class “H” insulated. 2700 RPM constant Hp speed. Includes phase insulation and thermostats.

Hp	Base Speed RPM	Max. RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	“C” Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
C-Face, Foot Mounted													
1/2	1800	6000	56C	TENV	**IDCSWDM3538**	1,551	WD	11.06	31	82.5	208-230/460	0.8	
3/4	1800	6000	56C	TENV	**IDCSWDM3542**	1,756	WD	11.06	32	82.5	208-230/460	1.1	
1	1800	6000	56C	TENV	**IDCSWDM3546**	1,823	WD	12.06	40	85.5	208-230/460	1.5	
			143TC	TENV	**IDCSWDM3546T**	1,823	WD	12.12	42	85.5	230/460	1.5	
1 1/2	1800	4000	56C	TEFC	**IDCSWDM3554**	1,950	WD	14.12	51	88.5	230/460	2.1	
			145TC	TEFC	**IDCSWDM3554T**	1,950	WD	14.17	49	88.5	230/460	2.1	
2	1800	4500	56C	TEFC	**IDCSWDM3558**	2,083	WD	13.24	44	86.5	230/460	2.9	
			145TC	TEFC	**IDCSWDM3558T**	2,083	WD	13.29	48	86.5	230/460	2.9	
3	1800	6000	182TC	TEFC	**IDCSWDM3611T**	2,284	WD	18.06	85	89.5	230/460	4.2	
5	1800	6000	184TC	TEFC	**IDCSWDM3615T**	2,658	WD	18.06	99	89.5	230/460	6.5	
7 1/2	1800	6000	213TC	TEFC	**IDCSWDM3710T**	4,024	WD	19.81	136	91.7	230/460	9.5	
10	1800	6000	215TC	TEFC	**IDCSWDM3714T**	4,601	WD	21.31	187	92.4	230/460	12.5	
C-Face, Footless													
1/2	1800	6000	56C	TENV	**IDVSWDM3538**	1,538	WD	11.06	32	84	230/460	0.9	
3/4	1800	6000	56C	TENV	**IDVSWDM3542**	1,748	WD	11.06	35	82.5	230/460	1.1	
1	1800	6000	56C	TENV	**IDVSWDM3546**	1,814	WD	12.06	40	85.5	208-230/460	1.5	
			143TC	TENV	**IDVSWDM3546T**	1,814	WD	12.12	40	85.5	208-230/460	1.5	
1 1/2	1800	4000	56C	TEFC	**IDVSWDM3554**	1,940	WD	14.12	50	88.5	230/460	2.1	
			145TC	TEFC	**IDVSWDM3554T**	1,940	WD	14.17	50	88.5	230/460	2.1	
2	1800	4500	56C	TEFC	**IDVSWDM3558**	2,066	WD	13.24	45	86.5	230/460	2.9	
			145TC	TEFC	**IDVSWDM3558T**	2,066	WD	13.29	46	86.5	230/460	2.9	
3	1800	6000	182TC	TEFC	**IDVSWDM3611T**	2,172	WD	18.06	80	89.5	230/460	4.2	
5	1800	6000	184TC	TEFC	**IDVSWDM3615T**	2,532	WD	18.06	97	89.5	230/460	6.5	

[a] See notes on the last page of this catalog.

Inverter Motor, Three Phase, TENV, C-Face, Foot Mounted

1 thru 10 Hp **NEMA 143TC thru 254TC** **IP55**

Applications: Conveyors, pumps and other equipment in food processing and other wet environments.

Features: Designed for inverter or vector applications where up to a 1000:1 constant torque speed range is required. Provisions for mounting optional HS25 encoder feedback devices (shown in Inverter/Vector section) for use in closed loop velocity or position control. Meets NEMA MG 1, Part 31. 1.00 Service Factor. Class "H" insulated. 2700 RPM constant Hp speed. Includes phase insulation and thermostats.

Hp	Base Speed RPM	Max. RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1	1800	6000	143TC	**IDWNM3546T**	1,551	WD	14.90	41	85.5	230/460	1.5	
1 1/2	1800	4500	145TC	**IDWNM3554T**	1,708	WD	15.78	52	86.5	230/460	2.1	
2	1800	6000	182TC	**IDWNM3609T**	1,882	WD	17.77	69	84	230/460	2.9	
3	1800	6000	184TC	**IDWNM3611T**	2,050	WD	19.27	90	89.5	230/460	4.1	
5	1800	4000	213TC	**IDWNM3707T**	2,320	WD	19.84	122	89.5	230/460	6.7	
7 1/2	1800	5000	254TC	**IDWNM22937T**	3,593	WD	23.92	240	91	230/460	9.1	
10	1800	5000	254TC	**IDWNM22938T**	4,208	WD	23.92	287	91.7	230/460	12	

[a] See notes on the last page of this catalog.

1000:1 CONSTANT TORQUE SPEED RANGE

Vector Motor, Three Phase, TENV, C-Face, Foot Mounted

1 thru 10 Hp **NEMA 143TC thru 254TC** **IP55**

Applications: Material handling, packaging equipment in food processing and other wet environments.

Features: Designed for inverter or vector applications where up to a 1000:1 constant torque speed range is required. Motors include 1024 PPR HS25 encoder feedback with MS connector. Meets NEMA MG 1, Part 31. 1.00 Service Factor. Class "H" insulated. 2700 RPM constant Hp speed. Includes phase insulation and thermostats.

Hp	Base Speed RPM	Max. RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1	1800	6000	143TC	**ZDWNM3546T**	3,107	WD	14.90	44	85.5	230/460	1.5	
1 1/2	1800	4500	145TC	**ZDWNM3554T**	3,264	WD	15.78	56	86.5	230/460	2.1	
2	1800	6000	182TC	**ZDWNM3609T**	3,438	WD	17.77	71	84	230/460	2.9	
3	1800	6000	184TC	**ZDWNM3611T**	3,609	WD	19.27	90	89.5	230/460	4.1	
5	1800	6000	213TC	**ZDWNM3707T**	3,878	WD	19.84	126	89.5	230/460	6.7	
7 1/2	1800	5000	254TC	**ZDWNM22937T**	5,152	WD	23.92	241	91	230/460	9.1	
10	1800	5000	254TC	**ZDWNM22938T**	5,767	WD	23.92	286	91.7	230/460	12	

[a] See notes on the last page of this catalog.

1000:1 CONSTANT TORQUE SPEED RANGE

Single and Three Phase, Foot Mounted

1/4 thru 250 Hp NEMA 48 thru 449T

Applications: Ideal for use on pumps, fans, and conveyors where hazardous fumes and dust are present requiring Div 1 UL listed and/or CSA approved enclosures.

Features: UL & CSA approved for Class I, Group D; Class I, Group D, Class II, Group F & G; Class I, Group C & D, Class II, Group F & G. Totally enclosed heavy gauge steel and cast iron construction. Corrosion resistant epoxy paint. Single or Three Phase designs. 1.0 Service Factor. Three Phase 143T frame and larger have 60Hz & 50Hz data included on the nameplate. Super-E® explosion proof motors have NEMA Premium® efficiency and 3 year warranty. Fixed speed sine wave operation only.

Hp	RPM	NEMA Frame	Catalog Number	XP Cls/Grp	Temp Code	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
Single Phase													
1/4	1800	48	**L4003A**	②	T3C	553	K	12.85	26	55	115/208-230	2.5	-
		56	**L5000A**	②	T3C	528	K	13.22	29	62	115/208-230	2.1	-
		56	**L5000A-C**	⑤	T3C	657	K	13.22	35	62	115/208-230	2.1	-
1/3	3600	48	**L4005A**	②	T3C	490	K	12.85	32	55	115/230	3	-
	1800	48	**L4006A**	②	T3C	713	K	12.85	29	60	115/208-230	3	-
		56	**L5001A**	②	T3C	679	K	13.22	29	60	115/208-230	3	-
	1200	56	**L5002A**	②	T4	961	K	14.30	41	54	115/230	3.4	-
1/2	3600	56	**L5003A**	②	T3C	644	K	13.22	29	57	115/230	3.7	-
	1800	48	**L4009A**	②	T3C	784	K	13.85	35	64	115/208-230	3.7	-
		56	**L5004A**	②	T3C	748	K	14.22	35	64	115/208-230	3.7	-
		56	**L5004A-C**	⑤	T3C	877	K	14.22	40	64	115/208-230	3.7	-
	1200	56	**L5005A**	②	T4	1,107	K	15.17	50	59	115/230	4	-
3/4	3600	56	**L5006A**	②	T4	726	K	14.30	40	62	115/230	4.9	-
	1800	56	**L5007A**	②	T4	879	K	15.17	47	66	115/230	5.3	-
		56	**L5007A-C**	⑤	T4	1,008	K	15.17	53	66	115/230	5.3	-
	1200	56	**L5022**	①	T2C	1,280	K	17.42	57	68	115/208-230	5.4	-
1	3600	56	**L5009A**	②	T4	784	K	15.17	48	66	115/230	6	-
	1800	56	**L5023A**	①	T2C	1,001	K	15.17	48	67	115/230	6.5	-
		143T	**L5023T**	①	T2C	980	L1	15.23	46	72	115/208-230	5.9	-
	1200	184	**L5026**	②	T3C	2,193	L1	16.92	83	67	115/208-230	7	-
1 1/2	3600	143T	**L5030T**	②	T3C	1,136	L1	15.23	54	70	115/208-230	7.5	-
	1800	184	**L5013**	②	T3C	2,036	L1	16.92	77	70	115/230	9.5	-
2	3600	145T	**L5031T**	②	T3C	1,404	L1	16.11	57	74	115/208-230	11.5	-
	1800	182T	**L5027T**	①	T2C	2,063	L1	17.42	84	75	115/230	11	-
3	3600	184T	**L5028T**	①	T2C	2,144	L1	17.42	84	76	115/230	14.5	-
	1800	215	**L5018**	②	T3C	3,257	L1	19.49	152	79	115/230	15	-
5	1800	215	**L5020**	①	T2C	4,143	L1	19.90	166	84	230	21	-
Three Phase													
1/4	1800	48	**M6002A**	②	T3C	575	K	12.85	25	63	208-230/460	0.7	-
1/3	1800	56	**M7002A**	②	T3C	691	K	13.22	27	67	208-230/460	0.8	-
	1200	56	**M7003A**	②	T4	992	K	14.36	34	70	208-230/460	0.8	-
1/2	3600	56	**M7005A**	②	T3C	792	K	13.22	27	68	208-230/460	1.1	-
	1800	48	**M6007A**	②	T3C	719	K	12.85	30	74	208-230/460	1	-
		56	**M7006A**	②	T3C	719	K	13.22	29	74	208-230/460	1	-
	1200	56	**M7007A**	②	T4	1,047	K	14.36	39	70	208-230/460	1.2	-
3/4	3600	56	**M7009A**	②	T3C	825	K	13.22	29	75	208-230/460	1.3	-
	1800	56	**M7010A**	②	T3C	828	K	14.22	33	73	208-230/460	1.5	-
	1200	56	**M7031A**	②	T4	1,112	K	15.23	43	77	208-230/460	1.4	-
		143T	**M7031TA**	②	T4	1,112	L1	15.23	47	77	208-230/460	1.4	-

(a) See notes on the last page of this catalog.

① = Class I, Group D; ② = Class I, Group D, Class II, Group F & G; ⑤ = Class I, Group C & D, Class II, Group F & G

CAUTION: Explosion-proof motors have a tight fit between mating parts to ensure the integrity of the explosion-proof enclosure. This can lead to an accumulation of moisture inside the motors due to condensation. Care should be used when selecting an explosion-proof motor, especially when installed outdoors and on intermittent duty. Consider Drill Rig Duty or explosion-proof pump motors. These explosion-proof motors are not suitable for use with adjustable speed drives, inverter duty explosion-proof motors must be used.

Single and Three Phase, Foot Mounted

Hp	RPM	NEMA Frame	Catalog Number	XP Cls/Grp	Temp Code	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1	3600	56	**M7013**	②	T3C	869	K	13.22	29	75.5	208-230/460	1.8	-
	1800	56	**M7014**	②	T3C	907	K	14.30	39	75.5	208-230/460	1.8	19
		143T	**EM7014T**	②	T3C	1,266	L1	14.36	44	85.5	230/460	1.5	19, 30
		143T	**EM7114T**	②	T3C	1,439	L1	16.28	78	85.5	230/460	1.5	19, 30
		143T	**EM7114T-C**	⑤	T4	1,444	L1	16.28	78	85.5	230/460	1.5	19, 30
		182	**M7015**	②	T3C	1,307	L1	15.23	48	82.5	230/460	1.6	19
	1200	56	**M7032**	①	T2C	1,112	K	14.30	44	78.5	230/460	1.9	-
		145T	**EM7032T**	②	T3C	1,416	L1	15.23	52	82.5	230/460	1.8	19, 30
1 1/2	3600	143T	**EM7018T**	②	T3C	1,158	L1	14.36	45	84	230/460	1.9	19
	1800	56	**M7034**	②	T3C	987	K	14.30	44	81.5	208-230/460	2.3	19
		145T	**EM7034T**	②	T3C	1,311	L1	15.23	50	86.5	230/460	2.2	19, 30
		145T	**EM7134T**	②	T3C	1,461	L1	16.28	84	86.5	208-230/460	2.3	-
		145T	**EM7134T-C**	⑤	T4	1,478	L1	16.28	62	86.5	208-230/460	2.3	-
		184	**M7019**	②	T3C	1,656	L1	15.23	55	84	230/460	2.4	19
	1200	182T	**EM7020T**	②	T3C	1,949	L1	17.42	88	87.5	230/460	2.4	19
		182T	**EM7120T**	②	T3C	2,167	L1	17.56	134	87.5	230/460	2.5	19
2	3600	145T	**EM7071T**	②	T3C	1,186	L1	15.23	52	85.5	230/460	2.5	19, 30
	1800	56	**M7037**	②	T3C	1,104	K	15.17	47	82.5	208-230/460	3	-
		145T	**EM7037T**	②	T3C	1,431	L1	15.23	58	86.5	230/460	2.9	19
		145T	**EM7137T**	②	T3C	1,499	L1	16.28	81	86.5	230/460	2.9	19
		145T	**EM7137T-C**	⑤	T3C	1,519	L1	16.28	60	86.5	208-230/460	2.9	-
		184	**M7023**	②	T3C	1,696	L1	15.23	55	84.1	230/460	3.1	19
	1200	184T	**EM7041T**	②	T3C	2,008	L1	18.92	97	88.5	230/460	3.5	19, 20, 30
3	3600	145T	**EM7075T**	①	T3C	1,404	L1	16.10	59	86.5	230/460	3.6	30
		182T	**EM7026T**	②	T3C	1,484	L1	16.05	69	86.5	230/460	3.7	19, 30
		182T	**EM7126T**	②	T3C	1,995	L1	17.56	126	86.5	230/460	3.8	19
		184	**M7026**	②	T3C	1,450	L1	15.55	74	85.5	230/460	3.7	19, 30
	1800	182T	**EM7042T**	②	T3C	1,520	L1	17.42	108	89.5	230/460	4.2	19, 30
		182T	**EM7142T**	②	T3C	1,597	L1	17.56	130	89.5	230/460	4.1	19, 30
		182T	**EM7142T-C**	⑤	T4	1,643	L1	17.56	137	89.5	230/460	4.1	19, 30
		213	**M7027**	②	T3C	1,937	L1	18.06	169	87.5	230/460	4.1	19, 30
	1200	213T	**EM7036T**	②	T3C	2,188	L1	20.32	170	89.5	230/460	4.6	19, 30
5	3600	184T	**EM7072T**	②	T3C	1,745	L1	18.12	93	88.5	230/460	5.9	19, 30
		184T	**EM7172T**	②	T3C	2,339	L1	17.56	130	88.5	230/460	6.3	19, 30
	1800	184T	**EM7044T**	②	T3C	1,883	L1	18.12	101	89.5	230/460	6.7	19, 30
		184T	**EM7144T**	②	T3C	1,896	L1	17.56	152	89.5	230/460	6.6	19, 30
		184T	**EM7144T-C**	⑤	T4	1,981	L1	17.56	146	89.5	230/460	6.6	19, 30
		215	**M7030**	②	T3C	2,508	L1	18.06	193	87.5	230/460	6.6	19, 30
	1200	215T	**EM7040T**	②	T3C	2,868	L1	22.32	170	89.5	230/460	7.3	19, 30
7 1/2	3600	184T	**EM7073T**	①	T2C	2,289	L1	18.92	105	89.5	230/460	8.4	30
		213T	**EM7045T**	②	T3C	2,407	L1	19.57	166	89.5	230/460	9	19, 30
		213T	**EM7145T**	②	T3C	2,698	L1	19.90	154	89.5	230/460	9	19
	1800	213T	**EM7047T**	②	T3C	2,500	L1	20.32	161	91.7	230/460	9.4	19, 30
		213T	**EM7147T**	②	T3C	2,404	L1	19.90	225	91.7	230/460	9.5	19
		213T	**EM7147T-C**	⑤	T4	2,477	L1	19.91	225	91.7	230/460	9.5	19
	1200	254T	**EM7048T**	②	T3C	3,396	L1	25.50	393	91	230/460	10.7	19, 30
10	3600	215T	**EM7074T**	①	T2C	2,713	L1	19.32	175	90.2	230/460	11.8	20
		215T	**EM7174T**	②	T3C	2,831	L1	19.90	235	90.2	230/460	11.8	-
	1800	215T	**EM7070T**	②	T3C	2,793	L1	22.32	189	91.7	230/460	12	19, 30
		215T	**EM7170T**	②	T3C	3,308	L1	19.90	249	91.7	230/460	12.2	19
		215T	**EM7170T-C**	⑤	T3C	3,442	L1	19.91	249	91.7	230/460	12.2	19
	1200	256T	**EM7065T**	②	T3C	4,083	L1	25.50	403	91	230/460	14.6	19, 30
15	3600	254T	**EM7053T**	②	T3C	3,201	L1	25.50	341	91	230/460	17.5	19, 20, 30
	1800	254T	**EM7054T**	②	T3C	3,751	L1	25.50	370	92.4	230/460	18	19, 30
		254T	**EM7054T-C**	⑤	T4	3,843	L1	25.50	370	92.4	230/460	18	19, 30
	1200	284T	**EM7057T**	②	T3C	6,581	L1	28.61	430	91.7	230/460	20	19

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Single and Three Phase, Foot Mounted

Hp	RPM	NEMA Frame	Catalog Number	XP Cls/Grp	Temp Code	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
20	3600	256T	**EM7059T**	②	T3C	4,105	L1	25.50	359	91	230/460	23	19, 20
	1800	256T	**EM7056T**	②	T3C	4,860	L1	25.50	393	93	230/460	24	19, 30
		256T	**EM7056T-C**	⑤	T4	4,962	L1	25.50	393	93	230/460	24	19, 30
	1200	286T	**EM7079T**	②	T3C	6,757	L1	28.61	494	91.7	230/460	27	19, 30
25	3600	284TS	**EM7063T**	②	T3C	5,463	L1	27.24	507	91.7	230/460	28.5	19, 20
	1800	284T	**EM7058T**	②	T3C	5,896	L1	28.61	537	93.6	230/460	30.5	19, 30
		284T	**EM7058T-C**	⑤	T4	6,011	L1	28.61	537	93.6	230/460	30.5	19, 30
	1200	324T	**EM7082T**	②	T3C	8,449	L1	32.00	741	93	230/460	32	19, 30
30	3600	286TS	**EM7083T**	②	T3C	6,421	L1	27.24	528	91.7	230/460	33	19, 20
	1800	286T	**EM7060T**	②	T3C	7,188	L1	28.61	554	93.6	230/460	36	19, 20, 30
		286T	**EM7060T-C**	⑤	T4	7,307	L1	28.61	563	93.6	230/460	37	19, 30
	1200	326T	**EM7080T**	②	T3C	9,321	L1	32.00	766	93	230/460	39	19, 30
40	3600	324TS	**EM7067T**	②	T3C	8,565	L1	30.50	630	92.4	230/460	46	19
	1800	324T	**EM7062T**	②	T3C	9,633	L1	32.00	713	94.1	230/460	48	19
		324T	**EM7062T-C**	⑤	T4	9,763	L1	32.00	700	94.1	230/460	48	19
	1200	364T	**EM7084T**	②	T3C	10,803	L1	33.44	915	94.1	230/460	47.2	19, 20, 30
50	3600	326TS	**EM7081T**	②	T3C	10,967	L1	30.50	745	93	230/460	56	19, 20, 30
	1800	326T	**EM7064T**	②	T3C	11,182	L1	32.00	764	94.5	230/460	58	19
		326T	**EM7064T-C**	⑤	T4	11,336	L1	32.12	764	94.5	230/460	58	19
	1200	365T	**EM7085T**	②	T4	12,193	L1	33.44	918	94.1	230/460	60.1	19, 20, 30
60	1800	364T	**EM7066T**	②	T4	12,508	L1	33.44	972	95	230/460	68	19, 20
		364T	**EM7066T-C**	⑤	T4	12,672	L1	33.44	910	95	230/460	68	19, 20
	1200	404T	**EM7086T**	②	T4	14,548	L1	38.31	1375	94.5	230/460	67.3	19, 20, 30
75	1800	365T	**EM7068T**	⑤	T4	15,134	L1	33.44	1156	95.4	230/460	84.1	19, 20, 30
	1200	405T	**EM7087T**	②	T4	16,276	L1	38.31	1428	94.5	230/460	84.2	19, 20, 30
100	1800	405T	**EM7090T**	⑤	T4	17,576	L1	38.31	1335	95.4	230/460	112	19, 20, 30
125	1800	444T	**EM74124T-4**	⑤	T4	20,539	L1	44.62	1900	95.4	460/380	139	19, 20
150	1800	447T	**EM74154T-4**	⑤	T4	22,954	L1	47.83	2455	95.8	460/380	164	19, 20
200	1800	449T	**EM74204T-4**	⑤	T4	32,808	L1	52.83	2993	96.2	460/380	216	19, 20
250	1800	447T	**M74254T-4**	⑤	T4	35,752	L1	47.83	2553	95	460/380	281	19, 20

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Cast Iron Frame

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Single and Three Phase, C-Face

1/4 thru 50 Hp **NEMA 56C thru 326TC**

Applications: Ideal for use on pumps, blowers, valves, and gearboxes where hazardous fumes and dust are present requiring Div 1 UL listed and/or CSA approved enclosures.

Features: UL & CSA approved for Class I, Group D; Class I, Group D, Class II, Group F & G. Totally enclosed heavy gauge steel and cast iron construction. Corrosion resistant epoxy paint. Single and Three Phase designs. 1.0 Service Factor. Three Phase 143T frame and larger have 60Hz & 50Hz data included on the nameplate. Super-E® explosion proof motors have NEMA Premium® efficiency and 3 year warranty. Fixed speed sine wave operation only. No Drip Cover.

Hp	RPM	NEMA Frame	Catalog Number	XP Cls/Grp	Temp Code	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
Single Phase, C-Face, Foot Mounted													
1/3	1800	56C	**CL5001A**	②	T3C	827	K	13.22	30	60	115/208-230	3	-
1/2	3600	56C	**CL5003A**	②	T3C	726	K	13.22	35	57	115/230	3.7	-
	1800	56C	**CL5004A**	②	T3C	828	K	14.22	36	64	115/208-230	3.7	-
3/4	1800	56C	**CL5007A**	②	T4	924	K	15.17	49	66	115/230	5.3	-
1	3600	56C	**CL5009A**	②	T4	824	K	15.17	50	66	115/230	6	-
	1800	56C	**CL5023A**	①	T2C	1,049	K	15.17	49	67	115/230	6.5	-
1 1/2	3600	143TC	**CL5030T**	②	T3C	1,291	L1	15.23	53	70	115/208-230	7.5	-
	1800	184C	**CL5013**	②	T3C	2,095	L1	16.93	83	70	115/230	9.5	-
2	3600	143TC	**CL5031T**	②	T3C	1,476	L1	16.10	60	74	115/208-230	11.5	-
	1800	182TC	**CL5027T**	①	T2C	2,162	L1	18.86	99	75	115/230	11	-
3	3600	184TC	**CL5028T**	①	T2C	2,187	L1	18.86	100	76	115/230	14.5	-
	1800	215C	**CL5018**	①	T2C	3,355	L1	19.56	154	79	115/230	15	-
5	1800	215C	**CL5020**	①	T2C	4,271	L1	20.69	170	84	230	21	-
Single Phase, C-Face, Footless													
1/4	1800	56C	**VL5000A**	②	T3C	732	K	13.22	29	62	115/208-230	2.1	-
1/3	3600	56C	**VL4005A**	②	T3C	557	K	13.22	34	57	115/230	3.5	-
	1800	56C	**VL5001A**	②	T3C	748	K	13.22	34	60	115/208-230	3	-
	1200	56C	**VL5002A**	②	T4	1,002	K	14.30	42	54	115/230	3.4	-
1/2	3600	56C	**VL5003A**	②	T3C	721	K	13.22	28	57	115/230	3.7	-
	1800	56C	**VL5004A**	②	T3C	826	K	14.22	37	64	115/208-230	3.7	-
	1200	56C	**VL5005A**	②	T4	1,149	K	15.17	51	59	115/230	4	-
3/4	3600	56C	**VL5006A**	②	T4	771	K	14.30	40	62	115/230	4.9	-
	1800	56C	**VL5007A**	②	T4	920	K	15.17	48	66	115/230	5.3	-
1	3600	56C	**VL5009A**	②	T4	826	K	15.17	48	66	115/230	6	-
	1800	56C	**VL5023A**	①	T2C	1,045	K	15.17	52	67	115/230	6.5	-
1 1/2	3600	56C	**VL5030**	②	T3C	1,189	K	15.17	51	70	115/208-230	7.5	-
	1800	56C	**VL5024A**	①	T2C	1,379	K	17.42	76	75	115/230	8	-
2	1800	184C	**VL5027**	①	T2C	2,194	L1	18.43	90	75	115/208-230	11	-
Three Phase, C-Face, Foot Mounted													
1/2	3600	56C	**CM7005A**	②	T3C	867	K	13.22	27	68	208-230/460	1.1	-
	1800	56C	**CM7006A**	②	T3C	938	K	13.22	30	74	208-230/460	1	-
3/4	3600	56C	**CM7009A**	②	T3C	895	K	13.22	29	75	208-230/460	1.3	-
	1800	56C	**CM7010A**	②	T3C	956	K	14.22	34	73	208-230/460	1.5	-
1	3600	56C	**CM7013**	②	T3C	936	K	13.22	31	75.5	208-230/460	1.8	-
	1800	56C	**CM7014**	②	T3C	1,020	K	14.30	40	75.5	208-230/460	1.8	19
		143TC	**CEM7014T**	②	T3C	1,342	L1	14.36	45	85.5	230/460	1.5	19, 30
1 1/2	3600	143TC	**CEM7018T**	②	T3C	1,328	L1	14.36	45	84	230/460	1.9	19
	1800	56C	**CM7034**	②	T3C	1,087	K	14.30	45	81.5	208-230/460	2.3	19
		145TC	**CEM7034T**	②	T3C	1,453	L1	15.23	52	86.5	230/460	2.2	19, 30

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Single and Three Phase, C-Face

Hp	RPM	NEMA Frame	Catalog Number	XP Cls/Grp	Temp Code	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
2	3600	145TC	**CEM7071T**	②	T3C	1,325	L1	15.23	53	85.5	230/460	2.4	19, 30
	1800	56C	**CM7037**	②	T3C	1,177	K	15.17	49	82.5	230/460	3	19, 30
		145TC	**CEM7037T**	②	T3C	1,539	L1	16.10	56	86.5	230/460	2.9	19, 30
3	3600	145TC	**CEM7075T**	①	T3C	1,643	L1	16.10	61	86.5	230/460	3.6	30
	1800	182TC	**CEM7042T**	②	T3C	1,866	L1	18.86	97	89.5	230/460	4.2	19, 30
5	3600	184TC	**CEM7072T**	②	T3C	2,167	L1	18.86	101	88.5	230/460	5.9	19, 30
	1800	184TC	**CEM7044T**	②	T3C	2,256	L1	19.55	119	89.5	230/460	6.7	19, 30
7 1/2	3600	184TC	**CEM7073T**	①	T2C	2,544	L1	20.36	124	89.5	230/460	8.4	30
		213TC	**CEM7045T**	②	T3C	2,887	L1	20.33	166	89.5	230/460	9	19, 30
	1800	213TC	**CEM7047T**	②	T3C	2,646	L1	21.08	161	91.7	230/460	9.4	19, 30
10	3600	215TC	**CEM7174T**	②	T3C	3,151	L1	20.65	235	90.2	230/460	11.8	19
	1800	215TC	**CEM7170T**	②	T3C	3,219	L1	20.65	249	91.7	230/460	12.2	19
15	3600	254TC	**CEM7053T**	②	T3C	3,419	L1	26.00	357	91	230/460	17.5	19, 20, 30
	1800	254TC	**CEM7054T**	②	T3C	5,324	L1	26.00	376	92.4	230/460	18	19, 30
20	3600	256TC	**CEM7059T**	②	T3C	5,458	L1	26.00	369	91	230/460	23	19, 20
	1800	256TC	**CEM7056T**	②	T3C	6,310	L1	26.00	376	93	230/460	24	19, 30
25	3600	284TSC	**CEM7063T**	②	T3C	7,197	L1	27.24	512	91.7	230/460	28.5	19, 20
	1800	284TC	**CEM7058T**	②	T3C	7,727	L1	28.61	647	93.6	230/460	30.5	19, 30
30	1800	286TC	**CEM7060T**	②	T3C	8,967	L1	28.61	552	93.6	230/460	36	19, 20, 30
40	1800	324TC	**CEM7062T**	②	T3C	11,961	L1	32.00	699	94.1	230/460	48	19
50	1800	326TC	**CEM7064T**	②	T3C	13,601	L1	32.00	746	94.5	230/460	58	19
Three Phase, C-Face, Footless													
1/4	1800	56C	**VM7001A**	②	T3C	871	K	13.22	25	63	208-230/460	0.7	-
1/3	1800	56C	**VM7002A**	②	T3C	890	K	13.22	27	67	208-230/460	0.8	-
1/2	3600	56C	**VM7005A**	②	T3C	861	K	13.22	26	68	208-230/460	1.1	-
	1800	56C	**VM7006A**	②	T3C	936	K	13.22	29	74	208-230/460	1	-
	1200	56C	**VM7007A**	②	T4	1,089	K	14.30	39	70	208-230/460	1.2	-
3/4	3600	56C	**VM7009A**	②	T3C	890	K	13.22	28	75	208-230/460	1.3	-
	1800	56C	**VM7010A**	②	T3C	953	K	14.22	33	73	208-230/460	1.5	-
	1200	56C	**VM7031A**	②	T4	1,144	K	15.17	47	77	208-230/460	1.4	-
1	3600	56C	**VM7013**	②	T3C	927	K	13.22	30	75.5	208-230/460	1.8	-
	1800	56C	**VM7014**	②	T3C	1,001	K	15.22	40	75.5	208-230/460	1.8	-
		143TC	**VM7014T**	②	T3C	1,080	L1	14.33	39	82.5	230/460	1.6	19
	1200	56C	**VM7032**	①	T2C	1,205	K	14.30	44	78.5	230/460	1.9	-
1 1/2	3600	143TC	**VM7018T**	②	T3C	1,138	L1	14.33	45	82.5	230/460	2.1	19, 30
	1800	56C	**VM7034**	②	T3C	1,078	K	14.30	44	81.5	208-230/460	2.3	19
		145TC	**VM7034T**	②	T3C	1,164	L1	15.21	46	84	230/460	2.4	19
	1200	145TC	**VM7035T**	①	T2C	1,331	L1	17.48	72	85.5	208-230/460	2.7	-
2	3600	145TC	**VM7071T**	②	T3C	1,273	L1	15.21	52	84	230/460	2.6	19, 30
	1800	56C	**VM7037**	②	T3C	1,165	K	15.17	49	82.5	230/460	3	19, 30
		145TC	**VM7037T**	②	T3C	1,259	L1	15.21	50	84	230/460	3.1	19
3	3600	143TC	**VM7075T**	①	T2C	1,412	L1	16.10	58	85.5	208-230/460	3.7	-
		182TC	**VM7026T**	②	T3C	1,489	L1	17.49	80	85.5	208-230/460	3.7	19
	1800	182TC	**VM7042T**	②	T3C	1,614	L1	18.86	91	87.5	230/460	4.2	19, 20
5	3600	184TC	**VM7072T**	②	T3C	1,883	L1	18.06	108	87.5	230/460	5.6	19, 30
	1800	184TC	**VM7044T**	②	T3C	1,966	L1	18.06	103	87.5	230/460	6.8	19, 30
7 1/2	3600	184TC	**VM7073T**	①	T2C	2,126	L1	20.36	110	88.5	230/460	8.7	30
		213TC	**VM7045T**	②	T3C	2,475	L1	19.19	165	88.5	230/460	9.5	19, 30
	1800	213TC	**VM7047T**	②	T3C	2,275	L1	19.19	157	89.5	230/460	10.1	19
10	1800	215TC	**VM7170T**	②	T3C	2760	L1	20.65	173	89.5	230/460	13	19

(a) See notes on the last page of this catalog.

① = Class I, Group D; ② = Class I, Group D, Class II, Group F & G

Cast Iron Frame

CAUTION: Explosion-proof motors have a tight fit between mating parts to ensure the integrity of the explosion-proof enclosure. This can lead to an accumulation of moisture inside the motors due to condensation. Care should be used when selecting an explosion-proof motor, especially when installed outdoors and on intermittent duty. Consider Drill Rig Duty or explosion-proof pump motors. These explosion-proof motors are not suitable for use with adjustable speed drives, inverter duty explosion-proof motors must be used.

575 Volt, Three Phase, Explosion Proof

1/2 thru 40 Hp NEMA 56 thru 324T

Applications: 575 volt designs for use on pumps, fans, and conveyors where hazardous fumes and dust are present, requiring Div 1 UL listed and/or CSA approved enclosures.

Features: UL & CSA approved for Class I, Group D, Class II, Group F & G, T3C. Totally enclosed heavy gauge steel and cast iron construction. Corrosion resistant epoxy finish. 1.0 Service Factor. Super-E® explosion proof motors have NEMA Premium® efficiency and 3 year warranty. Fixed speed sine wave operation only.

Hp	RPM	NEMA Frame	Catalog Number	XP Cls/Grp	Temp Code	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
Foot Mounted, No Drip Cover													
1/2	1800	56	**M7006-5**	②	T3C	719	K	14.30	34	78.5	575	0.7	-
3/4	1800	56	**M7010-5**	②	T3C	828	K	14.30	37	76	575	1.2	-
1	3600	56	**M7013-5**	②	T3C	869	K	13.22	30	75.5	575	1.2	-
	1800	56	**M7014-5**	②	T3C	907	K	14.30	40	75.5	575	1.5	-
		143T	**EM7014T-5**	②	T3C	1,266	LS	14.36	42	85.5	575	1.2	-
1 1/2	3600	143T	**EM7018T-5**	②	T3C	1,158	L1	14.36	45	84	575	1.5	-
	1800	145T	**EM7034T-5**	②	T3C	1,311	LS	15.23	51	86.5	575	1.8	-
2	3600	145T	**EM7071T-5**	②	T3C	1,186	L1	15.23	52	85.5	575	2	-
	1800	145T	**EM7037T-5**	②	T3C	1,431	LS	15.23	54	86.5	575	2.3	-
3	1800	182T	**EM7042T-5**	②	T3C	1,520	L1	17.42	84	89.5	575	3.3	-
5	3600	184T	**EM7072T-5**	②	T3C	1,745	L1	18.12	85	88.5	575	4.7	-
	1800	184T	**EM7044T-5**	②	T3C	1,883	L1	18.12	99	89.5	575	5.3	-
7 1/2	1800	213T	**EM7047T-5**	②	T3C	2,500	L1	20.32	161	91.7	575	7.6	-
10	1800	215T	**EM7170T-5**	②	T3C	3,525	L1	19.90	249	91.7	575	9.8	-
15	1800	254T	**EM7054T-5**	②	T3C	3,751	LS	25.50	364	92.4	575	14.5	-
20	1800	256T	**EM7056T-5**	②	T3C	4,860	LS	25.50	396	93	575	19.2	-
25	1800	284T	**EM7058T-5**	②	T3C	5,896	LS	28.61	534	93.6	575	24.5	-
30	1800	286T	**EM7060T-5**	②	T3C	7,188	L1	28.61	553	93.6	575	29	-
40	1800	324T	**EM7062T-5**	②	T3C	9,633	LS	32.00	729	94.1	575	39	-
C-Face, Footless, No Drip Cover													
1/2	1800	56C	**VM7006-5**	②	T3C	936	K	14.30	37	78.5	575	0.7	-
3/4	1800	56C	**VM7010-5**	②	T3C	953	K	14.30	38	76	575	1.2	-
1	1800	56C	**VM7014-5**	②	T3C	1,001	K	14.30	39	75.5	575	1.5	-
		143TC	**VEM7014T-5**	②	T3C	1,324	L1	14.33	44	85.5	575	1.2	-
		143TC	**VM7014T-5**	②	T3C	1,080	L1	14.36	41	82.5	575	1.3	-
1 1/2	1800	145TC	**VEM7034T-5**	②	T3C	1,443	L1	15.21	50	86.5	575	1.8	-
		145TC	**VM7034T-5**	②	T3C	1,164	L1	15.23	47	84	575	1.9	-
2	1800	145TC	**VEM7037T-5**	②	T3C	1,529	L1	15.21	54	86.5	575	2.3	-
		145TC	**VM7037T-5**	②	T3C	1,259	L1	15.23	49	84	575	2.5	-
3	1800	182TC	**VEM7042T-5**	②	T3C	1,727	L1	18.86	95	89.5	575	3.3	-
		182TC	**VM7042T-5**	②	T3C	1,614	L1	18.86	90	87.5	575	3.4	-
5	1800	184TC	**VEM7044T-5**	②	T3C	2,040	L1	20.36	110	89.5	575	5.3	-
		184TC	**VM7044T-5**	②	T3C	1,966	L1	18.80	113	87.5	575	5.2	-
7 1/2	1800	213TC	**VM7047T-5**	②	T3C	2,275	L1	19.19	157	89.5	575	8.1	-

(a) See notes on the last page of this catalog.
② = Class I, Group D, Class II, Group F & G

Cast Iron Frame

CAUTION: Explosion-proof motors have a tight fit between mating parts to ensure the integrity of the explosion-proof enclosure. This can lead to an accumulation of moisture inside the motors due to condensation. Care should be used when selecting an explosion-proof motor, especially when installed outdoors and on intermittent duty. Consider the explosion-proof 575 Volt Drill Rig Duty motors for outdoor applications. These explosion-proof motors are not suitable for use with adjustable speed drives, inverter duty explosion-proof motors must be used.

Severe Duty, Three Phase, 1.15 Service Factor

3 thru 150 Hp NEMA 182T thru 445T

Applications: Harsh industrial environments requiring protection against corrosion, that contain hazardous gas and vapor, dust fibers, filings or other material that may have explosive properties.

Features: UL & CSA listed for Class I (Gas), Group D, Class II (Dust), Group E, F, & G with a T3C temperature code. Totally enclosed cast iron construction. Brass labyrinth shaft slingers (Group E) installed on both ends of motor. Normally closed thermostats. Explosion Proof breather drains. Corrosion resistant epoxy finish. Motors have a Class F insulation system and a 1.15 service factor. Super-E® explosion proof motors have NEMA Premium® efficiency and 3 year warranty. Fixed speed sine wave operation only.

Hp	RPM	NEMA Frame	Catalog Number	XP Cls/Grp	Temp Code	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
3	1800	182T	**EM7542T-I**	③	T3C	1,576	SD	17.59	143	89.5	230/460	4.1	
	1200	213T	**EM7536T-I**	③	T3C	2,264	SD	20.02	225	89.5	230/460	4.5	
5	3600	L184T	**EM7572T-I**	③	T3C	2,072	SD	17.12	156	88.5	230/460	6	
	1800	L184T	**EM7544T-I**	③	T3C	1,952	SD	17.12	160	89.5	230/460	6.6	
	1200	L215T	**EM7540T-I**	③	T3C	2,969	SD	20.20	234	89.5	230/460	6.8	
7 1/2	1800	213T	**EM7547T-I**	③	T3C	2,407	SD	20.02	225	91.7	230/460	9.5	35
	1200	254T	**EM7548T-I**	③	T3C	3,515	SD	25.81	397	91.7	230/460	10.7	30
10	3600	215T	**EM7574T-I**	③	T3C	2,930	SD	19.32	215	91	230/460	11.1	
	1800	L215T	**EM7670T-I**	③	T3C	3,250	SD	20.20	180	91.7	230/460	12.3	
	1200	256T	**EM7565T-I**	③	T3C	4,226	SD	24.57	395	91	230/460	12.5	
15	1800	254T	**EM7554T-I**	③	T3C	3,897	SD	25.81	375	92.4	230/460	18	30
20	3600	256T	**EM7559T-I**	③	T3C	4,249	SD	24.57	394	91.7	230/460	22.3	
	1800	256T	**EM7556T-I**	③	T3C	4,879	SD	24.56	403	93	230/460	24	
25	1800	284T	**EM7558T-I**	③	T3C	6,124	SD	28.61	526	93.6	230/460	30	30
30	1800	286T	**EM7560T-I**	③	T3C	7,480	SD	27.44	499	93.6	230/460	36.1	
40	1800	324T	**EM7562T-I**	③	T3C	10,008	SD	32.00	737	94.1	230/460	47	
50	1800	326T	**EM7564T-I**	③	T3C	11,644	SD	30.45	818	94.5	230/460	58.8	
	1200	365T	**EM7585T-I**	③	T3C	12,619	SD	33.44	1038	94.1	230/460	60.1	
60	1800	364T	**EM7566T-I**	③	T3C	13,164	SD	33.44	1023	95	230/460	67.8	
75	1800	365T	**EM7568T-I**	③	T3C	13,703	SD	33.44	1072	95.4	230/460	84.1	
	1200	405T	**EM7587T-I**	③	T3C	16,847	SD	38.32	1368	95	230/460	86.9	
100	1800	405T	**EM7590T-I**	③	T3C	17,575	SD	38.32	1448	95.4	460	112	
	1200	444T	**EM7599T-I**	③	T3C	20,869	SD	44.62	1854	95	460	115	
125	1800	444T	**EM7600T-I**	③	T3C	21,217	SD	44.62	1881	95.8	460	139	
150	1800	445T	**EM7596T-I**	③	T3C	23,711	SD	44.62	2038	96.2	460	165	

(a) See notes on the last page of this catalog.

③ = Class I, Group D, Class II, Group E, F & G

Cast Iron Frame

These motors expel condensation better than standard explosion proof designs. They are recommended for applications where motors may run intermittently, applications where explosion-proof motors are installed outdoors exposed to the environment, and may not be operated for extended periods of time. These explosion-proof motors are not suitable for use with adjustable speed drives. Inverter duty explosion-proof motors must be used.

Drill Rig Duty, Three Phase, 1.15 Service Factor

1/2 thru 200 Hp NEMA 56C thru 449T

Applications: On and off shore drill rig service, bulk fuel terminals, and transfer stations. For use in high humidity hazardous-duty applications driving pumps, compressors, blowers, fans, and many other loads that require 1.15 service factor explosion-proof motors. Designed with features for use in the petroleum industry. Includes Class I, Group C & D approval for use in areas where hydrogen sulfide is present.

Features: UL & CSA listed for Class I (Gas), Group C & D with a T3C temperature code. Totally enclosed heavy gauge steel and cast iron construction. Drive-end shaft slinger. UL listed explosion proof breather drain. Corrosion resistant epoxy finish. Class F Insulation and 1.15 service factor. 230/460 volt models have 60Hz & 50Hz data included on the nameplate. Suitable for 55 Degrees C at 1.0 service factor. Super-E® explosion proof motors have NEMA Premium® efficiency and 3 year warranty. Fixed speed sine wave operation only.

Hp	RPM	NEMA Frame	Catalog Number	XP Cls/Grp	Temp Code	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
Foot Mounted													
1	3600	143T	**EM7013T-I**	④	T3C	1,298	SD	14.12	51	77	230/460	1.4	19
		143T	**EM7013T-I-5**	④	T3C	1,298	SD	14.12	51	84	575	1.1	-
	1800	143T	**EM7014T-I**	④	T3C	1,277	SD	14.22	55	85.5	230/460	1.5	19, 30
		143T	**EM7014T-I-5**	④	T3C	1,277	SD	14.22	55	85.5	575	1.2	-
	1200	145T	**EM7032T-I**	④	T3C	1,416	SD	15.09	62	82.5	230/460	1.8	19, 30
1 1/2	3600	143T	**EM7018T-I**	④	T3C	1,288	SD	14.12	54	84	230/460	1.9	19
	1800	145T	**EM7034T-I**	④	T3C	1,323	SD	15.09	61	86.5	230/460	2.2	19, 30
	1200	182T	**EM7020T-I**	④	T3C	1,949	SD	18.27	102	87.5	230/460	2.4	19, 30
2	3600	145T	**EM7071T-I**	④	T3C	1,408	SD	15.09	62	85.5	230/460	2.5	19, 30
		145T	**EM7071T-I-5**	④	T3C	1,408	SD	15.09	62	85.5	575	2.0	-
	1800	145T	**EM7037T-I**	④	T3C	1,442	SD	15.97	65	86.5	230/460	2.9	19, 30
		145T	**EM7037T-I-5**	④	T3C	1,442	SD	15.09	65	86.5	575	2.3	-
	1200	184T	**EM7041T-I**	④	T3C	2,008	SD	19.52	119	88.5	230/460	3.5	19
3	3600	182T	**EM7026T-I**	④	T3C	1,613	SD	16.77	91	86.5	230/460	3.7	19, 30
		182T	**EM7026T-I-5**	④	T3C	1,613	SD	18.27	91	86.5	575	2.7	-
	1800	182T	**EM7042T-I**	④	T3C	1,521	SD	18.27	107	89.5	230/460	4.2	19, 30
		182T	**EM7042T-I-5**	④	T3C	1,521	SD	18.27	106	89.5	575	3.3	-
	1200	213T	**EM7036T-I**	④	T3C	2,188	SD	20.32	185	89.5	230/460	4.6	19, 30
5	3600	184T	**EM7072T-I**	④	T3C	2,003	SD	18.27	114	90.2	230/460	5.6	19
		184T	**EM7072T-I-5**	④	T3C	2,003	SD	18.27	114	90.2	575	3.4	-
	1800	184T	**EM7044T-I**	④	T3C	1,886	SD	19.52	122	89.5	230/460	6.5	19, 30
		184T	**EM7044T-I-5**	④	T3C	1,886	SD	19.52	126	89.5	575	5.2	-
	1200	215T	**EM7040T-I**	④	T3C	2,868	SD	22.32	170	89.5	230/460	7.3	19, 30
7 1/2	3600	213T	**EM7045T-I**	④	T3C	2,407	SD	19.57	166	89.5	230/460	8.6	19
		213T	**EM7045T-I-5**	④	T3C	2,407	SD	19.57	166	89.5	575	7	-
	1800	213T	**EM7047T-I**	④	T3C	2,325	SD	20.32	161	91.7	230/460	9.4	19, 30
		213T	**EM7047T-I-5**	④	T3C	2,325	SD	20.32	161	91.7	575	7.6	-
	1200	254T	**EM7048T-I**	④	T3C	3,396	SD	25.50	389	91	230/460	10.7	19, 30
10	3600	215T	**EM7174T-I**	④	T3C	2,831	SD	20.03	235	90.2	230/460	11.8	19
		215T	**EM7174T-I-5**	④	T3C	2,831	SD	20.03	235	90.2	575	9.3	-
	1800	215T	**EM7170T-I**	④	T3C	3,138	SD	20.03	252	92.4	230/460	12.3	19
		215T	**EM7170T-I-5**	④	T3C	3,138	SD	20.03	252	92.4	575	10.1	-
	1200	256T	**EM7065T-I**	④	T3C	4,083	SD	25.50	400	91	230/460	15	19, 30
15	3600	254T	**EM7053T-I**	④	T3C	3,201	SD	25.50	352	91	230/460	17.5	19
		254T	**EM7053T-I-5**	④	T3C	3,201	SD	25.50	352	91	575	13.7	-
	1800	254T	**EM7054T-I**	④	T3C	3,766	SD	25.50	375	92.4	230/460	18	19, 30
		254T	**EM7054T-I-5**	④	T3C	3,766	SD	25.50	374	92.4	575	14.5	-
	1200	284T	**EM7057T-I**	④	T3C	6,581	SD	28.61	529	91.7	230/460	20	19

(a) See notes on the last page of this catalog.
④ = Class I, Group C & D
Cast Iron Frame

These motors expel condensation better than standard explosion proof designs. They are recommended for applications where motors may run intermittently, applications where explosion-proof motors are installed outdoors exposed to the environment, and may not be operated for extended periods of time. These explosion-proof motors are not suitable for use with adjustable speed drives. Inverter duty explosion-proof motors must be used.

Drill Rig Duty, Three Phase, 1.15 Service Factor

Hp	RPM	NEMA Frame	Catalog Number	XP Cls/Grp	Temp Code	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
20	3600	256T	**EM7059T-I**	④	T3C	4,105	SD	25.50	409	91	230/460	20	19, 30
		256T	**EM7059T-I-5**	④	T3C	4,105	SD	25.50	409	91	575	17.5	-
	1800	256T	**EM7056T-I**	④	T3C	4,714	SD	25.50	399	93	230/460	24	19, 30
		256T	**EM7056T-I-5**	④	T3C	4,714	SD	25.50	397	93	575	19.2	-
	1200	286T	**EM7079T-I**	④	T3C	6,757	SD	28.61	558	91.7	230/460	25	19, 30
25	3600	284TS	**EM7063T-I**	④	T3C	5,463	SD	27.23	552	91.7	230/460	28.5	19
		284TS	**EM7063T-I-5**	④	T3C	5,463	SD	27.23	552	91.7	575	22.8	-
	1800	284T	**EM7058T-I**	④	T3C	5,918	SD	28.61	538	93.6	230/460	30.5	19, 30
		284T	**EM7058T-I-5**	④	T3C	5,918	SD	28.61	559	93.6	575	24.5	-
	1200	324T	**EM7082T-I**	④	T3C	8,449	SD	32.00	762	93	230/460	32	19, 30
30	3600	286TS	**EM7083T-I**	④	T3C	6,421	SD	27.23	565	91.7	230/460	33	19
		286TS	**EM7083T-I-5**	④	T3C	6,421	SD	27.23	565	91.7	575	26	-
	1800	286T	**EM7060T-I**	④	T3C	7,216	SD	28.61	579	93.6	230/460	36	19, 30
		286T	**EM7060T-I-5**	④	T3C	7,216	SD	28.61	573	93.6	575	29	-
	1200	326T	**EM7080T-I**	④	T3C	9,321	SD	32.00	782	93	230/460	39	19, 30
40	3600	324TS	**EM7067T-I**	④	T3C	8,565	SD	30.50	684	92.4	230/460	45	19
		324TS	**EM7067T-I-5**	④	T3C	8,565	SD	30.50	684	92.4	575	36	-
	1800	324T	**EM7062T-I**	④	T3C	9,670	SD	32.00	756	94.1	230/460	48	19
		324T	**EM7062T-I-5**	④	T3C	9,670	SD	32.00	752	94.1	575	39	-
	1200	364T	**EM7084T-I**	④	T3C	10,803	SD	33.44	1026	94.1	230/460	47.2	19, 30
50	3600	326TS	**EM7081T-I**	④	T3C	10,967	SD	30.50	740	93	230/460	56	19, 30
		326TS	**EM7081T-I-5**	④	T3C	10,967	SD	30.50	740	93	575	45	-
	1800	326T	**EM7064T-I**	④	T3C	11,249	SD	32.00	846	94.5	230/460	59	19, 30
		326T	**EM7064T-I-5**	④	T3C	11,249	SD	32.00	841	94.5	575	47	-
	1200	365T	**EM7085T-I**	④	T3C	12,193	SD	33.44	1003	94.1	230/460	60.1	19, 30
60	3600	364TS	**EM7310T-I**	④	T3C	11,779	SD	31.31	984	93.6	230/460	67.3	19, 30
	1800	364T	**EM7066T-I**	④	T3C	12,719	SD	33.44	1030	95	230/460	67.8	19, 30
		364T	**EM7066T-I-5**	④	T3C	12,719	SD	33.44	1015	95	575	54.2	-
	1200	404T	**EM7086T-I**	④	T3C	14,246	SD	38.32	1418	94.5	230/460	67.3	19, 30
75	3600	365TS	**EM7313T-I**	④	T3C	13,254	SD	31.31	993	93.6	230/460	83.4	19, 30
	1800	365T	**EM7068T-I**	④	T3C	13,240	SD	33.44	1055	95.4	230/460	84.1	19, 30
		365T	**EM7068T-I-5**	④	T3C	13,240	SD	33.44	1064	95.4	575	67.2	-
	1200	405T	**EM7087T-I**	④	T3C	16,276	SD	38.32	1411	94.5	230/460	84.2	19, 30
100	1800	405T	**EM7090T-I**	④	T3C	16,981	SD	38.32	1437	95.4	230/460	112	19, 30
		405T	**EM7090T-I-5**	④	T3C	16,981	SD	38.32	1446	95.4	575	89.6	-
	1200	444T	**EM7088T-I**	④	T3C	19,008	SD	44.62	1866	95.0	230/460	115	19
125	1800	444T	**EM74124T-I-4**	④	T3C	19,841	SD	44.62	1900	95.4	460	144	19
	1200	447T	**EM7089T-I-4**	④	T3C	21,243	SD	47.83	2411	95.0	460	146	19
150	1800	447T	**EM74154T-I-4**	④	T3C	22,174	SD	47.83	2455	95.8	460	169	19
200	1800	449T	**EM74204T-I-4**	④	T3C	31,693	SD	52.83	2993	96.2	460	223	19
C-Face, Foot Mounted													
1/2	1800	56C	**CM7006-I**	④	T3C	938	SD	13.14	52	80	230/460	0.8	19, 30, 60
3/4	1800	56C	**CM7010-I**	④	T3C	956	SD	14.28	50	78.5	230/460	1.4	19
1	3600	143TC	**CEM7013T-I**	④	T3C	1376	SD	14.36	41	77	230/460	1.4	19
		143TC	**CEM7013T-I-5**	④	T3C	1376	SD	14.36	41	84	575	1.1	-
	1800	56C	**CM7014-I**	④	T3C	1,020	SD	14.28	52	82.5	230/460	1.6	19
		143TC	**CEM7014T-I**	④	T3C	1,375	SD	14.36	52	85.5	230/460	1.5	19
		143TC	**CEM7014T-I-5**	④	T3C	1,375	SD	15.23	52	85.5	575	1.1	-
	1200	145TC	**CEM7032T-I**	④	T3C	1514	SD	15.23	63	82.5	230/460	1.8	19, 30
1 1/2	3600	143TC	**CEM7018T-I**	④	T3C	1386	SD	14.36	47	84	230/460	1.9	19
	1800	145TC	**CEM7034T-I**	④	T3C	1,563	SD	15.23	61	86.5	230/460	2.2	19, 30
	1200	182TC	**CEM7020T-I**	④	T3C	2264	SD	19.59	107	87.5	230/460	2.4	19, 30
2	3600	145TC	**CEM7071T-I**	④	T3C	1506	SD	15.23	55	85.5	230/460	2.4	19, 30
		145TC	**CEM7071T-I-5**	④	T3C	1506	SD	15.23	55	85.5	575	2.0	-
	1800	145TC	**CEM7037T-I**	④	T3C	1,657	SD	16.10	66	86.5	230/460	2.9	19, 30
		145TC	**CEM7037T-I-5**	④	T3C	1,657	SD	15.97	65	86.5	575	2.2	-
	1200	184TC	**CEM7041T-I**	④	T3C	2323	SD	20.84	105	88.5	230/460	3.5	19

(a) See notes on the last page of this catalog.

④ = Class I, Group C & D Cast Iron Frame

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Drill Rig Duty, Three Phase, 1.15 Service Factor

Hp	RPM	NEMA Frame	Catalog Number	XP Cls/Grp	Temp Code	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
3	3600	182TC	**CEM7026T-I**	④	T3C	1928	SD	18.09	80	86.5	230/460	3.7	19, 30
		182TC	**CEM7026T-I-5**	④	T3C	1928	SD	18.09	80	86.5	575	2.9	-
	1800	182TC	**CEM7042T-I**	④	T3C	1,866	SD	19.59	117	89.5	230/460	4.2	19, 30
		182TC	**CEM7042T-I-5**	④	T3C	1,866	SD	19.59	106	89.5	575	3.3	-
	1200	213TC	**CEM7036T-I**	④	T3C	2529	SD	21.07	175	89.5	230/460	4.6	19, 30
5	3600	184TC	**CEM7072T-I**	④	T3C	2318	SD	19.59	91	90.2	230/460	5.6	19
		184TC	**CEM7072T-I-5**	④	T3C	2318	SD	19.59	91	88.5	575	4.8	-
	1800	184TC	**CEM7044T-I**	④	T3C	2,256	SD	20.84	136	89.5	230/460	6.5	19, 30
		184TC	**CEM7044T-I-5**	④	T3C	2,256	SD	20.84	126	89.5	575	5.2	-
	1200	215TC	**CEM7040T-I**	④	T3C	3209	SD	23.07	175	89.5	230/460	7.3	19, 30
7 1/2	3600	213TC	**CEM7045T-I**	④	T3C	2748	SD	20.32	149	89.5	230/460	9	19
		213TC	**CEM7045T-I-5**	④	T3C	2748	SD	20.32	149	89.5	575	7	-
	1800	213TC	**CEM7047T-I**	④	T3C	2,646	SD	21.07	161	91.7	230/460	9.4	19, 30
		213TC	**CEM7047T-I-5**	④	T3C	2,646	SD	21.07	161	91.7	575	7.6	-
	1200	254TC	**CEM7048T-I**	④	T3C	4749	SD	26.00	396	91	230/460	10.7	19, 30
10	3600	215TC	**CEM7174T-I**	④	T3C	3172	SD	20.77	240	90.2	230/460	11.8	19
		215TC	**CEM7174T-I-5**	④	T3C	3172	SD	20.77	240	90.2	575	9.3	-
	1800	215TC	**CEM7170T-I**	④	T3C	3,219	SD	20.77	252	92.4	230/460	12.3	19
		215TC	**CEM7170T-I-5**	④	T3C	3,219	SD	20.77	252	92.4	575	10.1	-
	1200	256TC	**CEM7065T-I**	④	T3C	5,436	SD	26.00	407	91	230/460	15	19, 30
15	3600	254TC	**CEM7053T-I**	④	T3C	4,554	SD	26.00	359	91	230/460	17.2	19
		254TC	**CEM7053T-I-5**	④	T3C	4,554	SD	26.00	359	91	575	13.7	-
	1800	254TC	**CEM7054T-I**	④	T3C	5,324	SD	26.00	385	92.4	230/460	18	19, 30
		254TC	**CEM7054T-I-5**	④	T3C	5,324	SD	26.00	374	92.4	575	14.5	-
	1200	284TC	**CEM7057T-I**	④	T3C	8,317	SD	28.61	537	91.7	230/460	20	19
20	3600	256TC	**CEM7059T-I**	④	T3C	5,458	SD	26.00	416	91	230/460	20	19, 30
		256TC	**CEM7059T-I-5**	④	T3C	5,458	SD	26.00	416	91	575	20	-
	1800	256TC	**CEM7056T-I**	④	T3C	6,310	SD	26.00	409	93	230/460	24	19, 30
		256TC	**CEM7056T-I-5**	④	T3C	6,310	SD	26.00	397	93	575	19.2	-
	1200	286TC	**CEM7079T-I**	④	T3C	8493	SD	28.61	566	91.7	230/460	25	19, 30
25	3600	284TSC	**CEM7063T-I**	④	T3C	7199	SD	27.23	560	91.7	230/460	28.5	19
		284TSC	**CEM7063T-I-5**	④	T3C	7199	SD	27.23	560	91.7	575	22.8	-
	1800	284TC	**CEM7058T-I**	④	T3C	7,727	SD	28.61	563	93.6	230/460	30.5	19, 30
		284TC	**CEM7058T-I-5**	④	T3C	7,727	SD	28.61	559	93.6	575	24.5	-
	1200	324TC	**CEM7082T-I**	④	T3C	10,850	SD	32.00	772	93	230/460	32	19, 30
30	3600	286TSC	**CEM7083T-I**	④	T3C	8,157	SD	27.23	573	91.7	230/460	33	19
		286TSC	**CEM7083T-I-5**	④	T3C	8,157	SD	27.23	573	91.7	575	26	-
	1800	286TC	**CEM7060T-I**	④	T3C	8,967	SD	28.61	572	93.6	230/460	36	19, 30
		286TC	**CEM7060T-I-5**	④	T3C	8,967	SD	28.61	573	93.6	575	29	-
	1200	326TC	**CEM7080T-I**	④	T3C	11,722	SD	32.00	792	93	230/460	39	19, 30
40	3600	324TSC	**CEM7067T-I**	④	T3C	10,966	SD	30.50	750	92.4	230/460	45	19
		324TSC	**CEM7067T-I-5**	④	T3C	10,966	SD	30.50	751	92.4	575	36	-
	1800	324TC	**CEM7062T-I**	④	T3C	11,961	SD	32.00	721	94.1	230/460	48	19
		324TC	**CEM7062T-I-5**	④	T3C	11,961	SD	32.00	720	94.1	575	39	-
	1200	364TC	**CEM7084T-I**	④	T3C	13472	SD	33.44	886	94.1	230/460	47.2	19, 30
50	3600	326TSC	**CEM7081T-I**	④	T3C	13368	SD	30.50	750	93	230/460	56	19, 30
		326TSC	**CEM7081T-I-5**	④	T3C	13368	SD	30.50	750	93	575	45	-
	1800	326TC	**CEM7064T-I**	④	T3C	13,601	SD	32.00	771	94.5	230/460	59	19, 30
		326TC	**CEM7064T-I-5**	④	T3C	13,601	SD	32.00	841	94.5	575	47	-
60	1800	364TC	**CEM7066T-I**	④	T3C	15,388	SD	33.44	910	95	230/460	67.8	19, 30
75	1800	365TC	**CEM7068T-I**	④	T3C	15,909	SD	33.44	977	95.4	230/460	84.1	19, 30
100	1800	405TC	**CEM7090T-I**	④	T3C	19,650	SD	38.31	1375	95.4	230/460	112	19, 30

(a) See notes on the last page of this catalog.
④ = Class I, Group C & D

Cast Iron Frame

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Drill Rig Duty, Three Phase, 1.15 Service Factor

Hp	RPM	NEMA Frame	Catalog Number	XP Cls/Grp	Temp Code	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
C-Face, Footless													
1/2	1800	56C	**VM7006-I**	④	T3C	858	SD	13.14	51	80	230/460	0.8	19, 30, 60
3/4	1800	56C	**VM7010-I**	④	T3C	953	SD	14.31	48	78.5	230/460	1.4	19
1	1800	56C	**VM7014-I**	④	T3C	1,001	SD	14.31	51	82.5	230/460	1.6	19
		143TC	**VM7014T-I**	④	T3C	1,080	SD	14.36	51	82.5	230/460	1.6	19
1 1/2	1800	56C	**VM7034-I**	④	T3C	1,078	SD	15.17	55	84	230/460	2.4	19
		145TC	**VM7034T-I**	④	T3C	1,164	SD	15.23	58	84	230/460	2.4	19
2	1800	145TC	**VM7037T-I**	④	T3C	1,259	SD	15.23	60	84	230/460	3.1	19
3	1800	182TC	**VM7042T-I**	④	T3C	1,614	SD	19.59	106	87.5	230/460	4.1	19
5	1800	184TC	**VM7044T-I**	④	T3C	1,966	SD	19.59	120	87.5	230/460	6.7	19
7 1/2	1800	213TC	**VM7047T-I**	④	T3C	2,275	SD	21.07	165	89.5	230/460	10.2	19, 30
10	1800	215TC	**VM7170T-I**	④	T3C	2,760	SD	20.77	230	89.5	230/460	12.7	19, 30
15	1800	254TC	**VEM7054T-I**	④	T3C	4,609	SD	26.00	374	92.4	230/460	18	19, 30
20	1800	256TC	**VEM7056T-I**	④	T3C	5,467	SD	26.00	393	93	230/460	24	19, 30
25	1800	284TC	**VEM7058T-I**	④	T3C	6,688	SD	28.67	560	93.6	230/460	30.5	19, 30
30	1800	286TC	**VEM7060T-I**	④	T3C	7,767	SD	28.67	572	93.6	230/460	36	19, 30
40	1800	324TC	**VEM7062T-I**	④	T3C	10,349	SD	32.00	721	94.1	230/460	48	19
50	1800	326TC	**VEM7064T-I**	④	T3C	11,776	SD	32.00	771	94.5	230/460	59	19, 30

(a) See notes on the last page of this catalog.
④ = Class I, Group C & D

Cast Iron Frame

These motors expel condensation better than standard explosion proof designs. They are recommended for applications where motors may run intermittently, applications where explosion-proof motors are installed outdoors exposed to the environment, and may not be operated for extended periods of time. These explosion-proof motors are not suitable for use with adjustable speed drives. Inverter duty explosion-proof motors must be used.

Drill Rig Duty, Single Phase, C-Face, 1.15 Service Factor, Foot Mounted

1/3 thru 1 Hp NEMA 56C

Applications: On and off shore drill rig service, bulk fuel terminals, and transfer stations. For use in high humidity hazardous-duty applications driving pumps, compressors, blowers, fans, and many other loads that require 1.15 service factor explosion-proof motors. Designed with features for use in the petroleum industry. Includes Class I, Group C & D approval for use in areas where hydrogen sulfide is present.

Features: UL & CSA listed for Class I (Gas), Group C & D with a T3C temperature code. Totally enclosed heavy gauge steel construction. Drive-end shaft slinger. UL listed explosion proof breather drain. Corrosion resistant epoxy finish. Class F Insulation and 1.15 service factor.

Hp	RPM	NEMA Frame	Catalog Number	XP Cls/Grp	Temp Code	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1/3	1800	56C	**CL5001-I**	④	T3C	911	K	14.31	47	55	115/208-230	3.3	-
1/2	1800	56C	**CL5004-I**	④	T3C	912	K	14.31	53	68	115/208-230	3.7	-
3/4	1800	56C	**CL5007-I**	④	T3C	974	K	15.17	60	68	115/208-230	5.3	-
1	1800	56C	**CL5023-I**	④	T3C	1,049	K	16.05	66	68	115/230	6	30

(a) See notes on the last page of this catalog.
④ = Class I, Group C & D

These motors expel condensation better than standard explosion proof designs. They are recommended for applications such as fuel transfer terminals and fuel truck loading facilities where motors may run intermittently, applications where explosion-proof motors are installed outdoors exposed to the environment, and may not be operated for extended periods of time. These explosion-proof motors are not suitable for use with adjustable speed drives. Inverter duty explosion-proof motors must be used.

Drill Rig Duty, Close Coupled Pump

3 thru 10 Hp 182JP thru 184JP

Applications: On and off shore drill rig service, bulk fuel terminals, and transfer stations. For use in high humidity hazardous-duty applications driving pump loads that require 1.15 service factor explosion-proof motors. Designed with features for use in the petroleum industry. Includes Class I, Group C & D approval for use in areas where hydrogen sulfide is present.

Features: Labyrinth-type recessed shaft slinger for increased bearing protection Explosion-proof breather/drain to prevent build up of condensation. 55°C ambient, Class F insulation. Corrosion resistant finish with two part epoxy coating. UL and CSA approved for Division 1, Class I, Group C & D. 1.15 service factor (EJPM71170T-I has 1.0 S.F.). Super-E® motors have NEMA Premium® efficiency and 3 year warranty.

Hp	RPM	NEMA Frame	Catalog Number	XP Cls/Grp	Temp Code	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
3	1800	182JP	**EJPM7142T-I**	④	T3C	2,112	L1	22.09	127	89.5	230/460	4.1	1, 19, 30
5	1800	184JP	**EJPM7144T-I**	④	T3C	2,472	L1	22.09	152	89.5	230/460	6.6	1, 19, 30
7 1/2	1800	213TCZ	**EJPM71147T-I**	④	T3C	2,804	L1	25.65	225	91.7	230/460	9.5	1, 19, 97
10	1800	215TCZ	**EJPM71170T-I**	④	T3C	3,473	L1	25.65	252	92.4	230/460	12.3	19, 97

(a) See notes on the last page of this catalog. Cast Iron Frame
④ = Class I, Group C & D

These motors expel condensation better than standard explosion proof designs. They are recommended for applications such as fuel transfer terminals and fuel truck loading facilities where motors may run intermittently, applications where explosion-proof motors are installed outdoors exposed to the environment, and may not be operated for extended periods of time. These explosion-proof motors are not suitable for use with adjustable speed drives. Inverter duty explosion-proof motors must be used.

Jet Pump, Footless

1/2 thru 2 Hp NEMA 56J

Applications: Ideal for use on pumping applications where hazardous fumes and dust are present requiring Div 1 UL listed and/or CSA approved enclosures.

Features: UL & CSA approved for Class I, Group D, Class II, Group F & G. NEMA 56J Jet pump mounting. Totally enclosed heavy gauge steel construction. Corrosion resistant epoxy paint. Stainless steel drive end shaft extension. Non-drive end shaft extension is slotted for ease of installation and maintenance. Single or Three Phase designs. 1.0 Service Factor. Fixed speed sine wave operation only.

Hp	RPM	NEMA Frame	Catalog Number	XP Cls/Grp	Temp Code	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
Single Phase													
1/2	3600	56J	**JL5003A**	②	T4	691	K	14.79	37	55	115/230	3.9	-
3/4	3600	56J	**JL5006A**	②	T4	773	K	15.68	37	62	115/230	4.9	-
1	3600	56J	**JL5009A**	②	T4	828	K	15.68	49	66	115/230	6	-
1 1/2	3600	56J	**JL5030**	②	T3C	1,065	K	15.68	52	70	115/208-230	7.5	-
2	3600	56J	**JL5031**	②	T3C	1,157	K	16.56	60	74	115/208-230	11.5	-
Three Phase													
1	3600	56J	**JM7013**	②	T3C	918	K	13.72	30	75.5	230/460	1.8	30
1 1/2	3600	56J	**JM7018**	②	T3C	936	K	14.79	41	75.5	208-230/460	2.3	-
2	3600	56J	**JM7071**	②	T3C	980	K	15.67	48	78.5	208-230/460	2.7	-

(a) See notes on the last page of this catalog.

② = Class I, Group D, Class II, Group F & G

CAUTION: Explosion-proof motors have a tight fit between mating parts to ensure the integrity of the explosion-proof enclosure. This can lead to an accumulation of moisture inside the motors due to condensation. Care should be used when selecting an explosion-proof motor, especially when installed outdoors and on intermittent duty. The Explosion-proof motors are not suitable for use with adjustable speed drives. Inverter Duty Explosion-proof motors must be used.

Close-Coupled Pump, Three Phase

3 thru 10 Hp NEMA 145JM thru 215JM

Applications: Applications for circulating and transferring fluids where hazardous fumes are present requiring Div 1 UL listed and/or CSA approved enclosures.

Features: UL & CSA approved for Class I, Group D, Temperature Code T2C. NEMA JM pump mounting. Totally enclosed heavy gauge steel construction. Corrosion resistant epoxy paint. Over-sized ball bearings with locked drive end construction. Three Phase designs with 1.0 Service Factor. Fixed speed sine wave operation only.

Hp	RPM	NEMA Frame	Catalog Number	XP [a] Cls/Grp	Temp Code	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
3	3600	145JM	**JMM7075T**	①	T3C	1,466	L1	18.67	69	85.5	208-230/460	3.7	-
		182JM	**JMM7026T**	①	T2C	1,466	L1	18.98	88.5	85.5	208-230/460	3.7	-
5	3600	184JM	**JMM7072T**	①	T2C	1,981	L1	20.36	110	87.5	230/460	5.6	-
7 1/2	3600	184JM	**JMM7073T**	①	T2C	2,227	L1	21.88	118	88.5	230/460	8.7	-
		213JM	**JMM7045T**	①	T2C	2,610	L1	20.05	165	88.5	230/460	9.5	-
10	3600	215JM	**JMM7074T**	①	T2C	2,956	L1	20.05	165	90.2	230/460	12	-

(a) See notes on the last page of this catalog.

① = Class I, Group D

CAUTION: Explosion-proof motors have a tight fit between mating parts to ensure the integrity of the explosion-proof enclosure. This can lead to an accumulation of moisture inside the motors due to condensation. Care should be used when selecting an explosion-proof motor, especially when installed outdoors and on intermittent duty. The Explosion-proof motors are not suitable for use with adjustable speed drives. Inverter Duty Explosion-proof motors must be used.

Explosion Proof, Inverter Duty, Class I, Group D, Foot Mounted

20 thru 75 Hp — NEMA 284T thru 405T

Applications: Designed for Variable Speed, foot mounted applications where hazardous fumes are present requiring Div 1 UL listed and/or CSA approved enclosures.

Features: UL and CSA approved for hazardous locations. Division 1, Class I, Group D only, Temperature Code T2B (260°C). Rugged Cast Iron construction. Class F insulation, 1.0 service factor and normally closed thermostats. All 4 Pole ratings are constant horsepower 60 to 90 Hz. Not encoder adaptable. Meets NEMA MG 1, Part 31.

Hp	Base Speed RPM	C.H. Speed RPM	NEMA Frame	Catalog Number	XP Cls/Grp	Temp Code	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
2:1 Constant Torque, 10:1 Variable Torque Ratings														
25	1800	2700	284T	**IDXM7058T**	①	T2B	6,190	L1	28.61	536	93.6	230/460	30.5	
30	1800	2700	286T	**IDXM7060T**	①	T2B	7,550	L1	28.61	561	93.6	230/460	38	
40	1800	2700	324T	**IDXM7062T**	①	T2B	10,113	L1	32.00	748	94.1	230/460	48	
50	1800	2700	326T	**IDXM7064T**	①	T2B	11,765	L1	32.00	764	94.5	230/460	58	
60	1800	2700	364T	**IDXM7066T**	①	T2B	13,433	L1	33.44	1024	95	230/460	68	
75	1800	2700	405T	**IDXM7068T**	①	T2B	14,892	L1	38.31	1391	95	230/460	83	
10:1 Constant Torque and Variable Torque Ratings														
20	1800	2700	284T	**IDXM7556T**	①	T2B	6,485	L1	28.61	526	93	230/460	23	
25	1800	2700	324T	**IDXM7558T**	①	T2B	7,808	L1	32.00	708	93.6	230/460	30	
30	1800	2700	326T	**IDXM7560T**	①	T2B	9,088	L1	32.00	738	93.6	230/460	37	
40	1800	2700	364T	**IDXM7562T**	①	T2B	11,065	L1	33.44	1013	95	230/460	48.2	
50	1800	2700	365T	**IDXM7564T**	①	T2B	12,680	L1	33.44	1034	93.6	230/460	61.6	
60	1800	2700	405T	**IDXM7566T**	①	T2B	15,021	L1	38.31	1262	93.6	230/460	67.6	

Explosion Proof, Inverter Duty, Class I, Group D C-Face, Foot Mounted

3 thru 20 Hp — NEMA 182TC thru 256TC

Applications: Designed for Variable Speed, Flanged mounted applications where hazardous fumes are present requiring Div 1 UL listed and/or CSA approved enclosures.

Features: UL and CSA approved for hazardous locations. Division 1, Class I, Group D only, Temperature Code T2B (260°C). Rugged Cast Iron construction. Class F insulation, 1.0 service factor and normally closed thermostats. All 4 Pole ratings are constant horsepower 60 to 90 Hz. Not encoder adaptable. Meets NEMA MG 1, Part 31.

Hp	Base Speed RPM	C.H. Speed RPM	NEMA Frame	Catalog Number	XP Cls/Grp	Temp Code	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
C-Face Foot Mounted, 2:1 Constant Torque, 10:1 Variable Torque Ratings														
3	1800	2700	182TC	**IDXM7142T**	①	T2B	1,715	L1	18.24	145	89.5	230/460	4.1	
5	1800	2700	184TC	**IDXM7144T**	①	T2B	2,040	L1	18.24	161	89.5	230/460	6.5	
7 1/2	1800	2700	213TC	**IDXM7147T**	①	T2B	2,565	L1	20.69	227	91.7	230/460	9.5	
10	1800	2700	215TC	**IDXM7170T**	①	T2B	3,516	L1	20.69	231	92.4	208-230/460	12.5	
15	1800	2700	254TC	**IDXM7054T**	①	T2B	4,026	L1	26.00	383	92.4	230/460	18	
20	1800	2700	256TC	**IDXM7056T**	①	T2B	5,224	L1	26.00	408	93	230/460	24	
C-Face Foot Mounted, 10:1 Constant Torque and Variable Torque Ratings														
3	1800	2700	182TC	**IDXM7542T**	①	T2B	1,799	L1	18.24	146	89.5	230/460	4.1	
5	1800	2700	213TC	**IDXM7544T**	①	T2B	2,621	L1	20.65	212	90.2	230/460	6.7	
7 1/2	1800	2700	215TC	**IDXM7547T**	①	T2B	3,685	L1	20.65	226	91.7	230/460	9.5	
10	1800	2700	254TC	**IDXM7570T**	①	T2B	4,124	L1	26.00	392	91.7	230/460	12.4	
15	1800	2700	256TC	**IDXM7554T**	①	T2B	5,348	L1	26.00	392	92.4	230/460	17	

① = Class I, Group D

Cast Iron Frame

CAUTION: Explosion-proof motors have a tight fit between mating parts to ensure the integrity of the explosion-proof enclosure. This can lead to an accumulation of moisture inside the motors due to condensation. Care should be used when selecting an explosion-proof motor, especially when installed outdoors and on intermittent duty.

Explosion Proof, Inverter Duty, Class I, Group D Class II, Group F&G C-Face, Foot Mounted, 10:1 CT, 10:1 VT

1/3 thru 2 Hp NEMA 56C thru 145TC

Applications: Designed for Variable Speed, Foot or Flanged mounted applications where hazardous fumes are present requiring Div 1 UL listed and/or CSA approved enclosures.

Features: UL and CSA approved for hazardous locations. Division 1, Class I, Group D, Class II, Groups F & G, Temperature Code T3C (160°C) 10:1 CT, 10:1 VT. Heavy gauge steel frame and cast conduit box construction. Class F insulation, 1.0 service factor, normally closed thermostats. All ratings constant horsepower 60 to 90 Hz. Not encoder adaptable. Meets NEMA MG 1, Part 31.

Hp	Base Speed RPM	C.H. Speed RPM	NEMA Frame	Catalog Number	XP Cls/Grp	Temp Code	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1/3	1800	2700	56C	**IDXM7002**	②	T3C	1,190	L1	14.30	43	80	230/460	0.55	
1/2	1800	2700	56C	**IDXM7006**	②	T3C	1,223	L1	14.30	39	82.5	230/460	0.8	
3/4	1800	2700	56C	**IDXM7010**	②	T3C	1,250	L1	14.30	43	84	230/460	1.1	
1	1800	2700	143TC	**IDXM7014T**	②	T3C	1,392	L1	14.30	52	85.5	230/460	1.5	
1 1/2	1800	2700	145TC	**IDXM7034T**	②	T3C	1,442	L1	15.20	60	86.5	230/460	2.2	
2	1800	2700	145TC	**IDXM7037T**	②	T3C	1,577	L1	16.10	63	88.5	230/460	2.8	

② = Class I, Group D, Class II, Group F & G

CAUTION: Explosion-proof motors have a tight fit between mating parts to ensure the integrity of the explosion-proof enclosure. This can lead to an accumulation of moisture inside the motors due to condensation. Care should be used when selecting an explosion-proof motor, especially when installed outdoors and on intermittent duty.

Explosion Proof, Inverter Duty, Class I, Group C&D; Class II, Group F&G T3C (160°C) Temperature Code, 4:1 CT, 10:1 VT

3 thru 75 Hp NEMA 182T thru 365T

Applications: Designed for Variable Speed, Foot or Flanged mounted applications where hazardous fumes are present requiring Div 1 UL listed and/or CSA approved enclosures.

Features: UL and CSA approved for hazardous locations. Division 1, Class I, Group C & D, Class II, Groups F & G, Temperature Code T3C (160°C) 4:1 CT, 10:1 VT. The premium efficient electrical design features Class F insulation system that meets the requirements of NEMA MG1 Part 31.4.4.2. Motor has a 1.0 service factor on inverter power and a 1.15 service factor on sine wave power. Motor winding design includes thermostats. These Division 1 motors are built with rugged all cast iron construction. The cast iron conduit box is threaded on to the motor frame and has a threaded lead input opening.

Hp	Base Speed RPM	C.H. Speed RPM	NEMA Frame	Catalog Number	XP Cls/Grp	Temp Code	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
Foot Mounted														
3	1800	2700	L182T	**IDXM7542T-C**	⑤	T3C	1,577	L1	17.12	175	89.5	230/460	4.3	20
5	1800	2700	L184T	**IDXM7544T-C**	⑤	T3C	1,902	L1	17.12	225	89.5	230/460	7.1	20
7.5	1800	2700	L213T	**IDXM7547T-C**	⑤	T3C	2,468	L1	20.12	250	91.7	230/460	9.5	20
10	1800	2700	L215T	**IDXM7570T-C**	⑤	T3C	3,419	L1	20.12	300	91.7	230/460	12.7	20
15	1800	2700	254T	**IDXM7554T-C**	⑤	T3C	3,846	L1	24.56	350	92.4	230/460	17.8	20
20	1800	2700	256T	**IDXM7556T-C**	⑤	T3C	5,044	L1	24.56	400	93	230/460	24.3	20
25	1800	2700	284T	**IDXM7558T-C**	⑤	T3C	6,700	L1	27.44	450	93.6	230/460	30.6	20
30	1800	2700	286T	**IDXM7560T-C**	⑤	T3C	8,060	L1	27.44	500	93.6	230/460	37.4	20
40	1800	2700	324T	**IDXM7562T-C**	⑤	T3C	10,723	L1	30.44	825	94.1	230/460	47.8	20
50	1800	2700	326T	**IDXM7564T-C**	⑤	T3C	12,375	L1	30.44	900	94.5	230/460	59.4	20
60	1800	2700	364T	**IDXM7566T-C**	⑤	T3C	14,266	L1	33.44	965	95	230/460	68	20
75	1800	2700	365T	**IDXM7568T-C**	⑤	T3C	14,725	L1	33.44	1326	95.4	230/460	85.9	20
C-Face Foot Mounted														
3	1800	2700	L182TC	**IDXCM7542T-C**	⑤	T3C	1,892	L1	17.88	175	89.5	230/460	4.3	20
5	1800	2700	L184TC	**IDXCM7544T-C**	⑤	T3C	2,217	L1	17.88	225	89.5	230/460	7.1	20
7.5	1800	2700	L213TC	**IDXCM7547T-C**	⑤	T3C	2,809	L1	20.88	250	91.7	230/460	9.5	20
10	1800	2700	L215TC	**IDXCM7570T-C**	⑤	T3C	3,760	L1	20.88	300	91.7	230/460	12.7	20
15	1800	2700	254TC	**IDXCM7554T-C**	⑤	T3C	4,359	L1	25.06	350	92.4	230/460	17.8	20
20	1800	2700	256TC	**IDXCM7556T-C**	⑤	T3C	5,557	L1	25.06	400	93	230/460	24.3	20
25	1800	2700	284TC	**IDXCM7558T-C**	⑤	T3C	7,558	L1	27.44	450	93.6	230/460	30.6	20
30	1800	2700	286TC	**IDXCM7560T-C**	⑤	T3C	8,918	L1	27.44	500	93.6	230/460	37.4	20
40	1800	2700	324TC	**IDXCM7562T-C**	⑤	T3C	11,963	L1	30.44	825	94.1	230/460	47.8	20
50	1800	2700	326TC	**IDXCM7564T-C**	⑤	T3C	13,615	L1	30.44	900	94.5	230/460	59.4	20
60	1800	2700	364TC	**IDXCM7566T-C**	⑤	T3C	15,841	L1	33.44	910	95	230/460	68	20
75	1800	2700	365TC	**IDXCM7568T-C**	⑤	T3C	16,300	L1	33.44	965	95.4	230/460	85.9	20

Cast Iron Frame (a) See notes on the last page of this catalog.

⑤ = Class I, Group C & D, Class II, Group F & G

CAUTION: Explosion-proof motors have a tight fit between mating parts to ensure the integrity of the explosion-proof enclosure. This can lead to an accumulation of moisture inside the motors due to condensation. Care should be used when selecting an explosion-proof motor, especially when installed outdoors and on intermittent duty.

Jet Pump, Single Phase, TEFC

1/3 thru 2 Hp NEMA 56J

Applications: Residential and industrial pumps, swimming pool pumps, etc.

Features: Diecast aluminum end plates with machined steel bearing seat insert. Stainless steel shaft extension, and slotted non-drive end shaft. Catalog numbers ending with “A” have automatic thermal overload.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	“C” Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
Foot Mounted											
1/3	1800	56J	**CJL3501A**	423	K	11.84	23	60	115/230	3	30
1/2	1800	56J	**CJL3504A**	498	K	12.47	28	68	115/230	3.7	30
3/4	1800	56J	**CJL3507A**	607	K	12.97	35	74	115/230	4.1	30
1	3600	56J	**CJL3509A**	614	K	13.74	39	66	115/230	6	
1.5	3600	56J	**CJL3513A**	675	K	13.74	47	70	115/230	8.3	
2	3600	56J	**CJL3515A**	793	K	14.62	51	74	115/230	11.5	
Footless											
1/3	3600	56J	**JL3405A**	313	K	11.85	19	60	115/230	3	
	1800	56J	**JL3501A**	391	K	11.85	22	60	115/230	3	30
1/2	3600	56J	**JL3503A**	359	K	12.85	26	62	115/230	3.7	30
	1800	56J	**JL3504A**	454	K	12.85	27	68	115/230	3.7	30
3/4	3600	56J	**JL3506A**	427	K	12.85	29	66	115/230	5.4	30
	1800	56J	**JL3507A**	539	K	12.97	33	74	115/230	4.1	30
1	3600	56J	**JL3509A**	522	K	13.74	42	66	115/230	6	
	1800	56J	**JL3510A**	619	K	13.74	40	67	115/230	6.2	
1 1/2	3600	56J	**JL3513A**	619	K	13.74	45	70	115/230	8.3	30
	1800	56J	**JL3514A**	679	K	14.62	51	75.5	115/230	8	
2	3600	56J	**JL3515A**	727	K	14.62	54	74	115/230	11.5	
	1800	56J	**JL3516A**	773	K	14.62	52	78	115/230	8.6	20

(a) See notes on the last page of this catalog.
All threaded shaft, single phase motors are connected single rotation - CCW when viewing drive end.
ALL ABOVE RATINGS CAN BE UL 1081 COMPLIANT THROUGH MOD EXPRESS. SEE M30A IN THE MOD EXPRESS PROGRAM SECTION OF THIS CATALOG FOR MORE DETAILS.

Jet Pump, Single Phase, ODP

1/3 thru 3 Hp

56J and 56C

Applications: Residential and industrial pumps, swimming pool pumps, etc.

Features: Diecast aluminum end plates with machined steel bearing seat insert, drip cover, and stainless steel shaft extension on 56J frames. Catalog numbers ending with "A" have automatic thermal overload.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
56J, Foot Mounted											
1/3	3600	56J	**CJL1205A**	308	K	11.91	23	58	115/230	3.1	
	1800	56J	**CJL1301A**	462	K	11.89	23	60	115/208-230	3	30
1/2	3600	56J	**CJL1303A**	320	K	12.51	30	66	115/230	3.7	
	1800	56J	**CJL1304A**	522	K	12.14	25	62	115/230	4.2	30
3/4	3600	56J	**CJL1306A**	408	K	13.39	30	69	115/230	5.5	
	1800	56J	**CJL1307A**	599	K	12.25	35	63	115/230	5.4	
1	3600	56J	**CJL1309A**	418	K	13.89	32	65	115/208-230	7	30
1 1/2	3600	56J	**CJL1313A**	580	K	13.89	37	78.5	115/230	6.5	
2	3600	56J	**CJL1317A**	776	K	13.25	45	70	115/230	13	30
56J, Footless											
1/3	3600	56J	**JL1205A**	270	K	11.89	25	58	115/230	3.1	
	1800	56J	**JL1301A**	311	K	11.89	23	60	115/230	3	30
1/2	3600	56J	**JL1303A**	304	K	12.51	26	66	115/230	3.7	
	1800	56J	**JL1304A**	366	K	12.14	25	62	115/230	4.2	30
3/4	3600	56J	**JL1306A**	400	K	13.39	33	69	115/230	5.5	
	1800	56J	**JL1307A**	462	K	13.89	33	68	115/230	5.1	30
1	3600	56J	**JL1309A**	414	K	13.89	32	65	115/230	7	30
1 1/2	3600	56J	**JL1313A**	578	K	13.89	36	78.5	115/230	6.5	
2	3600	56J	**JL1317A**	713	K	13.25	45	70	115/230	13	30
3	3600	56J	**JL1323A**	732	K	14.13	52	82.5	230	13	30
56C, Footless											
1/3	3600	56C	**VL1205A**	293	K	11.32	23	54	115/230	3.5	
	1800	56C	**VL1301A**	352	K	11.32	22	60	115/230	3	30
1/2	3600	56C	**VL1303A**	337	K	12.00	26	66	115/230	3.7	
	1800	56C	**VL1304A**	420	K	11.57	25	62	115/230	4.2	30
3/4	3600	56C	**VL1306A**	401	K	12.88	30	69	115/230	5.5	
	1800	56C	**VL1307A**	548	K	11.75	34	63	115/230	5.4	
1	3600	56C	**VL1309A**	423	K	13.40	32	65	115/208-230	7	30
	1800	56C	**VL1318A**	581	K	12.75	41	67	115/230	6.2	
1 1/2	3600	56C	**VL1313A**	578	K	13.01	35	78.5	115/230	6.5	
2	3600	56C	**VL1317A**	748	K	12.75	44	70	115/230	13	30
3	3600	56C	**VL1323A**	773	K	13.63	51	82.5	230	13	30

(a) See notes on the last page of this catalog.
All threaded shaft, single phase motors are connected single rotation - CCW when viewing drive end.
ALL ABOVE RATINGS CAN BE UL 1081 COMPLIANT THROUGH MOD EXPRESS. SEE M30A IN THE MOD EXPRESS PROGRAM SECTION OF THIS CATALOG FOR MORE DETAILS.

Jet Pump, Three Phase, TEFC, C-Face

1/3 thru 3 Hp **NEMA 56J**

Applications: Residential and industrial pumps, swimming pool pumps, etc.

Features: Diecast aluminum end plates with machined steel bearing seat insert, stainless steel shaft extension, and slotted non-driven end shaft.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
Footless											
1/3	3600	56J	**JM3457**	351	K	11.84	19	62	230/460	0.8	30
	1800	56J	**JM3458**	380	K	11.84	21	68	230/460	0.8	30
1/2	3600	56J	**JM3460**	380	K	11.84	21	70	230/460	1.2	30
	1800	56J	**JM3461**	448	K	11.84	23	74	230/460	1	30
3/4	3600	56J	**JM3463**	416	K	11.84	23	74	208-230/460	1.5	
	1800	56J	**JM3542**	484	K	11.84	26	75.5	208-230/460	1.5	
1	3600	56J	**JM3545**	496	K	11.84	26	77	230/460	1.6	30
	1800	56J	**JM3546**	514	K	13.34	31	78.5	208-230/460	1.7	
1 1/2	3600	56J	**JM3550**	514	K	12.47	29	80	230/460	2.3	1,30
	1800	56J	**JM3554**	565	K	12.74	35	81.5	208-230/460	2.3	1
2	3600	56J	**JM3555**	651	K	13.74	41	80	230/460	2.7	30
	1800	56J	**JM3558**	630	K	13.74	40	82.5	208-230/460	3	1
3	3600	56J	**JM3559**	707	K	13.74	44	82.5	208-230/460	3.8	1
Foot Mounted											
1/2	1800	56J	**CJM3538**	475	K	11.84	23	74	230/460	1	30
3/4	1800	56J	**CJM3542**	503	K	11.84	25	75.5	208-230/460	1.5	

(a) See notes on the last page of this catalog.

ALL ABOVE RATINGS CAN BE UL 1081 COMPLIANT THROUGH MOD EXPRESS. SEE M30A IN THE MOD EXPRESS PROGRAM SECTION OF THIS CATALOG FOR MORE DETAILS.

Jet Pump, Three Phase, ODP, C-Face

1/3 thru 3 Hp NEMA 56J

Applications: Residential and industrial pumps, swimming pool pumps, etc.

Features: Diecast aluminum end plates with machined steel bearing seat insert, drip cover, and stainless steel shaft extension.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
Footless											
1/3	3600	56J	**JM3006**	320	K	11.72	19	62	230/460	0.8	30
1/2	3600	56J	**JM3107**	338	K	11.72	21	70	230/460	1.2	30
	1800	56J	**JM3108**	404	K	11.85	23	74	230/460	1	30
3/4	3600	56J	**JM3111**	401	K	11.72	23	74	208-230/460	1.5	
	1800	56J	**JM3112**	446	K	12.34	27	75.5	208-230/460	1.5	
1	3600	56J	**JM3115**	446	K	12.34	32	77	230/460	1.6	30
	1800	56J	**JM3116**	489	K	13.22	30	78.5	208-230/460	1.7	1
1 1/2	3600	56J	**JM3120**	532	K	13.22	30	74	230/460	2.2	30
	1800	56J	**JM3154**	582	K	13.72	34	77	208-230/460	2.8	
2	3600	56J	**JM3155**	632	K	13.72	35	82.5	230/460	2.7	30
3	3600	56J	**JM3158**	750	K	13.72	42	80	208-230/460	4	
Foot Mounted											
1/3	1800	56J	**CJM3104**	383	K	11.85	22	68	230/460	0.8	30
1/2	3600	56J	**CJM3107**	351	K	11.72	22	70	230/460	1.2	30
	1800	56J	**CJM3108**	428	K	11.72	24	74	230/460	1	30
3/4	3600	56J	**CJM3111**	401	K	11.72	28	74	208-230/460	1.5	
	1800	56J	**CJM3112**	459	K	12.34	27	75.5	208-230/460	1.5	
1	3600	56J	**CJM3115**	448	K	12.34	29	77	230/460	1.6	30
1 1/2	3600	56J	**CJM3120**	546	K	13.22	31	81.5	230/460	2	30
2	3600	56J	**CJM3155**	649	K	13.72	34	82.5	230/460	2.7	30
3	3600	56J	**CJM3158**	768	K	13.74	41	80	208-230/460	4	

(a) See notes on the last page of this catalog.

ALL ABOVE RATINGS CAN BE UL 1081 COMPLIANT THROUGH MOD EXPRESS. SEE M30A IN THE MOD EXPRESS PROGRAM SECTION OF THIS CATALOG FOR MORE DETAILS.

Washdown, Jet Pump, Three Phase, TEFC, C-Face

3/4 thru 3 Hp — NEMA 56J — IP55

Applications: Industrial pumping applications in wet or humid environments, especially in food and beverage processing facilities in which equipment is cleaned on a regular basis.

Features: 300 series stainless steel shaft and hardware. Contact lip seal and V-ring slinger on drive end, easily removable drain plugs for thorough drainage, neoprene gaskets, precision die cast aluminum rotor coated with epoxy primer. Double-sealed ball bearings with moisture-resistant grease. White epoxy exterior paint.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
Footless											
3/4	3600	56J	**JWDM3463**	634	WD	12.73	33	68	208-230/460	1.4	1
1	3600	56J	**JWDM3545**	769	WD	12.73	35	72	208-230/460	2	1
1 1/2	3600	56J	**JWDM3550**	802	WD	12.73	38	75.5	208-230/460	2.4	1
2	3600	56J	**JWDM3555**	905	WD	13.73	43	80	230/460	2.7	30
3	3600	56J	**JWDM3559**	1109	WD	13.73	48	82.5	208-230/460	3.8	1
Foot Mounted											
3/4	3600	56J	**CJWDM3463**	639	WD	12.72	33	68	208-230/460	1.4	1
1	3600	56J	**CJWDM3545**	774	WD	12.72	35	72	208-230/460	2	1
1 1/2	3600	56J	**CJWDM3550**	807	WD	12.72	38	75.5	208-230/460	2.4	1
2	3600	56J	**CJWDM3555**	910	WD	13.73	43	80	230/460	2.7	30
3	3600	56J	**CJWDM3559**	1114	WD	13.73	48	82.5	208-230/460	3.8	1

(a) See notes on the last page of this catalog.

Square Flange Pump, ODP

1/2 thru 2 Hp — NEMA 56Y thru 56YZ

Applications: Pump applications where square flange mounting plate is required, such as swimming pools.

Features: Ball bearings, stainless steel shaft extension, long life windings. Catalog numbers ending with "A" have automatic thermal overload.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
Single Phase											
1/2	3600	56Y	**JSL325A**	376	K	11.35	24	70	115/230	3.3	30
3/4	3600	56Y	**JSL425A**	399	K	11.91	26	64	115/230	5.1	30
1	3600	56Y	**JSL525A**	426	K	12.72	30	70	115/230	6.3	30
1 1/2	3600	56YZ	**JSL625A**	580	K	14.44	42	72	115/230	9	30
2	3600	56YZ	**JSL725A**	582	K	14.44	47	74	115/230	11	30
Three Phase											
1/2	3600	56YZ	**JSM3107**	338	K	11.40	21	70	230/460	1.2	30
3/4	3600	56YZ	**JSM3111**	400	K	11.40	24	74	208-230/460	1.5	
1	3600	56YZ	**JSM3115**	443	K	12.02	27	77	230/460	1.6	30
1 1/2	3600	56YZ	**JSM3120**	528	K	12.77	31	81.5	230/460	2	30
2	3600	56YZ	**JSM3155**	625	K	13.40	35	82.5	230/460	2.7	30

(a) See notes on the last page of this catalog.

Close-Coupled Pump, Single Phase, TEFC and ODP

3 thru 10 Hp **NEMA 182 thru 215 (JM, JP, TCZ)**

Applications: Pumping systems where only single phase power is available.

Features: Heavy-gauge steel frame construction, corrosion resistant finish, oversized ball bearings with locked construction to minimize axial shaft movement.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
Totally Enclosed Fan Cooled, Mechanical Seal, Type JM											
3	3600	182JM	**JML3606T**	1,035	L1	18.06	79	76	115/230	14.5	1, 30
5	3600	184JM	**JML3608T**	1,379	L1	19.55	93	83	230	19.5	2, 20
Open Drip Proof, Mechanical Seal, Type JM											
3	3600	182JM	**JML1406T**	987	L1	16.50	69	78	115/208-230	14	
	1800	184JM	**JML1408T**	1,132	L1	16.50	80	78	115/230	16	30
5	3600	184JM	**JML1409T**	1,394	L1	16.50	81	80	230	21.5	1, 30
	1800	213JM	**JML1508T**	1,606	L1	18.19	115	77	230	27	
7 1/2	3600	213JM	**JML1509T**	2,000	L1	18.19	116	81	230	37	30
	1800	215JM	**JML1510T**	2,115	L1	19.31	142	85.5	230	31	30
10	3600	215JM	**JML1511T**	2,459	L1	19.31	141	83	230	46	20, 30
	1800	215JM	**JML1512T**	2,618	L1	20.95	150	84	230	41	20, 30
Open Drip Proof, Packed Pump, Type JP											
3	3600	182JP	**JPL1406T**	987	L1	19.57	76	78	115/230	14	30
	1800	184JP	**JPL1408T**	1,132	L1	19.57	87	78	115/230	16	30
5	3600	184JP	**JPL1409T**	1,394	L1	19.57	88	80	230	21.5	1, 30
	1800	213JP	**JPL1508T**	1,606	L1	22.07	117	77	230	27	
7 1/2	3600	213JP	**JPL1509T**	2,000	L1	22.07	121	81	230	37	30
	1800	215JP	**JPL1510T**	2,115	L1	23.19	143	85.5	230	31	30
10	3600	215JP	**JPL1511T**	2,459	L1	23.19	148	83	230	46	20, 30
	1800	215JP	**JPL1512T**	2,618	L1	20.95	142	84	230	41	20, 30
Open Drip Proof, West Coast Fit, Type TCZ											
3	3600	182TCZ	**WCL1406T**	994	L1	19.69	81	78	115/230	14	30
	1800	184TCZ	**WCL1408T**	1,140	L1	19.69	91	78	115/230	16	30
5	3600	184TCZ	**WCL1409T**	1,407	L1	19.69	91	75	230	23	1, 30
	1800	213TCZ	**WCL1508T**	1,620	L1	21.25	116	77	230	27	
7 1/2	3600	213TCZ	**WCL1509T**	2,013	L1	21.25	117	81	230	37	30
10	3600	215TCZ	**WCL1511T**	2,482	L1	22.38	143	83	230	46	20, 30

(a) See notes on the last page of this catalog.

Close-Coupled Pump, Three Phase, TEFC and ODP, C-Face, Foot Mounted, With Internal Aegis® Bearing Protection Ring

1 thru 20 Hp — NEMA 143JM thru 256JM

Applications: Commercial and industrial pump motor applications where adjustable speed drives are utilized.

Features: Class H insulated motor with AEGIS® bearing protection ring installed internally. Oversized ball bearings with locked drive end construction to minimize endplay. All models meet or exceed NEMA Premium® efficiencies, are Inverter Ready, and have a 3-year warranty.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
Totally Enclosed Fan Cooled											
3	3600	182JM	**EJMM3610T-G**	1,157	L1	16.91	60	86.5	208-230/460	3.6	
	1800	182JM	**EJMM3611T-G**	1,252	L1	18.06	76	89.5	208-230/460	4.2	
5	3600	184JM	**EJMM3613T-G**	1,333	L1	18.06	78	88.5	208-230/460	5.9	
	1800	184JM	**EJMM3615T-G**	1,255	L1	19.56	93	89.5	208-230/460	6.7	
7 1/2	3600	213JM	**EJMM3709T-G**	1,735	L1	19.81	124	89.5	208-230/460	9	
	1800	213JM	**EJMM3710T-G**	1,854	L1	20.94	134	91.7	230/460	9.4	30
10	3600	215JM	**EJMM3711T-G**	1,953	L1	19.81	124	90.2	208-230/460	11.8	
	1800	215JM	**EJMM3714T-G**	2,133	L1	22.44	165	91.7	208-230/460	12	
15	3600	254JM	**EJMM2394T-G**	3,384	L1	25.30	260	91	230/460	17.5	30
	1800	254JM	**EJMM2333T-G**	3,357	L1	25.30	265	92.4	230/460	18.1	30
20	3600	256JM	**EJMM4106T-G**	3,697	L1	25.30	274	91	230/460	23	30
	1800	256JM	**EJMM2334T-G**	3,750	L1	25.30	308	93	230/460	24	30
Open Drip Proof											
1	1800	143JM	**EJMM3116T-G**	873	L1	13.75	37	85.5	208-230/460	1.5	
1 1/2	1800	145JM	**EJMM3154T-G**	931	L1	13.75	41	86.5	230/460	2.2	30
2	1800	145JM	**EJMM3157T-G**	1,003	L1	14.25	44	86.5	230/460	2.9	30
3	3600	145JM	**EJMM3158T-G**	1,116	L1	15.13	51	85.5	230/460	3.8	30
	1800	182JM	**EJMM3211T-G**	1,134	L1	16.50	74	89.5	230/460	4.2	30
5	3600	182JM	**EJMM3212T-G**	1,340	L1	15.12	64	86.5	208-230/460	6	
	1800	184JM	**EJMM3218T-G**	1,255	L1	18.00	88	89.5	208-230/460	6.6	
7 1/2	3600	184JM	**EJMM3219T-G**	1,546	L1	16.50	78	88.5	208-230/460	8.6	
	1800	213JM	**EJMM3311T-G**	1,831	L1	18.19	120	91	230/460	9.7	
10	3600	213JM	**EJMM3312T-G**	1,984	L1	18.19	121	89.5	208-230/460	12	
	1800	215JM	**EJMM3313T-G**	1,959	L1	19.31	132	91.7	230/460	12.5	
15	3600	215JM	**EJMM3314T-G**	2,479	L1	18.19	134	90.2	230/460	17.5	
	1800	254JM	**EJMM2513T-G**	2,804	L1	23.19	213	93	230/460	17.7	30

(a) See notes on the last page of this catalog.

Cast Iron Frame

Close-Coupled Pump, Three Phase, TEFC, C-Face

1 thru 50 Hp

NEMA 143JM thru 326JP

Applications: Applications for circulating and transferring fluids. Mounting designed to support pump unit.

Features: Over-sized ball bearings with locked drive end construction to minimize endplay. Super-E® motors have NEMA Premium® efficiency.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
Foot Mounted											
1	1800	143JM	**EJMM3546T**	827	L1	15.43	40	85.5	208-230/460	1.5	1
		143JM	**JMM3546T**	657	L1	15.43	39	82.5	208-230/460	1.56	1
1 1/2	3600	143JM	**EJMM3550T**	822	L1	15.43	47	84	208-230/460	1.9	1
		143JM	**JMM3550T**	690	L1	15.43	42	82.5	208-230/460	2.1	1
	1800	145JM	**EJMM3554T**	881	L1	15.43	44	86.5	208-230/460	2.2	1
		145JM	**JMM3554T**	690	L1	15.43	43	84	208-230/460	2.4	1
		145JP	**JPM3554T**	690	L1	18.50	44	84	208-230/460	2.4	1
2	3600	145JM	**EJMM3555T**	882	L1	15.43	47	85.5	208-230/460	2.5	1
		145JM	**JMM3555T**	769	L1	15.43	47	84	208-230/460	2.6	1
		145JP	**JPM3555T**	769	L1	18.50	48	84	208-230/460	2.6	1
	1800	145JM	**EJMM3558T**	900	L1	15.43	50	86.5	208-230/460	2.9	1
		145JM	**JMM3558T**	721	L1	15.43	46	84	208-230/460	3.1	1
		145JP	**JPM3558T**	721	L1	18.50	42	84	208-230/460	3.1	1
3	3600	145JM	**EJMM3559T**	947	L1	16.31	54	86.5	208-230/460	3.6	1
		145JM	**JMM3559T**	862	L1	16.31	53	85.5	208-230/460	3.7	1
		145JP	**JPM3559T**	862	L1	19.37	54	85.5	208-230/460	3.7	1
		182JM	**EJMM3610T**	949	L1	16.81	56	86.5	208-230/460	3.6	1
		182JM	**JMM3610T**	894	L1	16.84	56	85.5	208-230/460	3.7	1
		182JP	**JPM3610T**	894	L1	19.87	58	85.5	208-230/460	3.7	1
	1800	182JM	**EJMM3611T**	1,044	L1	18.06	76	89.5	208-230/460	4.2	1
		182JM	**JMM3611T**	862	L1	18.18	66	87.5	208-230/460	4.2	1
		182JP	**JPM3611T**	862	L1	21.28	67	87.5	208-230/460	4.2	1
5	3600	184JM	**EJMM3613T**	1,125	L1	18.06	79	88.5	208-230/460	5.9	1
		184JM	**JMM3613T**	1,104	L1	18.06	74	87.5	208-230/460	5.8	1
		184JP	**JPM3613T**	1,104	L1	21.43	77	87.5	208-230/460	5.8	1
	1800	184JM	**EJMM3615T**	1,047	L1	19.56	93	89.5	208-230/460	6.7	1
		184JM	**JMM3615T**	964	L1	19.56	85	87.5	208-230/460	6.8	1
		184JP	**JPM3615T**	964	L1	22.93	88	87.5	208-230/460	6.8	1
7 1/2	3600	184JM	**EJMM3616T**	1,392	L1	19.56	101	89.5	208-230/460	8.4	1
		184JM	**JMM3616T**	1,249	L1	19.56	91	88.5	208-230/460	8.7	1
		184JP	**JPM3616T**	1,249	L1	22.93	93	88.5	208-230/460	8.7	1
		213JM	**EJMM3709T**	1,474	L1	19.76	125	89.5	208-230/460	9	1
		213JM	**JMM3709T**	1,407	L1	20.40	98	88.5	208-230/460	8.7	1
		213JP	**JPM3709T**	1,407	L1	23.64	120	88.5	208-230/460	9.5	1
		213TCZ	**WCM3709T**	1,374	L1	23.45	100	88.5	208-230/460	8.7	1
	1800	213JM	**EJMM3710T**	1,593	L1	20.88	134	91.7	230/460	9.4	1, 30
		213JM	**JMM3710T**	1,233	L1	19.76	125	89.5	208-230/460	10.1	1
		213JP	**JPM3710T**	1,262	L1	23.64	127	89.5	208-230/460	10.1	1
		213TCZ	**WCM3710T**	1,233	L1	22.82	124	89.5	208-230/460	10.1	1
10	3600	215JM	**EJMM3711T**	1,692	L1	19.76	130	90.2	208-230/460	11.8	1
		215JM	**JMM3711T**	1,682	L1	19.76	124	89.5	208-230/460	12	20
		215JP	**JPM3711T**	1,682	L1	23.64	128	89.5	208-230/460	12	20
		215TCZ	**WCM3711T**	1,644	L1	22.82	126	89.5	208-230/460	12	20
	1800	215JM	**EJMM3714T**	1,872	L1	22.39	165	91.7	208-230/460	12	1
		215JP	**EJPM3714T**	1,872	L1	26.29	165	91.7	208-230/460	12	1
		215JM	**JMM3714T**	1,556	L1	20.88	137	89.5	208-230/460	13.5	1
		215JP	**JPM3714T**	1,556	L1	24.79	146	89.5	208-230/460	13.5	1
		215TCZ	**WCM3714T**	1,522	L1	23.95	136	89.5	208-230/460	13.5	1

(a) See notes on the last page of this catalog.

Close-Coupled Pump, Three Phase, TEFC, C-Face

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
15	3600	215JM	**JMM3713T**	2,216	L1	21.64	160	90.2	208-230/460	17.3	20
		215JP	**JPM3713T**	2,216	L1	25.54	160	90.2	208-230/460	17.3	20
		215TCZ	**WCM3713T**	1,960	L1	24.70	160	90.2	208-230/460	17.3	20
		254JM	**EJMM2394T**	3,091	L1	25.30	257	91	230/460	17.5	1, 30
		254JP	**EJPM2394T**	3,091	L1	28.16	260	91	208-230/460	17.8	1
		254JM	**JMM2394T**	2,915	L1	23.07	225	90.2	208-230/460	17.2	1
		254JP	**JPM2394T**	2,915	L1	25.95	225	90.2	208-230/460	17.2	1
	1800	254JM	**EJMM2333T**	3,064	L1	25.30	265	92.4	230/460	18.5	1, 30
		254JP	**EJPM2333T**	3,064	L1	28.16	265	92.4	208-230/460	18.5	1
		254JM	**JMM2333T**	2,842	L1	23.07	236	91	208-230/460	18.5	1
		254JP	**JPM2333T**	2,842	L1	25.95	236	91	208-230/460	18.5	1
20	3600	256JM	**EJMM4106T**	3,404	L1	25.30	281	91	230/460	23	1, 30
		256JP	**EJPM4106T**	3,404	L1	28.16	264	91	208-230/460	23	1
		256JM	**JMM4106T**	3,208	L1	24.83	255	90.2	208-230/460	23	1
		256JP	**JPM4106T**	3,208	L1	27.70	255	90.2	208-230/460	23	1
	1800	256JM	**EJMM2334T**	3,457	L1	25.30	304	93	230/460	24	1, 30
		256JP	**EJPM2334T**	3,457	L1	28.16	300	93	230/460	24	1, 30
		256JM	**JMM2334T**	3,009	L1	24.82	245	91	230/460	25	20, 30
		256JP	**JPM2334T**	3,009	L1	27.70	245	91	230/460	25	20, 30
25	3600	284JM	**EJMM4107T**	3,955	L1	26.96	353	91.7	230/460	29	20
		284JP	**EJPM4107T**	3,955	L1	29.84	349	91.7	230/460	29	20
		284JM	**JMM4107T**	3,603	L1	26.96	342	91	230/460	28	1, 30
		284JP	**JPM4107T**	3,603	L1	29.84	333	91	230/460	28	1, 30
	1800	284JM	**EJMM4103T**	4,097	L1	28.64	387	93.6	230/460	30	1, 30
		284JP	**EJPM4103T**	4,097	L1	31.51	412	93.6	230/460	30	1, 30
		284JM	**JMM4103T**	3,516	L1	26.96	366	92.4	230/460	30	1, 30
		284JP	**JPM4103T**	3,516	L1	29.84	356	92.4	230/460	30	1, 30
30	3600	286JM	**EJMM4108T**	5,439	L1	28.64	406	91.7	208-230/460	33	1
		286JP	**EJPM4108T**	5,439	L1	31.51	405	91.7	208-230/460	35	1
		286JM	**JMM4108T**	4,716	L1	26.96	370	91	230/460	34	1, 30
		286JP	**JPM4108T**	4,716	L1	29.84	359	91	208-230/460	34	1
	1800	286JM	**EJMM4104T**	4,854	L1	28.64	422	93.6	230/460	36	1, 30
		286JP	**EJPM4104T**	4,854	L1	31.51	452	93.6	230/460	36	1, 30
		286JM	**JMM4104T**	4,333	L1	26.96	382	92.4	230/460	36	1, 30
		286JP	**JPM4104T**	4,333	L1	29.84	386	92.4	230/460	36	1, 30
40	3600	324JM	**EJMM4109T**	6,159	L1	30.64	487	92.4	208-230/460	45	1
		324JP	**EJPM4109T**	6,159	L1	33.51	498	92.4	208-230/460	45	1
		324JM	**JMM4109T**	5,661	L1	30.64	460	91.7	230/460	45	1, 30
		324JP	**JPM4109T**	5,661	L1	33.51	468	91.7	230/460	45	1, 30
	1800	324JM	**EJMM4110T**	6,310	L1	30.65	586	94.1	230/460	48	1, 30
		324JP	**EJPM4110T**	6,310	L1	33.41	602	94.1	230/460	48	1, 30
		324JM	**JMM4110T**	5,456	L1	30.64	486	93	230/460	47	1, 30
		324JP	**JPM4110T**	5,456	L1	33.51	496	93	230/460	47	1, 30
50	3600	326JM	**EJMM4114T**	7,453	L1	30.65	595	93	208-230/460	56	1
		326JP	**EJPM4114T**	7,453	L1	33.41	604	93	230/460	56	1, 30
		326JM	**JMM4114T**	6,174	L1	30.64	507	92.4	230/460	56	1, 30
		326JP	**JPM4114T**	6,174	L1	33.51	517	92.4	230/460	56	1, 30
	1800	326JM	**EJMM4115T**	7,585	L1	30.65	624	94.5	230/460	58	1, 30
		326JP	**EJPM4115T**	7,585	L1	33.41	646	94.5	230/460	58	1, 30
		326JM	**JMM4115T**	6,396	L1	30.65	591	93	230/460	59	1, 30
		326JP	**JPM4115T**	6,396	L1	33.41	595	93	230/460	59	1, 30

(a) See notes on the last page of this catalog.

Cast Iron Frame

Close-Coupled Pump, Three Phase, TEFC, C-Face

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
Footless											
1	1800	143JM	**VEJMM3546T**	691	L1	14.43	38	85.5	208-230/460	1.5	1
		143JM	**VJMM3546T**	670	L1	14.43	35	82.5	208-230/460	1.56	1
1 1/2	1800	145JM	**VEJMM3554T**	729	L1	15.43	45	86.5	208-230/460	2.2	1
		145JM	**VJMM3554T**	701	L1	15.43	40	84	208-230/460	2.4	1
2	1800	145JM	**VEJMM3558T**	873	L1	15.43	44	86.5	208-230/460	2.9	1
		145JM	**VJMM3558T**	733	L1	15.43	43	84	208-230/460	3.1	1
3	1800	182JM	**VEJMM3611T**	996	L1	18.05	74	89.5	208-230/460	4.2	1
		182JM	**VJMM3611T**	876	L1	18.20	61	87.5	208-230/460	4.2	1
5	1800	184JM	**VEJMM3615T**	1,149	L1	19.55	90	89.5	208-230/460	6.7	1
		184JM	**VJMM3615T**	981	L1	18.05	78	87.5	208-230/460	6.8	1
7 1/2	1800	213JM	**VEJMM3710T**	1,682	L1	20.92	136	91.7	230/460	9.4	1, 30
		213JM	**VJMM3710T**	1,274	L1	19.76	115	89.5	208-230/460	10.1	1
10	1800	215JM	**VEJMM3714T**	1,948	L1	22.40	165	91.7	208-230/460	12	1
		215JM	**VJMM3714T**	1,573	L1	20.92	132	89.5	208-230/460	13.5	1
15	1800	254JM	**VJMM2333T**	2,867	L1	21.82	236	91	208-230/460	18.5	1
20	1800	256JM	**VJMM2334T**	2,964	L1	25.28	267	91	230/460	24	1, 30

(a) See notes on the last page of this catalog.
Cast Iron Frame

Close-Coupled Pump, Three Phase, ODP, C-Face

1 thru 75 Hp — NEMA 143JM thru 365JP

Applications: Applications for circulating and transferring fluids. Mounting designed to support pump unit.

Features: Oversized ball bearings with locked drive end construction to minimize endplay. Furnished with rodent screens at both ends. EJMM and EJPM Super-E® motors have NEMA Premium® Efficiency.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
Foot Mounted											
1	1800	143JM	**EJMM3116T**	707	L1	13.75	38	85.5	208-230/460	1.5	1
		143JM	**JMM3116T**	607	L1	13.75	35	82.5	208-230/460	1.56	
		143JP	**JPM3116T**	607	L1	16.81	37	82.5	208-230/460	1.56	
1 1/2	3600	143JM	**JMM3120T**	632	L1	13.75	40	82.5	208-230/460	2.1	1
	1800	145JM	**EJMM3154T**	765	L1	13.75	38	86.5	230/460	2.2	1, 30
		145JM	**JMM3154T**	599	L1	13.75	38	84	208-230/460	2.4	
		145JP	**JPM3154T**	599	L1	16.81	39	84	208-230/460	2.4	
2	3600	145JM	**EJMM3155T**	846	L1	13.75	44	85.5	208-230/460	2.5	1
		145JM	**JMM3155T**	700	L1	13.75	42	84	208-230/460	2.6	
	1800	145JM	**EJMM3157T**	837	L1	14.25	44	86.5	230/460	2.9	1, 30
		145JM	**JMM3157T**	685	L1	13.75	42	84	208-230/460	3.15	
		145JP	**JPM3157T**	685	L1	16.81	43	84	208-230/460	3.15	
3	3600	145JM	**EJMM3158T**	950	L1	15.13	49	85.5	230/460	3.8	1, 30
		145JM	**JMM3158T**	742	L1	14.25	48	84	208-230/460	3.7	
		145JP	**JPM3158T**	742	L1	17.31	41	84	208-230/460	3.7	1
	1800	182JM	**EJMM3211T**	926	L1	16.50	72	89.5	230/460	4.2	1, 30
		182JM	**JMM3211T**	735	L1	16.25	63	86.5	208-230/460	4.1	1
		182JP	**JPM3211T**	735	L1	19.31	61	86.5	208-230/460	4.1	1

(a) See notes on the last page of this catalog.

Close-Coupled Pump, Three Phase, ODP, C-Face

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
5	3600	182JM	**EJMM3212T**	1,132	L1	15.12	64	86.5	208-230/460	6	1
		182JM	**JMM3212T**	834	L1	15.62	62	85.5	208-230/460	6.1	
		182JP	**JPM3212T**	834	L1	18.69	65	85.5	208-230/460	6.1	
		182TCZ	**WCM3212T**	818	L1	19.13	69	85.5	208-230/460	6.1	1
	1800	184JM	**EJMM3218T**	1,047	L1	18.00	87	89.5	208-230/460	6.6	1
		184JM	**JMM3218T**	795	L1	16.50	73	87.5	208-230/460	7.2	1
		184JP	**JPM3218T**	795	L1	19.56	74	87.5	208-230/460	7.2	1
	1200	215JM	**JMM3309T**	1,276	L1	18.19	124	87.5	208-230/460	7.6	
7 1/2	3600	184JM	**EJMM3219T**	1,338	L1	16.50	78	88.5	208-230/460	8.6	1
		184JM	**JMM3219T**	1,020	L1	16.50	71	87.5	208-230/460	8.7	1
		184JP	**JPM3219T**	1,020	L1	19.56	73	87.5	208-230/460	8.7	1
		184TCZ	**WCM3219T**	995	L1	19.69	83	87.5	208-230/460	8.7	1
	1800	213JM	**EJMM3311T**	1,570	L1	18.19	120	91	230/460	9.7	1, 30
		213JM	**JMM3311T**	1,155	L1	18.84	106	88.5	208-230/460	9.9	1
		213JP	**JPM3311T**	1,155	L1	20.94	124	88.5	208-230/460	10.1	1
	1200	254JM	**JMM2506T**	1,610	L1	21.81	160	88.5	208-230/460	11.2	1
10	3600	213JM	**EJMM3312T**	1,723	L1	18.19	120	89.5	208-230/460	12	1
		213JP	**EJPM3312T**	1,723	L1	20.94	122	89.5	208-230/460	12	1
		213JM	**JMM3312T**	1,387	L1	18.19	116	88.5	208-230/460	12.4	1
		213JP	**JPM3312T**	1,387	L1	20.94	120	88.5	208-230/460	12.4	1
		213TCZ	**WCM3312T**	1,356	L1	21.25	114	88.5	208-230/460	12.4	
	1800	215JM	**EJMM3313T**	1,698	L1	19.31	136	91.7	230/460	12.5	1, 30
		215JP	**EJPM3313T**	1,698	L1	22.07	138	91.7	208-230/460	12.5	1
		215JM	**JMM3313T**	1,372	L1	18.19	121	89.5	208-230/460	13.4	1
		215JP	**JPM3313T**	1,372	L1	22.10	127	89.5	208-230/460	13.4	1
	1200	256JM	**JMM2511T**	1,995	L1	24.69	242	90.2	230/460	14.7	30
15	3600	215JM	**EJMM3314T**	2,218	L1	18.19	131	90.2	208-230/460	17.5	1
		215JP	**EJPM3314T**	2,218	L1	20.94	134	90.2	208-230/460	17.5	1
		215JM	**JMM3314T**	1,864	L1	18.19	126	89.5	208-230/460	18	1
		215JP	**JPM3314T**	1,864	L1	20.94	131	89.5	208-230/460	18	1
		215TCZ	**WCM3314T**	1,830	L1	21.25	137	89.5	208-230/460	18	1
	1800	254JM	**EJMM2513T**	2,511	L1	23.19	214	93	230/460	17.7	1, 30
		254JP	**EJPM2513T**	2,511	L1	26.06	219	93	208-230/460	17.7	1
		254JM	**JMM2513T**	2,049	L1	21.06	155	91	208-230/460	19	1
		254JP	**JPM2513T**	2,049	L1	23.94	175	91	208-230/460	19	1
	1200	284JM	**JMM2524T**	2,602	L1	27.56	323	90.2	230/460	21.3	30
20	3600	254JM	**EJMM2514T**	2,793	L1	23.19	195	91	230/460	23.5	1, 30
		254JP	**EJPM2514T**	2,793	L1	26.06	220	91	230/460	23.5	1, 30
		254JM	**JMM2514T**	2,461	L1	23.19	195	90.2	208-230/460	24	
		254JP	**JPM2514T**	2,461	L1	26.06	206	90.2	230/460	24	30
	1800	256JM	**EJMM2515T**	3,008	L1	23.19	248	93	230/460	23.5	1, 30
		256JP	**EJPM2515T**	3,008	L1	26.06	236	93	230/460	23.5	1, 30
		256JM	**JMM2515T**	2,484	L1	23.56	197	91	230/460	24.8	1, 30
		256JP	**JPM2515T**	2,484	L1	26.44	197	91	230/460	24.8	1, 30
25	3600	256JM	**EJMM2516T**	3,310	L1	23.19	219	91.7	230/460	28	1, 30
		256JP	**EJPM2516T**	3,310	L1	26.06	230	91.7	230/460	28	1, 30
		256JM	**JMM2516T**	3,049	L1	23.19	221	91	230/460	29	30
		256JP	**JPM2516T**	3,049	L1	26.06	219	91	230/460	29	30
	1800	284JM	**EJMM2531T**	3,578	L1	25.94	317	93.6	230/460	30	1
		284JP	**EJPM2531T**	3,578	L1	28.81	335	93.6	230/460	30	1, 30
		284JM	**JMM2531T**	3,078	L1	25.06	281	91.7	230/460	31	30
		284JP	**JPM2531T**	3,078	L1	27.94	282	91.7	230/460	31	30
30	3600	284JM	**EJMM2534T**	4,207	L1	26.56	305	91.7	230/460	33	1, 30
		284JP	**EJPM2534T**	4,207	L1	29.44	310	91.7	230/460	33	1, 30
		284JM	**JMM2534T**	3,127	L1	25.06	267	91	230/460	35	30
		284JP	**JPM2534T**	3,127	L1	27.94	270	91	230/460	35	30
	1800	286JM	**EJMM2535T**	4,286	L1	25.94	359	94.1	230/460	35	1, 30
		286JP	**EJPM2535T**	4,286	L1	28.81	372	94.1	230/460	35	1, 30
		286JM	**JMM2535T**	3,529	L1	26.56	299	92.4	230/460	36	30
		286JP	**JPM2535T**	3,529	L1	29.44	312	92.4	230/460	36	30

(a) See notes on the last page of this catalog.

Close-Coupled Pump, Three Phase, ODP, C-Face

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
40	3600	286JM	**EJMM2538T**	5,065	L1	26.56	328	92.4	230/460	45	1, 30
		286JP	**EJPM2538T**	5,065	L1	29.44	329	92.4	230/460	45	1, 30
		286JM	**JMM2538T**	4,593	L1	26.56	307	91.7	230/460	45	30
		286JP	**JPM2538T**	4,593	L1	29.44	308	91.7	230/460	45	30
	1800	324JM	**EJMM2539T**	5,210	L1	27.44	417	94.1	230/460	49	1 30
		324JP	**EJPM2539T**	5,210	L1	29.81	458	94.1	230/460	47	1, 30
		324JM	**JMM2539T**	4,575	L1	26.44	375	93	230/460	49	1, 30
		324JP	**JPM2539T**	4,575	L1	29.31	378	93	230/460	49	1, 30
50	3600	324JM	**EJMM2542T**	5,710	L1	26.94	421	93	230/460	58	1
		324JP	**EJPM2542T**	5,710	L1	29.81	424	93	230/460	58	1
		324JM	**JMM2542T**	4,997	L1	26.44	368	92.4	230/460	58	30
		324JP	**JPM2542T**	4,997	L1	29.31	376	92.4	230/460	58	30
	1800	326JM	**EJMM2543T**	6,025	L1	27.94	491	94.5	230/460	57	1, 30
		326JP	**EJPM2543T**	6,025	L1	30.81	500	94.5	230/460	57	1, 30
		326JM	**JMM2543T**	5,205	L1	27.44	406	93	230/460	62	30
		326JP	**JPM2543T**	5,205	L1	30.31	415	93	230/460	62	30
60	3600	326JM	**JMM2546T**	6,220	L1	26.44	401	93	230/460	68	30
	1800	364JP	**JPM2547T**	5,912	L1	30.44	507	93.6	230/460	72	30
75	1800	365JP	**JPM2551T**	7,764	L1	32.44	586	94.1	230/460	88	30
Footless											
1	1800	143JM	**VEJMM3116T**	707	L1	14.43	37	85.5	208-230/460	1.5	1
		143JM	**VJMM3116T**	599	L1	14.43	37	82.5	208-230/460	1.56	
1 1/2	1800	145JM	**VEJMM3154T**	758	L1	15.43	43	86.5	230/460	2.2	1
		145JM	**VJMM3154T**	608	L1	15.43	41	84	208-230/460	2.4	1
2	1800	145JM	**VEJMM3157T**	829	L1	15.43	46	86.5	230/460	2.9	1, 30
		145JM	**VJMM3157T**	680	L1	15.43	42	84	208-230/460	3.15	1
3	3600	145JM	**VJMM3158T**	755	L1	15.43	50	84	208-230/460	3.7	1
	1800	184JM	**VEJMM3211T**	910	L1	18.06	74	89.5	230/460	4.2	1, 30
		182JM	**VJMM3211T**	742	L1	18.22	62	86.5	208-230/460	4.1	1
5	3600	182JM	**VJMM3212T**	874	L1	16.84	60	85.5	208-230/460	6.1	
	1800	184JM	**VEJMM3218T**	1,030	L1	19.56	84	89.5	208-230/460	6.6	1
		184JM	**VJMM3218T**	793	L1	18.06	73	87.5	208-230/460	7.2	1
7 1/2	3600	184JM	**VJMM3219T**	1,029	L1	18.06	74	87.5	208-230/460	8.7	1
	1800	213JM	**VEJMM3311T**	1,554	L1	19.78	125	91	230/460	9.6	1, 30
		213JM	**VJMM3311T**	1,158	L1	19.78	122	88.5	208-230/460	10.1	1
10	3600	213JM	**VJMM3312T**	1,291	L1	18.19	110	88.5	208-230/460	12.4	1
	1800	215JM	**VEJMM3313T**	1,682	L1	22.41	165	91.7	208-230/460	12	1
		215JM	**VJMM3313T**	1,356	L1	19.78	119	89.5	208-230/460	13.4	
15	3600	215JM	**VJMM3314T**	1,741	L1	18.69	120	89.5	208-230/460	18	1

(a) See notes on the last page of this catalog.

Washdown Close-Coupled Pump, Three Phase, Totally Enclosed

1 thru 15 Hp **NEMA 143JM thru 215JM** **IP55**

Applications: Commercial and industrial water pumps, food processing and applications that expose the motor to high pressure washdown.

Features: Over-sized ball bearings with locked drive end construction for minimum shaft movement. Moisture sealant on bolt heads, between frame and endplates. Neoprene gaskets. V-Ring running contact v-ring slinger. Stainless steel shaft extension. Electrostatic epoxy coating.

Hp	RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1	1800	143JM	TENV	**JMWDM3546T**	954	WD	14.25	39	82.5	208-230/460	1.5	1
1 1/2	3600	143JM	TEFC	**JMWDM3550T**	998	WD	15.43	42	82.5	208-230/460	2.1	1
	1800	145JM	TENV	**JMWDM3554T**	998	WD	14.25	46	85.5	208-230/460	2.3	2
2	3600	145JM	TEFC	**JMWDM3555T**	1,110	WD	15.43	47	84	208-230/460	2.6	1
	1800	145JM	TEFC	**JMWDM3558T**	1,044	WD	15.43	45	84	208-230/460	3.1	1
3	3600	145JM	TEFC	**JMWDM3559T**	1,249	WD	16.34	53	85.5	208-230/460	3.7	1
	1800	182JM	TEFC	**JMWDM3611T**	1,249	WD	18.22	67	87.5	208-230/460	4.2	1
5	3600	184JM	TEFC	**JMWDM3613T**	1,601	WD	18.05	79	87.5	208-230/460	5.8	1
	1800	184JM	TEFC	**JMWDM3615T**	1,398	WD	18.05	89	87.5	208-230/460	6.8	1
7 1/2	3600	184JM	TEFC	**JMWDM3616T**	1,814	WD	19.55	96	88.5	208-230/460	8.7	1
	1800	213JM	TEFC	**JMWDM3710T**	1,787	WD	19.78	125	89.5	208-230/460	10.1	1
10	3600	215JM	TEFC	**JMWDM3711T**	2,438	WD	19.78	134	89.5	208-230/460	11.5	1
	1800	215JM	TEFC	**JMWDM3714T**	2,257	WD	20.91	136	89.5	208-230/460	13.5	1
15	3600	215JM	TEFC	**JMWDM3713T**	2,904	WD	21.66	160	90.2	208-230/460	17	1

(a) See notes on the last page of this catalog.

SSE Super-E Stainless Steel, Close-Coupled Pump, Three Phase, Totally Enclosed, Encapsulated

1 thru 10 Hp **NEMA 143JM thru 215JM** **IP56** **IP69K for Water**

Applications: Commercial and industrial water pumps, food processing and applications that expose the motor to high pressure washdown.

Features: Stainless steel motor frame, endplates, conduit box, shaft and base. Moisture resistant insulation system. Endplate rabbets have O-ring seals. Conduit box is welded to the motor frame. Patented bearing seal to protect motor bearings. Epoxy encapsulation, Class H insulation. Laser etched nameplate. NEMA Premium® efficiency. 3 year warranty.

Hp	RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1	1800	143JM	TENV	**JMSSEWDM3546T**	1,805	WD	14.94	62	87.5	208-230/460	1.5	
1 1/2	3600	143JM	TENV	**JMSSEWDM3550T**	1,809	WD	15.82	68	85.5	208-230/460	1.8	
	1800	145JM	TEFC	**JMSSEWDM3554T**	1,820	WD	16.96	69	88.5	208-230/460	2.2	
2	3600	145JM	TEFC	**JMSSEWDM3555T**	2,138	WD	16.96	72	86.5	208-230/460	2.5	
	1800	145JM	TEFC	**JMSSEWDM3558T**	2,168	WD	18.34	74	88.5	208-230/460	2.7	
3	3600	145JM	TEFC	**JMSSEWDM3559T**	2,568	WD	18.34	83	86.5	208-230/460	3.7	
	1800	182JM	TEFC	**JMSSEWDM3611T**	2,696	WD	19.73	108	89.5	230/460	4.2	30
5	3600	184JM	TEFC	**JMSSEWDM3613T**	2,904	WD	18.23	104	89.5	208-230/460	5.6	
	1800	184JM	TEFC	**JMSSEWDM3615T**	2,924	WD	19.73	121	89.5	208-230/460	6.5	
7 1/2	3600	213JM	TEFC	**JMSSEWDM3709T**	3,423	WD	21.56	184	91	208-230/460	8.3	
	1800	213JM	TEFC	**JMSSEWDM3710T**	3,487	WD	22.75	135	91.7	208-230/460	9.5	
10	3600	215JM	TEFC	**JMSSEWDM3711T**	3,838	WD	22.75	154	91.7	208-230/460	10.6	
	1800	215JM	TEFC	**JMSSEWDM3714T**	4,049	WD	24.19	187	92.4	208-230/460	12.5	

(a) See notes on the last page of this catalog.

P-Base Vertical Solid Shaft Pump, Three Phase, TEFC, 1.15 Service Factor

3 thru 75 Hp NEMA 182LP thru 365VP

Applications: For normal medium and high thrust in-line pump applications. Waste water treatment plants, petro chemical industries, pulp and paper mills and agricultural irrigation applications.

Features: Severe duty construction with corrosion-resistant epoxy finish, cast-iron construction, designed for vertical mounting. Rotatable conduit box, stainless steel nameplates, shaft seals. Energy efficient windings. Two lifting lugs for balanced lifting. VHECP motors have NEMA Premium® efficiency and are Inverter-Ready. 1.15 Service Factor.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
Super-E Efficiency, Normal Thrust											
3	3600	182HP	**VHECP3660T**	2,394	SD	22.18	120	89.5	230/460	3.5	1, 30
	1800	182HP	**VHECP3661T**	2,144	SD	22.18	129	89.5	208-230/460	4.1	1
5	3600	184HP	**VHECP3663T**	3,092	SD	22.18	99	90.2	230/460	5.7	1, 30
	1800	184HP	**VHECP3665T**	2,855	SD	22.18	141	89.5	208-230/460	6.6	1
7 1/2	3600	213HP	**VHECP3769T**	3,661	SD	22.51	173	91	230/460	8.6	1, 30
	1800	213HP	**VHECP3770T**	3,543	SD	22.51	170	91.7	230/460	9.5	1, 30
10	3600	215HP	**VHECP3771T**	3,818	SD	22.51	203	92.4	230/460	11	1, 30
	1800	215HP	**VHECP3774T**	3,975	SD	22.51	231	92.4	230/460	12.5	1, 30
15	3600	254HP	**VHECP2394T**	4,401	SD	25.73	296	91.7	230/460	17.2	1, 30
	1800	254HP	**VHECP2333T**	4,562	SD	25.72	316	92.4	230/460	18.1	1, 30
20	3600	256HP	**VHECP4106T**	4,786	SD	25.73	325	92.4	230/460	23	1, 30
	1800	256HP	**VHECP2334T**	5,181	SD	25.73	337	93	230/460	24	1, 30
25	3600	284HP	**VHECP4107T**	5,089	SD	25.72	337	93	230/460	28	1, 30
	1800	284HP	**VHECP4103T**	5,780	SD	30.69	518	93.6	230/460	30	1, 30
30	3600	286HP	**VHECP4108T**	5,604	SD	25.72	361	93	230/460	33	1, 30
	1800	286HP	**VHECP4104T**	6,486	SD	30.69	563	94.1	230/460	36	1, 30
40	3600	324HP	**VHECP4109T**	7,844	SD	34.72	600	93.6	230/460	45	1
	1800	324HP	**VHECP4110T**	7,335	SD	34.72	650	94.5	230/460	46	1, 30
50	3600	326HP	**VHECP4114T**	9,612	SD	34.72	668	93	208-230/460	56	1
	1800	326HP	**VHECP4115T**	10,362	SD	34.72	764	94.5	230/460	58	1, 30
60	3600	364HP	**VHECP4310T**	12,280	SD	35.36	959	95	230/460	65.1	1, 30
	1800	364HP	**VHECP4314T**	12,819	SD	35.36	969	95	230/460	68	1, 30
75	3600	365HP	**VHECP4313T**	15,342	SD	35.36	1042	94.5	230/460	80.7	1, 30
	1800	365HP	**VHECP4316T**	15,611	SD	35.36	1008	95.4	230/460	85.9	1, 30
Standard Efficiency, Medium Thrust											
3	3600	182LP	**VLCP3660T**	2,292	SD	22.18	115	85.5	208-230/460	3.7	1
	1800	182LP	**VLCP3661T**	2,050	SD	22.18	124	87.5	208-230/460	4.1	1
5	3600	184LP	**VLCP3663T**	2,958	SD	22.18	122	87.5	208-230/460	5.9	1
	1800	184LP	**VLCP3665T**	2,730	SD	22.18	131	87.5	208-230/460	6.9	1
7 1/2	3600	213LP	**VLCP3769T**	3,504	SD	22.33	168	88.5	208-230/460	9.5	1
	1800	213LP	**VLCP3770T**	3,388	SD	22.33	164	89.5	208-230/460	10.3	1
10	3600	215LP	**VLCP3771T**	3,654	SD	22.33	171	89.5	208-230/460	12	1
	1800	215LP	**VLCP3774T**	3,802	SD	22.33	169	89.5	208-230/460	13	1
15	3600	254LP	**VLCP2394T**	4,208	SD	22.33	225	90.2	208-230/460	17.2	1
	1800	254LP	**VLCP2333T**	4,364	SD	25.54	236	91	208-230/460	18.5	1
20	3600	256LP	**VLCP4106T**	4,596	SD	25.72	338	90.2	230/460	23	1
	1800	256LP	**VLCP2334T**	4,953	SD	25.72	307	91	230/460	24	1, 30
25	3600	284LP	**VLCP4107T**	4,868	SD	27.47	372	91	230/460	28	1, 30
	1800	286LP	**VLCP4103T**	5,527	SD	27.47	384	92.4	230/460	30	1, 30
30	3600	286LP	**VLCP4108T**	5,358	SD	27.47	383	91	208-230/460	34	1
	1800	286LP	**VLCP4104T**	6,203	SD	32.44	523	92.4	230/460	37	1, 30
40	3600	324LP	**VLCP4109T**	7,500	SD	34.72	615	91.7	230/460	45	1, 30
	1800	324LP	**VLCP4110T**	7,015	SD	34.72	638	93	230/460	47	1, 30

(a) See notes on the last page of this catalog. Cast Iron Frame

P-Base Vertical Solid Shaft Pump, Three Phase, TEFC, 1.15 Service Factor

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
Standard Efficiency, High Thrust											
50	3600	326VP	**VPCP4114T**	9,191	SD	34.71	646	92.4	208-230/460	57	1
	1800	326VP	**VPCP4115T**	9,907	SD	34.71	660	93	230/460	59	1, 30
60	3600	364VP	**VPCP4310T**	10,568	SD	37.25	940	93	230/460	72.8	1, 30
	1800	364VP	**VPCP4314T**	11,035	SD	37.25	933	93.6	230/460	73.4	1, 30
75	3600	365VP	**VPCP4313T**	13,203	SD	37.25	982	93	230/460	87.9	1, 30
	1800	365VP	**VPCP4316T**	13,434	SD	37.25	1010	94.1	230/460	87	1, 30

(a) See notes on the last page of this catalog.
Cast Iron Frame

P-Base Vertical Solid Shaft Pump, Three Phase, ODP, 1.15 Service Factor

3 thru 60 Hp — NEMA 182HP thru 326HP

Applications: For normal thrust applications. Waste water treatment plants, petro chemical industries, pulp and paper mills and agricultural irrigation applications.

Features: Cast iron frame and endplates. Rotatable conduit box, drip cover, stainless nameplate, epoxy finish. Two lifting lugs for balanced lifting.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
EPAct High Efficiency, Normal Thrust											
3	3600	182HP	**VHM3210T**	2,083	L1	21.33	132	84	208-230/460	3.7	1, 17
	1800	182HP	**VHM3211T**	1,861	L1	21.33	96	86.5	208-230/460	4.2	1, 17
5	3600	184HP	**VHM3212T**	2,686	L1	21.33	99	85.5	208-230/460	5.7	1, 17
	1800	184HP	**VHM3218T**	2,480	L1	21.33	105	87.5	208-230/460	6.9	1, 17
7 1/2	3600	184HP	**VHM3219T**	3,181	L1	21.33	158	87.5	208-230/460	8.5	1, 17, 35
	1800	213HP	**VHM3311T**	3,078	L1	23.73	169	88.5	208-230/460	10.7	1, 17
10	3600	213HP	**VHM3312T**	3,320	L1	23.73	169	88.5	208-230/460	11.6	1, 17
	1800	215HP	**VHM3313T**	3,454	L1	23.73	165	89.5	208-230/460	13	1, 17
15	3600	215HP	**VHM3314T**	3,505	L1	23.73	179	89.5	208-230/460	16.8	1, 17
	1800	254HP	**VHM2513T**	3,632	L1	26.74	337	91	208-230/460	18.1	1, 17
20	3600	254HP	**VHM2514T**	3,812	L1	26.73	310	90.2	230/460	23.5	1, 17, 30
	1800	256HP	**VHM2515T**	4,125	L1	25.81	334	91	230/460	25	1, 17, 30
25	3600	256HP	**VHM2516T**	4,055	L1	26.73	333	91	230/460	29	1, 17, 30
	1800	284HP	**VHM2531T**	4,602	L1	29.93	442	92.4	230/460	30	1, 17, 30
30	3600	284HP	**VHM2534T**	4,461	L1	26.74	450	91	230/460	34	1, 17, 30
	1800	286HP	**VHM2535T**	5,168	L1	29.93	462	92.4	230/460	38.2	1, 17, 30
40	3600	286HP	**VHM2538T**	6,437	L1	29.93	486	91.7	230/460	45	1, 17, 30
	1800	324HP	**VHM2539T**	6,020	L1	33.87	660	93	230/460	47	1, 17, 30
50	3600	324HP	**VHM2542T**	7,888	L1	33.87	680	92.4	208-230/460	57	1, 17
	1800	326HP	**VHM2543T**	8,504	L1	33.87	682	93	230/460	59	1, 17, 30
60	3600	326HP	**VHM2546T**	10,078	L1	33.87	705	93	208-230/460	66	1, 17

(a) See notes on the last page of this catalog.
Custom TEFC motors available through 2,250 Hp; Open and WPII custom motors through 15,000 Hp. Contact your ABB Sales Representative.
THRUST BEARINGS MUST BE LOADED TO A MINIMUM OF 20% OF RATED THRUST FOR PROPER BEARING LOADING AND LIFE.
Cast Iron Frame

SAE Hydraulic Pump Motors, Three Phase, Continuous Duty

5 thru 10 Hp **NEMA 184TYZ thru 215TYZ**

Applications: Hydraulic pumps for lifts, trash compactors and other machinery.

Features: TEFC motors designed for continuous duty (may be used on intermittent duty applications). Base mount with SAE A or B pump mount face and shaft. F3 top-mounted conduit box.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
5	1800	184TYZ	**HPM3615T**	842	L1	13.50	82	87.5	208-230/460	6.8	
7 1/2	1800	213TYZ	**HPM3710T**	1,082	L1	14.66	127	89.5	208-230/460	10.1	
10	1800	215TYZ	**HPM3714T**	1,277	L1	15.79	136	89.5	208-230/460	13.5	

(a) See notes on the last page of this catalog.

Submersible Motors, Single Phase, TENV

1 thru 5 Hp **180TY thru 210TY**

Applications: Submersible motors suitable for wet pit applications. Municipal and Industrial wastewater, slurry pump, aerators and mixers. Continuous duty in water/ sewage, 15 minutes in air.

Features: All cast iron construction, 416 stainless steel shafts, dual carbon ceramic mechanical seals, (2) NC thermostats and 25 feet of cable. Dual moisture sensing probes. Includes NEMA 1 enclosure control box, wired complete with starting capacitors, wiring diagram and terminal board. 1.15 Service Factor. Explosion Proof, Division 1, Class I, Group C & D, T3C. 5 year pro-rated warranty. UL listed, Hazardous Duty.

Hp	RPM	NEMA Frame	Catalog Number	XP Cls/Grp	Temp Code	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1	1800	180TY	**SUL50104SM**	④	T3C	5,725	S1	25.94	240	55	230	8.1	81, 97
	1200	180TY	**SUL50106SM**	④	T3C	5,991	S1	25.94	240	55.6	230	8.6	81, 97
1 1/2	1800	180TY	**SUL50154SM**	④	T3C	5,725	S1	25.94	291	62.5	230	10.6	81, 97
	1200	180TY	**SUL50156SM**	④	T3C	6,850	S1	25.94	256	57	230	12.5	81, 97
2	1800	180TY	**SUL50204SM**	④	T3C	6,347	S1	25.94	250	60.9	230	14.4	81, 97
3	1800	180TY	**SUL50304SM**	④	T3C	7,935	S1	26.66	260	64.7	230	20	81, 97
		180TY	**SUL50304**	④	T3C	7,935	S1	25.94	256	64.7	230	20	81
	1200	210TY	**SUL50306SM**	④	T3C	9,727	S1	32.41	315	65.6	230	21	81, 97
5	1800	210TY	**SUL50504**	④	T3C	10,566	S1	31.69	369	69	230	30	82

(a) See notes on the last page of this catalog.
④ = Class I, Group C & D
Cast Iron Frame

IMMERSIBLE MOTORS AVAILABLE THROUGH 250 HP. CONTACT YOUR LOCAL ABB SALES REPRESENTATIVE WITH YOUR INQUIRY AND SPECIFICATIONS.

Submersible Motors, Three Phase, TENV

1 thru 100 Hp 180TY thru 360TY

Applications: Submersible motors suitable for wet pit applications. Municipal and Industrial wastewater, slurry pump, aerators and mixers. Continuous duty in water/ sewage, 15 minutes in air.

Features: All cast iron construction, 416 stainless steel shafts, dual carbon ceramic mechanical seals, (2) NC thermostats and 25 feet of cable. Dual moisture sensing probes. 1.15 Service Factor. UL Listed motors are Division 1, Class I, Group C & D, T3C. 5 year pro-rated warranty. Inverter capable for 10:1 variable torque for Division 1, Class I, Group C & D, T2A temp code.

Hp	RPM	NEMA Frame	Catalog Number	XP Cls/Grp	Temp Code	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
UL Listed, Hazardous Duty, Explosion Proof													
1	1800	180TY	**SUM70104SM**	④	T3C	5,102	S1	25.94	169	63.5	230	3.4	81, 97
1 1/2	1800	180TY	**SUM70154SM**	④	T3C	5,226	S1	25.94	175	70.5	230	4.6	81, 97
2	1800	180TY	**SUM70204SM**	④	T3C	5,324	S1	25.94	183	73.5	230	5.8	81, 97
		180TY	**SUM70204SM-8**	④	T3C	5,324	S1	25.94	182	73.5	200	6.7	81, 97
3	1800	180TY	**SUM70304SM**	④	T3C	5,382	S1	25.94	200	78.1	230	8.8	81, 97
	1200	180TY	**SUM70306**	④	T3C	5,469	S1	26.66	235	78	230	10.4	81
5	1800	180TY	**SUM70504**	④	T3C	5,611	S1	26.66	240	80.2	230	14	81
		180TY	**SUM70504-4**	④	T3C	5,611	S1	26.66	235	80.2	460	7	81
		180TY	**SUM70504-8**	④	T3C	5,611	S1	26.66	235	80.2	200	16.1	81
	1200	180TY	**SUM70506**	④	T3C	7,412	S1	26.66	248	80.7	230	16	81
	900	210TY	**SUM70508-4**	④	T3C	9,155	S1	31.69	350	82.6	460	8.3	82
7 1/2	1800	180TY	**SUM70754**	④	T3C	7,021	S1	26.66	243	82.7	230	20.2	81
		180TY	**SUM70754-4**	④	T3C	7,021	S1	26.66	245	82.7	460	10.1	81
	1200	210TY	**SUM70756**	④	T3C	8,190	S1	31.69	350	81.7	230	22.6	81
		210TY	**SUM70756-4**	④	T3C	8,190	S1	31.69	350	81.7	460	11.3	81
10	1800	210TY	**SUM71004**	④	T3C	7,567	S1	31.69	356	85.6	230	26	81
		210TY	**SUM71004-4**	④	T3C	7,567	S1	31.69	356	85.6	460	13	81
	1200	210TY	**SUM71006**	④	T3C	10,014	S1	31.69	391	83.8	230	28.8	81
		210TY	**SUM71006-4**	④	T3C	10,014	S1	31.69	391	83.8	460	14.4	81
15	1800	210TY	**SUM71504**	④	T3C	9,694	S1	31.69	376	85.4	230	40.2	81
		210TY	**SUM71504-4**	④	T3C	9,694	S1	31.69	374	85.4	460	20.1	81
	1200	250TY	**SUM71506-4**	④	T3C	13,228	S1	37.34	469	86.5	460	20.3	81
20	1800	210TY	**SUM72004SM-4**	④	T3C	10,684	S1	32.41	378	86.6	460	26.2	81, 97
		210TY	**SUM72004-4**	④	T3C	11,257	S1	31.69	407	86.6	460	26.2	81
	1200	250TY	**SUM72006-4**	④	T3C	14,587	S1	37.34	474	86.7	460	27.4	81
25	1800	250TY	**SUM72504-4**	④	T3C	13,650	S1	37.34	495	88.5	460	32.1	81
		250TY	**SUM72504SM-4**	④	T3C	13,650	S1	37.06	517	88.5	460	32.1	81, 97
	1200	250TY	**SUM72506-4**	④	T3C	18,927	S1	37.34	496	86.7	460	35.2	81
30	1800	250TY	**SUM73004-4**	④	T3C	14,744	S1	37.34	445	88.7	460	39.9	81
	1200	320TY	**SUM73006-4**	④	T3C	22,712	S1	43.12	1150	89.7	460	40.7	82
40	1800	250TY	**SUM74004-4**	④	T3C	19,961	S1	37.34	510	89	460	51.7	82
50	1800	320TY	**SUM75004-4**	④	T3C	23,360	S1	43.12	882	91.1	460	64.3	82
		320TY	**SUM75004SM-4**	④	T3C	23,360	S1	42.5	880	91.1	460	64.3	82, 97
	1200	320TY	**SUM75006-4**	④	T3C	25,332	S1	43.12	872	90.5	460	65.9	82
60	1800	320TY	**SUM76004-4**	④	T3C	29,877	S1	43.12	950	92	460	74.9	82
75	1800	320TY	**SUM77504-4**	④	T3C	38,734	S1	43.12	956	92.6	460	91.3	82
	1200	360TY	**SUM77506-4**	④	T3C	39,606	S1	47.1	1374	92.3	460	90.9	82
100	1800	360TY	**SUM710004-4**	④	T3C	41,185	S1	47.1	1340	91.6	460	116	82
	1200	360TY	**SUM710006-4**	④	T3C	50,906	S1	47.1	1500	91.2	460	122	82
Non-UL Listed, Non Hazardous Duty													
7 1/2	1800	210TY	**SUM20754**			5,361	S1	31.69	335	82.8	230	20.8	81
		210TY	**SUM20754-4**			5,361	S1	31.69	340	82.8	460	10.4	81
10	1800	210TY	**SUM21004**			6,434	S1	31.69	351	85.6	230	26	81
		210TY	**SUM21004-4**			6,434	S1	31.69	367	85.6	460	13	81
15	1800	210TY	**SUM21504**			8,104	S1	31.69	368	85.4	230	40.2	81
		210TY	**SUM21504-4**			8,104	S1	31.69	377	85.4	460	20.1	81

(a) See notes on the last page of this catalog.

④ = Class I, Group C & D

Cast Iron Frame

Longer cable lengths and custom submersible motors are available. Contact your ABB Sales Representative.

Three Phase, TEFC, Foot Mounted, with Internal Baldor Shaft Grounding Brush

1 thru 50 Hp

NEMA 143T thru 326T

Applications: Heating, ventilation and air conditioning blower and fan motors, pump motors, and other general purpose applications using an adjustable speed drive.

Features: Baldor shaft grounding brush installed internally. Class H insulated motor. Regreasable ball bearings. Dynamically balanced rotors for reduced vibration and quiet operation. All models are Super-E® designs which meet NEMA Premium® efficiencies, are Inverter Ready, and have a 3-year warranty.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1	1800	143T	**EM3546T-BG**	872	L1	13.31	38	85.5	208-230/460	1.5	
1 1/2	1800	145T	**EM3554T-BG**	900	L1	13.31	41	86.5	208-230/460	2.2	
2	3600	145T	**EM3555T-BG**	961	L1	13.31	41	85.5	208-230/460	2.5	
	1800	145T	**EM3558T-BG**	927	L1	13.31	45	86.5	208-230/460	2.9	
3	3600	145T	**EM3559T-BG**	1,037	L1	14.19	50	86.5	208-230/460	3.6	
	1800	182T	**EM3611T-BG**	1,037	L1	16.54	70	89.5	208-230/460	4.2	
	1200	213T	**EM3704T-BG**	1,570	L1	19.01	132	89.5	230/460	4.6	
5	3600	184T	**EM3613T-BG**	1,175	L1	16.54	74	88.5	230/460	5.9	
	1800	184T	**EM3615T-BG**	1,116	L1	18.04	93	89.5	208-230/460	6.7	
	1200	215T	**EM3708T-BG**	1,745	L1	19.76	154	89.5	208-230/460	7.3	
7 1/2	3600	213T	**EM3709T-BG**	1,686	L1	17.89	121	89.5	208-230/460	9	
	1800	213T	**EM3710T-BG**	1,547	L1	19.01	127	91.7	230/460	9.4	30
	1200	254T	**EM2276T-BG**	2,812	L1	23.30	310	91	230/460	10.7	30
10	3600	215T	**EM3711T-BG**	1,706	L1	17.89	118	90.2	208-230/460	11.8	
	1800	215T	**EM3714T-BG**	1,718	L1	20.51	165	91.7	208-230/460	12	
	1200	256T	**EM2332T-BG**	3,172	L1	23.30	310	91	230/460	14.4	30
15	3600	254T	**EM2394T-BG**	2,783	L1	23.30	253	91	230/460	17.5	30
	1800	254T	**EM2333T-BG**	2,569	L1	23.30	274	92.4	230/460	18.1	30
	1200	284T	**EM4100T-BG**	4,179	L1	27.76	372	91.7	230/460	21	30
20	1800	256T	**EM2334T-BG**	3,059	L1	23.30	290	93	230/460	24	30
	1200	286T	**EM4102T-BG**	5,465	L1	27.76	406	91.7	208-230/460	27	
25	1800	284T	**EM4103T-BG**	3,956	L1	27.76	420	93.6	230/460	30	30
	1200	324T	**EM4111T-BG**	6,211	L1	30.39	475	93	230/460	32	30
30	1800	286T	**EM4104T-BG**	4,637	L1	27.76	437	93.6	230/460	38	
40	1800	324T	**EM4110T-BG**	6,039	L1	30.28	578	94.1	230/460	48	30
50	1800	326T	**EM4115T-BG**	6,565	L1	30.28	641	94.5	230/460	58	

(a) See notes on the last page of this catalog.

Cast Iron Frame

Three Phase, TEFC, Foot Mounted, C-Face, with Internal Baldor Shaft Grounding Brush

1/2 thru 5 Hp

NEMA 56C thru 184TC

Applications: Unit Handling, HVAC, pump motors, and other general purpose applications using an adjustable speed drive.

Features: Baldor shaft grounding brush installed internally. Class H insulated motor. Regreasable ball bearings. Dynamically balanced rotors for reduced vibration and quiet operation. All models are Super-E® designs which meet NEMA Premium® efficiencies, are Inverter Ready, and have a 3-year warranty.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1/2	1800	56C	**CEM3538-BG**	854	K	12.23	33	82.5	208-230/460	0.8	
3/4	1800	56C	**CEM3542-BG**	881	K	12.23	37	84	208-230/460	1.1	12
1	1800	143TC	**CEM3546T-BG**	907	L1	13.29	38	85.5	208-230/460	1.5	
1 1/2	1800	145TC	**CEM3554T-BG**	935	L1	13.29	41	86.5	208-230/460	2.2	
2	1800	145TC	**CEM3558T-BG**	962	L1	13.29	45	86.5	208-230/460	2.9	
3	1800	182TC	**CEM3611T-BG**	1,109	L1	16.55	70	89.5	208-230/460	4.2	
5	1800	184TC	**CEM3615T-BG**	1,188	L1	18.05	93	89.5	208-230/460	6.7	

(a) See notes on the last page of this catalog.

Cast Iron Frame

Three Phase, ODP, Foot Mounted, with Internal Baldor Shaft Grounding Brush

1 thru 50 Hp

NEMA 143T thru 326T

Applications: Heating, ventilation and air conditioning blower and fan motors, pump motors, and other general purpose applications using an adjustable speed drive.

Features: Baldor shaft grounding brush installed internally. Class H insulated motor. Regreasable ball bearings. Dynamically balanced rotors for reduced vibration and quiet operation. All models are Super-E® designs which meet NEMA Premium® efficiencies, are Inverter Ready, and have a 3-year warranty.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1	1800	143T	**EM3116T-BG**	877	L1	11.12	34	85.5	208-230/460	1.5	
1 1/2	1800	145T	**EM3154T-BG**	909	L1	11.62	37	86.5	230/460	2.2	30
2	3600	143T	**EM3155T-BG**	884	L1	11.62	43	85.5	208-230/460	2.5	
	1800	145T	**EM3157T-BG**	962	L1	12.12	43	86.5	230/460	2.9	30
3	3600	145T	**EM3158T-BG**	893	L1	13.00	51	85.5	230/460	3.8	30
	1800	182T	**EM3211T-BG**	1,055	L1	15.00	74	89.5	230/460	4.2	30
	1200	213T	**EM3305T-BG**	1,328	L1	16.32	110	88.5	208-230/460	4.5	
5	3600	182T	**EM3212T-BG**	991	L1	13.62	63	86.5	208-230/460	6	
	1800	184T	**EM3218T-BG**	1,137	L1	16.50	92	89.5	208-230/460	6.6	
	1200	215T	**EM3309T-BG**	1,672	L1	17.45	141	89.5	208-230/460	7.4	
7 1/2	3600	184T	**EM3219T-BG**	1,456	L1	15.00	77	88.5	208-230/460	8.6	
	1800	213T	**EM3311T-BG**	1,602	L1	16.32	120	91	208-230/460	9.7	
	1200	254T	**EM2506T-BG**	2,002	L1	23.19	248	90.2	230/460	11	30
10	3600	213T	**EM3312T-BG**	1,661	L1	16.32	121	89.5	208-230/460	12	
	1800	215T	**EM3313T-BG**	1,893	L1	17.45	132	91.7	230/460	12.5	
	1200	256T	**EM2511T-BG**	2,526	L1	23.19	255	91.7	230/460	14.3	30
15	3600	215T	**EM3314T-BG**	2,266	L1	16.32	131	90.2	230/460	17.5	
	1800	254T	**EM2513T-BG**	2,630	L1	21.69	234	93	230/460	17.7	30
	1200	284T	**EM2524T-BG**	3,350	L1	23.81	300	91.7	230/460	20.5	30
20	1800	256T	**EM2515T-BG**	2,860	L1	21.69	228	93	230/460	23.5	30
	1200	286T	**EM2528T-BG**	4,012	L1	23.81	321	92.4	230/460	27	30
25	1800	284T	**EM2531T-BG**	3,465	L1	25.06	387	93.6	230/460	30	
30	1800	286T	**EM2535T-BG**	3,761	L1	25.06	341	94.1	230/460	35	30
40	1800	324T	**EM2539T-BG**	4,882	L1	27.19	389	94.1	230/460	49	30
50	1800	326T	**EM2543T-BG**	5,349	L1	27.69	497	94.5	230/460	57	30

(a) See notes on the last page of this catalog.

Cast Iron Frame

Three Phase, TEFC, Foot Mounted, with Internal AEGIS® Bearing Protection Ring

1 thru 100 Hp

NEMA 56 thru 405T

Applications: Heating, ventilation and air conditioning blower and fan motors, pump motors, and other general purpose applications using an adjustable speed drive.

Features: Class H insulated motor with AEGIS® bearing protection ring installed internally. Regreasable ball bearings. Dynamically balanced rotors for reduced vibration and quiet operation. All models meet NEMA Premium® efficiencies, are Inverter Ready, and have a 3-year warranty.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
230/460 Volt											
1	3600	56	**EM3545-G**	796	K	12.23	32	77	230/460	1.4	12
	1800	143T	**EM3546T-G**	872	L1	12.31	36	85.5	208-230/460	1.5	
	1200	145T	**EM3556T-G**	1,012	L1	13.31	43	82.5	208-230/460	1.8	
1 1/2	3600	143T	**EM3550T-G**	892	L1	12.29	36	84	208-230/460	1.9	
	1800	145T	**EM3554T-G**	900	L1	13.31	42	86.5	208-230/460	2.2	
	1200	182T	**EM3607T-G**	1,186	L1	16.54	76	87.5	208-230/460	2.4	
2	3600	145T	**EM3555T-G**	961	L1	13.29	46	85.5	208-230/460	2.5	
	1800	145T	**EM3558T-G**	927	L1	13.31	42	86.5	208-230/460	2.9	
	1200	184T	**EM3614T-G**	1,234	L1	18.04	94	88.5	208-230/460	3.5	
3	3600	145T	**EM3559T-G**	1,037	L1	14.17	53	86.5	208-230/460	3.6	
		182T	**EM3610T-G**	1,079	L1	15.29	57	86.5	208-230/460	3.6	
	1800	182T	**EM3611T-G**	1,037	L1	16.54	74	89.5	208-230/460	4.2	
	1200	213T	**EM3704T-G**	1,570	L1	19.01	135	89.5	230/460	4.6	
5	3600	184T	**EM3613T-G**	1,175	L1	16.54	76	88.5	230/460	5.9	
	1800	184T	**EM3615T-G**	1,116	L1	18.04	92	89.5	208-230/460	6.7	
	1200	215T	**EM3708T-G**	1,745	L1	19.76	154	89.5	208-230/460	7.3	
7 1/2	3600	213T	**EM3709T-G**	1,686	L1	17.89	133	89.5	208-230/460	9	
	1800	213T	**EM3710T-G**	1,547	L1	19.01	129	91.7	230/460	9.4	30
	1200	254T	**EM2276T-G**	2,842	L1	23.30	281	91	230/460	10.7	30
10	3600	215T	**EM3711T-G**	1,706	L1	17.89	118	90.2	208-230/460	11.8	
	1800	215T	**EM3714T-G**	1,718	L1	20.51	156	91.7	208-230/460	12	
	1200	256T	**EM2332T-G**	3,202	L1	23.30	291	91	230/460	14.4	30
15	3600	254T	**EM2394T-G**	2,813	L1	23.30	239	91	230/460	17.5	30
	1800	254T	**EM2333T-G**	2,599	L1	23.30	270	92.4	230/460	18.1	30
	1200	284T	**EM4100T-G**	4,257	L1	27.76	369	91.7	230/460	21	30
20	3600	256T	**EM4106T-G**	3,059	L1	23.30	261	91	230/460	23	30
	1800	256T	**EM2334T-G**	3,089	L1	23.30	295	93	230/460	24	30
	1200	286T	**EM4102T-G**	5,543	L1	27.76	393	91.7	208-230/460	27	
25	3600	284TS	**EM4107T-G**	3,986	L1	24.70	323	91.7	230/460	29	
	1800	284T	**EM4103T-G**	4,034	L1	27.76	380	93.6	230/460	30	30
	1200	324T	**EM4111T-G**	6,301	L1	30.39	507	93	230/460	32	30
30	3600	286TS	**EM4108T-G**	4,665	L1	24.70	336	91.7	230/460	34	
	1800	286T	**EM4104T-G**	4,715	L1	27.76	410	93.6	230/460	38	
	1200	326T	**EM4117T-G**	7,209	L1	30.28	604	93	230/460	39	30
40	3600	324TS	**EM4109T-G**	6,333	L1	28.78	532	92.4	230/460	46	30
	1800	324T	**EM4110T-G**	6,129	L1	30.28	596	94.1	230/460	48	30
	1200	364T	**EM4308T-G**	9,257	L1	33.48	883	94.1	230/460	49.4	
50	3600	326TS	**EM4114T-G**	6,885	L1	28.78	584	93	208-230/460	56	
	1800	326T	**EM4115T-G**	6,655	L1	30.28	648	94.5	230/460	58	
	1200	365T	**EM4312T-G**	11,010	L1	33.48	910	94.1	230/460	61.7	

(a) See notes on the last page of this catalog.

Cast Iron Frame

Three Phase, TEFC, Foot Mounted, with Internal AEGIS® Bearing Protection Ring

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
230/460 Volt											
60	3600	364TS	**EM4310T-G**	9,875	L1	31.36	900	95	230/460	66.3	
	1800	364T	**EM4314T-G**	9,763	L1	33.48	907	95	230/460	68	
75	3600	365TS	**EM4313T-G**	11,350	L1	31.36	966	95	230/460	81.9	
	1800	365T	**EM4316T-G**	11,273	L1	33.48	956	95.4	230/460	85.9	
100	1800	405T	**EM4400T-G**	14,152	L1	38.45	1214	95.4	230/460	112	
200 Volt											
5	1800	184T	**EM3665T-8G**	1,350	L1	15.23	119	89.5	200	15.1	
7 1/2	1800	213T	**EM3770T-8G**	1,725	L1	18.45	170	91.7	200	21.4	
10	1800	215T	**EM3774T-8G**	1,908	L1	18.45	231	91.7	200	28	
15	1800	254T	**EM2333T-8G**	2,599	L1	23.30	254	92.4	200	42.4	
575 Volt											
1	1800	143T	**EM3546T-5G**	872	L1	12.31	35	85.5	575	1.2	
1 1/2	1800	145T	**EM3554T-5G**	900	L1	13.31	42	86.5	575	1.8	
2	1800	145T	**EM3558T-5G**	927	L1	13.31	46	86.5	575	2.3	
3	1800	182T	**EM3611T-5G**	1,037	L1	16.54	76	89.5	575	3.3	
5	1800	184T	**EM3615T-5G**	1,116	L1	18.04	84	89.5	575	5.3	
7 1/2	1800	213T	**EM3710T-5G**	1,547	L1	19.01	126	91.7	575	7.6	
10	1800	215T	**EM3714T-5G**	1,718	L1	20.51	165	91.7	575	9.6	
15	1800	254T	**EM2333T-5G**	2,599	L1	23.30	250	92.4	575	14.5	
20	1800	256T	**EM2334T-5G**	3,089	L1	23.30	293	93	575	19.2	
25	1800	284T	**EM4103T-5G**	4,034	L1	27.76	364	93.6	575	23	
30	1800	286T	**EM4104T-5G**	4,715	L1	27.76	423	93.6	575	29	
40	1800	324T	**EM4110T-5G**	6,129	L1	30.28	576	94.1	575	39	
50	1800	326T	**EM4115T-5G**	6,655	L1	30.28	644	94.5	575	46	

(a) See notes on the last page of this catalog.

Cast Iron Frame

Three Phase, ODP, Foot Mounted, with Internal AEGIS® Bearing Protection Ring

1 thru 100 Hp

NEMA 56 thru 404T

Applications: Heating, ventilation and air conditioning blower and fan motors, pump motors, and other general purpose applications using an adjustable speed drive.

Features: Class H insulated motor with AEGIS® bearing protection ring installed internally. Regreasable ball bearings. Dynamically balanced rotors for reduced vibration and quiet operation. All models meet NEMA Premium® efficiencies, are Inverter Ready, and have a 3-year warranty.

Note: Non-compliant small motors may not be manufactured after March 9, 2015. Pre-existing inventory may be sold or used. Contact ABB for new compliant motors.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
					230/460 Volt						
1	3600	56	**EM3115-G**	703	K	11.06	28	80	208-230/460	1.5	12, 98
	1800	143T	**EM3116T-G**	877	L1	11.12	34	85.5	208-230/460	1.5	
	1200	145T	**EM3156T-G**	893	L1	11.62	40	82.5	208-230/460	1.8	
1 1/2	3600	143T	**EM3120T-G**	778	L1	11.12	34	84	208-230/460	2	
	1800	145T	**EM3154T-G**	909	L1	11.62	38	86.5	230/460	2.2	30
	1200	182T	**EM3207T-G**	1,048	L1	15.00	67	86.5	208-230/460	2.5	
2	3600	143T	**EM3155T-G**	884	L1	11.62	41	85.5	208-230/460	2.5	
	1800	145T	**EM3157T-G**	962	L1	12.12	41	86.5	230/460	2.9	30
	1200	184T	**EM3215T-G**	1,067	L1	16.50	79	87.5	208-230/460	3.4	
3	3600	145T	**EM3158T-G**	893	L1	13.00	46	85.5	230/460	3.8	30
	1800	182T	**EM3211T-G**	1,055	L1	15.00	72	89.5	230/460	4.2	30
	1200	213T	**EM3305T-G**	1,328	L1	16.32	110	88.5	208-230/460	4.5	
5	3600	182T	**EM3212T-G**	991	L1	13.62	63	86.5	208-230/460	6	
	1800	184T	**EM3218T-G**	1,137	L1	16.50	84	89.5	208-230/460	6.6	
	1200	215T	**EM3309T-G**	1,672	L1	17.45	141	89.5	208-230/460	7.4	
7 1/2	3600	184T	**EM3219T-G**	1,456	L1	15.00	75	88.5	208-230/460	8.6	
	1800	213T	**EM3311T-G**	1,602	L1	16.32	115	91	208-230/460	9.7	
	1200	254T	**EM2506T-G**	2,032	L1	23.19	243	90.2	230/460	11	30
10	3600	213T	**EM3312T-G**	1,661	L1	16.32	113	89.5	208-230/460	12	
	1800	215T	**EM3313T-G**	1,893	L1	17.45	127	91.7	230/460	12.5	
	1200	256T	**EM2511T-G**	2,556	L1	23.19	255	91.7	230/460	14.3	30
15	3600	215T	**EM3314T-G**	2,266	L1	16.32	126	90.2	230/460	17.5	
	1800	254T	**EM2513T-G**	2,660	L1	21.69	210	93	230/460	17.7	30
	1200	284T	**EM2524T-G**	3,428	L1	23.81	280	91.7	230/460	20.5	30
20	3600	254T	**EM2514T-G**	2,695	L1	21.69	195	91	230/460	23.5	30
	1800	256T	**EM2515T-G**	2,890	L1	21.69	227	93	230/460	23.5	30
	1200	286T	**EM2528T-G**	4,090	L1	23.81	299	92.4	230/460	27	30
25	3600	256T	**EM2516T-G**	3,177	L1	21.69	212	91.7	230/460	28	30
	1800	284T	**EM2531T-G**	3,543	L1	25.06	314	93.6	230/460	30	
	1200	324T	**EM2532T-G**	4,941	L1	27.69	384	93	208-230/460	34	
30	3600	284TS	**EM2534T-G**	3,781	L1	22.44	311	91.7	208-230/460	35	
	1800	286T	**EM2535T-G**	3,839	L1	25.06	337	94.1	230/460	35	30
	1200	326T	**EM2536T-G**	5,134	L1	28.69	457	93.6	230/460	38	30
40	3600	286TS	**EM2538T-G**	4,762	L1	22.44	328	92.4	208-230/460	46	
	1800	324T	**EM2539T-G**	4,972	L1	27.19	389	94.1	230/460	49	30
	1200	364T	**EM2540T-G**	7,170	L1	30.69	606	94.1	230/460	51	30
50	3600	324TS	**EM2542T-G**	5,232	L1	25.69	392	93	208-230/460	56	
	1800	326T	**EM2543T-G**	5,439	L1	27.69	473	94.5	230/460	57	30
60	1800	364T	**EM2547T-G**	7,117	L1	30.69	616	95	230/460	68	30
75	1800	365T	**EM2551T-G**	8,543	L1	33.72	750	95	230/460	87	30
100	1800	404T	**EM2555T-4G**	10,158	L1	36.97	898	95.4	460	115	

(a) See notes on the last page of this catalog.

Three Phase, ODP, Foot Mounted, with Internal AEGIS® Bearing Protection Ring

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
200 Volt											
1	1800	143T	**EM3116T-8G**	877	L1	11.12	34	85.5	200	3.5	
1 1/2	1800	145T	**EM3154T-8G**	909	L1	11.62	37	86.5	200	5.1	
2	1800	145T	**EM3157T-8G**	962	L1	12.12	43	86.5	200	6.5	
3	1800	182T	**EM3211T-8G**	1,055	L1	15.00	74	89.5	200	9.7	
5	1800	184T	**EM3218T-8G**	1,137	L1	16.50	92	89.5	200	15.3	
7 1/2	1800	213T	**EM3311T-8G**	1,602	L1	16.32	120	91	200	22.2	
10	1800	215T	**EM3313T-8G**	1,893	L1	17.45	132	91.7	200	29.5	
15	1800	254T	**EM2513T-8G**	2,660	L1	21.69	234	93	200	40.7	
20	1800	256T	**EM2515T-8G**	2,890	L1	21.69	250	93	200	54.3	
25	1800	284T	**EM2531T-8G**	3,543	L1	25.06	330	93.6	200	70	
30	1800	286T	**EM2535T-8G**	3,839	L1	25.06	340	94.1	200	81	
40	1800	324T	**EM2539T-8G**	4,972	L1	27.19	390	94.1	200	109	
575 Volt											
1	1800	143T	**EM3116T-5G**	877	L1	11.12	34	85.5	575	1.2	
1 1/2	1800	145T	**EM3154T-5G**	909	L1	11.62	37	86.5	575	1.8	
2	1800	145T	**EM3157T-5G**	962	L1	12.12	43	86.5	575	2.3	
3	1800	182T	**EM3211T-5G**	1,055	L1	15.00	74	89.5	575	3.4	
5	1800	184T	**EM3218T-5G**	1,137	L1	16.50	92	89.5	575	5.3	
7 1/2	1800	213T	**EM3311T-5G**	1,602	L1	16.32	114	91	575	7.8	
10	1800	215T	**EM3313T-5G**	1,893	L1	17.45	132	91.7	575	10	
15	1800	254T	**EM2513T-5G**	2,660	L1	21.69	210	93	575	14.1	
20	1800	256T	**EM2515T-5G**	2,890	L1	21.69	250	93	575	18.9	
25	1800	284T	**EM2531T-5G**	3,543	L1	25.06	328	93.6	575	24.5	
30	1800	286T	**EM2535T-5G**	3,839	L1	25.06	340	94.1	575	28	
40	1800	324T	**EM2539T-5G**	4,972	L1	27.19	400	94.1	575	40	

(a) See notes on the last page of this catalog.

Cast Iron Frame

Super-E, Three Phase, ODP, Foot Mounted

1 thru 100 Hp **NEMA 143T thru 404T**

Applications: Heating, ventilation and air conditioning blower and fan motors.

Features: Class F insulated motor with 1.15 service factor or higher that operates within class "B" temperature limits at rated horsepower. Heavy-gauge steel frame construction, ball bearings, with plugged grease passages. Dynamically balanced rotors for reduced vibration and quiet operation. All models meet NEMA Premium® efficiencies, are Inverter Ready, and have a 3-year warranty. Includes bar-coded spec number label. Mounting holes on drive endplate for field conversion to add AEGIS® shaft ground.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
230/460 Volt, F1 Mounting											
1	1800	143T	**EHM3116T**	651	LS	11.12	35	85.5	208-230/460	1.5	
1 1/2	1800	145T	**EHM3154T**	676	LS	11.62	37	86.5	230/460	2.2	30
2	1800	145T	**EHM3157T**	726	LS	12.13	41	86.5	230/460	2.9	30
3	1800	182T	**EHM3211T**	779	LS	15.00	72	89.5	230/460	4.2	30
	1200	213T	**EHM3305T**	1,141	L1	16.32	114	88.5	208-230/460	4.5	
5	1800	184T	**EHM3218T**	846	LS	16.50	85	89.5	208-230/460	6.6	
	1200	215T	**EHM3309T**	1,485	L1	17.45	141	89.5	208-230/460	7.4	
7 1/2	1800	213T	**EHM3311T**	1,230	LS	16.32	115	91	208-230/460	9.7	
	1200	254T	**EHM2506T**	1,773	L1	23.19	248	90.2	230/460	11	30
10	1800	215T	**EHM3313T**	1,480	LS	17.45	127	91.7	208-230/460	12.5	
	1200	256T	**EHM2511T**	2,297	L1	23.19	260	91.7	230/460	14.3	30
15	1800	254T	**EHM2523T**	2,087	LS	21.69	212	93	208-230/460	17.7	
	1200	284T	**EHM2524T**	3,085	L1	23.81	300	91.7	230/460	20.5	30
20	1800	256T	**EHM2515T**	2,612	LS	21.69	225	93	230/460	23.5	30
	1200	286T	**EHM2528T**	3,747	L1	23.81	321	92.4	230/460	27	30
25	1800	284T	**EHM2531T**	3,177	LS	25.06	306	93.6	230/460	30	30
	1200	324T	**EHM2532T**	4,519	L1	27.69	393	93	208-230/460	34	
30	1800	286T	**EHM2535T**	3,473	LS	25.06	339	94.1	230/460	35	30
	1200	326T	**EHM2536T**	4,712	L1	28.69	482	93.6	230/460	38	30
40	1800	324T	**EHM2539T**	4,519	LS	27.19	433	94.1	230/460	49	30
50	1800	326T	**EHM2543T**	5,544	LS	27.69	469	94.5	230/460	57	30
60	1800	364T	**EHM2547T**	6,268	LS	29.94	582	95	208-230/460	68	
75	1800	365T	**EHM2551T**	7,687	LS	33.72	752	95	230/460	87	
100	1800	404T	**EHM2555T**	8,762	LS	36.97	911	95.4	208-230/460	113	
230/460 Volt, F2 Mounting											
2	1800	145T	**EHFM3157T**	726	LS	12.13	49	86.5	230/460	2.9	
3	1800	182T	**EHFM3211T**	779	LS	15.00	68	89.5	230/460	4.2	30
5	1800	184T	**EHFM3218T**	846	LS	16.50	82	89.5	208-230/460	6.6	
7 1/2	1800	213T	**EHFM3311T**	1,230	LS	16.32	115	91	208-230/460	9.7	
10	1800	215T	**EHFM3313T**	1,480	LS	17.45	127	91.7	208-230/460	12.5	
15	1800	254T	**EHFM2523T**	2,087	LS	21.69	212	93	208-230/460	17.7	
20	1800	256T	**EHFM2515T**	2,612	LS	21.69	227	93	230/460	23.5	30
25	1800	284T	**EHFM2531T**	3,177	LS	25.06	301	93.6	230/460	30	30
30	1800	286T	**EHFM2535T**	3,473	LS	25.06	328	94.1	230/460	35	30
40	1800	324T	**EHFM2539T**	4,519	LS	27.19	429	94.1	230/460	49	30
50	1800	326T	**EHFM2543T**	5,544	LS	27.69	466	94.5	230/460	57	30

(a) See notes on the last page of this catalog.

Super-E, Three Phase, ODP, Foot Mounted

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
					200 Volt						
1	1800	143T	**EHM3116T-8**	651	LS	11.12	34	85.5	200	3.5	
1 1/2	1800	145T	**EHM3154T-8**	676	LS	11.62	38	86.5	200	5.1	
2	1800	145T	**EHM3157T-8**	726	LS	12.13	41	86.5	200	6.5	
3	1800	182T	**EHM3211T-8**	779	LS	15.00	71	89.5	200	9.7	
5	1800	184T	**EHM3218T-8**	846	LS	16.50	85	89.5	200	15.3	
7 1/2	1800	213T	**EHM3311T-8**	1,230	LS	16.32	115	91	200	22.2	
10	1800	215T	**EHM3313T-8**	1,480	LS	17.45	129	91.7	200	29.5	30
15	1800	254T	**EHFM2523T-8**	2,082	LS	21.69	211	93	200	40.7	6, 30
		254T	**EHM2523T-8**	2,087	LS	21.69	210	93	200	40.7	30
20	1800	256T	**EHM2515T-8**	2,612	LS	21.69	226	93	200	54.3	30
25	1800	284T	**EHM2531T-8**	3,177	LS	25.06	369	93.6	200	70	
30	1800	286T	**EHM2535T-8**	3,473	LS	25.06	331	94.1	200	81	
40	1800	324T	**EHM2539T-8**	4,519	LS	26.69	434	94.1	200	108	
50	1800	326T	**EHM2543T-8**	5,544	LS	27.69	459	94.5	200	132	

(a) See notes on the last page of this catalog.

Super-E, Three Phase, TEFC, Foot Mounted

1 thru 50 Hp **NEMA 143T thru 326T**

Applications: Heating, ventilation and air conditioning blower and fan motors.

Features: Class F Insulation, 1.15 service factor, ball bearings with plugged grease passages, heavy-gauge steel and cast-iron frames, dynamically balanced rotors for reduced vibration and quiet operation. All models meet NEMA Premium® efficiencies, are Inverter Ready, and have a 3-year warranty. Includes bar-coded spec number label. Mounting holes on drive endplate for field conversion to add AEGIS® shaft ground.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
230/460 Volt											
1	1800	143T	**EHM3546T**	734	LS	12.31	37	85.5	208-230/460	1.5	1
1 1/2	1800	145T	**EHM3554T**	737	LS	13.29	44	86.5	208-230/460	2.2	1
2	1800	145T	**EHM3558T**	789	LS	13.29	46	86.5	208-230/460	2.9	1
3	1800	182T	**EHM3611T**	869	LS	16.54	73	89.5	208-230/460	4.2	1
5	1800	184T	**EHM3615T**	949	LS	18.04	93	89.5	208-230/460	6.7	1
	1200	215T	**EHM3708T**	1,558	L1	19.78	154	89.5	208-230/460	7.3	
7 1/2	1800	213T	**EHM3710T**	1,353	LS	19.03	128	91.7	208-230/460	9.4	1
	1200	254T	**EHM2276T**	2,583	L1	23.16	294	91	230/460	10.7	30
10	1800	215T	**EHM3714T**	1,526	LS	20.53	165	91.7	208-230/460	12	1
	1200	256T	**EHM2332T**	2,943	L1	23.16	290	91	230/460	14.4	30
15	1800	254T	**EHM2333T**	2,332	LS	23.16	250	92.4	208-230/460	18.1	1
	1200	284T	**EHM4100T**	3,914	L1	27.76	400	91.7	230/460	21	30
20	1800	256T	**EHM2334T**	2,821	LS	23.16	288	93	208-230/460	24	1
	1200	286T	**EHM4102T**	5,201	L1	27.76	457	91.7	208-230/460	27	
25	1800	284T	**EHM4103T**	3,680	LS	27.76	430	93.6	208-230/460	30	1
	1200	324T	**EHM4111T**	5,879	L1	30.39	465	93	230/460	32	30
30	1800	286T	**EHM4104T**	4,360	LS	27.76	423	93.6	208-230/460	38	1
40	1800	324T	**EHM4110T**	5,691	LS	30.28	612	94.1	208-230/460	48	1
50	1800	326T	**EHM4115T**	6,198	LS	30.28	622	94.5	230/460	58	1, 30
575 Volt											
1	1800	143T	**EHM3546T-5**	734	LS	12.31	37	85.5	575	1.2	1
1 1/2	1800	145T	**EHM3554T-5**	737	LS	13.29	44	86.5	575	1.8	1
2	1800	145T	**EHM3558T-5**	789	LS	13.29	47	86.5	575	2.3	1
3	1800	182T	**EHM3611T-5**	869	LS	16.54	74	89.5	575	3.3	1
5	1800	184T	**EHM3615T-5**	949	LS	18.04	92	89.5	575	5.3	1
7 1/2	1800	213T	**EHM3710T-5**	1,353	LS	19.03	127	91.7	575	7.6	1
10	1800	215T	**EHM3714T-5**	1,526	LS	20.53	165	91.7	575	9.6	1
15	1800	254T	**EHM2333T-5**	2,332	LS	23.16	255	92.4	575	14.5	1
20	1800	256T	**EHM2334T-5**	2,821	LS	23.16	286	93	575	19.2	1
25	1800	284T	**EHM4103T-5**	3,680	LS	27.76	397	93.6	575	23	1
30	1800	286T	**EHM4104T-5**	4,360	LS	27.76	395	93.6	575	29	1
40	1800	324T	**EHM4110T-5**	5,691	LS	30.28	575	94.1	575	39	1
50	1800	326T	**EHM4115T-5**	6,198	LS	30.28	622	94.5	575	50	1

(a) See notes on the last page of this catalog.

Cast Iron Frame

Chiller/Cooling Tower, Three Phase, TEAO

5 thru 60 Hp **NEMA 184T thru 364T** **IP55**

Applications: For use in the airstream on chillers and cooling towers.

Features: Class F insulated motor with 1.15 service factor that operates within class “B” temperature limits at rated horsepower. Corrosion resistant epoxy finish, double sealed bearings filled with moisture resistant grease, shaft seal/slinger, moisture resistant copper windings, double dipped and baked, stainless steel nameplates and corrosion resistant hardware. Designed for wet, high humidity environments. “ECTM” model Super-E® motors have NEMA Premium® efficiency and 3 year warranty. Direct replacement for most OEM applications.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	“C” Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Airflow Ft/Min	Notes [a]
5	1800	184T	**CTM3665T**	1,095	L1	13.68	100	87.5	208-230/460	6.9	1200	
		184T	**ECTM3665T**	1,239	L1	13.68	108	89.5	208-230/460	6.6	1200	
	1200	215T	**CTM3768T**	1,660	L1	19.54	206	87.5	208-230/460	7.5	1200	
		215T	**ECTM3768T**	1,968	L1	19.54	227	90.2	230/460	7.3	1200	30
7 1/2	1800	213T	**CTM3770T**	1,458	L1	19.54	164	89.5	208-230/460	10.3	1500	
		213T	**ECTM3770T**	1,653	L1	19.54	170	91.7	208-230/460	9.5	1500	
	1200	254T	**CTM2276T**	2,025	L1	23.16	179	89.5	208-230/460	10.9	1500	
		254T	**ECTM2276T**	2,802	L1	23.00	290	91	230/460	10.7	1500	30
10	1800	215T	**CTM3774T**	1,861	L1	19.54	170	89.5	208-230/460	13	1500	
		215T	**ECTM3774T**	2,218	L1	19.54	231	91.7	208-230/460	12.2	1500	
	1200	256T	**CTM2332T**	2,254	L1	23.00	275	89.5	230/460	14.4	1500	30
		256T	**ECTM2332T**	3,201	L1	23.00	297	91	230/460	14.4	1500	30
15	1800	254T	**CTM2333T**	2,472	L1	22.16	236	91	208-230/460	18.5	1500	
		254T	**ECTM2333T**	2,944	L1	23.00	278	92.4	230/460	18.1	1500	30
	1200	284T	**ECTM4100T**	4,268	L1	25.63	345	91.7	230/460	20	1500	30
20	1800	256T	**CTM2334T**	2,756	L1	23.91	245	91	230/460	25	1500	30
		256T	**ECTM2334T**	3,284	L1	23.00	293	93	230/460	24	1500	30
25	1800	284T	**CTM4103T**	3,341	L1	25.78	343	92.4	230/460	29	1500	30
		284T	**ECTM4103T**	4,042	L1	25.63	378	93.6	230/460	30	1500	30
30	1800	286T	**CTM4104T**	4,010	L1	25.78	363	92.4	230/460	36	1500	30
		286T	**ECTM4104T**	4,797	L1	25.63	410	93.6	230/460	38	1500	30
40	1800	324T	**CTM4110T**	5,334	L1	28.38	529	93	230/460	47	2000	30
		324T	**ECTM4110T**	6,273	L1	28.38	553	94.1	230/460	48	1500	30
50	1800	326T	**ECTM4115T**	7,500	L1	28.38	598	94.5	230/460	58	2000	30
60	1800	364T	**ECTM4314T**	9,863	L1	29.70	835	95	230/460	68	2000	30

(a) See notes on the last page of this catalog.

Cast Iron Frame

Chiller/Cooling Tower, Three Phase, Two Speed, TEFC

10 thru 60 Hp **215T thru 364T** **IP55**

Applications: High moisture environment fan motor for mounting in the air stream of cooling towers.

Features: High efficiency severe duty multi-speed axial fan motors. Class F insulation, 1.15 service factor. Lip seal, shaft slinger, and T-drain in both ends. Electrical design is single winding variable torque. Double shielded ball bearings. Burndy type YA compression lead lugs.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency [b]	Voltage	Full Load Amps	Notes [a]
10/2.5	1800/900	215T	**CTM1760T**	3,455	L1	20.19	210	87.5	460	12	
15/3.75	1800/900	254T	**CTM1761T**	4,381	L1	24.78	290	90.2	460	18.1	
20/5	1800/900	256T	**CTM1762T**	5,293	L1	24.56	358	91	460	24.4	
25/6.25	1800/900	284T	**CTM1763T**	6,158	L1	27.44	442	91.7	460	31.2	
30/7.5	1800/900	286T	**CTM1764T**	7,069	L1	27.44	455	91.7	460	36.6	
40/10	1800/900	324T	**CTM1765T**	9,280	L1	30.16	619	92.4	460	48	
50/12.5	1800/900	326T	**CTM1766T**	10,949	L1	30.16	657	90.2	460	63	
60/15	1800/900	364T	**CTM1767T**	15,857	L1	33.44	836	93	460	69.6	

(a) See notes on the last page of this catalog.
(b) Full load efficiency is at 1800 RPM and low speed efficiency is not published.
Cast Iron Frame

Ventilation Fan, Three Phase, TEAO, C-Face, Footless

1/2 thru 1 Hp **NEMA 56C**

Applications: Ventilation fan applications which require a C-Face mounted motor.

Features: Class F insulation, 1.0 service factor, easy access terminal panel for connections in front endplate, lube-for-life double sealed ball bearings, locked drive end construction for minimum shaft movement.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1/2	900	56C	**VAOM3560**	673	K	12.68	50	64	208-230/460	1.6	
1	900	56C	**VAOM3527**	798	K	14.93	57	74	208-230/460	3.2	

(a) See notes on the last page of this catalog.
Cast Iron Frame

Three Phase, TEAO, Foot Mounted

1/4 thru 10 Hp **NEMA 48 thru 254T**

Applications: "In the Airstream" and fan-on-shaft applications.

Features: Locked drive end bearing construction, bearings sized for larger overhung loads for fan-on-shaft applications. 36" leads.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1/4	1800	48	**AOM3454**	337	K	9.63	18	64	230/460	0.7	2, 20, 30
	1200	48	**AOM3455**	529	K	9.63	19	68	230/460	0.7	2, 20, 30
1/3	1800	48	**AOM3458**	376	K	9.63	18	68	230/460	0.9	2, 20, 30
	1200	56	**AOM3535**	557	K	10.25	22	70	208-230/460	0.9	2, 20
1/2	1800	56	**AOM3538**	442	K	10.25	25	70	208-230/460	1.1	2, 20
	1200	56	**AOM3539**	600	K	10.88	24	72	208-230/460	1.2	2, 20
3/4	1800	56	**AOM3542**	476	K	10.25	23	72	208-230/460	1.6	2, 20
	1200	56	**AOM3543**	617	K	11.75	31	77	208-230/460	1.5	2, 20
1	1800	143T	**AOM3546T**	495	L1	11.81	33	75.5	208-230/460	1.8	2
	1200	145T	**AOM3556T**	626	L1	11.12	35	78.5	208-230/460	1.9	2
	900	182T	**AOM3617T**	1,212	L1	13.62	62	74	208-230/460	2.2	2
1 1/2	1800	145T	**AOM3554T**	515	L1	11.12	34	81.5	208-230/460	2.3	2, 20
	1200	182T	**AOM3607T**	716	L1	13.62	50	78.5	208-230/460	2.5	2, 20
2	1800	145T	**AOM3558T**	546	L1	12.12	38	82.5	208-230/460	3	2, 20
	1200	184T	**AOM3614T**	768	L1	15.00	56	81.5	208-230/460	3.4	2, 20
	900	213T	**AOM3702T**	1,839	L1	16.32	97	82.5	208-230/460	3.5	2
3	1800	182T	**AOM3611T**	640	L1	13.62	59	85.5	208-230/460	4.5	2, 20
	1200	213T	**AOM3704T**	962	L1	16.32	92	84	208-230/460	4.8	2, 20
	900	215T	**AOM3705T**	2,010	L1	17.44	113	86.5	208-230/460	5.2	2, 20
5	1800	184T	**AOM3615T**	740	L1	15.00	71	87.5	208-230/460	6.8	1
	1200	215T	**AOM3708T**	1,377	L1	16.32	115	86.5	208-230/460	7.6	2, 20
	900	254T	**AOM25904T**	3,194	L1	19.63	208	82.5	230/460	8.9	1, 30
7 1/2	1800	213T	**AOM3710T**	949	L1	16.32	106	87.5	208-230/460	10.9	1
10	1800	215T	**AOM3714T**	1,150	L1	17.45	126	89.5	208-230/460	13.5	2, 20

(a) See notes on the last page of this catalog.

Cast Iron Frame

Condenser Fan, Three Phase, ODP, "Belly Band" Round Body

1/2 thru 1-1/2 Hp **NEMA 48YZ thru 56YZ**

Applications: Designed specifically for use on commercial refrigeration condenser units and air conditioning units.

Features: Corrosion resistant finish, ball bearings, dynamically balanced for quiet operation. Automatic reset thermal. Shaft 6" long - keyway and flat are 90° apart. Reconnectable leads in pulley endplate.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1/2	1200	48YZ	**CFM3036A**	566	K	14.29	24	72	208-230/460	1.2	2, 20
		56YZ	**CFM3136A**	586	K	15.30	28	70	208-230/460	1.2	
3/4	1200	48YZ	**CFM3046A**	614	K	16.02	33	77	208-230/460	1.5	2, 20
		56YZ	**CFM3146A**	633	K	15.55	33	75.5	208-230/460	1.4	
1	1200	56YZ	**CFM3156A**	722	K	16.55	38	75.5	208-230/460	1.8	
1 1/2	1200	56YZ	**CFM3166A**	785	K	17.43	48	76	208-230/460	2.5	

(a) See notes on the last page of this catalog.

Condenser Fan, Three Phase, TEAO, "Belly Band" Round Body

1/2 Hp **NEMA 56**

Applications: Condenser fan motor for use on commercial freezers in food processing plants.

Features: Totally Enclosed Air Over, low temperature grease, double sealed ball bearings, additional auxiliary 50 Hz data nameplate.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1/2	1200	56	**M3539-TP**	625	K	11.68	29	70	208-230/460	1.2	

(a) See notes on the last page of this catalog.

Fan and Blower, Single and Three Phase, ODP, Resilient Base

1/4 thru 2 Hp

NEMA 48 thru 56H

Applications: Ventilators, summer cooling fans, band saws, drill presses, farm equipment, etc.

Features: Heavy-gauge steel base, ball bearings. Dynamically balanced rotors for reduced vibration and quiet operation.

Note: Non-compliant small motors may not be manufactured after March 9, 2015. Pre-existing inventory may be sold or used. Contact ABB for new compliant motors.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
Single Phase											
1/4	1800	48	**RL1203A**	271	K	10.34	20	55	115/230	2.5	12, 30, 96
1/3	1800	56	**RL1206A**	292	K	10.96	24	60	115/230	3	30, 96
1/2	1800	48	**RL1209A**	333	K	10.96	27	62	115/230	4.2	12, 30, 96
	1800	56	**RL1304A**	434	K	11.59	26	62	115/230	4.2	12, 30, 66, 96
		56	**RL1323A**	395	K	10.97	24	62	115/230	4	2, 66, 98
3/4	3600	56	**RL1306A**	399	K	11.59	26	71	115/230	5.5	12, 30, 66, 96
	1800	56H	**RL1307A**	532	K	12.96	34	68	115/230	5.1	12, 30, 66, 96
		56	**RL1324A**	428	K	12.47	31	71	115/230	5	2, 66, 98
1	3600	56H	**RL1309A**	459	K	11.42	36	63	115/230	7.3	30, 66, 96
	1800	56H	**RL1310A**	578	K	12.04	34	66	115/230	6.7	12, 30, 66, 98
1 1/2	3600	56H	**RL1313A**	591	K	12.42	36	68	115/230	9	30, 66, 98
	1800	56H	**RL1319A**	699	K	12.42	42	68	115/230	9	30, 66, 98
Single Phase, 277 Volt											
1/3	1800	56	**RL1301A277**	446	K	10.97	23	60	277	2.5	13, 66, 98
1/2	1800	56	**RL1304A277**	464	K	11.59	26	62	277	3.6	12, 66, 98
3/4	1800	56H	**RL1307A277**	639	K	12.47	34	66	277	4.2	12, 66, 98
1	1800	56H	**RL1310A277**	657	K	12.42	42	70	277	5.4	66, 98
1 1/2	1800	56H	**RL1319A277**	715	K	13.30	49	70	277	8.5	66, 98
Three Phase											
1/4	1800	48	**RM3003**	318	K	10.34	19	64	230/460	0.7	13, 30, 98
1/3	1800	48	**RM3007**	321	K	10.34	21	68	230/460	0.8	13, 30, 98
		56	**RM3104**	366	K	10.97	22	68	230/460	0.8	13, 30, 98
1/2	3600	48	**RM3009**	321	K	10.34	19	68	230/460	1	12, 30, 98
	1800	48	**RM3010**	404	K	10.34	22	74	230/460	1	12, 30, 98
		56	**RM3108**	416	K	10.97	23	74	230/460	1	12, 30, 98
3/4	3600	56	**RM3111**	422	K	10.97	22	74	230/460	1.3	12, 30, 98
	1800	56	**RM3112**	462	K	11.59	27	75.5	208-230/460	1.5	12, 98
1	3600	56	**RM3115**	446	K	10.97	23	75.5	230/460	1.8	12, 30, 98
	1800	56	**RM3116**	489	K	12.47	32	78.5	230/460	1.7	30, 98
1 1/2	3600	56H	**RM3120**	543	K	12.47	31	80	208-230/460	2.3	98
	1800	56H	**RM3154**	563	K	12.97	35	77	208-230/460	2.8	98
2	3600	56H	**RM3155**	630	K	12.47	33	80	208-230/460	2.9	98
	1800	56H	**RM3157**	608	K	12.42	37	80	208-230/460	3.1	98

(a) See notes on the last page of this catalog.

Three Phase, ODP

1/3 thru 5 Hp NEMA 48 thru 184T

Applications: Ventilators, direct-drive or belted fan and ventilation applications.

Features: Heavy-gauge steel base, ball bearings. Dynamically balanced rotors for reduced vibration and quiet operation. Automatic thermal overloads.

Note: Non-compliant small motors may not be manufactured after March 9, 2015. Pre-existing inventory may be sold or used. Contact ABB for new compliant motors.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
Foot Mounted											
5	1800	184T	**EHM3218TA**	1,076	L1	16.50	84	89.5	208-230/460	6.6	11, 30
Resilient Base											
1/3	1800	48	**RM3007A**	383	K	10.34	21	68	230/460	0.8	12, 30, 98
1/2	1800	56H	**RM3108A**	487	K	10.97	25	72	230/460	1	12, 30, 36, 98
3/4	1800	56H	**RM3112A**	524	K	11.59	32	74	230/460	1.5	12, 30, 36, 96
1	1800	56/56H	**RM3116A**	546	K	12.47	32	78.5	208-230/460	1.6	36, 96
1 1/2	1800	56H	**RM3154A**	580	K	12.04	34	78.5	208-230/460	2.3	36, , 98
2	1800	56H	**RM3157A**	665	K	12.42	40	81.5	208-230/460	2.9	36, , 98
3	3600	145TY	**ERM3158TA**	797	L1	13.64	48	85.5	208-230/460	3.8	
5	3600	145TY	**ERHM3162TA**	1,138	L1	15.02	60	86.5	208-230/460	6.1	

(a) See notes on the last page of this catalog.

(PSC) - Direct Drive Fan, Single Phase, Foot Mounted, TEAO

1/4 thru 1/2 Hp NEMA 48Z

Applications: Exhaust fans, air handling fans, unit heaters.

Features: Double sealed ball bearings, rugged steel frame, corrosion resistant epoxy finish. 1" extended thru bolts. Permanent split capacitor. Automatic thermal overloads.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1/4	1800	48Z	**PSC3413A**	400	K	11.34	19	65.5	115/230	1.3	2, 29
1/3	1800	48Z	**PSC3416A**	444	K	11.34	21	62	115/230	1.8	2, 29
1/2	1800	48Z	**PSC3524A**	487	K	11.96	24	65	115/230	3	2, 29

(a) See notes on the last page of this catalog.

Direct Drive Fan, Single and Three Phase, TEAO

1/4 thru 1 Hp — NEMA 48Z thru 56YZ

Applications: Air-handling fans, confinement houses, exhaust fans, unit heaters. Designed for continuous air-over applications with moderate starting loads.

Features: 40°C ambient, 60 Hertz, aluminum endplates, automatic thermal overloads, ball bearings, and capacitor start (single phase). Termination panel with quick connection for easier installation. Resilient cushion rings on a rugged steel base. Reversible rotation. Class B insulation.

Note: Non-compliant small motors may not be manufactured after March 9, 2015. Pre-existing inventory may be sold or used. Contact ABB for new compliant motors.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Voltage	Full Load Amps	S.F.	Notes [a]
Single Phase, Permanent Split Capacitor											
1/4	1800	48Z	**CHC144A**	347	K	11.35	21	115/230	1.4	1.00	30, 98
	1200	48Z	**CHC164A**	403	K	11.35	19	115/230	1.5	1.15	30, 98
1/3	1800	48Z	**CHC244A**	387	K	11.35	22	115/230	1.7	1.15	30, 98
	1200	48Z	**CHC264A**	467	K	11.35	23	115/230	1.9	1.15	30, 98
1/2	1800	56YZ	**CHC345A**	438	K	12.70	27	115/230	2.6	1.15	30, 98
	1200	56YZ	**CHC365A**	504	K	13.58	34	115/230	3.3	1.15	30, 98
3/4	1800	56YZ	**CHC445A**	499	K	13.58	35	115/230	3.7	1.15	98
1	1800	56	**CHC545A**	534	K	13.04	39	115/230	4.9	1.00	98
	1200	56	**CHC565A**	722	K	13.92	51	115/230	5.3	1.00	20, 98
Three Phase											
1/4	1200	48YZ	**CHM164A**	408	K	11.34	20	230/460	0.7	1.25	30, 96
1/3	1200	48YZ	**CHM264A**	435	K	11.34	19	230/460	0.9	1.25	30, 98
1/2	1800	48YZ	**CHM344A**	416	K	11.34	23	230/460	1.1	1.25	30, 98
		56YZ	**CHM345A**	419	K	12.08	24	230/460	1.1	1.25	30, 98
	1200	48YZ	**CHM364A**	473	K	11.96	25	230/460	1.2	1.25	30, 98
		56YZ	**CHM365A**	477	K	12.70	28	230/460	1.2	1.25	30, 98
3/4	1200	56YZ	**CHM465A**	545	K	13.58	34	208-230/460	1.5	1.15	30, 98
1	1800	56YZ	**CHM545A**	526	K	13.58	35	208-230/460	1.6	1.15	30, 98
	1200	56	**CHM565A**	620	K	13.04	40	208-230/460	1.8	1.15	30, 98

(a) See notes on the last page of this catalog.

Yoke/Pedestal Fan, Single Phase, PSC, TEAO

1/4 thru 1/2 Hp — NEMA 48YZ thru 56YZ

Applications: Air circulation fans. Designed for continuous air-over applications with moderate starting loads.

Features: 40°C ambient, 60 Hertz, aluminum endplates, automatic thermal overloads, and ball bearings. 1.0 service factor. Extended thru bolts on 5.13" bolt circle for mounting fan shroud. Heavy gage steel yoke with 180° slot for wide angle rotation. Reversible rotation. Termination panel with quick connection for easier installation.

Note: Non-compliant small motors may not be manufactured after March 9, 2015. Pre-existing inventory may be sold or used. Contact ABB for new compliant motors.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Voltage	Full Load Amps	S.F.	Notes [a]
1/4	1800	48YZ	**YPC144A**	297	K	10.68	20	115	2.6	1.00	98
	1200	48YZ	**YPC164A**	337	K	10.68	20	115	2.9	1.00	98
1/3	1800	48YZ	**YPC244A**	321	K	10.68	17	115	3.4	1.00	98
		56YZ	**YPC245A**	326	K	10.68	21	115	3.4	1.00	98
	1200	48YZ	**YPC264A**	369	K	10.68	22	115	3.8	1.00	98
1/2	1800	48YZ	**YPC344A**	369	K	10.68	23	115	5.1	1.00	98
		56YZ	**YPC345A**	374	K	10.68	24	115	5.1	1.00	98
	1200	48YZ	**YPC364A**	422	K	11.31	27	115	5.5	1.00	98

(a) See notes on the last page of this catalog.

Three Phase, Two Speed, TEFC, Foot Mounted

1/2 thru 25 Hp

NEMA 56 thru 324T

Applications: Fans, blowers, machine tools, hoists, conveyors, pumps.

Features: Designed for use in applications in which multiple speeds are required. Heavy duty steel or cast-iron frames, ball bearing, dynamically balanced rotors.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Voltage	Full Load Amps	Notes [a]
Constant Torque, One Winding, Low Voltage										
1/.5	1800/900	143T	**M1504T**	1,132	L1	13.31	39	208-230	2.8	71
1.5/.75	1800/900	145T	**M1505T**	1,196	L1	14.19	47	230	4.1	8, 71
2/1	1800/900	184T	**M1506T**	1,452	L1	16.54	64	208-230	5.5	71
3/1.5	1800/900	184T	**M1507T**	1,644	L1	18.04	84	230	8.3	1, 71
5/2.5	1800/900	215T	**M1508T**	2,148	L1	19.01	134	208-230	13	71
7.5/3.8	1800/900	215T	**M1509T**	2,797	L1	20.51	185	230	18.9	1, 71
Constant Torque, One Winding, High Voltage										
1/.5	1800/900	143T	**M1704T**	1,132	L1	14.19	45	460	1.4	71
1.5/.75	1800/900	145T	**M1705T**	1,196	L1	14.19	47	460	2.1	8, 71
2/1	1800/900	184T	**M1706T**	1,452	L1	16.54	65	460	2.8	71
3/1.5	1800/900	184T	**M1707T**	1,644	L1	18.04	84	460	4.2	1, 71
5/2.5	1800/900	215T	**M1708T**	2,148	L1	19.01	132	460	6.5	71
7.5/3.8	1800/900	215T	**M1709T**	2,797	L1	20.51	181	460	9.4	1, 71
10/5	1800/900	254T	**M1710T**	4,308	L1	23.28	263	460	13	1, 71
15/7.5	1800/900	256T	**M1711T**	4,988	L1	23.28	267	460	19.2	1, 71
20/10	1800/900	284T	**M1712T**	6,338	L1	27.76	378	460	25	1, 71
25/13	1800/900	286T	**M1713T**	7,694	L1	27.76	397	460	29	1, 71
Variable Torque, One Winding, Low Voltage										
1/.25	1800/900	143T	**M1554T**	798	L1	12.31	33	208-230	3	71
1.5/.38	1800/900	145T	**M1555T**	829	L1	13.31	41	208-230	4.8	71
2/.5	1800/900	145T	**M1556T**	963	L1	13.31	41	208-230	6.1	71
3/.75	1800/900	184T	**M1557T**	1,036	L1	16.54	65	208-230	8	1, 71
5/1.3	1800/900	184T	**M1558T**	1,318	L1	18.04	83	208-230	13.5	71
Variable Torque, One Winding, High Voltage										
1/.25	1800/900	143T	**M1754T**	798	L1	12.31	33	460	1.7	1, 71
1.5/.38	1800/900	145T	**M1755T**	829	L1	13.31	38	460	2.3	71
2/.5	1800/900	145T	**M1756T**	963	L1	14.19	45	460	3	71
3/.75	1800/900	184T	**M1757T**	1,036	L1	16.54	63	460	4	1, 71
5/1.3	1800/900	184T	**M1758T**	1,318	L1	18.04	84	460	6.7	1, 71
7.5/1.9	1800/900	215T	**M1759T**	1,857	L1	19.01	136	460	9.3	1, 71
10/2.5	1800/900	215T	**M1760T**	2,187	L1	20.52	158	460	12.5	8, 71
15/3.75	1800/900	254T	**M1761T**	3,023	L1	23.28	247	460	19.6	1, 71
20/5	1800/900	284T	**M1762T**	3,574	L1	27.76	344	460	26	1, 71
25/6.3	1800/900	286T	**M1763T**	4,147	L1	27.76	384	460	32	1, 71
Variable Torque, Two Windings, Low Voltage										
.75/.33	1800/1200	56	**M1519**	882	K	13.23	37	230	2.8	71
1/.44	1800/1200	145T	**M1520T**	921	L1	13.31	42	208-230	3.1	71
1.5/.67	1800/1200	182T	**M1521T**	1,138	L1	15.17	58	208-230	4.4	71
2/.89	1800/1200	182T	**M1522T**	1,305	L1	16.54	66	208-230	5.8	71
3/1.3	1800/1200	184T	**M1523T**	1,527	L1	16.54	73	208-230	8	1, 71
5/2.2	1800/1200	215T	**M1524T**	2,392	L1	19.01	126	230	12.8	1, 71

(a) See notes on the last page of this catalog.

Cast Iron Frame

Three Phase, Two Speed, TEFC, Foot Mounted

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Voltage	Full Load Amps	Notes [a]
Variable Torque, Two Windings, High Voltage										
.5/.22	1800/1200	56	**M1718**	822	K	12.23	29	460	1.1	71
.75/.33	1800/1200	56	**M1719**	909	K	12.23	33	460	1.4	71
1/.44	1800/1200	145T	**M1720T**	921	L1	13.31	35	460	1.6	71
1.5/.67	1800/1200	182T	**M1721T**	1,138	L1	14.26	50	460	2.2	71
2/.89	1800/1200	182T	**M1722T**	1,305	L1	16.52	58	460	2.8	71
3/1.3	1800/1200	184T	**M1723T**	1,527	L1	16.54	73	460	4	1, 71
5/2.2	1800/1200	215T	**M1724T**	2,392	L1	19.01	128	460	6.4	1, 71
7.5/3.3	1800/1200	254T	**M1725T**	3,092	L1	23.28	230	460	10.3	1, 71
10/4.4	1800/1200	254T	**M1726T**	3,559	L1	21.07	225	460	12.5	1, 71
15/6.7	1800/1200	284T	**M1727T**	4,223	L1	27.76	355	460	19.3	1, 71
20/8.9	1800/1200	286T	**M1728T**	5,726	L1	27.76	390	460	27	1, 71
25/11	1800/1200	324T	**M1729T**	6,032	L1	30.28	512	460	30	1, 71

(a) See notes on the last page of this catalog.

Cast Iron Frame

Three Phase, Two Speed, ODP, Foot Mounted

1/2 thru 25 Hp

NEMA 56 thru 286T

Applications: Fans, blowers, and pumps.

Features: Designed for use in applications in which multiple speeds are required. Heavy duty steel or cast-iron frames, ball bearing, dynamically balanced rotors.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Voltage	Full Load Amps	Notes [(a)]
Variable Torque, One Winding, Low Voltage										
1/.25	1800/900	143T	**M1004T**	760	L1	11.12	33	208-230	3	
1.5/.38	1800/900	145T	**M1005T**	790	L1	12.13	38	208-230	4.4	
2/.5	1800/900	145T	**M1006T**	912	L1	12.13	41	230	6.1	
3/.75	1800/900	184T	**M1007T**	980	L1	13.62	56	208-230	8	
5/1.3	1800/900	184T	**M1008T**	1,180	L1	15.00	71	230	13.2	1
7.5/1.9	1800/900	215T	**M1009T**	1,685	L1	16.32	113	230	20	
10/2.5	1800/900	215T	**M1010T**	1,910	L1	17.45	133	208-230	25	1
Variable Torque, One Winding, High Voltage										
1/.25	1800/900	143T	**M1204T**	760	L1	11.12	33	460	1.5	
1.5/.38	1800/900	145T	**M1205T**	790	L1	12.13	37	460	2.2	
2/.5	1800/900	145T	**M1206T**	912	L1	12.13	41	460	3.1	
3/.75	1800/900	184T	**M1207T**	980	L1	13.62	56	460	4	
5/1.3	1800/900	184T	**M1208T**	1,180	L1	15.00	72	460	6.6	1
7.5/1.9	1800/900	215T	**M1209T**	1,685	L1	16.32	112	460	10	
10/2.5	1800/900	215T	**M1210T**	1,910	L1	17.45	132	460	13	1
15/3.8	1800/900	254T	**M1211T**	2,683	L1	21.69	206	460	20	1
20/5	1800/900	256T	**M1212T**	3,288	L1	21.69	204	460	26	1
25/6.3	1800/900	284T	**M1213T**	3,859	L1	23.81	300	460	34	
Variable Torque, Two Windings, Low Voltage										
.75/.33	1800/1200	56	**M1019**	816	K	12.07	36	230	2.8	
1/.44	1800/1200	145T	**M1020T**	879	L1	12.13	41	230	3	
1.5/.67	1800/1200	182T	**M1021T**	1,065	L1	13.62	55	208-230	4.4	
2/.89	1800/1200	182T	**M1022T**	1,215	L1	15.00	64	230	5.8	
3/1.3	1800/1200	184T	**M1023T**	1,415	L1	15.00	72	230	8	
5/2.2	1800/1200	215T	**M1024T**	2,178	L1	16.32	113	230	12.8	1
Variable Torque, Two Windings, High Voltage										
.5/.22	1800/1200	56	**M1218**	777	K	11.07	33	460	0.9	
.75/.33	1800/1200	56	**M1219**	816	K	12.07	36	460	1.4	
1/.44	1800/1200	145T	**M1220T**	879	L1	12.13	41	460	1.9	
1.5/.67	1800/1200	182T	**M1221T**	1,065	L1	13.62	55	460	2.2	
2/.89	1800/1200	182T	**M1222T**	1,215	L1	15.00	65	460	3	
3/1.3	1800/1200	184T	**M1223T**	1,415	L1	15.00	72	460	4	
5/2.2	1800/1200	215T	**M1224T**	2,178	L1	16.32	113	460	6.4	1
7.5/3.3	1800/1200	256T	**M1225T**	2,896	L1	22.25	148	460	9.9	
10/4.4	1800/1200	256T	**M1226T**	3,271	L1	22.25	172	460	12.7	1
15/6.7	1800/1200	284T	**M1227T**	3,969	L1	23.81	288	460	18.1	
20/8.9	1800/1200	286T	**M1228T**	5,323	L1	23.81	309	460	24	

(a) See notes on the last page of this catalog.

Pressure Washer, Single Phase, TEFC and ODP

1-1/2 thru 5 Hp NEMA 56 thru 184TC

Applications: Pressure washers, steam cleaners, portable and self contained stationary system for direct drive mount and doubled mount designs.

Features: Ball bearing design. 1 1/2 horsepower ratings are rated at 14 amps or less on 115 volts. Manual thermal overload located in the conduit box. UL and CSA recognized component approval. Capacitor start, capacitor run (two value capacitor).

Note: Non-compliant small motors may not be manufactured after March 9, 2015. Pre-existing inventory may be sold or used. Contact ABB for new compliant motors.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
Totally Enclosed Fan Cooled											
1 1/2	3600	56	**PL3513M**	634	K	13.25	38	75.5	115/230	6.6	
	1800	56	**PL3514M**	842	K	14.12	51	82.5	115/230	6	
2	3600	56	**PL3515M**	767	K	13.25	42	77	115/230	8.8	1
	1800	56HZ	**L3516TM**	1,043	K	13.31	46	82.5	208-230	8.1	1, 57
3	3600	56	**PL3519M**	841	K	14.12	50	85.5	230	12.5	1, 30
	1800	184T	**L3609TM**	1,152	L1	16.54	79	78	115/230	14.5	2, 20
5	3600	184T	**L3608TM**	1,326	L1	18.05	89	83	230	19.5	2, 20
	1800	184T	**L3612TM**	1,339	L1	18.05	100	80	230	23	2, 20
Totally Enclosed Fan Cooled, C-Face											
1 1/2	3600	56C	**PCL3513M**	679	K	13.25	38	75.5	115/230	6.6	
	1800	56C	**PCL3514M**	885	K	14.12	54	82.5	115/230	6	
2	3600	56C	**PCL3515M**	805	K	13.24	43	77	115/230	8.8	1
	1800	145TC	**CL3516TM**	1,052	L1	14.16	53	82.5	208-230	7.9	1
3	3600	56C	**PCL3519M**	882	K	14.12	52	85.5	230	12.5	1, 30
	1800	184TC	**CL3619TM**	1,368	L1	16.54	81	81.5	230	13.2	2, 20
5	3600	184TC	**CL3608TM**	1,482	L1	18.05	92	83	230	19.5	2, 20
	1800	184TC	**CL3612TM**	1,434	L1	18.05	102	80	230	23	2, 20
Open Drip Proof											
1 1/2	3600	56/56H	**PL1313M**	552	K	11.75	37	75.5	115/230	6.6	36, 98
	1800	56	**PL1319M**	732	K	12.06	43	74	115/230	7	98
2	3600	56	**PL1317M**	719	K	12.06	41	77	115/230	8.8	98
	1800	56	**PL1322M**	767	K	12.94	46	78.5	115/230	9.2	96
3	3600	56	**PL1326M**	794	K	12.94	49	85.5	230	12.5	30, 98
	1800	184T	**L1408TM**	958	L1	15.00	74	78	115/230	16	
5	3600	56/56H	**PL1327M**	818	K	13.81	56	74.2	230	23	2, 20, 30, 36, 98
	1800	184T	**L1410TM**	1,165	L1	16.50	85	82.5	230	23	1, 30
Open Drip Proof, C-Face											
1 1/2	3600	56C	**PCL1313M**	598	K	12.06	38	75.5	115/230	6.6	98
	1800	56C	**PCL1319M**	767	K	12.06	44	74	115/230	7	98
2	3600	56C	**PCL1317M**	767	K	12.06	42	77	115/230	8.8	98
	1800	56C	**PCL1322M**	795	K	12.94	48	78.5	115/230	9.2	96
3	3600	56C	**PCL1326M**	841	K	12.94	50	78.1	230	12.5	30, 98
	1800	184TC	**CL1408TM**	1,012	L1	15.00	80	78	115/230	16	
5	3600	56HCY	**PCL1327M**	861	K	14.11	57	74.2	230	23	2, 20, 30, 36, 47, 98
	1800	184TC	**CL1410TM**	1,220	L1	16.50	88	82.5	230	23	1, 30

(a) See notes on the last page of this catalog.

Arbor Saw, Three Phase, TEFC, Foot Mounted

7-1/2 thru 15 Hp

Applications: Heavy duty circular saw applications. Machine tools.

Features: Low profile for maximum blade cutting depth. Supplied with keyway and unthreaded shaft suitable for right or left threading. (See “Mod Express” section for custom threading.) Double row ball bearings for maximum shaft stability in precision woodworking applications.

Hp	RPM	Catalog Number	List Price	Mult. Sym.	“C” Dim.	Aprx. Wt. (lb)	Voltage	Full Load Amps	Notes [a]
7 1/2	3600	**ASM6207**	3,117	L1	16.73	105	230/460	9.2	1
10	3600	**ASM6210**	3,331	L1	16.73	108	208-230/460	11.5	
		ASM7510	3,883	L1	13.45	142	230/460	12	2
15	3600	**ASM6215**	3,883	L1	18.48	117	208-230/460	17	
		ASM7515	4,189	L1	14.45	146	208-230/460	16.5	2

(a) See notes on the last page of this catalog.

Woodworking, Single Phase, TEFC

1 thru 3 Hp — NEMA 48Z thru 184YZ

Applications: Woodworking equipment such as table saws, planers, etc.

Features: Motor swivels on rod for belt tensioning. Shaft supplied with full key and keyway. Extra high breakdown torques for maximum cutting power. 1.00 Service Factor.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1	3600	48Z	**WWL3509**	496	K	13.35	33	65	115/230	6.3	67
2	3600	145TYZ	**WWL3515T**	809	L1	13.56	55	70	115/208-230	12	20, 65
3	3600	184YZ	**WWL3606**	1,034	L1	14.89	72	72	230	15.5	

(a) See notes on the last page of this catalog.

Cast Iron Frame

Pre-1952 NEMA, Single and Three Phase, Foot Mounted

1/2 thru 5 Hp — NEMA 66 thru 254

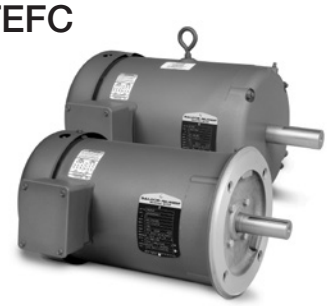
Applications: Applications requiring pre-1952 NEMA frame dimensions.

Features: Heavy-gauge seam-welded base, ball bearings.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
Single Phase, Totally Enclosed Fan Cooled											
.5	1800	66	**L3576M**	696	K	13.62	36	64	115/230	4	
.75	1800	66	**L3565M**	827	K	13.62	38	66	115/230	5.3	
1	1800	66	**L3566M**	899	K	13.62	41	67	115/230	6.5	30
1.5	1800	66	**L3567M**	1,089	K	14.5	49	75.5	115/208-230	8	2, 65
Three Phase, Totally Enclosed Fan Cooled											
.5	1800	66	**M3564**	671	K	13.62	30	72	208-230/460	1.1	
.75	1800	66	**M3565**	705	K	13.62	31	75.5	208-230/460	1.3	30
1	1800	66	**M3566**	740	K	13.62	32	75.5	208-230/460	1.8	
1.5	1800	66	**M3567**	776	K	13.62	38	81.5	208-230/460	2.3	
Single Phase, Open Drip Proof											
1	1800	203	**L1413**	1,268	L1	14.37	52	70	115/230	7	30
1.5	1800	204	**L1414**	1,483	L1	14.37	59	68	115/230	9.5	30
Three Phase, Open Drip Proof											
1	1800	203	**M3233**	1,098	L1	14.38	51	77	208-230/460	1.6	
1.5	1800	204	**M3234**	1,164	L1	14.38	51	81.5	208-230/460	2.4	
2	1800	224	**M3324**	1,567	L1	16.32	79	79	208-230/460	3.3	
3	1800	225	**M3325**	1,614	L1	16.32	80	82.5	208-230/460	5.7	
5	1800	254	**M3326**	1,968	L1	18.32	95	84	208-230/460	6.8	

(a) See notes on the last page of this catalog.

U-Frame, Three Phase, TEFC



1/2 thru 30 Hp NEMA 182 thru 326U

Applications: Pumps, compressors, fans, conveyors, machine tools and other general purpose three phase applications requiring NEMA U-frame mounting.

Features: Ball bearings, heavy-gauge steel and cast-iron frames, Exxon Polyrex EM grease. All the features of our stock three phase general purpose NEMA T -frame motors but with NEMA U-frame mounting dimensions.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
Totally Enclosed Foot Mounted											
1/2	900	182	**M3600**	1,082	L1	13.76	41	70	208-230/460	1.3	
3/4	1200	182	**M3601**	857	L1	13.76	36	72	208-230/460	1.5	
	900	184	**M3602**	1,082	L1	14.64	51	72	208-230/460	1.6	1
1	1800	182	**M3603**	777	L1	13.76	38	82.5	208-230/460	1.6	
	1200	184	**M3604**	991	L1	13.76	44	80	208-230/460	1.8	
1 1/2	3600	182	**M3605**	882	L1	13.76	41	82.5	208-230/460	2.1	
	1800	184	**M3606**	792	L1	13.76	43	84	208-230/460	2.4	
	1200	184	**M3607**	1,059	L1	15.69	66	85.5	208-230/460	2.5	
	900	213	**M3701**	1,671	L1	15.89	88	77	230/460	2.7	
2	3600	184	**M3608**	1,015	L1	13.76	41	84	208-230/460	2.6	
	1800	184	**M3609**	835	L1	13.76	45	84	208-230/460	3.1	
	1200	213	**M3712**	1,197	L1	18.17	80	86.5	208-230/460	3.4	
	900	215	**M3702**	1,865	L1	17.51	100	82.5	208-230/460	3.5	
3	3600	184	**M3610**	836	L1	14.64	54	85.5	208-230/460	3.7	1
	1800	182	**M3611**	870	L1	14.64	63	87.5	208-230/460	4.2	1
		213	**M3703**	1,023	L1	18.17	70	87.5	208-230/460	4.2	1
	1200	215	**M3704**	1,259	L1	17.51	109	87.5	208-230/460	4.6	1
5	3600	213	**M3706**	1,424	L1	18.17	75	87.5	208-230/460	5.8	1
	1800	215	**M3707**	1,290	L1	18.17	83	87.5	208-230/460	6.8	1
	1200	254U	**M2275**	2,626	L1	20.82	211	87.5	208-230/460	7.5	
7 1/2	3600	215	**M3709**	1,436	L1	18.17	90	88.5	208-230/460	8.7	
	1800	254U	**M2237**	2,236	L1	22.91	232	89.5	208-230/460	9.3	1
	1200	256U	**M2276**	3,157	L1	22.57	229	89.5	208-230/460	10.9	1
10	3600	254U	**M2393**	2,509	L1	20.82	171	89.5	208-230/460	11.5	1
	1800	256U	**M2238**	2,803	L1	22.91	245	89.5	208-230/460	12.7	1
	1200	284U	**M2332**	4,033	L1	26.34	310	89.5	230/460	14.4	1, 30
15	3600	256U	**M2394**	2,602	L1	22.57	225	90.2	208-230/460	17.2	1
	1800	284U	**M2333**	3,859	L1	26.34	292	91	230/460	18.1	1, 30
20	3600	286U	**M4106**	3,759	L1	26.34	309	90.2	230/460	23	1, 30
	1800	286U	**M2334**	4,618	L1	26.34	296	91	230/460	24	1, 30
25	3600	324U	**M4107**	5,860	L1	30.76	401	91	230/460	29	1, 30
	1800	324U	**M4103**	5,738	L1	30.76	408	92.4	230/460	30	1, 30
30	1800	326U	**M4104**	6,806	L1	30.76	423	92.4	230/460	37	1, 30
Totally Enclosed, C-Face, Footless											
1	1800	182C	**VM3603**	937	L1	12.31	34	82.5	208-230/460	1.56	
1 1/2	1800	184C	**VM3606**	996	L1	13.31	39	84	208-230/460	2.4	
	1200	184C	**VM3607**	1,118	L1	15.68	64	85.5	208-230/460	2.5	
2	1800	184C	**VM3609**	1,035	L1	13.31	41	84	208-230/460	3.1	
	1200	184C	**VM3614**	1,169	L1	15.68	73	86.5	208-230/460	3.4	
3	3600	184C	**VM3610**	1,006	L1	14.19	50	85.5	208-230/460	3.7	1
	1800	184C	**VM3611**	1,069	L1	15.56	60	87.5	208-230/460	4.2	1
		213C	**VM3703**	1,136	L1	16.67	72	87.5	208-230/460	4.1	1
	1200	215C	**VM3704**	1,372	L1	18.26	106	87.5	208-230/460	4.6	1
5	3600	184C	**VM3613**	960	L1	15.68	68	87.5	208-230/460	5.8	1
	1800	184C	**VM3615**	1,221	L1	15.68	73	87.5	208-230/460	6.8	1
		215C	**VM3707**	1,402	L1	16.67	78	87.5	208-230/460	6.8	1

(a) See notes on the last page of this catalog.

Cast Iron Frame

U-Frame, Three Phase, ODP

1 thru 20 Hp NEMA 182 thru 286U

Applications: Pumps, compressors, fans, conveyors, machine tools and other general purpose three phase applications requiring NEMA U-frame mounting.

Features: Ball bearings, heavy-gauge steel and cast-iron frames, Exxon Polyrex EM grease. All the features of our stock three phase general purpose NEMA T -frame motors but with NEMA U-frame mounting dimensions.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
Open Drip Proof, Foot Mounted											
1	1800	182	**M3203**	713	L1	12.62	36	82.5	208-230/460	1.56	
1 1/2	1800	184	**M3206**	742	L1	12.62	40	84	208-230/460	2.4	
2	3600	184	**M3208**	911	L1	12.62	42	84	208-230/460	2.5	
	1800	184	**M3209**	799	L1	12.62	44	84	208-230/460	3.15	
3	3600	184	**M3210**	968	L1	12.62	57	84	208-230/460	3.7	
	1800	184	**M3211**	801	L1	14.12	55	86.5	208-230/460	4.1	
		213	**M3304**	976	L1	16.63	68	86.5	230/460	4.6	30
5	1800	215	**M3308**	1,023	L1	16.62	77	87.5	208-230/460	7.2	
7 1/2	3600	215	**M3310**	1,376	L1	16.62	75	87.5	208-230/460	8.7	
	1800	254U	**M2505**	2,088	L1	19.51	129	88.5	208-230/460	10.1	
10	1800	256U	**M2510**	2,521	L1	22.00	177	87.5	230/460	13.4	1, 30
15	1800	284U	**M2523**	3,297	L1	23.69	223	91	230/460	18	1, 30
20	1800	286U	**M2527**	3,783	L1	23.69	240	91.7	230/460	25	1, 30
Open Drip Proof, C-Face, Footless											
3	1800	184C	**VM3211**	839	L1	15.55	55	86.5	208-230/460	4.1	1
5	1800	184C	**VM3218**	667	L1	15.68	74	87.5	208-230/460	7.2	1

(a) See notes on the last page of this catalog.

U-Frame, Single Phase

1 thru 5 Hp NEMA 182 thru 215

Applications: Pumps, compressors, fans, conveyors, machine tools and other general purpose single phase applications requiring NEMA U-frame mounting.

Features: Ball bearings, heavy-gauge steel frames, Exxon Polyrex EM grease, All the features of our stock general purpose single phase NEMA T-frame motors but with NEMA U-frame mounting dimensions.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
Totally Enclosed, Foot Mounted											
1	1800	182	**L3601**	996	L1	14.31	55	72	115/230	6	3, 30
	1200	184	**L3607**	1,590	L1	15.69	74	67	115/230	7	3, 30
1 1/2	1800	184	**L3603**	1,085	L1	15.69	66	70	115/230	9.5	3, 30
2	1800	184	**L3605**	1,214	L1	15.69	67	75.5	115/230	11.5	3, 30
		184	**L3605M**	1,301	L1	15.69	66	75.5	115/230	11.5	3, 30
	1200	215	**L3703**	2,626	L1	17.51	113	80	115/230	9.4	2, 30, 65
3	1800	215	**L3705**	2,070	L1	17.51	117	80	115/230	14	30, 65
	1200	215	**L3706**	3,153	L1	17.51	110	82.5	115/230	14	1, 30, 65
5	1800	215	**L3708**	2,117	L1	18.64	100	84	230	20.5	1, 30, 65
Totally Enclosed, C-Face, Footless											
2	1800	184C	**VL3605**	1,309	L1	15.68	64	75.5	115/230	11.5	3, 30
Open Drip Proof, Foot Mount											
1	1800	182	**L1401**	799	L1	12.75	46	70	115/230	7	30
		182	**L1401M**	867	L1	12.75	49	70	115/230	7	
	1200	184	**L1407**	1,401	L1	14.13	64	65	115/230	8	30
1 1/2	1800	184	**L1403**	892	L1	12.75	56	68	115/230	9.5	30
2	1800	184	**L1405**	936	L1	14.13	65	71	115/230	12	30
	1200	215	**L1503**	2,188	L1	15.94	108	68	115/230	14	30
3	1800	215	**L1505**	1,781	L1	15.94	106	75	115/230	18	30

(a) See notes on the last page of this catalog.

Automotive Duty, Three Phase, TEFC, Foot Mounted

1 thru 100 Hp NEMA 182 thru 445U

Applications: Pumps, compressors, fans, conveyors, machine tools and other applications where automotive approved motors are required.

Features: Heavy duty cast iron frames, regreasable double shield ball bearings, shaft slinger on both ends of motor, stainless steel nameplate, epoxy paint. Suitable for 65°C ambient 1.00 service factor or 1.15 service factor, 40°C ambient. Class F insulation, 1.00 service factor.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1	1800	182	**AEM3683-4**	1,269	L1	13.18	79	84	460	1.5	60
	1200	184	**AEM3684-4**	1,601	L1	14.74	90	80.5	460	1.7	
1 1/2	1800	184	**AEM3686-4**	1,362	L1	14.74	86	85	460	2.2	
	1200	184	**AEM3687-4**	1,771	L1	14.74	88	85.5	460	2.5	
2	1800	184	**AEM3689-4**	1,451	L1	14.74	95	86	460	2.9	
	1200	213	**AEM3782-4**	1,976	L1	18.07	180	86.5	460	3.2	
3	1800	213	**AEM3783-4**	1,675	L1	18.07	155	89.5	460	3.9	
	1200	215	**AEM3784-4**	2,406	L1	18.07	155	87.5	460	4.6	
5	1800	215	**AEM3787-4**	2,193	L1	18.07	166	90.2	460	6.7	
	1200	254U	**AEM2275-4**	3,338	L1	20.81	211	87.5	460	7.5	
7 1/2	1800	254U	**AEM2237-4**	2,942	L1	23.11	227	89.5	460	9.2	
	1200	256U	**AEM2276-4**	4,252	L1	23.11	299	90.2	460	10.6	
10	1800	256U	**AEM2238-4**	3,558	L1	23.11	245	90.2	460	12	
	1200	284U	**AEM2332-4**	5,218	L1	27.81	353	91	460	13.8	
15	1800	284U	**AEM2333-4**	4,943	L1	26.92	312	92.4	460	18	
	1200	324U	**AEM4100-4**	6,992	L1	30.66	497	90.2	460	20.3	
20	1800	286U	**AEM2334-4**	5,960	L1	27.81	384	91	460	25	
	1200	326U	**AEM4102-4**	8,773	L1	30.66	513	90.2	460	25.4	
25	1800	324U	**AEM4103-4**	7,597	L1	30.66	551	92.4	460	29.5	
	1200	364U	**AEM4111-4**	9,413	L1	33.94	878	93	460	29.2	
30	1800	326U	**AEM4104-4**	8,583	L1	30.66	559	93.6	460	35	
	1200	365U	**AEM4117-4**	10,918	L1	33.95	830	93	460	35.1	
40	1800	364U	**AEM4307-4**	10,199	L1	33.95	874	94.5	460	45	
	1200	404U	**AEM4308-4**	13,888	L1	38.20	1198	94.1	460	47.4	
50	1800	365U	**AEM4311-4**	12,282	L1	33.95	915	93.6	460	56.4	
	1200	405U	**AEM4312-4**	16,572	L1	38.20	1160	94.1	460	58.2	
60	1800	405U	**AEM4314-4**	15,008	L1	38.20	1294	94.5	460	67.6	
	1200	444U	**AEM4403-4**	19,390	L1	44.75	1574	94.1	460	70.2	
75	1800	444U	**AEM4316-4**	18,755	L1	44.75	1751	95.4	460	82.5	
	1200	445U	**AEM4404-4**	26,259	L1	44.75	1681	95	460	85.6	
100	1800	445U	**AEM4400-4**	20,718	L1	44.75	1892	95.8	460	110	

(a) See notes on the last page of this catalog.

Cast Iron Frame

Single and Three Phase, TENV, Foot or C-Face Mounting, Removable Base

1/12 thru 1/4 Hp NEMA 42C

Applications: General purpose fractional horsepower applications including pumps, compressors, machine tools, and air handling.

Features: C-face with removable base, rugged cast aluminum housing having a dry powder epoxy coating, and ball bearings with the drive end bearing locked.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
Single Phase											
1/12	3600	42C	**CNL20082**	256	DS	7.39	12	55	115	1.1	2, 20
1/8	1800	42C	**CNL20134**	279	DS	7.89	13	58.6	115	1.6	2, 20
1/6	3600	42C	**CNL20172**	288	DS	8.39	13	68	115	1.9	2, 20
Three Phase											
1/8	3600	42C	**CNM20132**	311	DS	7.39	8	64	230/460	0.4	2, 20
	1800	42C	**CNM20134**	337	DS	7.39	10	62	208-230/460	0.4	2, 20
1/4	3600	42C	**CNM20252**	346	DS	7.89	12	72	230/460	0.5	2, 20

(a) See notes on the last page of this catalog.

Synchronous Permanent Magnet, Three Phase, TEFC, Foot Mounted

1 thru 3 Hp NEMA 56C thru 182TC

Applications: Synchronous permanent magnet motors are designed for those applications requiring inherent, precise, open-loop speed regulation of individual or multiple interconnected operations.

Features: Motor design incorporates permanent magnets imbedded in the rotor to form salient poles that synchronize the load to the frequency applied with zero slip line start capable. Steel band frames, top mounted steel conduit box, 1.00 Service Factor, Class F insulation, 40C ambient, continuous duty. Precision balanced with Max Safe Speed = 6,000 RPM. Inverter Ready design suitable for 10:1 Constant Torque speed range.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
F1 Mounting											
2	1800	145TC	**CSPM3558T**	3,735	L1	14.17	55	87.5	230/460	2.5	
F3 Mounting											
1	3600	56C	**CSPM3545**	2,997	K	13.29	34	78	230/460	1.1	
	1800	145TC	**CSPM3546T**	3,299	L1	13.29	37	89.5	230/460	1.2	
2	3600	145TC	**CSPM3555T**	3,495	L1	14.17	60	84	230/460	2.2	
3	1800	182TC	**CSPM3611T**	4,457	L1	16.56	70	89.5	230/460	4	

(a) See notes on the last page of this catalog.

Single and Three Phase, C-Face, TEFC

1/2 thru 7-1/2 Hp — NEMA 56C thru 213TC

Applications: Unit and baggage handling, conveyors, packaging equipment, machine tools, hoists, elevators and door operators.

Features: UL/CSA recognized and CE certified. CEUHM/VEUHM motors are Super-E® with NEMA Premium® efficiency, Inverter-ready. 143-145TY and 143-145TCY frame motors have a special base with 56, 143 and 145 slots used on OEM conveyors. 56-140 frames have low profile F3 top-mounted conduit box. 3 year warranty on Super-E® motors.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
Single Phase, C-Face, Foot Mounted											
1/2	1800	56C	**CUHL3518**	490	K	12.22	37	68	115/208-230	3.7	
1	1800	56C	**CUHL3519**	597	K	13.22	44	67	115/208-230	6.4	
Single Phase, C-Face, Footless											
1/2	1800	56C	**VUHL3518**	464	K	12.22	35	68	115/208-230	3.7	
1	1800	56C	**VUHL3519**	571	K	13.22	40	67	115/208-230	6.4	
Three Phase, C-Face, Foot Mounted											
1/2	1800	56C	**CUHM3538**	420	K	12.23	27	72	208-230/460	1.1	1, 48
3/4	1800	56C	**CUHM3542**	444	K	12.23	31	77	208-230/460	1.2	1, 48
1	1800	56C	**CUHM3546**	476	K	12.23	36	82.5	208-230/460	1.6	1, 48
		143TCY	**CEUHM3546T**	681	L1	13.29	39	85.5	208-230/460	1.5	1, 48
1 1/2	1800	56C	**CUHM3554**	518	K	13.23	39	84	208-230/460	2.4	1, 48
		145TCY	**CEUHM3554T**	719	L1	13.29	45	86.5	208-230/460	2.2	1, 48
2	1800	56C	**CUHM3558**	555	K	13.23	43	84	208-230/460	3.1	1, 48
		145TCY	**CEUHM3558T**	792	L1	13.29	50	86.5	208-230/460	2.9	1, 48
3	1800	182TC	**CEUHM3611T**	926	L1	16.55	73	89.5	208-230/460	4.2	1, 48
5	1800	184TC	**CEUHM3615T**	1,017	L1	18.05	94	89.5	208-230/460	6.7	1, 48
Three Phase, C-Face, Footless											
1/2	1800	56C	**VEUHM3538**	607	K	13.23	33	82.5	208-230/460	0.8	1, 48
		56C	**VUHM3538**	414	K	13.23	30	72	208-230/460	1.1	1, 48
		56C	**VUHM3538-5**	414	K	13.23	33	82.5	575	0.6	1, 48
3/4	1800	56C	**VEUHM3542**	645	K	13.23	35	84	208-230/460	1.1	1, 48
		56C	**VUHM3542**	439	K	13.23	35	77	208-230/460	1.2	1, 48
		56C	**VUHM3542-5**	439	K	13.23	34	75.5	575	0.9	1, 48
1	1800	56C	**VEUHM3546**	664	K	13.23	38	85.5	208-230/460	1.5	1, 48
		56C	**VUHM3546**	470	K	13.23	35	82.5	208-230/460	1.6	1, 48
		56C	**VUHM3546-5**	470	K	13.23	36	82.5	575	1.3	1, 48
		56C	**VEUHM3546-5**	664	K	13.23	38	85.5	575	1.2	1, 48
		143TC	**VEUHM3546T**	676	L1	13.29	38	85.5	208-230/460	1.5	1, 48
		143TC	**VEUHM3546T-5**	676	L1	13.29	43	85.5	575	1.2	1, 48
		143TC	**VUHM3546T**	507	L1	13.29	36	82.5	208-230/460	1.6	1, 48
		143TC	**VUHM3546T-5**	507	L1	13.29	39	82.5	575	1.3	1, 48
1 1/2	1800	56C	**VUHM3554**	512	K	13.23	40	84	208-230/460	2.4	1, 48
		145TC	**VEUHM3554T**	706	L1	13.29	43	86.5	208-230/460	2.2	1, 48
		145TC	**VEUHM3554T-5**	706	L1	13.29	41	86.5	575	1.8	1, 48
		145TC	**VUHM3554T**	553	L1	13.29	39	84	208-230/460	2.4	1, 48
		145TC	**VUHM3554T-5**	553	L1	13.29	39	84	575	1.9	1, 48
2	1800	56C	**VUHM3558**	551	K	13.23	43	84	208-230/460	3.1	1, 48
		145TC	**VEUHM3558T**	784	L1	13.29	48	86.5	208-230/460	2.9	1, 48
		145TC	**VEUHM3558T-5**	784	L1	13.29	48	86.5	575	2.3	1, 48
		145TC	**VUHM3558T**	595	L1	13.29	43	84	208-230/460	3.1	1, 48
		145TC	**VUHM3558T-5**	595	L1	13.29	42	84	575	2.5	1, 48
3	1800	182TC	**VEUHM3611T**	891	L1	16.55	73	89.5	208-230/460	4.2	1, 48
		182TC	**VUHM3611T**	719	L1	16.56	64	87.5	208-230/460	4.2	1, 48
		182TC	**VEUHM3611T-5**	891	L1	16.55	70	89.5	575	3.3	1, 48
5	1800	184TC	**VEUHM3615T**	980	L1	18.05	88	89.5	208-230/460	6.7	1, 48
		184TC	**VUHM3615T**	822	L1	16.55	75	87.5	208-230/460	6.8	1, 48
7 1/2	1800	213TC	**VEUHM3710T**	1,445	L1	19.76	129	91.7	208-230/460	9.4	1, 48

(a) See notes on the last page of this catalog.

High Cycle Brake Motor, Three Phase

1/2 thru 3 Hp NEMA 56C thru 182TC

Applications: Unit and baggage handling, conveyors and other applications requiring frequent starting and stopping.

Features: UL/CSA recognized and CE certified. Low inertia high efficiency motor with cast aluminum footless frame for increased thermal dissipation specific to this application. A DC brake with integral rectifier provides for faster action than traditional spring-set brakes. Not suitable for use with inverters; Dodge brake on 1.5 thru 3 Hp has TEFC enclosure.

Hp	RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Brake Rating (b)	Notes (a)
C-Face, Footless													
1/2	1800	56C	TENV	**VRBM3538**	1,399	K	13.62	35	75.5	208-230/460	0.9	3	1
3/4	1800	56C	TENV	**VRBM3542**	1,638	K	14.50	47	75	208-230/460	1.3	6	1
1	1800	56C	TENV	**VRBM3546**	1,888	K	15.50	47	80	230/460	1.6	6	1
		143TC	TENV	**VRBM3546T**	2,019	L1	15.57	46	80	230/460	1.6	6	1
1 1/2	1800	145TC	TEFC	**VRBM3554T**	2,054	L1	16.31	63	82.5	230/460	2.3	10	1
2	1800	145TC	TEFC	**VRBM3558T**	2,110	L1	17.68	69	84	230/460	2.9	10	1
3	1800	145TC	TEFC	**VRBM3561T**	2,173	L1	17.68	76	87.5	230/460	4.1	15	1
		182TC	TEFC	**VRBM3161T**	2,579	L1	18.68	82	87.5	230/460	4.1	15	1

(a) See notes on the last page of this catalog.
(b) Brake torque rating in lb-ft.

D-Series Brake Motor, Single Phase, TEFC

1/2 thru 1 Hp NEMA 56C

Applications: Conveyors, packaging equipment, machine tools, hoists, elevators and door operators.

Features: UL/CSA recognized and CE certified. Dodge "D" Series brakes are spring set, magnetically released power off type brakes flange mounted to the motor. Brakes are single phase with built-in rectifier to DC. Brakes have a manual release lever. Leads are brought to the motor conduit box for connecting to the motor leads (56-140 frames) or connecting separately (180-210 frames). D series brake motors can be universally mounted. Low profile top-mounted F3 conduit box. 2 year warranty.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Brake Rating (b)	Notes (a)
C-Face, Foot Mounted												
1/2	1800	56C	**CBL3518-D**	1,215	K	17.29	43	68	115/208-230	3.7	3	
3/4	1800	56C	**CBL3597-D**	1,283	K	17.29	43	68	115/208-230	5.5	3	
1	1800	56C	**CBL3519-D**	1,350	K	17.29	47	67	115/208-230	6.4	6	
C-Face, Footless												
1/2	1800	56C	**VBL3518-D**	1,209	K	16.29	43	68	115/208-230	3.7	3	
3/4	1800	56C	**VBL3597-D**	1,277	K	16.29	45	68	115/208-230	5.5	3	
1	1800	56C	**VBL3519-D**	1,343	K	17.29	56	67	115/208-230	6.4	6	

(a) See notes on the last page of this catalog.
(b) Brake torque rating in lb-ft.

D-Series Brake Motor, Three Phase, Totally Enclosed

1/2 thru 10 Hp **NEMA 56 thru 215T**

Applications: Unit and baggage handling, conveyors, packaging equipment, machine tools, hoists, elevators and door operators.

Features: UL/CSA recognized and CE certified. Dodge "D" Series brakes are spring set, magnetically released power off type brakes flange mounted to the motor. Brakes are single phase with built-in rectifier to DC. Brakes have a manual release lever. Leads are brought to the motor conduit box for connecting to the motor leads (56-140 frames) or connecting separately (180-210 frames). 56-140 frames have low profile F3 top-mounted conduit box. D series brake motors can be universally mounted. Inverter ready. 143-145TY and 143-145TCY frame motors have a special base with 56, 143 and 145 slots used on OEM conveyors.

Hp	RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Brake Rating (b)	Notes (a)
Foot Mounted													
1/2	1800	56	TENV	**BNM3538-D**	926	K	14.96	43	80	208-230/460	0.8	3	1, 48
3/4	1800	56	TENV	**BNM3542-D**	1,259	K	14.96	47	78.5	208-230/460	1.4	6	1, 48
1	1800	56	TENV	**BNM3546-D**	1,307	K	15.96	39	85.5	208-230/460	1.5	6	1, 48
		145TY	TENV	**BNM3546T-D**	1,411	L1	16.02	58	85.5	208-230/460	1.5	6	1, 48
1 1/2	1800	56	TENV	**BNM3554-D**	1,356	K	15.96	66	86.5	208-230/460	2.3	10	1, 48
		145TY	TENV	**BNM3554T-D**	1,465	L1	16.90	65	86.5	208-230/460	2.1	10	1, 48
2	1800	56	TEFC	**BM3558-D**	1,387	K	17.29	45	84	208-230/460	3.1	10	1, 48
		145TY	TEFC	**EBM3558T-D**	1,631	L1	17.35	61	86.5	208-230/460	2.9	10	1, 48
3	1800	182T	TEFC	**EBM3611T-D**	2,112	L1	21.64	104	89.5	208-230/460	4.1	15	1, 48
5	1800	184T	TEFC	**EBM3615T-D**	2,554	L1	23.14	117	89.5	208-230/460	6.7	15	1, 48
7 1/2	1800	213T	TEFC	**EBM3710T-D**	3,434	L1	25.42	170	91.7	208-230/460	9.4	25	1, 48
10	1800	215T	TEFC	**EBM3714T-D**	4,227	L1	26.92	165	91.7	208-230/460	12	35	1, 48
C-Face, Foot Mounted													
2	1800	145TCY	TEFC	**CEBM3558T-D**	1,723	L1	17.35	61	86.5	208-230/460	2.9	10	1, 48
3	1800	182TC	TEFC	**CEBM3611T-D**	2,184	L1	21.64	103	89.5	208-230/460	4.1	15	1, 48
5	1800	184TC	TEFC	**CEBM3615T-D**	2,532	L1	23.14	121	89.5	208-230/460	6.7	25	1, 48
7 1/2	1800	213TC	TEFC	**CEBM3710T-D**	3,570	L1	26.17	127	91.7	208-230/460	9.4	25	1, 48
10	1800	215TC	TEFC	**CEBM3714T-D**	4,364	L1	27.67	165	91.7	208-230/460	12	35	1, 48
C-Face, Footless													
1/2	1800	56C	TEFC	**VBM3538-5D**	1,205	K	16.29	48	78.5	575	0.7	3	1, 48
		56C	TEFC	**VBM3538-D**	1,205	K	16.29	46	72	208-230/460	1.1	3	1, 48
		56C	TENV	**VBNM3538-D**	1,233	K	15.96	44	80	208-230/460-480	0.8	3	1, 48
3/4	1800	56C	TEFC	**VBM3542-D**	1,251	K	16.29	51	78.5	208-230/460	1.4	6	1, 48
		56C	TEFC	**VEBM3542-D**	1,373	K	16.29	52	84	208-230/460	1.1	6	1,48
		56C	TENV	**VBNM3542-D**	1,280	K	15.96	48	78.5	208-230/460	1.4	6	1, 48
1	1800	56C	TEFC	**VBM3546-D**	1,308	K	16.29	55	82.5	208-230/460	1.6	6	1, 48
		56C	TENV	**VBNM3546-D**	1,338	K	15.96	55	85.5	208-230/460	1.5	6	1, 48
		56C	TEFC	**VEBM3546-D**	1,429	K	16.29	54	85.5	208-230/460	1.5	6	1, 48
		143TC	TEFC	**VBM3546T-5D**	1,412	L1	16.35	40	82.5	575	1.3	6	1, 48
		143TC	TEFC	**VBM3546T-D**	1,412	L1	16.35	49	82.5	208-230/460	1.6	6	1, 48
		143TC	TENV	**VBNM3546T-D**	1,442	L1	16.02	57	85.5	208-230/460	1.5	6	1, 48
		143TC	TEFC	**VEBM3546T-5D**	1,534	L1	16.35	52	85.5	575	1.2	6	1, 48
		143TC	TEFC	**VEBM3546T-D**	1,534	L1	16.35	51	85.5	208-230/460	1.5	6	1, 48
1 1/2	1800	56C	TEFC	**VBM3554-D**	1,357	K	17.29	58	84	208-230/460	2.4	10	1, 48
		56C	TENV	**VBNM3554-D**	1,385	K	16.83	64	86.5	208-230/460	2.1	10	1, 48
		56C	TEFC	**VEBM3554-D**	1,488	K	17.29	62	86.5	208-230/460	2.2	10	1, 48
		145TC	TEFC	**VBM3554T-5D**	1,466	L1	17.35	54	84	575	1.9	10	1, 48
		145TC	TEFC	**VBM3554T-D**	1,466	L1	17.35	54	84	208-230/460	2.4	10	1, 48
		145TC	TENV	**VBNM3554T-D**	1,494	L1	16.90	65	86.5	208-230/460	2.1	10	1, 48
		145TC	TEFC	**VEBM3554T-5D**	1,597	L1	17.35	55	86.5	575	1.8	10	1, 48
		145TC	TEFC	**VEBM3554T-D**	1,597	L1	17.35	58	86.5	208-230/460	2.2	10	1, 48

(a) See notes on the last page of this catalog.
(b) Brake torque rating in lb-ft.

D-Series Brake Motor, Three Phase, Totally Enclosed

Hp	RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Brake Rating (b)	Notes (a)
2	1800	56C	TEFC	**VBM3558-D**	1,387	K	17.29	63	84	208-230/460	3.1	10	1, 48
		145TC	TEFC	**VBM3558T-5D**	1,499	L1	17.35	57	84	575	2.5	10	1, 48
		145TC	TEFC	**VBM3558T-D**	1,499	L1	17.35	56	84	208-230/460	3.1	10	1, 48
		145TC	TEFC	**VEBM3558T-5D**	1,631	L1	17.35	62	86.5	575	2.3	10	1, 48
		145TC	TEFC	**VEBM3558T-D**	1,631	L1	17.35	62	86.5	208-230/460	2.9	10	1, 48
3	1800	182TC	TEFC	**VBM3611T-5D**	2,076	L1	20.62	79	87.5	575	3.3	15	1, 48
		182TC	TEFC	**VBM3611T-D**	2,076	L1	20.62	80	87.5	208-230/460	4.2	15	1, 48
		182TC	TEFC	**VEBM3611T-5D**	2,153	L1	21.64	101	89.5	575	3.1	15	1, 48
		182TC	TEFC	**VEBM3611T-D**	2,153	L1	21.64	101	89.5	208-230/460	4.2	15	1, 48
5	1800	184TC	TEFC	**VBM3615T-5D**	2,567	L1	21.64	81	87.5	575	5.5	15	1, 48
		184TC	TEFC	**VBM3615T-D**	2,567	L1	21.64	105	87.5	208-230/460	6.8	15	1, 48
		184TC	TEFC	**VEBM3615T-5D**	2,596	L1	23.14	117	89.5	575	5.2	15	1, 48
		184TC	TEFC	**VEBM3615T-D**	2,596	L1	23.14	117	89.5	208-230/460	6.7	15	1, 48
7 1/2	1800	213TC	TEFC	**VBM3710T-D**	3,348	L1	25.01	162	89.5	208-230/460	10.1	25	1, 48
		213TC	TEFC	**VEBM3710T-D**	3,534	L1	26.17	127	91.7	208-230/460	9.4	25	1, 48
10	1800	215TC	TEFC	**VBM3714T-D**	4,230	L1	26.17	157	89.5	208-230/460	13.5	35	1, 48

(a) See notes on the last page of this catalog.

(b) Brake torque rating in lb-ft.

Short Series Brake Motor, Three Phase, TEFC

1/2 thru 5 Hp **NEMA 56 thru 184TC**

Applications: Unit and baggage handling, conveyors, packaging equipment, machine tools, hoists, elevators and door operators.

Features: UL/CSA recognized and CE certified. Dodge short series brakes are spring set, magnetically released power off type brakes and integrally mounted in the motor for the most compact design. Brakes are single phase with built-in rectifier to DC. Brakes have a manual release lever. Leads are brought to the motor conduit box for connecting to the motor leads (56-140 frames) or connecting separately (180-210 frames). 56-140 frames have low profile F3 top-mounted conduit box. SSB brake motors can be universally mounted and are inverter ready. 143-145TY frame motors have a special base with 56, 143 and 145 slots used on OEM conveyors.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Brake Rating (b)	Notes (a)
Foot Mounted												
1/2	1800	56	**BM3538-S**	1,153	K	14.37	42	72	208-230/460	1.1	3	1, 48
3/4	1800	56	**BM3542-S**	1,198	K	14.37	45	78.5	208-230/460	1.4	3	1, 48
1	1800	56	**BM3546-S**	1,242	K	14.37	47	82.5	208-230/460	1.6	6	1, 48
		143TY	**BM3546T-S**	1,242	L1	15.43	41	82.5	208-230/460	1.6	6	1, 48
1 1/2	1800	145TY	**BM3554T-S**	1,288	L1	15.43	56	84	208-230/460	2.4	10	1, 48
2	1800	145TY	**BM3558T-S**	1,321	L1	15.43	52	84	208-230/460	3.1	10	1, 48
3	1800	182T	**BM3611T-S**	1,788	L1	18.68	78	87.5	208-230/460	4.2	15	1, 48
5	1800	184T	**BM3615T-S**	2,218	L1	19.05	95	87.5	208-230/460	6.8	25	1, 48
C-Face, Footless												
1/2	1800	56C	**VBM3538-5S**	1,144	K	14.37	42	72	575	0.8	3	1, 48
		56C	**VBM3538-S**	1,144	K	14.37	41	72	208-230/460	1.1	3	1, 48
3/4	1800	56C	**VBM3542-S**	1,190	K	14.37	45	78.5	208-230/460	1.4	3	1, 48
1	1800	56C	**VBM3546-5S**	1,245	K	14.37	35	82.5	575	1.3	6	1, 48
		56C	**VBM3546-S**	1,245	K	14.37	47	82.5	208-230/460	1.6	6	1, 48
		143TC	**VBM3546T-S**	1,245	L1	14.43	49	82.5	208-230/460	1.6	6	1, 48
1 1/2	1800	56C	**VBM3554-S**	1,290	K	15.37	55	84	208-230/460	2.4	10	1, 48
		145TC	**VBM3554T-5S**	1,290	L1	15.43	55	84	575	1.9	10	1, 48
		145TC	**VBM3554T-S**	1,290	L1	15.43	52	84	208-230/460	2.4	10	1, 48
2	1800	56C	**VBM3558-S**	1,321	K	15.37	57	84	208-230/460	3.1	10	1, 48
		145TC	**VBM3558T-5S**	1,321	L1	15.43	58	84	575	2.5	10	1, 48
		145TC	**VBM3558T-S**	1,321	L1	15.43	57	84	208-230/460	3.1	10	1, 48
3	1800	182TC	**VBM3611T-S**	1,825	L1	18.68	79	87.5	208-230/460	4.2	15	1, 48
5	1800	184TC	**VBM3615T-S**	2,257	L1	19.05	96	87.5	208-230/460	6.8	25	1, 48

(a) See notes on the last page of this catalog.

(b) Brake torque rating in lb-ft.

D-Series and SSB Fast Response Brake Kit

Applications: These kits are designed for Dodge manufactured D-Series and Short Series brakes. These fast response kits allow the brake to provide a faster dropout time (timed to braking).

Frame	Enclosure	Catalog Number	Voltage	Aprx. Wt. (lb)	List Price	Mult. Sym.
56 - 180	TENV, TEFC, SSB	**FBRK115230**	115	1	131	A8
56 - 180	TENV, TEFC, SSB	**FBRK230460**	230	1	144	A8

Three Phase, Super-E Premium Efficient, TEFC

1 thru 30 Hp **NEMA 56 thru 284T**

Applications: Machine tools, conveyors, door operators, speed reducers, any application requiring quick stops and positive hold.

Features: Standard NEMA BA dimension. (C-Face may be added in ModExpress to EBM motors for C-Face with base). Spring-set brake. Power off manual release. Resets automatically. Class F insulated with 1.15 service factor. Motors have NEMA Premium® Efficiency and are suitable for inverter use. 230/460V brakes are connected in conduit box allowing for separate connection when used with an inverter.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Brake Rating (b)	Notes (a)
Foot Mounted												
1	1800	56	**EBM3546**	1,529	K	16.80	44	85.5	208-230/460	1.5	6	41
		143T	**EBM3546T**	1,560	L1	17.86	46	85.5	208-230/460	1.5	6	41
1 1/2	1800	145T	**EBM3554T**	1,756	L1	17.86	52	86.5	208-230/460	2.2	10	41
2	1800	145T	**EBM3558T**	1,795	L1	17.86	57	86.5	208-230/460	2.9	10	41
3	1800	182T	**EBM3611T**	2,325	L1	21.12	89	89.5	208-230/460	4.2	15	41
5	1800	184T	**EBM3615T**	2,819	L1	22.65	106	89.5	208-230/460	6.7	25	42
7 1/2	1800	213T	**EBM3710T**	3,780	L1	27.20	158	91.7	230/460	9.4	35	30, 40
10	1800	215T	**EBM3714T**	4,673	L1	29.19	165	91.7	208-230/460	12	50	40
15	1800	254T	**EBM2333T**	6,611	L1	33.07	337	92.4	230/460	18.1	75	30
20	1800	256T	**EBM2334T**	8,016	L1	33.57	398	93	230/460	24	105	30
25	1800	284T	**EBM4103T**	9,022	L1	39.66	516	93.6	230/460	30	105	30
30	1800	284T	**EBM4104T**	12,220	L1	42.84	667	93.6	230/460	37	125	30
C-Face, Footless												
1/2	1800	56C	**VEBNM3538**	1,392	K	15.26	37	84	230/460	0.9	3	41, 60
3/4	1800	56C	**VEBNM3542**	1,565	K	15.26	53	84	208-230/460	1.1	6	41, 60
1	1800	56C	**VEBM3546**	1,586	K	16.80	45	85.5	208-230/460	1.5	6	41
		143TC	**VEBM3546T**	1,597	L1	16.86	45	85.5	208-230/460	1.5	6	41
1 1/2	1800	56C	**VEBM3554**	1,783	K	17.80	53	86.5	208-230/460	2.2	6	41
		145TC	**VEBM3554T**	1,795	L1	17.86	52	86.5	208-230/460	2.2	10	41
2	1800	56C	**VEBM3558**	1,832	K	17.80	56	86.5	208-230/460	2.9	6	41
		145TC	**VEBM3558T**	1,832	L1	17.86	57	86.5	208-230/460	2.9	10	41
3	1800	182TC	**VEBM3611T**	2,400	L1	21.11	82	89.5	208-230/460	4.2	15	41
5	1800	184TC	**VEBM3615T**	2,890	L1	23.06	99	89.5	208-230/460	6.7	25	42
7 1/2	1800	213TC	**VEBM3710T**	3,946	L1	27.95	172	91.7	230/460	9.4	35	30, 40
10	1800	215TC	**VEBM3714T**	4,838	L1	29.95	165	91.7	208-230/460	12	50	42

(a) See notes on the last page of this catalog.

(b) Brake torque rating in lb-ft.

Cast Iron Frame

Single and Three Phase, TEFC, Foot Mounted

1/4 thru 30 Hp NEMA 56 thru 286T

Applications: Machine tools, conveyors, door operators, speed reducers, any application requiring quick stops and positive hold.

Features: Spring-set brake. Power off operation manual release. Resets automatically. Brakes internally connected to motor on 215T and smaller.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Brake Rating (b)	Notes (a)
Single Phase												
1/4	1800	56	**BL3516**	874	K	14.36	27	59.5	115/230	2.1	3	2, 30, 41, 60
1/3	1800	56	**BL3517**	921	K	15.46	27	60	115/230	3	3	30, 41
1/2	1800	56	**BL3518**	1,000	K	16.08	32	68	115/230	3.7	3	30, 41
3/4	1800	56	**BL3507**	1,313	K	16.71	40	72	115/230	4.2	6	30, 41
1	1800	56	**BL3510**	1,390	K	17.11	52	68	115/230	6.4	6	30, 41
Three Phase												
1/4	1800	56	**BM3568**	839	K	14.36	26	68	208-230/460	0.5	3	2, 41, 60
1/3	1800	56	**BM3569**	887	K	14.36	27	70	208-230/460	0.7	3	2, 41, 60
1/2	1800	56	**BM3538**	964	K	14.98	31	75.5	208-230/460	0.9	3	2, 41, 60
	1200	56	**BM3539**	1,328	K	16.45	35	72	230/460	1.2	6	30, 41
3/4	1800	56	**BM3542**	1,128	K	16.45	31	75.5	208-230/460	1.5	6	41
	1200	56	**BM3543**	1,394	K	17.45	39	77	208-230/460	1.5	6	41
1	1800	56	**BM3546**	1,309	K	17.45	38	78.5	208-230/460	1.7	6	41
		143T	**BM3546T**	1,309	L1	17.01	39	78.5	208-230/460	1.7	6	41
		182	**BM3603**	1,814	L1	17.49	43	75.5	208-230/460	1.8	6	41
	1200	145T	**BM3556T**	1,864	L1	16.49	46	78.5	208-230/460	1.9	10	41
1 1/2	1800	56	**BM3554**	1,469	K	17.11	47	84	208-230/460	2.4	10	41
		145T	**BM3554T**	1,469	L1	17.49	47	84	208-230/460	2.4	10	41
		184	**BM3606**	1,940	L1	17.49	50	81.5	208-230/460	2.3	10	41
2	1800	56	**BM3558**	1,505	K	17.11	49	82.5	208-230/460	3	10	41
		145T	**BM3558T**	1,505	L1	17.49	51	82.5	208-230/460	3	10	41
		184	**BM3609**	2,019	L1	17.49	53	82.5	208-230/460	3	10	41
	1200	184T	**BM3614T**	2,494	L1	20.57	77	81.5	208-230/460	3.4	15	41
3	1800	182T	**BM3611T**	2,040	L1	19.19	67	85.5	208-230/460	4.5	15	1, 41
		213	**BM3703**	3,050	L1	22.42	78	85.5	208-230/460	4.5	15	1, 41
	1200	213T	**BM3704T**	3,695	L1	25.88	136	84	208-230/460	4.8	35	1, 40
5	1800	184T	**BM3615T**	2,531	L1	21.02	90	87.5	208-230/460	6.8	25	1, 40
		184T	**BM3635T**	2,151	L1	21.02	90	87.5	208-230/460	6.8	15	1. 41
		215	**BM3707**	3,730	L1	22.87	91	87.5	208-230/460	6.8	25	1, 40
7 1/2	1800	213T	**BM3710T**	3,253	L1	25.88	155	87.5	208-230/460	10.9	35	1, 40
		213T	**BM3730T**	3,087	L1	25.88	155	89.5	208-230/460	10.1	25	1, 40
10	1800	215T	**BM3714T**	4,139	L1	27.51	154	89.5	208-230/460	13.5	50	1, 2, 20, 42
		215T	**BM3734T**	3,426	L1	27.51	158	89.5	208-230/460	13.5	35	1, 2, 20, 40
15	1800	254T	**BM2353T**	5,010	L1	29.38	249	89.5	208-230/460	18.9	50	1,
20	1800	256T	**BM2334T**	6,885	L1	31.63	273	91	230/460	25	105	1, 30
		256T	**BM2354T**	5,822	L1	31.13	273	91	230/460	25	75	1, 30
25	1800	284T	**BM4103T**	7,290	L1	35.83	402	92.4	230/460	30	105	1, 30
30	1800	286T	**BM4104T**	10,224	L1	39.13	545	92.4	230/460	37	125	1, 30

(a) See notes on the last page of this catalog.

(b) Brake torque rating in lb-ft.

Enclosed brake motors have non-standard "BA" dimension except for TENV ratings.

Cast Iron Frame

Single and Three Phase, TEFC, C-Face

1/4 thru 10 Hp

NEMA 56C thru 215TC

Applications: Machine tools, conveyors, door operators, speed reducers, any application requiring quick stops and positive hold.

Features: Spring-set brake. Power off operation manual release. Resets automatically. Brakes internally connected to motor on 215T and smaller.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Brake Rating (b)	Notes (a)
Single Phase, C-Face, Footless												
1/3	1800	56C	**KBL3406**	939	K	15.45	27	60	115/230	3	3	30, 41
1/2	1800	56C	**KBL3409**	1,031	K	16.07	32	68	115/230	3.7	3	30, 41
3/4	1800	56C	**VBL3507**	1,338	K	16.82	40	72	115/230	4.2	6	30, 41
1	1800	56C	**VBL3510**	1,418	K	17.80	49	76.5	115/230	4.5	6	30, 41
		143TC	**VBL3510T**	1,418	L1	17.86	49	76.5	115/230	4.5	6	30, 41
Three Phase, C-Face, Foot Mounted												
1	1800	143TC	**CBM3546T**	1,373	L1	17.86	42	75.5	208-230/460	1.8	6	41
1 1/2	1800	145TC	**CBM3554T**	1,539	L1	17.86	48	81.5	208-230/460	2.3	10	41
2	1800	145TC	**CBM3558T**	1,582	L1	17.86	51	82.5	208-230/460	3	10	41
3	1800	182TC	**CBM3611T**	2,136	L1	19.74	72	85.5	208-230/460	4.5	15	1, 41
5	1800	184TC	**CBM3615T**	2,670	L1	21.56	90	87.5	208-230/460	6.8	25	8, 42
7 1/2	1800	213TC	**CBM3710T**	3,404	L1	26.83	160	87.5	208-230/460	10.9	35	1, 40
10	1800	215TC	**CBM3714T**	4,372	L1	28.45	154	89.5	208-230/460	13.5	50	1, 42
Three Phase, C-Face, Footless												
1/4	1800	56C	**KBM3454**	833	K	14.36	26	68	208-230/460	0.5	3	2, 41, 60
1/3	1800	56C	**KBM3458**	885	K	14.36	23	70	208-230/460	0.7	3	2, 41, 60
1/2	1800	56C	**VBM3538**	986	K	14.98	30	75.5	208-230/460	0.9	3	2, 41, 60
3/4	1800	56C	**VBM3542**	1,155	K	15.86	35	75	208-230/460	1.3	6	2, 41, 60
		56C	**VBM3542-5**	1,155	K	15.26	40	80	575	1.9	6	2, 41, 60
		56C	**VBM3546**	1,330	K	16.96	38	78.5	208-230/460	1.7	6	41
1	1800	143TC	**VBM3546T**	1,330	L1	17.02	38	78.5	208-230/460	1.7	6	41
		143TC	**VBM3546T-5**	1,330	L1	16.86	40	75.5	575	1.5	6	41
1 1/2	1800	56C	**VBM3554**	1,493	K	17.80	48	84	208-230/460	2.4	10	41
		145TC	**VBM3554T**	1,493	L1	17.86	49	84	208-230/460	2.4	10	41
2	1800	56C	**VBM3558**	1,530	K	17.80	50	82.5	208-230/460	3	10	41
		145TC	**VBM3558T**	1,530	L1	17.86	50	82.5	208-230/460	3	10	41
3	1800	182TC	**VBM3611T**	2,139	L1	19.74	67	85.5	208-230/460	4.5	15	1, 41
5	1800	184TC	**VBM3615T**	2,643	L1	21.56	89	87.5	208-230/460	6.8	25	1, 42
7 1/2	1800	213TC	**VBM3710T**	3,386	L1	26.83	128	87.5	208-230/460	10.9	35	1, 40
10	1800	215TC	**VBM3714T**	4,296	L1	28.45	154	89.5	208-230/460	13.5	50	1, 42

(a) See notes on the last page of this catalog.

(b) Brake torque rating in lb-ft.

If brake motors are to be used with any electronic control, soft start, inverter or vector etc., then brake must be externally connected.

Three Phase, ODP

1/2 thru 15 Hp

NEMA 56 thru 254T

Applications: Machine tools, conveyors, door operators, speed reducers, any application requiring quick stops and positive hold.

Features: Spring-set brake. Power off operation manual release. Resets automatically. Brakes internally connected to motor on 215T and smaller. Super-E motors are 1.15 service factor and suitable for inverter use.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Brake Rating (b)	Notes (a)
Foot Mounted												
1/2	1800	56	**BM3108**	908	K	14.14	27	74	230/460	1	3	30, 41
3/4	1800	56	**BM3112**	1,057	K	14.77	31	75.5	208-230/460	1.5	6	41
1	1800	56	**BM3116**	1,150	K	15.64	33	78.5	208-230/460	1.7	3	41
		143T	**EBM3116T**	1,343	L1	16.37	49	87.5	208-230/460	1.5	6	41
1 1/2	1800	145T	**EBM3154T**	1,488	L1	16.37	48	86.5	230/460	2.2	10	41
2	1800	145T	**EBM3157T**	1,698	L1	16.37	51	86.5	230/460	2.9	10	41
3	1800	182T	**EBM3211T**	2,083	L1	19.57	83	89.5	208-230/460	4.2	15	41
5	1800	184T	**EBM3218T**	2,574	L1	21.52	104	89.5	208-230/460	6.4	25	42
		184T	**EBM3248T**	2,212	L1	21.06	104	89.5	208-230/460	6.4	15	41
7 1/2	1800	213T	**EBM3311T**	3,235	L1	24.45	149	91	208-230/460	9.7	35	40
10	1800	215T	**EBM3313T**	4,064	L1	26.08	159	91.7	208-230/460	12.5	50	42
15	1800	254T	**EBM2513T**	5,375	L1	29.88	252	93	208-230/460	17.7	75	42
C-Face, Footless												
1/2	1800	56C	**VBM3108**	929	K	14.36	28	74	230/460	1	3	30, 41
3/4	1800	56C	**VBM3112**	1,086	K	15.36	31	75.5	208-230/460	1.5	6	41
1	1800	56C	**VBM3116**	1,175	K	15.36	33	78.5	208-230/460	1.7	6	41
		143TC	**VBM3116T**	1,269	L1	15.32	42	82.5	208-230/460	1.6	6	41
1 1/2	1800	56C	**VBM3154**	1,366	K	15.26	44	80	208-230/460	2.5	10	41
		145TC	**VBM3154T**	1,475	L1	15.37	41	84	208-230/460	2.4	10	41
2	1800	145TC	**VBM3157T**	1,662	L1	15.87	48	84	208-230/460	3.2	10	41
3	1800	182TC	**VBM3211T**	2,105	L1	19.57	81	86.5	230/460	46	15	30, 41
5	1800	184TC	**VBM3218T**	2,612	L1	20.02	84	87.5	208-230/460	7.2	25	42
		184TC	**VBM3248T**	2,197	L1	19.57	83	87.5	208-230/460	7.2	15	41

(a) See notes on the last page of this catalog.

(b) Brake torque rating in lb-ft.

If brake motors are to be used with any electronic control, soft start, inverter or vector etc., then brake must be externally connected.

ALL BRAKE MOTORS WITH 20 FT.-LB OR SMALLER BRAKES CAN BE MOUNTED HORIZONTAL OR VERTICAL. FOR LARGER RATINGS CONSULT AN ABB SALES REPRESENTATIVE. ALL MOTORS INCLUDE MANUAL RELEASE BRAKES AS STANDARD. BRAKES ON NON-EXPLOSION PROOF MOTORS 10 HP AND BELOW ARE INTERNALLY CONNECTED.

Three Phase, Explosion Proof, C-Face

1/2 thru 5 Hp **NEMA 56C thru 215TC**

Applications: Machine tools, conveyors, door operators, speed reducers, any application requiring quick stops and positive hold.

Features: Spring-set brake. Power off operation manual release. Resets automatically. Explosion proof brakes require external connections. UL and CSA approved for Division 1, Class I, Group D; Class I, Group D, Class II, Group F & G.

Hp	RPM	NEMA Frame	Catalog Number	XP Cls/Grp	Temp Code	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Brake Rating (b)	Notes (a)
1/2	1800	56C	**CBM7006**	②	T3C	3,306	K	19.44	95	80	208-230/460	0.8	3	41, 60
3/4	1800	56C	**CBM7010**	①	T2C	3,682	K	19.13	93	78.5	208-230/460	1.4	6	2, 41, 60
1	1800	143TC	**CBM7014T**	②	T3C	4,244	L1	19.50	95	82.5	208-230/460	1.4	6	2, 41, 60
2	1800	182TC	**CBM7023T**	①	T2C	5,137	L1	23.24	137	84	230/460	2.9	10	2, 41, 60
3	1800	182TC	**CEBM7142T**	②	T3C	6,217	L1	26.63	240	91.7	230/460	12	15	41
		215TC	**CBM7027T**	①	T2C	7,122	L1	27.29	215	84	230/460	4.3	15	2, 40, 60
5	1800	184TC	**CEBM7144T**	②	T3C	7,489	L1	29.72	289	91.7	230/460	12	25	40

(a) See notes on the last page of this catalog.
(b) Brake torque rating in lb-ft.
① = Class I, Group D; ② = Class I, Group D, Class II, Group F & G
Cast Iron Frame

Washdown, Three Phase, Totally Enclosed, C-Face, Foot Mounted

1/2 thru 5 Hp **NEMA 56C thru 184TC** **IP55**

Applications: Food processing and other applications where motors receive washdown on a regular basis.

Features: Class F insulated motor with 1.15 service factor or higher that operates within class "B" temperature limits at rated horsepower. Standard NEMA BA dimension, 300 series stainless steel hardware, moisture sealant on bolt heads, between frame and end plates. Neoprene gaskets. Power off manual release. Resets automatically. Motors have NEMA Premium® Efficiency and inverter-ready. 230/460V brakes are connected in conduit box allowing for separate connection when used with an inverter.

Hp	RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Brake Rating (b)	Notes (a)
1/2	1800	56C	TENV	**CEWDBM3538**	2,025	WD	15.31	42	84	208-230/460	0.9	3	12, 41
3/4	1800	56C	TENV	**CEWDBM3542**	2,188	WD	15.31	42	84	230/460	1.1	6	12, 30, 41
1	1800	56C	TENV	**CEWDBM3546**	2,246	WD	16.31	50	85.5	208-230/460	1.5	6	41
		143TC	TENV	**CEWDBM3546T**	2,269	WD	16.81	51	85.5	208-230/460	1.5	6	41
1 1/2	1800	145TC	TENV	**CEWDBM3554T**	2,444	WD	18.14	61	86.5	208-230/460	2.1	10	41
2	1800	145TC	TEFC	**CEWDBM3558T**	2,487	WD	18.56	60	86.5	208-230/460	2.9	10	41
3	1800	182TC	TEFC	**CEWDBM3611T**	3,009	WD	21.80	93	89.5	208-230/460	4.2	15	41
5	1800	184TC	TEFC	**CEWDBM3615T**	3,635	WD	23.30	110	89.5	208-230/460	6.7	25	42

(a) See notes on the last page of this catalog.
(b) Brake torque rating in lb-ft.

Double C-Face Motor Brake Kits

Coil Voltage: 115/208-230

Features: Double C-Face coupler brakes. Mounts on motors with C-Face, provides NEMA C-face mounting on brake. Spring set, electrically released.

Brake Rating	Brake Mounting	Catalog Number	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.
3 ft-lb	56C	**CBK003-1**	670	A8	12
6 ft-lb	56C	**CBK006-1**	986	A8	12
6 ft-lb	145TC	**CBK006-2**	986	A8	12
10 ft-lb	145TC	**CBK010-1**	1,150	A8	12
15 ft-lb	145TC	**CBK015-1**	2,457	A8	12

200 Volt, Three Phase, TEFC, Foot Mounted

1/2 thru 50 Hp **NEMA 56C thru 326T**

Applications: Pumps, fans, compressors, blowers, machine tools, conveyors and many other applications requiring 200 volt power.

Features: 1.15 Service Factor, positively locked drive end bearing on 254T and larger, ball bearings, dynamically balanced rotors. Super-E® motors have NEMA Premium® efficiency and 3 year warranty.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
Foot Mounted											
1	1800	143T	**EM3546T-8**	727	L1	12.31	35	85.5	200	3.5	1, 68
		143T	**M3546T-8**	493	L1	12.31	33	82.5	200	3.6	68
1 1/2	1800	145T	**EM3554T-8**	756	L1	13.31	43	86.5	200	5	1, 68
		145T	**M3554T-8**	503	L1	13.31	39	84	200	5.4	68
2	1800	145T	**EM3558T-8**	783	L1	13.31	46	86.5	200	6.7	1, 68
		145T	**M3558T-8**	528	L1	13.31	41	84	200	6.6	68
3	3600	182T	**EM3660T-8**	1,123	L1	15.24	82	86.5	200	8.8	1, 68
	1800	182T	**EM3661T-8**	1,155	L1	15.24	96	89.5	200	9.5	1, 68
		182T	**EM3611T-8**	862	L1	16.55	72	895	200	9.7	1, 68
		182T	**M3611T-8**	624	L1	16.52	64	87.5	200	9.5	1, 68
5	3600	184T	**EM3663T-8**	1,382	L1	15.24	88	88.5	200	14.5	1, 68
	1800	184T	**EM3665T-8**	1,156	L1	15.24	108	89.5	200	15.1	1, 68
		184T	**M3615T-8**	718	L1	16.54	76	87.5	200	15.5	1, 68
7 1/2	3600	213T	**EM3769T-8**	1,599	L1	18.45	155	89.5	200	21	1, 68
	1800	213T	**EM3770T-8**	1,541	L1	18.45	170	91.7	200	21.4	1, 68
		213T	**M3710T-8**	917	L1	17.89	116	89.5	200	23.2	1, 68
10	3600	215T	**EM3771T-8**	1,875	L1	18.45	182	90.2	200	26.8	1, 68
	1800	215T	**EM3774T-8**	1,730	L1	18.45	189	91.7	200	28	1, 68
		215T	**M3714T-8**	1,113	L1	19.01	131	89.5	200	31.3	2, 68
15	3600	254T	**EM2394T-8**	2,582	L1	23.28	240	91	200	40	1, 68
	1800	254T	**EM2333T-8**	2,375	L1	23.28	255	92.4	200	42.4	1, 30, 68
		254T	**M2333T-8**	1,953	L1	21.07	236	91	200	42.5	1, 68
20	3600	256T	**EM4106T-8**	2,834	L1	23.28	242	91	200	52	1, 24, 69
	1800	256T	**EM2334T-8**	2,881	L1	23.28	292	93	200	55.2	1, 24, 30, 69
		256T	**M2334T-8**	2,357	L1	23.28	262	91	200	55	1, 24, 69
25	3600	284TS	**EM4107T-8**	3,697	L1	24.70	305	91.7	200	65	1, 24, 69
	1800	284T	**EM4103T-8**	3,767	L1	27.76	382	93.6	200	68.4	1, 24, 69
		284T	**M4103T-8**	2,915	L1	26.08	333	92.4	200	67	1, 24, 69
30	3600	286TS	**EM4108T-8**	4,395	L1	24.70	324	91.7	200	76	1, 24, 69
	1800	286T	**EM4104T-8**	4,470	L1	27.76	413	93.6	200	84	1, 24, 69
		286T	**M4104T-8**	3,443	L1	26.08	357	92.4	200	83	1, 24, 69
40	1800	324T	**EM4110T-8**	5,845	L1	30.28	576	94.1	200	111	1, 24, 69
		324T	**M4110T-8**	4,568	L1	30.39	480	93	200	108	1, 24, 69
50	1800	326T	**EM4115T-8**	6,387	L1	30.28	621	94.5	200	131	1, 24, 69
		326T	**M4115T-8**	4,729	L1	30.39	530	93	200	137	1, 24, 69
C-Face, Foot Mounted											
1/2	1800	56C	**CM3538-8**	473	K	11.35	23	74	200	2.2	
1	1800	56C	**CM3546-8**	478	K	12.00	29	78.5	200	3.9	

(a) See notes on the last page of this catalog.

Cast Iron Frame

200 Volt, Three Phase, ODP, Foot Mounted

3/4 thru 100 Hp

NEMA 56 thru 404T

Applications: Pumps, fans, compressors, blowers, machine tools, conveyors and many other applications requiring 200 volt power.

Features: 1.15 Service Factor, positively locked drive end bearing on 254T and larger, ball bearings, dynamically balanced rotors. Super-E® motors have NEMA Premium® efficiency and 3 year warranty.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1	1800	143T	**EM3116T-8**	637	L1	11.12	34	85.5	200	3.5	1, 68
		143T	**M3116T-8**	444	L1	11.12	32	82.5	200	3.6	68
1 1/2	1800	145T	**EM3154T-8**	665	L1	11.62	37	86.5	200	5.1	1, 68
		145T	**M3154T-8**	522	L1	11.12	34	84	200	5.5	68
2	1800	145T	**EM3157T-8**	714	L1	12.12	40	86.5	200	6.5	1, 68
		145T	**M3157T-8**	530	L1	11.62	38	84	200	7.3	68
3	3600	145T	**M3158T-8**	615	L1	12.13	45	84	200	8.8	68
	1800	182T	**EM3211T-8**	769	L1	15.00	71	89.5	200	9.7	1, 68
		182T	**M3211T-8**	552	L1	14.63	57	86.5	200	9.4	1, 68
5	3600	182T	**M3212T-8**	637	L1	14.00	56	85.5	200	14.2	68
	1800	184T	**EM3218T-8**	842	L1	16.50	84	89.5	200	15.3	1, 68
		184T	**M3218T-8**	612	L1	15.00	71	87.5	200	16.4	1, 68
7 1/2	3600	184T	**M3219T-8**	873	L1	15.00	69	87.5	200	19.8	1, 68
	1800	213T	**EM3311T-8**	1,237	L1	16.32	114	91	200	22.2	1, 68
		213T	**M3311T-8**	866	L1	17.00	96	88.5	200	23	68
10	3600	213T	**M3312T-8**	1,095	L1	16.32	107	88.5	200	28.5	68
	1800	215T	**EM3313T-8**	1,496	L1	17.45	129	91.7	200	29.5	1, 68
		215T	**M3313T-8**	1,060	L1	16.32	116	89.5	200	30.8	68
15	3600	215T	**M3314T-8**	1,599	L1	16.32	117	89.5	200	41.5	1, 68
	1800	254T	**EM2513T-8**	2,120	L1	21.69	209	93	200	40.7	1, 68
		254T	**M2513T-8**	1,602	L1	19.75	155	91	200	43	1, 68
20	3600	254T	**EM2514T-8**	2,464	L1	21.69	190	91	200	53	1, 24, 69
		256T	**M2514T-8**	2,045	L1	21.69	194	90.2	200	54	24, 69
	1800	256T	**EM2515T-8**	2,661	L1	21.69	227	93	200	54.3	1, 24, 69
		256T	**M2515T-8**	2,062	L1	22.25	197	91	200	58	69
25	3600	256T	**EM2516T-8**	2,957	L1	21.69	220	91.7	200	65	1, 24, 69
		256T	**M2516T-8**	2,474	L1	21.69	189	91	200	68	24, 69
	1800	284T	**EM2531T-8**	3,244	L1	25.06	311	93.6	200	70	1, 24, 69
		284T	**M2531T-8**	2,499	L1	23.44	250	91.7	200	70	24, 69
30	3600	284TS	**M2534T-8**	2,619	L1	22.06	275	91	200	81	24, 69
	1800	286T	**EM2535T-8**	3,548	L1	25.06	278	94.1	200	81	1, 24, 69
		286T	**M2535T-8**	2,922	L1	24.94	282	92.4	200	83	24, 69
40	3600	286TS	**EM2538T-8**	4,495	L1	22.44	362	92.4	200	105	1, 24, 69
		286TS	**M2538T-8**	3,685	L1	23.56	259	91.7	200	104	24, 69
	1800	324T	**EM2539T-8**	4,629	L1	27.19	434	94.1	200	109	1, 24, 69
		324T	**M2539T-8**	3,725	L1	26.19	351	93	200	113	24, 69
50	3600	324TS	**M2542T-8**	3,819	L1	24.69	336	92.4	200	134	24, 69
	1800	326T	**EM2543T-8**	5,107	L1	27.69	467	94.5	200	132	1, 24, 69
		326T	**M2543T-8**	4,372	L1	27.19	383	93	200	140	24, 69
60	1800	364T	**EM2547T-8**	6,431	L1	30.69	623	95	200	160	1, 24, 69
75	1800	365T	**EM2551T-8**	7,892	L1	29.70	783	95	200	199	1, 24, 69
100	1800	404T	**EM2555T-8**	9,183	L1	36.97	906	95.4	200	263	1, 24, 69

(a) See notes on the last page of this catalog.

Cast Iron Frame

200 Volt, F2, Three Phase, ODP, Foot Mounted

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
3/4	1800	56	**FM3112-8**	389	K	10.12	25	74	200	3.2	12, 68
2	1800	145T	**EFM3157T-8**	714	L1	12.12	43	86.5	200	6.5	1, 68
3	1800	182T	**EFM3211T-8**	769	L1	15.00	70	89.5	200	9.7	1, 68
5	1800	184T	**EFM3218T-8**	842	L1	16.50	82	89.5	200	15.3	1, 68
7 1/2	1800	213T	**EFM3311T-8**	1,237	L1	16.32	111	91	200	22.3	1, 68
		213T	**FM3311T-8**	866	L1	17.00	96	88.5	200	23	68
10	1800	215T	**EFM3313T-8**	1,496	L1	17.45	127	91.7	200	29.5	1, 68
		215T	**FM3313T-8**	1,060	L1	16.32	129	89.5	200	30.8	68
15	1800	254T	**EFM2513T-8**	2,120	L1	21.69	209	93	200	40.7	1, 68
		254T	**FM2513T-8**	1,602	L1	19.75	155	91	200	43	1, 68
20	1800	256T	**EFM2515T-8**	2,661	L1	21.69	226	93	200	54.3	1, 24, 69
		256T	**FM2515T-8**	2,062	L1	22.25	197	91	200	58	69

(a) See notes on the last page of this catalog.

575 Volt, Three Phase, TEFC, Foot Mounted

1/3 thru 150 Hp **NEMA 56 thru 445T**

Applications: Pumps, compressors, fans, conveyors, machine tools and other applications where 575 volt three phase power is available.

Features: Ball bearings. Mount in any position. Heavy-gauge steel and cast iron frames. EM Super-E® motors have NEMA Premium® efficiency and 3 year warranty.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1/3	1800	56	**M3534-5**	340	LS	11.35	20	68	575	0.6	1, 13
1/2	3600	56	**M3537-5**	366	K	11.35	19	68	575	0.8	1, 12
	1800	56	**M3538-5**	389	LS	11.35	22	74	575	0.8	1, 12
	1200	56	**M3539-5**	586	K	11.35	23	72	575	1	1, 12
3/4	3600	56	**M3541-5**	403	K	11.35	21	74	575	1	1, 12
	1800	56	**M3542-5**	416	LS	11.35	26	75.5	575	1.2	1, 12
	1200	56/56H	**M3543-5**	598	K	12.84	33	77	575	1.2	
		143T	**M3543T-5**	598	L1	13.41	34	77	575	1.2	1
1	3600	56	**M3545-5**	472	K	11.35	23	75.5	575	1.4	1, 12
	1800	56	**M3546-5**	433	LS	12.23	29	75.5	575	1.5	
		143T	**EM3546T-5**	706	LS	12.31	34	85.5	575	1.2	1
	1200	56/56H	**M3556-5**	608	K	12.93	37	78.5	575	1.5	
		145T	**EM3556T-5**	846	L1	13.31	40	82.5	575	1.4	1
1 1/2	3600	143T	**EM3550T-5**	726	L1	12.31	36	84	575	1.5	1
	1800	145T	**EM3554T-5**	734	LS	13.31	42	86.5	575	1.8	1
	1200	182T	**EM3607T-5**	989	L1	16.55	73	87.5	575	1.9	1
2	3600	56/56H	**M3555-5**	579	K	12.93	40	78.5	575	2.2	
		145T	**EM3555T-5**	795	L1	13.31	43	85.5	575	2	1
	1800	56/56H	**M3558-5**	528	LS	12.93	40	82.5	575	2.4	
		145T	**EM3558T-5**	761	LS	13.31	46	86.5	575	2.3	1
	1200	184T	**EM3614T-5**	1,037	L1	18.05	90	88.5	575	2.8	
3	3600	56/56H	**M3559-5**	673	K	13.81	50	82.5	575	3	
		145T	**EM3559T-5**	892	L1	14.19	60	86.5	575	2.9	
	1800	182T	**EM3611T-5**	840	LS	16.55	73	89.5	575	3.3	1
		182T	**EM3661T-5**	1,127	L1	15.24	97	89.5	575	3.3	1
	1200	213T	**EM3704T-5**	1,349	L1	19.01	129	89.5	575	3.7	1
5	3600	184T	**EM3613T-5**	978	L1	16.54	75	88.5	575	4.7	1
	1800	184T	**EM3615T-5**	919	LS	18.05	89	89.5	575	5.3	1
		184T	**EM3665T-5**	1,153	L1	15.24	108	89.5	575	5.3	1
	1200	215T	**EM3708T-5**	1,524	L1	19.76	154	89.5	575	5.8	1
7 1/2	3600	184T	**EM3616T-5**	1,290	L1	18.05	98	89.5	575	6.8	1
		213T	**EM3709T-5**	1,465	L1	17.89	115	89.5	575	7	1
	1800	213T	**EM3710T-5**	1,326	LS	19.02	123	91.7	575	7.6	1
		213T	**EM3770T-5**	1,504	L1	18.45	170	91.7	575	7.5	1
10	3600	215T	**EM3711T-5**	1,485	L1	17.89	119	90.2	575	9.5	1
	1800	215T	**EM3714T-5**	1,497	LS	20.52	165	91.7	575	9.6	1
		215T	**EM3774T-5**	1,687	L1	18.45	185	91.7	575	9.8	1

(a) See notes on the last page of this catalog.

Cast Iron Frame

575 Volt, Three Phase, TEFC, Foot Mounted

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
15	3600	215T	**EM3713T-5**	2,095	L1	20.52	169	91	575	13.6	1
		254T	**EM2394T-5**	2,520	L1	23.28	245	91	575	14.1	1
	1800	254T	**EM2333T-5**	2,306	LS	23.28	258	92.4	575	14.5	1
20	3600	256T	**EM4106T-5**	2,766	L1	23.28	252	91	575	18.2	1
	1800	256T	**EM2334T-5**	2,796	LS	23.28	290	93	575	19.2	1
25	3600	284TS	**EM4107T-5**	3,609	L1	24.70	335	91.7	575	22	1
	1800	284T	**EM4103T-5**	3,657	LS	27.76	380	93.6	575	23	1
30	3600	286TS	**EM4108T-5**	4,288	L1	24.70	331	91.7	575	26.5	1
	1800	286T	**EM4104T-5**	4,338	LS	27.76	408	93.6	575	29	1
40	3600	324TS	**EM4109T-5**	5,877	L1	28.78	522	92.4	575	37	1
	1800	324T	**EM4110T-5**	5,673	LS	30.28	575	94.1	575	39	1
50	3600	326TS	**EM4114T-5**	6,429	L1	28.78	574	93	575	45	1
	1800	326T	**EM4115T-5**	6,199	LS	30.28	623	94.5	575	46	1
60	1800	364T	**EM4314T-5**	8,919	LS	33.48	919	95	575	54.4	1
75	1800	365T	**EM4316T-5**	10,429	LS	33.48	958	95.4	575	68.7	1
100	1800	405T	**EM4400T-5**	12,952	LS	38.06	1208	95.4	575	89.6	1
125	1800	444T	**EM4410T-5**	16,033	LS	44.75	2041	95.4	575	115	1
		444T	**EM4410T-5E**	16,033	LS	44.62	1626	95.8	575	111	1, 56
		444T	**EM4910T-5**	16,033	LS	44.75	2041	95.4	575	115	1, 99
150	1800	445T	**EM4406T-5E**	18,443	LS	44.62	1770	96.2	575	132	1, 56
		445T	**EM4406T-5**	18,443	LS	44.75	2151	95.8	575	135	1
		445T	**EM4906T-5**	18,443	LS	44.75	1826	95.8	575	135	1, 99

(a) See notes on the last page of this catalog.

Cast Iron Frame

575 Volt, Three Phase, TEFC, C-Face

1/3 thru 30 Hp

NEMA 56C thru 286TC

Applications: Pumps, fans, compressors, blowers, machine tools, conveyors and many applications requiring 575 volt power.

Features: 1.15 Service Factor. Positively locked drive end ball bearing, dynamically balanced rotors. CEM Super-E® motors have NEMA Premium® efficiency and 3 year warranty.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
C-Face, Foot Mounted											
1/3	1800	56C	**CM3534-5**	377	LS	11.35	21	68	575	0.6	13
1/2	1800	56C	**CM3538-5**	417	LS	11.35	23	74	575	0.8	12
3/4	1800	56C	**CM3542-5**	443	LS	11.35	26	75.5	575	1.2	12
1	1800	56C	**CM3546-5**	476	K	11.97	29	78.5	575	1.3	
		143TC	**CEM3546T-5**	741	LS	13.29	37	85.5	575	1.2	1
		143TC	**CEM3581T-5**	972	L1	13.03	54	85.5	575	1.2	1
1 1/2	3600	143TC	**CEM3583T-5**	1,073	L1	13.03	54	84	575	1.5	1
	1800	56C	**CM3554-5**	518	K	12.23	35	81.5	575	1.8	
		145TC	**CEM3554T-5**	769	LS	13.29	42	86.5	575	1.8	1
		145TC	**CEM3584T-5**	1,005	L1	13.03	63	86.5	575	1.8	1
2	3600	145TC	**CEM3586T-5**	1,076	L1	13.03	60	85.5	575	2	1
	1800	56C	**CM3558-5**	555	K	13.23	41	82.5	575	2.4	
		145TC	**CEM3558T-5**	796	LS	13.29	47	86.5	575	2.3	1
		145TC	**CEM3587T-5**	1,052	L1	13.03	61	86.5	575	2.3	1
3	3600	145TC	**CEM3559T-5**	927	L1	14.17	52	86.5	575	2.9	1
		182TC	**CEM3610T-5**	954	L1	16.53	58	86.5	575	2.9	1
		182TC	**CEM3660T-5**	1,196	L1	16.00	89	86.5	575	3	1
	1800	182TC	**CEM3611T-5**	912	LS	16.55	75	89.5	575	3.3	1
		182TC	**CEM3661T-5**	1,226	L1	16.00	102	89.5	575	3.3	1
5	3600	184TC	**CEM3613T-5**	1,051	L1	16.55	78	88.5	575	4.7	1
		184TC	**CEM3663T-5**	1,450	L1	16.00	95	88.5	575	5.1	1
	1800	184TC	**CEM3615T-5**	991	LS	18.05	93	89.5	575	5.3	1
		184TC	**CEM3665T-5**	1,252	L1	16.00	113	89.5	575	5.3	1
7 1/2	3600	213TC	**CEM3769T-5**	1,759	L1	19.20	179	89.5	575	7.4	1
	1800	213TC	**CEM3710T-5**	1,460	LS	19.76	129	91.7	575	7.6	1
		213TC	**CEM3770T-5**	1,703	L1	19.20	170	91.7	575	7.5	1
10	3600	215TC	**CEM3711T-5**	1,620	L1	18.63	123	90.2	575	9.5	1
		215TC	**CEM3771T-5**	2,028	L1	19.20	182	90.2	575	9.3	1
	1800	215TC	**CEM3714T-5**	1,629	LS	21.26	165	91.7	575	9.6	1
		215TC	**CEM3774T-5**	1,886	L1	19.20	231	91.7	575	9.8	1
15	3600	215TC	**CEM3713T-5**	2,229	L1	21.26	169	91	575	13.6	1
	1800	254TC	**CEM2333T-5**	3,339	LS	23.78	263	92.4	575	14.5	1
20	1800	256TC	**CEM2334T-5**	3,409	L1	23.78	289	93	575	19	1
25	1800	284TC	**CEM4103T-5**	4,508	L1	27.76	401	93.6	575	23	1
30	1800	286TC	**CEM4104T-5**	5,160	L1	27.76	449	93.6	575	28	1

(a) See notes on the last page of this catalog.

Cast Iron Frame

575 Volt, Three Phase, TEFC, C-Face

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
C-Face, Footless											
1/3	1800	56C	**VM3534-5**	356	LS	11.35	21	68	575	0.6	13
1/2	3600	56C	**VM3537-5**	386	K	11.35	19	68	575	0.8	12
	1800	56C	**VM3538-5**	408	LS	11.35	22	74	575	0.8	12
3/4	3600	56C	**VM3541-5**	422	K	11.35	21	74	575	0.9	12
	1800	56C	**VM3542-5**	434	LS	11.35	26	75.5	575	1.2	12
1	3600	56C	**VM3545-5**	494	K	11.35	23	75.5	575	1.4	12
	1800	56C	**VEM3546-5**	760	LS	12.23	35	85.5	575	1.2	
		56C	**VM3546-5**	453	LS	12.23	31	75.5	575	1.5	
		143TC	**VEM3546T-5**	775	LS	12.29	36	85.5	575	1.2	
		143TC	**VEM3581T-5**	968	L1	13.03	53	85.5	575	1.2	1
		143TC	**VM3546T-5**	551	LS	12.31	33	82.5	575	1.3	
1 1/2	3600	56C	**VM3550-5**	537	K	11.97	29	80	575	1.8	
		143TC	**VEM3550T-5**	757	L1	12.29	35	84	575	1.5	
		143TC	**VM3550T-5**	623	L1	12.29	37	82.5	575	1.6	
	1800	56C	**VM3554-5**	509	LS	12.23	36	81.5	575	1.8	
		145TC	**VEM3554T-5**	809	LS	13.29	41	86.5	575	1.8	
		145TC	**VEM3584T-5**	970	L1	13.03	58	86.5	575	1.8	1
		145TC	**VM3554T-5**	561	LS	13.29	39	84	575	1.9	
2	3600	56C	**VM3555-5**	598	K	12.85	33	80	575	2.2	
	1800	56C	**VM3558-5**	546	LS	13.23	40	82.5	575	2.4	
		145TC	**VEM3558T-5**	832	LS	13.29	46	86.5	575	2.3	
		143TC	**VEM3587T-5**	1,045	L1	13.03	60	86.5	575	2.3	1
		145TC	**VM3558T-5**	589	LS	13.31	38	84	575	2.5	
3	3600	56C	**VM3559-5**	693	K	13.23	45	82.5	575	3	1
		182TC	**VEM3610T-5**	938	L1	15.18	53	86.5	575	2.9	
		182TC	**VM3610T-5**	887	L1	15.18	56	85.5	575	3	1
	1800	182TC	**VEM3611T-5**	1,030	L1	16.55	71	89.5	575	3.3	
		182TC	**VEM3661T-5**	1,237	L1	16.00	98	89.5	575	3.3	1
		182TC	**VM3611T-5**	711	LS	16.55	63	87.5	575	3.3	1
5	3600	182TC	**VEM3613T-5**	1,035	L1	16.55	74	88.5	575	4.7	
		184TC	**VM3613T-5**	1,010	L1	16.55	73	87.5	575	4.8	1
	1800	184TC	**VEM3615T-5**	1,123	L1	18.05	88	89.5	575	5.3	
		184TC	**VEM3665T-5**	1,237	L1	16.00	110	89.5	575	5.3	1
		184TC	**VM3615T-5**	814	LS	16.55	75	87.5	575	5.5	1
7 1/2	3600	213TC	**VEM3709T-5**	1,580	L1	19.28	101	89.5	575	6.8	
		213TC	**VM3709T-5**	1,527	L1	19.28	91	88.5	575	7	1
	1800	213TC	**VEM3710T-5**	1,438	L1	19.76	123	91.7	575	7.6	
		213TC	**VEM3770T-5**	1,680	L1	19.20	170	91.7	575	7.5	1
		213TC	**VM3710T-5**	1,086	LS	18.63	114	89.5	575	8.1	1
10	3600	215TC	**VEM3711T-5**	1,596	L1	18.63	118	90.2	575	9.5	
		215TC	**VM3711T-5**	1,588	L1	18.63	115	89.5	575	9.6	1
	1800	215TC	**VEM3714T-5**	1,607	L1	21.26	165	91.7	575	9.6	
		215TC	**VEM3774T-5**	1,864	L1	19.20	231	91.7	575	9.8	
		215TC	**VM3714T-5**	1,293	LS	19.76	127	89.5	575	10.8	1
15	3600	215TC	**VEM3713T-5**	2,211	L1	21.26	169	91	575	13.6	
		215TC	**VM3713T-5**	1,983	L1	20.51	170	90.2	575	13.8	1
	1800	254TC	**VEM2333T-5**	3,134	L1	23.80	266	92.4	575	14.5	
		254TC	**VM2333T-5**	2,515	LS	23.80	271	91	575	14.5	1
20	1800	256TC	**VEM2334T-5**	3,699	L1	23.66	296	93	575	19.2	
		256TC	**VM2334T-5**	2,944	LS	23.80	271	91	575	19.3	1

(a) See notes on the last page of this catalog.

Cast Iron Frame

Premium Efficient, Severe Duty, 575 Volt, Three Phase, TEFC

1 thru 200 Hp **NEMA 143T thru 447T** **IP55**

Applications: Designed for 600V distribution systems for use in Petro-chemical plants, mines, quarries, foundries, pulp and paper plants, waste management facilities, chemical plants, and other processing industry applications requiring protection against corrosion caused by severe environmental operating conditions.

Features: Totally enclosed cast iron construction, Premium insulation system, Sealed frame fits, Gasketed conduit box, V-Ring shaft slinger, Stainless Steel nameplates, Corrosion resistant epoxy finish and Corrosion resistant hardware. Super-E® severe duty motors have NEMA Premium® efficiency, Class F insulation, 1.15 service factor and 3 year warranty. Positive lubrication system (PLS) on 250 frames and larger. Motors are marked for Division 2/Zone 2, Class I locations. Inverter Ready design with speed range and Inverter T. Code nameplate information, see chart at the back of the severe duty section for specific motor information.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1	3600	143T	**ECP3580T-5**	950	SD	12.95	61	84	575	1.1	1
	1800	143T	**ECP3581T-5**	1,044	SD	12.95	65	87.5	575	1.2	1
1 1/2	1800	145T	**ECP3584T-5**	1,063	SD	12.95	71	88.5	575	1.7	1
2	1800	145T	**ECP3587T-5**	1,110	SD	12.95	75	88.5	575	2.3	1
3	3600	182T	**ECP3660T-5**	1,336	SD	15.93	107	88.5	575	2.7	1
	1800	182T	**ECP3661T-5**	1,404	SD	15.93	113	89.5	575	3.3	1
	1200	213T	**ECP3764T-5**	1,971	SD	19.50	211	90.2	575	3.6	1
5	3600	184T	**ECP3663T-5**	1,644	SD	15.93	111	89.5	575	4.6	1
	1800	184T	**ECP3665T-5**	1,429	SD	15.93	118	89.5	575	5.3	1
	1200	215T	**ECP3768T-5**	1,998	SD	19.50	196	90.2	575	5.8	1
7 1/2	3600	213T	**ECP3769T-5**	2,145	SD	19.50	169	91.7	575	6.9	1
	1800	213T	**ECP3770T-5**	1,799	SD	19.50	170	91.7	575	7.5	1
	1200	254T	**ECP2276T-5**	2,858	SD	24.78	333	91.7	575	8.7	1
10	3600	215T	**ECP3771T-5**	2,284	SD	19.50	182	92.4	575	8.9	1
	1800	215T	**ECP3774T-5**	2,154	SD	19.50	231	92.4	575	10	1
	1200	256T	**ECP2332T-5**	3,713	SD	24.78	347	91.7	575	11.5	1
15	3600	254T	**ECP2394T-5**	2,922	SD	24.78	239	91.7	575	13.8	1
	1800	254T	**ECP2333T-5**	2,745	SD	24.78	297	92.4	575	14.5	1
	1200	284T	**ECP4100T-5**	4,257	SD	27.93	446	93	575	15.9	1
20	3600	256T	**ECP4106T-5**	3,408	SD	24.78	310	91.7	575	17.8	1
	1800	256T	**ECP2334T-5**	2,944	SD	24.78	325	93	575	19.2	1
	1200	286T	**ECP4102T-5**	5,784	SD	27.93	478	93	575	20.6	1
25	1800	284T	**ECP4103T-5**	3,852	SD	27.93	424	93.6	575	23	1
	1200	324T	**ECP4111T-5**	6,044	SD	30.27	612	93	575	25.7	1
30	1800	286T	**ECP4104T-5**	4,574	SD	27.93	467	94.1	575	29	1
40	1800	324T	**ECP4110T-5**	5,984	SD	30.27	623	94.5	575	36.8	1
50	1800	326T	**ECP4115T-5**	7,024	SD	30.27	652	94.5	575	45	1
60	1800	364T	**ECP4314T-5**	9,414	SD	33.49	936	95	575	54.4	1
75	1800	365T	**ECP4316T-5**	11,000	SD	33.49	966	95.4	575	68.7	1
100	1800	405T	**ECP4400T-5**	14,439	SD	38.32	1305	95.4	575	89.6	1
125	1800	444T	**ECP4410T-5**	17,070	SD	44.75	2054	95.4	575	115	1
		444T	**ECP4410T-5E**	17,070	SD	44.62	1764	95.4	575	112	1, 56
		444T	**ECP4910T-5**	17,070	SD	44.75	2054	95.4	575	115	1, 99
150	1800	445T	**ECP4406T-5**	19,997	SD	44.75	2175	95.8	575	135	1
		445T	**ECP4906T-5**	19,997	SD	44.75	1826	95.8	575	135	1, 99
200	1800	447T	**ECP4407T-5**	24,056	SD	48.24	2570	96.2	575	178	1
		447T	**ECP4907T-5**	24,056	SD	48.24	2676	96.2	575	178	1, 99

(a) See notes on the last page of this catalog.

All ratings are 1.15 service factor at 40°C ambient.

All ratings meet the intent of IEEE-45 for weather protection, and are suitable for use in a 50°C ambient with a 1.0 service factor.

Cast Iron Frame

IEEE 841, 575 Volts, Three Phase, TEFC

1 thru 250 Hp **NEMA 143T thru 449T** **IP56**

Applications: Designed for 600V distribution systems for use in Petro-chemical, pulp and paper, cement, aggregate mining and other process industries requiring premium efficient motors designed, manufactured and tested to exceed IEEE 841-2009 TEFC motor standards for extreme severe duty service.

Features: Meets and/or exceeds all requirements of IEEE Std. 841-2009 including: Totally enclosed cast iron construction, Lower vibration design, Inpro Seals and Positive Lubrication System with oversize bearings on both ends, Stainless Steel nameplates, Terminal lugs on motor leads, Corrosion resistant epoxy finish, NEMA Premium efficiency, Class F insulation with a Class B temperature Rise, 1.15 service factor and 5 year warranty. Final test and vibration results provided with motor. Motors are marked for Div.2/Zone 2, Class I locations and are designed to meet 200° C @ 1.0 Service Factor. Inverter Ready design with speed range and Inverter T. Code nameplate information, see chart at the back of the severe duty section for specific motor information.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
Foot Mounted											
1	3600	143T	**ECP83580T-5**	1,043	SD	12.88	53	84	575	1.1	1
	1800	143T	**ECP83581T-5**	1,145	SD	12.87	67	87.5	575	1.2	1
	1200	145T	**ECP83582T-5**	1,228	SD	12.88	69	82.5	575	1.4	1
1 1/2	3600	143T	**ECP83583T-5**	1,120	SD	12.88	71	85.5	575	1.6	1
	1800	145T	**ECP83584T-5**	1,165	SD	12.87	73	88.5	575	1.7	1
	1200	182T	**ECP83667T-5**	1,414	SD	15.93	112	87.5	575	2	1
2	3600	145T	**ECP83586T-5**	1,161	SD	12.88	79	86.5	575	1.9	1
	1800	145T	**ECP83587T-5**	1,217	SD	12.87	77	88.5	575	2.3	1
	1200	184T	**ECP83664T-5**	1,537	SD	15.93	128	88.5	575	2.5	1
3	3600	182T	**ECP83660T-5**	1,465	SD	15.93	116	88.5	575	2.7	1
	1800	182T	**ECP83661T-5**	1,541	SD	15.93	118	89.5	575	3.3	1
	1200	213T	**ECP83764T-5**	2,143	SD	19.50	211	89.5	575	3.6	1
5	3600	184T	**ECP83663T-5**	1,805	SD	15.93	130	89.5	575	4.5	1
	1800	184T	**ECP83665T-5**	1,570	SD	15.93	127	89.5	575	5.3	1
	1200	215T	**ECP83768T-5**	2,215	SD	19.50	226	89.5	575	5.7	1
7 1/2	3600	213T	**ECP83769T-5**	2,356	SD	19.50	179	91.7	575	6.9	1
	1800	213T	**ECP83770T-5**	1,978	SD	19.50	199	91.7	575	7.6	1
	1200	254T	**ECP82276T-5**	3,352	SD	24.78	348	91.7	575	8.4	1
10	3600	215T	**ECP83771T-5**	2,508	SD	19.50	225	90.2	575	9	1
	1800	215T	**ECP83774T-5**	2,342	SD	19.50	231	91.7	575	9.8	1
	1200	256T	**ECP82332T-5**	4,079	SD	24.78	355	91.7	575	11.4	1
15	3600	254T	**ECP82394T-5**	3,264	SD	24.78	305	91.7	575	13.8	1
	1800	254T	**ECP82333T-5**	3,015	SD	24.78	318	92.4	575	14.1	1
	1200	284T	**ECP84100T-5**	4,712	SD	27.93	445	92.4	575	15.6	1
20	3600	256T	**ECP84106T-5**	3,742	SD	24.78	324	91.7	575	17.8	1
	1800	256T	**ECP82334T-5**	3,260	SD	24.78	361	93	575	19	1
	1200	286T	**ECP84102T-5**	6,350	SD	27.93	443	92.4	575	21	1
25	3600	284TS	**ECP84107T-5**	4,575	SD	26.56	429	91.7	575	22.8	1
	1800	284T	**ECP84103T-5**	4,228	SD	27.93	443	93.6	575	23	1
	1200	324T	**ECP84111T-5**	6,692	SD	30.66	623	93	575	25.4	1
30	3600	286TS	**ECP84108T-5**	5,480	SD	26.56	422	91.7	575	26.6	1
	1800	286T	**ECP84104T-5**	4,979	SD	27.93	480	93.6	575	28	1
	1200	326T	**ECP84117T-5**	8,709	SD	30.66	635	93	575	30.9	1
40	3600	324TS	**ECP84109T-5**	7,498	SD	29.16	624	92.4	575	35	1
	1800	324T	**ECP84110T-5**	6,629	SD	30.66	635	94.5	575	37	1
	1200	364T	**ECP84308T-5**	10,662	SD	33.49	922	94.1	575	39.5	1
50	3600	326TS	**ECP84114T-5**	7,821	SD	29.16	662	93	575	44	1
	1800	326T	**ECP84115T-5**	7,783	SD	30.66	653	94.5	575	45	1
	1200	365T	**ECP84312T-5**	11,355	SD	33.49	924	94.1	575	49.3	1

(a) See notes on the last page of this catalog.

All ratings meet the intent of IEEE-45 for weather protection, and are suitable for use in a 50°C ambient with a 1.0 service factor.

Cast Iron Frame

IEEE 841, 575 Volts, Three Phase, Totally Enclosed, Foot Mounted

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
60	3600	364TS	**ECP84310T-5**	11,558	SD	31.37	932	95	575	52	1
	1800	364T	**ECP84314T-5**	10,335	SD	33.49	937	95	575	54.4	1
	1200	404T	**ECP84403T-5**	14,718	SD	38.20	1275	95	575	55.2	1
75	3600	365TS	**ECP84313T-5**	12,802	SD	31.37	998	95	575	64.5	1
	1800	365T	**ECP84316T-5**	12,019	SD	33.49	985	95.4	575	68.7	1
	1200	405T	**ECP84404T-5**	17,827	SD	38.32	1283	94.5	575	69.4	1
100	3600	405TS	**ECP84402T-5**	15,341	SD	35.31	1287	95	575	88	1
	1800	405T	**ECP84400T-5**	16,043	SD	38.20	1304	95.4	575	89.6	1
	1200	444T	**ECP84409T-5**	19,609	SD	44.75	1885	95	575	92	1
125	3600	444TS	**ECP84412T-5**	17,941	SD	40.98	1799	95.4	575	109	1
		444TS	**ECP84412T-5E**	17,941	SD	40.88	1740	95.4	575	109	1, 56
	1800	444T	**ECP84410T-5**	18,198	SD	44.75	1915	95.8	575	111	1
		444T	**ECP84410T-5E**	18,198	SD	44.62	1802	95.8	575	111	1, 56
	1200	445T	**ECP84411T-5**	22,257	SD	44.75	2000	95.4	575	114	1
150	3600	445TS	**ECP84413T-5**	20,617	SD	40.98	2062	96.2	575	131	1
	1800	445T	**ECP84406T-5**	21,521	SD	44.75	1886	96.2	575	132	1
		445T	**ECP84406T-5E**	21,521	SD	44.62	1879	96.2	575	132	1, 56
	1200	447T	**ECP844156TR-5**	25,964	SD	48.24	2595	95.8	575	136	1, 5
		447T	**ECP849156TR-5**	25,964	SD	48.24	2000	95.8	575	136	1, 5, 99
200	3600	447TS	**ECP84416T-5**	27,256	SD	44.48	2182	96.2	575	177	1
	1800	447T	**ECP84407T-5**	25,892	SD	48.24	2606	96.2	575	178	1
		447T	**ECP84407TR-5**	27,119	SD	48.24	2618	96.2	575	178	1, 5
		447T	**ECP84907T-5**	25,892	SD	48.24	2676	96.2	575	178	1, 99
		447T	**ECP84907TR-5**	27,119	SD	48.24	2676	96.2	575	178	1, 5, 99
	1200	449T	**ECP844206TR-5**	34,092	SD	53.24	3100	95.8	575	180	1, 5
250	3600	449TS	**ECP844252T-5**	43,915	SD	49.48	2784	96.2	575	212	1
		449TS	**ECP849252T-5**	43,915	SD	49.48	2595	96.2	575	212	1, 99
	1800	449T	**ECP84408T-5**	33,052	SD	53.24	2932	96.2	575	220	1
		449T	**ECP84408TR-5**	34,246	SD	53.24	2732	96.2	575	220	1, 5
		449T	**ECP84908T-5**	33,052	SD	53.24	2941	96.2	575	220	1, 99
		449T	**ECP84908TR-5**	34,246	SD	53.24	2677	96.2	575	220	1, 5, 99
C-Face, Foot Mounted											
1	1800	143TC	**CECP83581T-5**	1,190	SD	13.38	71	87.5	575	1.2	1
2	1800	145TC	**CECP83587T-5**	1,262	SD	13.38	80	88.5	575	2.3	1
3	1800	182TC	**CECP83661T-5**	1,644	SD	16.69	111	89.5	575	3.3	1
5	1800	184TC	**CECP83665T-5**	1,653	SD	16.69	131	89.5	575	5.3	1
7 1/2	1800	213TC	**CECP83770T-5**	2,094	SD	20.23	211	91.7	575	7.6	1
10	1800	215TC	**CECP83774T-5**	2,531	SD	20.23	231	91.7	575	9.8	1
15	1800	254TC	**CECP82333T-5**	3,465	SD	25.28	309	92.4	575	14.1	1
20	1800	256TC	**CECP82334T-5**	3,666	SD	25.28	357	93	575	19	1
25	1800	284TC	**CECP84103T-5**	5,145	SD	27.93	444	93.6	575	23	1
30	1800	286TC	**CECP84104T-5**	5,892	SD	27.93	487	93.6	575	28	1
40	1800	324TC	**CECP84110T-5**	7,637	SD	30.66	670	94.5	575	36.8	1
50	1800	326TC	**CECP84115T-5**	8,790	SD	30.66	663	94.5	575	45	1

(a) See notes on the last page of this catalog.

All ratings meet the intent of IEEE-45 for weather protection, and are suitable for use in a 50°C ambient with a 1.0 service factor.

Cast Iron Frame

575 Volt, Three Phase, C-Face, Washdown, Totally Enclosed

1/2 thru 20 Hp **NEMA 56C thru 256TC** **IP55**

Applications: Food processing and other applications where motors receive washdown on a regular basis.

Features: 300 series stainless steel hardware, moisture sealant on bolt heads, between frame and endplates. Neoprene gaskets. Double sealed ball bearings. Lip and V-Ring seal on drive end. Stainless steel shaft extension. Electrostatically applied epoxy finish. Class F insulation. Super-E® motors have NEMA Premium® efficiency and 3 year warranty.

Hp	RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
575 Volt												
1/2	1800	56C	TENV	**CWDM3538-5**	654	WD	11.07	26	80	575	0.7	1, 12
3/4	1800	56C	TENV	**CWDM3542-5**	709	WD	11.06	35	78.5	575	1.1	1, 12
1	1800	56C	TENV	**CEWDM3546-5**	1,044	WD	12.06	39	85.5	575	1.2	
		56C	TENV	**CWDM3546-5**	760	WD	11.06	35	82.5	575	1.2	1
		143TC	TENV	**CEWDM3546T-5**	1,065	WD	12.12	38	85.5	575	1.2	
1 1/2	1800	56C	TEFC	**CWDM3554-5**	800	WD	13.24	40	84	575	1.9	1
		145TC	TENV	**CEWDM3554T-5**	1,115	WD	13.00	46	86.5	575	1.7	1
		145TC	TENV	**CWDM3554T-5**	823	WD	12.12	42	85.5	575	1.8	
2	1800	56C	TEFC	**CWDM3558-5**	883	WD	13.24	39	84	575	2.5	1
		145TC	TEFC	**CEWDM3558T-5**	1,229	WD	13.28	46	86.5	575	2.3	1
3	3600	145TC	TEFC	**CEWDM3559T-5**	1,451	WD	14.17	52	86.5	575	2.9	1
	1800	182TC	TEFC	**CEWDM3611T-5**	1,614	WD	16.54	77	89.5	575	3.3	1
5	3600	184TC	TEFC	**CEWDM3613T-5**	1,920	WD	16.54	70	88.5	575	4.7	1
	1800	184TC	TEFC	**CEWDM3615T-5**	1,829	WD	18.04	94	89.5	575	5.3	1
7 1/2	1800	213TC	TEFC	**CEWDM3710T-5**	2,314	WD	19.78	195	91.7	575	7.6	1
10	1800	215TC	TEFC	**CEWDM3714T-5**	2,630	WD	21.27	165	91.7	575	9.6	1
15	1800	254TC	TEFC	**CEWDM23933T-5**	5,172	WD	23.57	258	92.4	575	14.5	1
20	1800	256TC	TEFC	**CEWDM23934T-5**	5,998	WD	23.57	289	93	575	19	1
C-Face, Footless												
1/2	1800	56C	TENV	**VWDM3538-5**	649	WD	11.06	28	80	575	0.7	1
3/4	1800	56C	TENV	**VWDM3542-5**	705	WD	11.06	32	80	575	0.9	1
1	1800	56C	TENV	**VWDM3546-5**	755	WD	11.06	33	82.5	575	1.2	1
1 1/2	1800	145TC	TENV	**VWDM3554T-5**	815	WD	12.12	42	85.5	575	1.8	1
2	1800	145TC	TEFC	**VWDM3558T-5**	926	WD	13.28	41	84	575	2.2	1

(a) See notes on the last page of this catalog.

575 Volt, Stainless Steel, Three Phase, Totally Enclosed, C-Face, Foot Mounted

1/2 thru 5 Hp **NEMA 56C thru 184TC** **IP56**

Applications: Food processing, packaging, outdoor and highly corrosive environments.

Features: All external surfaces 300 series stainless steel: motor frame, endplates, conduit box, shaft and base. Moisture resistant insulation system. Four condensate drains in each endplate. Endplate rabbets sealed and conduit box gasketed. Labyrinth seals each end. Especially effective in highly corrosive environments where paint or other finishes do not hold up. Super-E® motors have NEMA Premium® efficiency and 3 year warranty.

Hp	RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1/2	1800	56C	TENV	**CSSWDM3538-5**	1,336	WD	11.09	37	80	575	0.7	1, 12
3/4	1800	56C	TENV	**CSSWDM3542-5**	1,383	WD	11.09	41	82.5	575	0.9	1, 12
1	1800	56C	TENV	**CSSWDM3546-5**	1,420	WD	11.09	46	85.5	575	1.2	
		143TC	TEFC	**CESSWDM3546T-5**	1,426	WD	13.42	51	87.5	575	1.3	1
1 1/2	1800	56C	TEFC	**CSSWDM3554-5**	1,452	WD	13.34	48	84	575	1.9	1
		145TC	TEFC	**CESSWDM3554T-5**	1,453	WD	13.42	56	87.5	575	1.7	1
2	1800	56C	TEFC	**CSSWDM3558-5**	1,765	WD	15.59	62	88.5	575	2.2	1
		145TC	TEFC	**CESSWDM3558T-5**	1,746	WD	15.67	64	88.5	575	2.2	1
3	3600	145TC	TEFC	**CESSWDM3559T-5**	2,089	WD	15.67	73	86.5	575	2.9	1
	1800	182TC	TEFC	**CESSWDM3611T-5**	2,041	WD	16.82	92	89.5	575	3.4	1
5	3600	184TC	TEFC	**CESSWDM3613T-5**	2,374	WD	18.32	106	90.2	575	4.6	
	1800	184TC	TEFC	**CESSWDM3615T-5**	2,297	WD	18.32	112	89.5	575	5.2	

575V, SSE Super-E Stainless Steel, Three Phase, Totally Enclosed, C-Face, Encapsulated

1/2 thru 5 Hp **NEMA 56C thru 184TC** **IP69K for Water**

Applications: Food processing, packaging, outdoor and highly corrosive environments, which expose the motor to high pressure washdown.

Features: Class H insulated motor with 1.15 service factor or higher. All external surfaces 300 series stainless steel: motor frame, endplates, conduit box, shaft and base. Moisture resistant insulation system. Endplate rabbets have O-ring seals to band. Conduit box and base fully welded-no crevices to trap contaminants. Patented bearing seal to protect motor bearings, inside and out. Epoxy encapsulation prevents any moisture from reaching the windings as well as potting the passage between the band and the conduit box. Nameplate information is laser etched on the band. Especially effective in highly corrosive environments where paint or other finishes do not hold up. NEMA Premium® efficiency and 3-year warranty.

Hp	RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
575 Volt, F1 Mounting												
1/2	3600	56C	TENV	**CSSEWDM3537-5**	1,412	WD	11.75	35	84	575	0.6	
	1800	56C	TENV	**CSSEWDM3538-5**	1,433	WD	11.75	35	84	575	0.7	12
3/4	1800	56C	TENV	**CSSEWDM3542-5**	1,481	WD	12.75	40	84	575	1	
1	1800	56C	TENV	**CSSEWDM3546-5**	1,547	WD	12.75	43	87.5	575	1.2	
		143TC	TENV	**CSSEWDM3546T-5**	1,560	WD	12.80	43	87.5	575	1.2	
1 1/2	1800	56C	TEFC	**CSSEWDM3554-5**	1,559	WD	14.75	62	86.5	575	1.7	
		145TC	TEFC	**CSSEWDM3554T-5**	1,574	WD	14.81	64	86.5	575	1.7	
2	1800	56C	TEFC	**CSSEWDM3558-5**	1,884	WD	16.13	72	88.5	575	2.2	
		145TC	TEFC	**CSSEWDM3558T-5**	1,897	WD	16.19	72	88.5	575	2.2	
3	3600	145TC	TEFC	**CSSEWDM3559T-5**	2,267	WD	16.19	81	86.5	575	2.9	
	1800	182TC	TEFC	**CSSEWDM3611T-5**	2,283	WD	19.25	112	89.5	575	3.3	
5	3600	184TC	TEFC	**CSSEWDM3613T-5**	2,474	WD	17.75	110	89.5	575	4.5	
	1800	184TC	TEFC	**CSSEWDM3615T-5**	2,493	WD	19.25	125	89.5	575	5.1	

(a) See notes on the last page of this catalog.

575 Volt, Three Phase, ODP, Foot Mounted

1/3 thru 150 Hp NEMA 56 thru 444T

Applications: Pumps, compressors, fans, conveyors, machine tools and other applications where 575 volt three phase power is available.

Features: 1.15 Service Factor or greater, ball bearings, dynamically balanced rotors, heavy-gauge steel and cast iron frames. Super-E® motors have NEMA Premium® efficiency and 3 year warranty.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1/3	1800	56	**M3104-5**	300	LS	9.50	20	68	575	0.6	13
1/2	1800	56	**M3108-5**	341	LS	9.50	22	74	575	0.8	12
3/4	1800	56	**M3112-5**	381	LS	10.12	25	75.5	575	1.2	12
1	1800	56	**M3116-5**	429	LS	11.75	28	78.5	575	1.3	
		143T	**EM3116T-5**	711	LS	11.12	34	85.5	575	1.2	1
1 1/2	1800	145T	**EM3154T-5**	743	LS	11.62	37	86.5	575	1.8	1
2	1800	145T	**EM3157T-5**	796	LS	12.12	39	86.5	575	2.3	1
3	1800	182T	**EM3211T-5**	858	LS	15.00	69	89.5	575	3.4	1
5	1800	184T	**EM3218T-5**	940	LS	16.50	82	89.5	575	5.3	1
7 1/2	1800	213T	**EM3311T-5**	1,381	LS	16.32	114	91	575	7.8	1
10	1800	215T	**EM3313T-5**	1,672	LS	17.45	123	91.7	575	10	1
15	1800	254T	**EM2513T-5**	2,367	LS	21.69	273	93	575	14.1	1
20	1800	256T	**EM2515T-5**	2,597	L1	21.69	227	93	575	18.9	1
25	1800	284T	**EM2531T-5**	3,166	L1	25.06	312	93.6	575	24.5	1
30	1800	286T	**EM2535T-5**	3,462	L1	25.06	333	94.1	575	28	1
40	1800	324T	**EM2539T-5**	4,516	L1	27.19	397	94.1	575	40	1
50	1800	326T	**EM2543T-5**	4,983	L1	27.69	465	94.5	575	46	1
60	1800	364T	**EM2547T-5**	6,274	L1	30.69	620	95	575	56	1
75	1800	365T	**EM2551T-5**	7,701	L1	33.72	740	95	575	68	1
100	1800	404T	**EM2555T-5**	8,959	L1	36.97	943	95.4	575	93	1
125	1800	405T	**EM2559T-5**	10,991	L1	34.47	960	95.4	575	114	1
150	1800	444T	**EM2558T-5**	12,208	L1	39.56	1535	96.2	575	136	1

(a) See notes on the last page of this catalog.

■ Cast Iron Frame

575 Volt, Three Phase, Close-Coupled Pump, TEFC and ODP, C-Face

1 thru 20 Hp **NEMA 143JM thru 256JM**

Applications: Applications for circulating and transferring fluids.

Features: Over-sized ball bearings with locked drive end construction for minimum shaft movement. Open drip-proof, close coupled pump motors are furnished with rodent screens at both ends.

Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
Foot Mounted, Totally Enclosed Fan Cooled											
1	1800	143JM	**JMM3546T-5**	657	L1	15.43	38	82.5	575	1.3	1
1 1/2	3600	143JM	**JMM3550T-5**	690	L1	15.43	39	82.5	575	1.6	
	1800	145JM	**JMM3554T-5**	690	L1	15.43	41	84	575	1.9	1
2	3600	145JM	**JMM3555T-5**	769	L1	15.43	49	84	575	2.1	
	1800	145JM	**JMM3558T-5**	721	L1	15.43	51	84	575	2.5	1
3	3600	145JM	**JMM3559T-5**	862	L1	16.31	55	85.5	575	3	1
	3600	182JM	**JMM3610T-5**	894	L1	16.69	68	85.5	575	2.8	
	1800	182JM	**JMM3611T-5**	862	L1	18.18	66	87.5	575	3.3	1, 35
5	3600	184JM	**JMM3613T-5**	1,104	L1	18.06	78	87.5	575	4.8	1
	1800	184JM	**JMM3615T-5**	964	L1	18.06	81	87.5	575	5.5	1, 35
7 1/2	3600	184JM	**JMM3616T-5**	1,249	L1	19.56	91	88.5	575	7	2, 20
	1800	213JM	**JMM3710T-5**	1,233	L1	19.76	122	89.5	575	8.1	1, 35
10	3600	215JM	**JMM3711T-5**	1,682	L1	19.76	123	89.5	575	9.6	20
	1800	215JM	**JMM3714T-5**	1,556	L1	20.88	137	89.5	575	10.8	1, 35
15	3600	215JM	**JMM3713T-5**	2,216	L1	21.64	170	90.2	575	13.8	1, 35
	3600	254JM	**JMM2394T-5**	2,915	L1	23.07	225	90.2	575	13.7	1, 35
	1800	254JM	**JMM2333T-5**	2,842	L1	23.07	236	91	575	15.2	1, 35
Footless, Totally Enclosed Fan Cooled											
1	1800	143JM	**VJMM3546T-5**	670	L1	14.43	38	82.5	575	1.3	1
1 1/2	1800	145JM	**VJMM3554T-5**	701	L1	15.43	40	84	575	1.9	1
2	1800	145JM	**VJMM3558T-5**	733	L1	15.43	44	84	575	2.5	1
3	1800	182JM	**VJMM3611T-5**	876	L1	18.20	72	87.5	575	3.3	1, 35
5	1800	184JM	**VJMM3615T-5**	981	L1	19.55	90	87.5	575	5.2	1
7 1/2	1800	213JM	**VJMM3710T-5**	1,274	L1	19.79	115	89.5	575	8.1	1, 35
10	1800	215JM	**VJMM3714T-5**	1,573	L1	20.92	136	89.5	575	10.8	1, 35
15	1800	254JM	**VJMM2333T-5**	2,867	L1	21.82	236	91	575	15.2	1, 35
20	1800	256JM	**VJMM2334T-5**	2,964	L1	25.28	276	91	575	19.1	1
Foot Mounted, Open Drip Proof											
3	3600	145JM	**JMM3158T-5**	742	L1	14.25	47	84	575	3.1	
	1800	182JM	**JMM3211T-5**	735	L1	17.04	67	86.5	575	3.3	1
5	3600	182JM	**JMM3212T-5**	834	L1	15.62	61	85.5	575	4.9	
	1800	184JM	**JMM3218T-5**	795	L1	16.50	73	87.5	575	5.7	1, 35
7 1/2	3600	184JM	**JMM3219T-5**	1,020	L1	16.50	73	87.5	575	7	1
	1800	213JM	**JMM3311T-5**	1,155	L1	18.84	95	88.5	575	7.9	1, 35
10	3600	213JM	**JMM3312T-5**	1,387	L1	18.19	116	89.5	575	9.6	
	1800	215JM	**JMM3313T-5**	1,372	L1	18.19	119	89.5	575	10.8	1, 35
15	3600	215JM	**JMM3314T-5**	1,864	L1	18.19	129	89.5	575	14.4	1

(a) See notes on the last page of this catalog.

Cast Iron Frame

575 Volt, Three Phase, Explosion Proof

1/2 thru 40 Hp — NEMA 56 thru 324T

Applications: 575 volt designs for use on pumps, fans, and conveyors where hazardous fumes and dust are present, requiring Div 1 UL listed and/or CSA approved enclosures.

Features: UL & CSA approved for Class I, Group D, Class II, Group F & G, T3C. Totally enclosed heavy gauge steel and cast iron construction. Corrosion resistant epoxy finish. 1.0 Service Factor. Super-E® explosion proof motors have NEMA Premium® efficiency and 3 year warranty. Fixed speed sine wave operation only.

Hp	RPM	NEMA Frame	Catalog Number	XP Cls/Grp	Temp Code	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
Foot Mounted, No Drip Cover													
1/2	1800	56	**M7006-5**	②	T3C	719	K	14.30	34	78.5	575	0.7	-
3/4	1800	56	**M7010-5**	②	T3C	828	K	14.30	37	76	575	1.2	-
1	3600	56	**M7013-5**	②	T3C	869	K	13.22	30	75.5	575	1.2	-
	1800	56	**M7014-5**	②	T3C	907	K	14.30	40	75.5	575	1.5	-
		143T	**EM7014T-5**	②	T3C	1,266	LS	14.36	42	85.5	575	1.2	-
1 1/2	3600	143T	**EM7018T-5**	②	T3C	1,158	L1	14.36	45	84	575	1.5	-
	1800	145T	**EM7034T-5**	②	T3C	1,311	LS	15.23	51	86.5	575	1.8	-
2	3600	145T	**EM7071T-5**	②	T3C	1,186	L1	15.23	52	85.5	575	2	-
	1800	145T	**EM7037T-5**	②	T3C	1,431	LS	15.23	54	86.5	575	2.3	-
3	1800	182T	**EM7042T-5**	②	T3C	1,520	L1	17.42	84	89.5	575	3.3	-
5	3600	184T	**EM7072T-5**	②	T3C	1,745	L1	18.12	85	88.5	575	4.7	-
	1800	184T	**EM7044T-5**	②	T3C	1,883	L1	18.12	99	89.5	575	5.3	-
7 1/2	1800	213T	**EM7047T-5**	②	T3C	2,500	L1	20.32	161	91.7	575	7.6	-
10	1800	215T	**EM7170T-5**	②	T3C	3,525	L1	19.90	249	91.7	575	9.8	-
15	1800	254T	**EM7054T-5**	②	T3C	3,751	LS	25.50	364	92.4	575	14.5	-
20	1800	256T	**EM7056T-5**	②	T3C	4,860	LS	25.50	396	93	575	19.2	-
25	1800	284T	**EM7058T-5**	②	T3C	5,896	LS	28.61	534	93.6	575	24.5	-
30	1800	286T	**EM7060T-5**	②	T3C	7,188	L1	28.61	553	93.6	575	29	-
40	1800	324T	**EM7062T-5**	②	T3C	9,633	LS	32.00	729	94.1	575	39	-
C-Face, Footless, No Drip Cover													
1/2	1800	56C	**VM7006-5**	②	T3C	936	K	14.30	37	78.5	575	0.7	-
3/4	1800	56C	**VM7010-5**	②	T3C	953	K	14.30	38	76	575	1.2	-
1	1800	56C	**VM7014-5**	②	T3C	1,001	K	14.30	39	75.5	575	1.5	-
		143TC	**VEM7014T-5**	②	T3C	1,324	L1	14.33	44	85.5	575	1.2	-
		143TC	**VM7014T-5**	②	T3C	1,080	L1	14.36	41	82.5	575	1.3	-
1 1/2	1800	145TC	**VEM7034T-5**	②	T3C	1,443	L1	15.21	50	86.5	575	1.8	-
		145TC	**VM7034T-5**	②	T3C	1,164	L1	15.23	47	84	575	1.9	-
2	1800	145TC	**VEM7037T-5**	②	T3C	1,529	L1	15.21	54	86.5	575	2.3	-
		145TC	**VM7037T-5**	②	T3C	1,259	L1	15.23	49	84	575	2.5	-
3	1800	182TC	**VEM7042T-5**	②	T3C	1,727	L1	18.86	95	89.5	575	3.3	-
		182TC	**VM7042T-5**	②	T3C	1,614	L1	18.86	90	87.5	575	3.4	-
5	1800	184TC	**VEM7044T-5**	②	T3C	2,040	L1	20.36	110	89.5	575	5.3	-
		184TC	**VM7044T-5**	②	T3C	1,966	L1	18.80	113	87.5	575	5.2	-
7 1/2	1800	213TC	**VM7047T-5**	②	T3C	2,275	L1	19.19	157	89.5	575	8.1	-

(a) See notes on the last page of this catalog.

② = Class I, Group D, Class II, Group F & G

Cast Iron Frame

CAUTION: Explosion-proof motors have a tight fit between mating parts to ensure the integrity of the explosion-proof enclosure. This can lead to an accumulation of moisture inside the motors due to condensation. Care should be used when selecting an explosion-proof motor, especially when installed outdoors and on intermittent duty. The Explosion-proof motors are not suitable for use with adjustable speed drives. Inverter Duty Explosion-proof motors must be used.

575 Volt, Drill Rig Duty, Three Phase, 1.15 Service Factor

1 thru 100 Hp — NEMA 143T thru 405T

Applications: On and off shore drill rig service, bulk fuel terminals, and transfer stations. For use in high humidity hazardous-duty applications driving pumps, compressors, blowers, fans, and many other loads that require 1.15 service factor explosion-proof motors. Designed with features for use in the petroleum industry. Includes Class I, Group C & D approval for use in areas where hydrogen sulfide is present.

Features: UL & CSA listed for Class I (Gas), Group C & D with a T3C temperature code. Totally enclosed heavy gauge steel and cast iron construction. Drive-end shaft slinger. UL listed explosion proof breather drain. Corrosion resistant epoxy finish. Class F Insulation and 1.15 service factor. Suitable for 55 Degrees C at 1.0 service factor. Super-E® explosion proof motors have NEMA Premium® efficiency and 3 year warranty. Fixed speed sine wave operation only.

Hp	RPM	NEMA Frame	Catalog Number	XP Cls/Grp	Temp Code	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
Foot Mounted													
1	3600	143T	**EM7013T-I-5**	④	T3C	1,298	SD	14.12	51	84	575	1.1	1
	1800	143T	**EM7014T-I-5**	④	T3C	1,277	SD	14.22	55	85.5	575	1.2	1
2	3600	145T	**EM7071T-I-5**	④	T3C	1,408	SD	15.09	62	85.5	575	2	1
	1800	145T	**EM7037T-I-5**	④	T3C	1,442	SD	15.09	65	86.5	575	2.3	1
3	3600	182T	**EM7026T-I-5**	④	T3C	1,613	SD	18.27	91	86.5	575	2.7	1
	1800	182T	**EM7042T-I-5**	④	T3C	1,521	SD	18.27	106	89.5	575	3.3	1
5	3600	184T	**EM7072T-I-5**	④	T3C	2,003	SD	18.27	114	90.2	575	3.4	1
	1800	184T	**EM7044T-I-5**	④	T3C	1,886	SD	19.52	126	89.5	575	5.2	1
7 1/2	3600	213T	**EM7045T-I-5**	④	T3C	2,407	SD	19.57	166	89.5	575	7	1
	1800	213T	**EM7047T-I-5**	④	T3C	2,325	SD	20.32	161	91.7	575	7.6	1
10	3600	215T	**EM7174T-I-5**	④	T3C	2,831	SD	20.03	235	90.2	575	9.3	1
	1800	215T	**EM7170T-I-5**	④	T3C	3,138	SD	20.03	252	92.4	575	10.1	1
15	3600	254T	**EM7053T-I-5**	④	T3C	3,201	SD	25.50	352	91	575	13.7	1
	1800	254T	**EM7054T-I-5**	④	T3C	3,766	SD	25.50	374	92.4	575	14.5	1
20	3600	256T	**EM7059T-I-5**	④	T3C	4,105	SD	25.50	409	91	575	17.5	1
	1800	256T	**EM7056T-I-5**	④	T3C	4,714	SD	25.50	397	93	575	19.2	1
25	3600	284TS	**EM7063T-I-5**	④	T3C	5,463	SD	27.23	552	91.7	575	22.8	1
	1800	284T	**EM7058T-I-5**	④	T3C	5,918	SD	28.61	559	93.6	575	24.5	1
30	3600	286TS	**EM7083T-I-5**	④	T3C	6,421	SD	27.23	565	91.7	575	26	1
	1800	286T	**EM7060T-I-5**	④	T3C	7,216	SD	28.61	573	93.6	575	29	1
40	3600	324TS	**EM7067T-I-5**	④	T3C	8,565	SD	30.50	684	92.4	575	36	1
	1800	324T	**EM7062T-I-5**	④	T3C	9,670	SD	32.00	752	94.1	575	39	1
50	3600	326TS	**EM7081T-I-5**	④	T3C	10,967	SD	30.50	740	93	575	45	1
	1800	326T	**EM7064T-I-5**	④	T3C	11,249	SD	32.00	841	94.5	575	47	1
60	1800	364T	**EM7066T-I-5**	④	T3C	12,719	SD	33.44	1015	95	575	54.2	1
75	1800	365T	**EM7068T-I-5**	④	T3C	13,240	SD	33.44	1064	95.4	575	67.2	1
100	1800	405T	**EM7090T-I-5**	④	T3C	16,981	SD	38.32	1446	95.4	575	89.6	1
C-Face, Foot Mounted													
1	3600	143TC	**CEM7013T-I-5**	④	T3C	1,376	SD	14.36	41	84	575	1.1	1
	1800	143TC	**CEM7014T-I-5**	④	T3C	1,375	SD	15.23	52	85.5	575	1.1	1
2	3600	145TC	**CEM7071T-I-5**	④	T3C	1,506	SD	15.23	55	85.5	575	2	1
	1800	145TC	**CEM7037T-I-5**	④	T3C	1,657	SD	16.10	65	86.5	575	2.2	1
3	3600	182TC	**CEM7026T-I-5**	④	T3C	1,928	SD	18.09	80	86.5	575	2.9	1
	1800	182TC	**CEM7042T-I-5**	④	T3C	1,866	SD	19.59	106	89.5	575	3.3	1
5	3600	184TC	**CEM7072T-I-5**	④	T3C	2,318	SD	19.59	91	88.5	575	4.8	1
	1800	184TC	**CEM7044T-I-5**	④	T3C	2,256	SD	20.84	126	89.5	575	5.2	1

(a) See notes on the last page of this catalog.

④ = Class I, Group C & D

Cast Iron Frame

These motors expel condensation better than standard explosion proof designs. They are recommended for applications where motors may run intermittently, applications where explosion-proof motors are installed outdoors exposed to the environment, and may not be operated for extended periods of time. These explosion-proof motors are not suitable for use with adjustable speed drives. Inverter duty explosion-proof motors must be used.

575 Volt, Drill Rig Duty, Three Phase, 1.15 Service Factor, Foot Mounted

Hp	RPM	NEMA Frame	Catalog Number	XP Cls/Grp	Temp Code	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
7 1/2	3600	213TC	**CEM7045T-I-5**	④	T3C	2,748	SD	20.32	149	89.5	575	7	1
	1800	213TC	**CEM7047T-I-5**	④	T3C	2,646	SD	21.07	161	91.7	575	7.6	1
10	3600	215TC	**CEM7174T-I-5**	④	T3C	3,172	SD	20.77	240	90.2	575	9.3	1
	1800	215TC	**CEM7170T-I-5**	④	T3C	3,219	SD	20.77	252	92.4	575	10.1	1
15	3600	254TC	**CEM7053T-I-5**	④	T3C	4,554	SD	26.00	359	91	575	13.7	1
	1800	254TC	**CEM7054T-I-5**	④	T3C	5,324	SD	26.00	374	92.4	575	14.5	1
20	3600	256TC	**CEM7059T-I-5**	④	T3C	5,458	SD	26.00	416	91	575	20	1
	1800	256TC	**CEM7056T-I-5**	④	T3C	6,310	SD	26.00	397	93	575	19.2	1
25	3600	284TSC	**CEM7063T-I-5**	④	T3C	7,199	SD	27.23	560	91.7	575	22.8	1
	1800	284TC	**CEM7058T-I-5**	④	T3C	7,727	SD	28.61	559	93.6	575	24.5	1
30	3600	286TSC	**CEM7083T-I-5**	④	T3C	8,157	SD	27.23	573	91.7	575	26	1
	1800	286TC	**CEM7060T-I-5**	④	T3C	8,967	SD	28.61	573	93.6	575	29	1
40	3600	324TSC	**CEM7067T-I-5**	④	T3C	10,966	SD	30.50	761	92.4	575	36	1
	1800	324TC	**CEM7062T-I-5**	④	T3C	11,961	SD	32.00	720	94.1	575	39	1
50	3600	326TSC	**CEM7081T-I-5**	④	T3C	13,368	SD	30.50	750	93	575	45	1
	1800	326TC	**CEM7064T-I-5**	④	T3C	13,601	SD	32.00	841	94.5	575	47	1

(a) See notes on the last page of this catalog.

④ = Class I, Group C & D

Cast Iron Frame

These motors expel condensation better than standard explosion proof designs. They are recommended for applications where motors may run intermittently, applications where explosion-proof motors are installed outdoors exposed to the environment, and may not be operated for extended periods of time. These explosion-proof motors are not suitable for use with adjustable speed drives. Inverter duty explosion-proof motors must be used.

Single Phase, NEMA Frame, TEFC and ODP, Foot Mounted

1/3 thru 5 Hp

NEMA 48 thru 213T

Applications: Pumps, fans and other applications where only 50 hertz power is available.

Features: CE certified. Windings tied each end at every slot for rigidity. Ball bearings, high temperature insulation, copper windings.

Hp	RPM 50 Hz.	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
Totally Enclosed Fan Cooled, IP54											
1/3	1500	56	**L3501-50**	418	K	11.34	25	59	110/220	3.2	1
1/2	3000	56	**L3503-50**	409	K	11.35	27	68	110/220	3.3	
	1500	48	**L3409-50**	476	K	12.22	31	62	110/220	3.6	
		56	**L3504-50**	476	K	12.84	32	62	110/220	3.6	
3/4	3000	56	**L3506-50**	456	K	12.23	35	62	110/220	4.6	
	1500	56	**L3507-50**	565	K	13.25	38	66	110/220	5	
1	3000	56	**L3509-50**	531	K	13.23	40	68	110/220	6.3	
	1500	56	**L3510-50**	650	K	14.12	47	68	110/220	6.2	
1 1/2	3000	56	**L3513-50**	699	K	14.11	48	68	110/220	9	1
	1500	56	**L3514-50**	734	K	14.13	46	73	110/220	8	
		145T	**L3514T-50**	734	L1	14.18	51	73	110/220	8	
2	3000	56	**L3515-50**	909	K	14.11	53	77	110/220	9.7	1
	1500	182T	**L3605T-50**	1,039	L1	16.56	76	81	110/220	10	
3	1500	184T	**L3609T-50**	1,223	L1	18.06	95	84.5	110/220	12.5	2
5	1500	213T	**L3708T-50**	1,462	L1	17.89	119	84	220	22	2
Open Drip Proof, IP22											
1/3	3000	48	**L1205-50**	309	K	9.13	22	64.9	110/220	2.6	
	1500	48	**L1206-50**	376	K	9.38	24	62	110/220	2.3	
1/2	3000	48	**L1208-50**	340	K	9.75	25	68	110/220	3.3	
	1500	48	**L1209-50**	472	K	10.63	28	62	110/220	3.7	
		56	**L1304-50**	428	K	11.01	29	62	110/220	3.7	
3/4	3000	56	**L1306-50**	414	K	11.01	28	64	110/220	5.3	
	1500	56	**L1307-50**	529	K	12.07	38	66	110/220	5	
1	3000	56	**L1309-50**	436	K	11.51	34	66	110/220	6	
	1500	56	**L1318-50**	645	K	12.07	41	68	110/220	6.5	2
1 1/2	3000	56	**L1313-50**	612	K	12.07	43	68	110/220	9.2	
	1500	56	**L1319-50**	744	K	12.07	41	68	110/220	11.5	2
2	3000	56	**L1317-50**	815	K	12.94	47	70	110/220	12	2
	1500	182T	**L1405T-50**	865	L1	15.00	66	69	110/220	14	2
3	1500	184T	**L1408T-50**	934	L1	16.50	91	75.5	110/220	16	
5	1500	213T	**L1508T-50**	1,462	L1	16.32	112	82.5	220	21.6	2

(a) See notes on the last page of this catalog.

IP22 = Open Drip Proof, IP54 = Totally Enclosed Fan Cooled.

ALL MOTORS LISTED ABOVE ARE SPECIFICALLY DESIGNED FOR OPERATION WITH 50 HZ. POWER.

Three Phase, NEMA Frame, TEFC and ODP, Foot Mounted

1/2 thru 60 Hp

NEMA 56 thru 364T

Applications: Pumps, fans and other applications where only 50 hertz power is available.

Features: CE certified. Windings tied each end at every slot for rigidity. Ball bearings, high temperature insulation, copper windings.

Hp	RPM 50 Hz.	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
Totally Enclosed Fan Cooled, IP54											
1/2	1500	56	**M3538-57**	446	K	11.35	26	73	230/400	1	
3/4	3000	56	**M3541-57**	446	K	11.35	25	75.5	230/400	1.4	
	1500	56	**M3542-57**	477	K	12.85	32	75.5	230/400	1.8	
1	3000	56	**M3545-57**	543	K	11.35	27	78.5	230/400	1.7	
	1500	143T	**M3546T-57**	555	L1	12.31	33	80	230/400	1.8	
1 1/2	3000	143T	**M3550T-57**	630	L1	12.31	37	80	230/400	2.4	
	1500	145T	**M3554T-57**	565	L1	13.31	39	81.5	230/400	2.5	
2	3000	145T	**M3555T-57**	692	L1	13.31	44	81.5	230/400	3	
	1500	145T	**M3558T-57**	596	L1	14.19	46	82.8	230/400	3.4	
3	3000	182T	**M3610T-57**	882	L1	16.52	66	84	230/400	4.2	
	1500	182T	**M3611T-57**	700	L1	16.54	71	85	230/400	4.9	
5	3000	184T	**M3613T-57**	1,014	L1	16.54	76	86	230/400	6.6	
	1500	184T	**M3615T-57**	808	L1	18.04	96	87.5	230/400	7.5	
7 1/2	3000	213T	**M3709T-58**	1,493	L1	17.89	113	87.5	400	10.7	
	1500	213T	**M3710T-58**	1,027	L1	19.01	130	87.7	400	11.2	
10	3000	215T	**M3711T-58**	1,563	L1	19.76	160	88.5	400	13.8	
	1500	215T	**M3714T-58**	1,249	L1	19.76	158	89.5	400	14.7	
15	1500	254T	**M2333T-58**	2,193	L1	21.07	245	90.2	400	22	
20	1500	256T	**M2334T-58**	2,646	L1	23.35	305	91.2	400	28	
25	1500	284T	**M4103T-58**	3,725	L1	27.76	397	91.2	400	35	
30	1500	286T	**M4104T-58**	4,403	L1	27.76	417	91.6	400	42	
40	1500	324T	**M4110T-58**	5,759	L1	30.28	554	92.3	400	56	
50	1500	326T	**M4115T-58**	6,252	L1	30.28	614	92.7	400	67	
60	1500	364T	**M4314T-58**	8,129	L1	33.44	904	94.1	400	80.5	
Open Drip Proof, IP22											
1/2	1500	56	**M3108-57**	393	K	10.12	26	73	230/400	1	
3/4	1500	56	**M3112-57**	437	K	10.12	26	70	230/400	1.9	
1	1500	56	**M3116-57**	494	K	11.07	20	80	230/400	1.8	
		143T	**M3116T-57**	497	L1	11.12	20	81	230/400	1.8	
1 1/2	1500	145T	**M3154T-57**	528	L1	12.13	25	81.5	230/400	2.5	
2	1500	145T	**M3157T-57**	543	L1	13.00	32	82.8	230/400	3.4	
3	1500	182T	**M3211T-57**	621	L1	15.00	58	85	230/400	4.9	
5	1500	184T	**M3218T-57**	687	L1	16.50	92	87.5	230/400	7.5	
7 1/2	1500	213T	**M3311T-58**	972	L1	16.32	105	87.7	400	11.5	
10	1500	215T	**M3313T-58**	1,189	L1	17.45	117	88.7	400	15.1	
15	1500	254T	**M2513T-58**	1,797	L1	20.51	187	89.8	400	21.4	
20	1500	256T	**M2515T-58**	2,314	L1	21.69	235	90.6	400	28	

(a) See notes on the last page of this catalog.

IP22 = Open Drip Proof, IP54 = Totally Enclosed Fan Cooled.

ALL MOTORS LISTED ABOVE ARE SPECIFICALLY DESIGNED FOR OPERATION WITH 50 HZ. POWER. THREE PHASE, 50 HZ. MOTORS SHOWN IN THIS CATALOG ARE SUITABLE FOR USE ON 400 VOLT OR 415 VOLT 50 HZ. POWER SUPPLIES.

Cast Iron Frame

Single and Three Phase, NEMA Frame, TEFC, C-Face, Footless

1/4 thru 2 Hp — NEMA 56C thru 145TC

Applications: Pumps, fans, gear reducers, conveyors and many other applications with 50 Hz power supply.

Features: CE certified. Heavy gauge steel frame construction, pressure-cast aluminum endplates with machined steel bearing inserts for extended bearing life.

Hp	RPM 50 Hz.	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
Single Phase, IP54											
1/3	1500	56C	**VL3501-50**	459	K	11.35	17	59	110/220	3.2	1
1/2	3000	56C	**VL3503-50**	416	K	11.35	25	68	110/220	3.3	
	1500	56C	**VL3504-50**	532	K	12.85	31	62	110/220	3.6	
3/4	3000	56C	**VL3506-50**	480	K	12.25	35	62	110/220	4.6	
	1500	56C	**VL3507-50**	630	K	13.25	39	66	110/220	5	
1	3000	56C	**VL3509-50**	564	K	13.25	40	68	110/220	6.3	
	1500	56C	**VL3510-50**	721	K	14.12	47	68	110/220	6.2	
1 1/2	3000	56C	**VL3513-50**	726	K	14.12	48	68	110/220	9	1
	1500	56C	**VL3514-50**	815	K	14.12	51	73	110/220	8	
2	3000	56C	**VL3515-50**	921	K	14.12	52	77	110/220	9.7	1
Three Phase, IP54											
1/4	1500	56C	**KM3454-57**	361	K	11.35	20	64	230/400	0.7	
1/3	1500	56C	**VM3534-57**	408	K	11.35	21	68	230/400	1	
1/2	3000	56C	**VM3537-57**	443	K	11.35	22	72	230/400	1.1	
	1500	56C	**VM3538-57**	477	K	11.35	25	73	230/400	1	
3/4	3000	56C	**VM3541-57**	462	K	11.35	26	75.5	230/400	1.4	
	1500	56C	**VM3542-57**	512	K	12.85	32	75.5	230/400	1.8	
1	3000	56C	**VM3545-57**	548	K	11.35	26	78.5	230/400	1.7	
	1500	56C	**VM3546-57**	543	K	12.23	35	80	230/400	1.8	
		143TC	**VM3546T-57**	543	L1	12.29	34	80	230/400	1.8	
1 1/2	3000	143TC	**VM3550T-57**	596	L1	12.29	36	80	230/400	2.4	
	1500	145TC	**VM3554T-57**	564	L1	13.29	38	81.5	230/400	2.5	
2	3000	56C	**VM3555-57**	592	K	13.23	44	81.5	230/400	3	
		143TC	**VM3555T-57**	651	L1	13.29	43	81.5	230/400	3	
	1500	145TC	**VM3558T-57**	598	L1	14.17	46	82.8	230/400	3.4	

(a) See notes on the last page of this catalog.

IP54 = Totally Enclosed Fan Cooled.

ALL MOTORS LISTED ABOVE ARE SPECIFICALLY DESIGNED FOR OPERATION WITH 50 HZ. POWER. THREE PHASE, 50 HZ. MOTORS SHOWN IN THIS CATALOG ARE SUITABLE FOR USE ON 400 VOLT OR 415 VOLT 50 HZ. POWER SUPPLIES.

Single and Three Phase, NEMA Frame, Explosion Proof, C-Face, Foot Mounted

1/3 thru 2 Hp NEMA 56C thru 182TC

Applications: Ideal for use on pumps, blowers, valves, and gearboxes where hazardous fumes and dust are present requiring Div 1 UL listed and/or CSA approved enclosures.

Features: UL & CSA approved for Class I, Group D; Class I, Group D, Class II, Group F & G. Totally enclosed heavy gauge steel construction with locked drive end bearing. Corrosion resistant epoxy finish. Single or Three Phase design. 1.0 Service Factor. Fixed speed sine wave operation only. No Drip Cover.

Hp	RPM	NEMA Frame	Catalog Number	XP Cls/Grp	Temp Code	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
Single Phase													
1/3	1500	56C	**CL5001A-50**	②	T3C	911	K	14.22	35	59.5	110/220	2.6	2
1/2	1500	56C	**CL5004A-50**	②	T3C	912	K	15.22	45	62	110/220	3.6	2
3/4	1500	56C	**CL5007A-50**	②	T4	1,061	K	15.17	52	70	110/220	4.8	2
1	1500	56C	**CL5023-50**	①	T3C	1,122	K	16.05	56	68	110/220	6.2	2
2	1500	182TC	**CL5027T-50**	①	T2C	2,485	L1	20.36	121	77	110/220	11.5	2
Three Phase													
1/2	1500	56C	**CM7006-57**	②	T3C	994	K	14.22	36	73	230/400	1	-
3/4	1500	56C	**CM7010-57**	②	T3C	1,017	K	15.22	42	75.5	230/400	1.7	2
1	3000	56C	**CM7013-57**	②	T3C	1,028	K	14.22	34	78.5	230/400	1.7	-
	1500	56C	**CM7014-57**	②	T3C	1,087	K	15.22	45	74	230/400	2	2
1 1/2	3000	143TC	**CM7018T-57**	②	T3C	1,169	L1	14.36	47	80	230/400	2.4	-
	1500	143TC	**CM7034T-57**	②	T3C	1,198	L1	15.23	49	81.5	230/400	2.5	2
2	3000	145TC	**CM7071T-57**	②	T3C	1,209	L1	15.23	50	78.5	230/400	3.2	2
	1500	145TC	**CM7037T-57**	②	T3C	1,293	L1	16.10	59	84	230/400	3.4	2

(a) See notes on the last page of this catalog.

① = Class I, Group D

② = Class I, Group D, Class II, Group F & G

CAUTION: Explosion-proof motors have a tight fit between mating parts to ensure the integrity of the explosion-proof enclosure. This can lead to an accumulation of moisture inside the motors due to condensation. Care should be used when selecting an explosion-proof motor, especially when installed outdoors and on intermittent duty. These explosion proof motors are not suitable for use with adjustable speed drives. Inverter Duty explosion proof motors must be used.

AC Motor Adjustable Speed Range Capabilities

Inverter Drive, Vector Drive, V*S Master and RPMAC Motors

Inverter Drive, Vector Drive, V*S Master and RPMAC Motors exceed all requirements of NEMA MG-1 Parts 30 and 31 for AC induction motors powered from adjustable speed inverter control. Satisfactory motor performance depends on proper drive setup.

Super-E® Motors

Super-E motors are Inverter-Ready and meet NEMA MG 1 Part 31.4.4.2. Super-E motors are suitable for use with inverter drives. Motor inverter setup is unique to each specific application. Proper setup and wiring procedures must be closely followed.

Application Considerations

It is necessary that motor-drive applications are commissioned by persons familiar with the operation and setup of adjustable speed drives, applicable electrical codes and any other regulations.

Each drive must be tuned to the motor for the specific application. System operating parameters must be checked, including voltage at motor power leads, to insure that motor/drive setup has been successfully completed.

Applications that are not properly setup can lead to substandard performance and failure of system components. In some installations, shaft grounding and isolated bearings may prevent bearing fluting and are available as an option or through Mod Express.

Reference the chart below for constant torque and variable torque capabilities for each product family. Torque performance depends upon proper drive setup.

Motors 48 body style and smaller are suitable for maximum 230V inverter operation.

Efficiency Savings

Significant energy savings can be achieved when applying Inverter Ready motors such as the Super-E to centrifugal load applications (fan and centrifugal pump) and running at reduced speed taking advantage of the affinity laws where motor load and corresponding energy consumption is reduced by the cube of the speed.

Family	Enclosure	Frame Size	Constant Torque	Variable Torque	Comments
Super-E® Motors 230, 460 and 575 Volts (2)					
EM	TEFC	56-210 (1)	20:1	20:1	General Purpose Premium Efficient
		250-320	10:1	20:1	
		360-400	4:1	20:1	
		444-449	2:1	20:1	
EM	ODP	56-210 (1)	10:1	20:1	General Purpose Premium Efficient
		250-320	5:1	20:1	
		360 - 449	2:1	20:1	
ECP/XEX and ECP8/841XL	TEFC	**Please refer to the Severe Duty section**			Severe Duty Premium Efficient
EWDM	TENV,TEFC	56-256 (1)	20:1	20:1	Washdown Duty Premium Efficient
ESS/SSE	TEFC	56-250	2:1	10:1	Stainless Steel Washdown Duty
	TENV	56-140	4:1	10:1	
Standard-E Motors 230/460 and 575V (2) (3)					
M (TEFC)		56-326T frames (1)	4:1	20:1	General Purpose motors
		360T - 449T	2:1	20:1	
M (ODP)		56-326T frames (1)	4:1	20:1	
		360T - 449T	2:1	20:1	
CP/XT		145T frames	4:1	20:1	Severe Duty
		180T-445T frames	2:1	20:1	
		447T-449T frames	2:1	20:1	
WDM		56-215T frames (1)	4:1	20:1	Washdown Duty
Inverter Duty and Vector Duty Motors 230, 460 and 575 Volts					
IDCSWDM	TENV	56-140	5:1	10:1	Inverter Duty, Paint Free
IDCSWDM	TEFC	56-215	3:1	10:1	Inverter Duty, Paint Free
IDM	TEBC	143-5009	1000:1	1000:1	Inverter Duty, Blower Cooled
IDNM	TENV	143-256	1000:1	1000:1	Inverter Duty, Totally Enclosed Non-Ventilated
ZDM	TEBC	143-5009	1000:1	1000:1	Vector Duty, Blower Cooled
ZDNM	TENV	143-256	1000:1	1000:1	Vector Duty, Non-Ventilated
IDXM	TEXP	182-405	2:1	10:1	Inverter Duty, Explosion Proof
(2 families)		56-405	10:1	10:1	
IDWNM	TENV	143-254	1000:1	1000:1	Inverter Duty, Washdown, Non-Ventilated
ZDWNM	TENV	143-254	1000:1	1000:1	Vector Duty, Washdown, Non-Ventilated
V*S Master Motors 230 & 460 Volts					
IDNVSM	TENV	56-256	1000:1	1000:1	Inverter Duty, TENV, V*S Master
IDVSM	TEFC	182-449	1000:1	1000:1	Inverter Duty, TEFC, V*S Master
ZDNVSM	TENV	56-256	1000:1	1000:1	Vector Duty, TENV, V*S Master
ZDVSM	TEFC	182-449	1000:1	1000:1	Vector Duty, TEFC, V*S Master
ZDVSCP	TEFC-XT	143-326	1000:1	1000:1	Vector Duty, TEFC-XT, V*S Master
RPMAC Motors 230 & 460					
IDRPMN	TENV	FL180-FL210	1000:1	1000:1	Inverter Duty, TENV, RPMAC
IDRPMN	TEFC, TEBC, DPG-FV	FL180-FL440	1000:1	1000:1	Inverter Duty, TEFC, TEBC, DPG-FV, RPMAC
ZDNRPM	TENV	FL180-FL210	1000:1	1000:1	Vector Duty, TENV, RPMAC
ZDRPM	TEFC, TEBC	FL180-L400	1000:1	1000:1	Vector Duty, TEFC & TEBC, RPMAC
ZDPM	TEBC	FL180 - FL440	1000:1	1000:1	Vector Duty, TEBC, PM, RPMAC

(1) Type 35M frames and larger

(2) For greater speed range capabilities, please select an Inverter Duty®, Vector Duty®, V*S Master or RPM AC type motor, or contact your local ABB sales representative for a custom motor design.

(3) Standard-E EPAct efficient motors are suitable for use in adjustable speed applications per NEMA MG 1 Part 30.

RPM AC, Salient Pole PM Rotor, Three Phase, TEBC

10 thru 150 Hp FL1831C thru FL2890

Applications: Extruders, conveyors, crane & hoist systems, converting, pumps, web processing, test stands, traction duty, winders, printing.

Features: Above premium efficient design utilizing salient pole PM rotor technology to achieve high efficiency, low FLA and optimized power factor. Synchronous speed performance in a compact square frame design FL180 aluminum and FL210-280 laminated steel frame design. Must be applied with VS1PM permanent magnet drive specifically designed for permanent magnet rotor performance. Speed feedback and rotor positioning provided via Tamagawa resolver (800123-5A). Continuous constant torque from base speed down to zero speed 1000:1 turn down. Premium class H insulation 40 C ambient, 1.0 S.F., ball bearings, three normally closed thermostats (one per phase). Surpasses the requirements of MG1, Part 31. Exclusive optimum pole Inverter Duty - not for across the line operation.

Hp	Base Speed RPM	C.H. Speed RPM	NEMA Frame	Catalog Number	List (c) Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency (b)	Voltage	Full Load Amps (b)	Rotor Inertia lb-ft^2	Notes (a)
10	1800	3000	FL1831C	**ZDPM18010C-BV**	7,233	E2	22.08	132	94.0	230/460	10.6	0.46	8, 77, 91
15	1800	3000	FL1838C	**ZDPM18015C-BV**	7,315	E2	22.71	158	94.6	460	16.0	0.63	8, 77, 92
20	1800	3000	FL1844C	**ZDPM18020C-BV**	8,892	E2	25.96	180	94.7	460	21.7	0.77	8, 77, 92
25	1800	3000	FL1852C	**ZDPM18025C-BV**	8,913	E2	27.96	209	95.1	460	26.6	0.96	8, 77, 92
30	1800	3000	FL1852C	**ZDPM18030C-BV**	8,913	E2	27.96	209	94.7	460	32.3	0.96	8, 77, 92
40	1800	3000	FL2162	**ZDPM21040-BV**	9,339	E2	28.55	290	94.5	460	43.2	2.14	8, 77, 93
50	1800	3000	FL2168	**ZDPM21050-BV**	9,674	E2	30.06	325	94.8	460	53.4	2.60	8, 77, 93
60	1800	3000	FL2173	**ZDPM21060-BV**	10,597	E2	31.31	355	94.8	460	65.7	2.99	8, 77, 93
75	1800	3000	FL2578	**ZDPM25075-BV**	17,411	E2	33.85	540	95.8	460	81.8	4.90	8, 77, 93
100	1800	3000	FL2586	**ZDPM25100-BV**	18,448	E2	35.85	605	95.7	460	110.6	5.83	8, 77, 93
125	1800	3000	FL2882	**ZDPM28125-BV**	19,486	E2	39.27	730	95.9	460	137.0	8.82	8, 77, 93
150	1800	3000	FL2890	**ZDPM28150-BV**	20,523	E2	41.27	805	96.0	460	168.0	10.56	8, 77, 93

(a) See notes on the last page of this catalog.

(b) The data - including efficiency - is for fundamental sinewave components of amps and volts and does not include losses due to inverter pwm waveshapes.

(c) List price includes magnet surcharge and resolver.

All TEBC have integral blower rated 230/460 volts 3 phase.

MUST BE APPLIED WITH DRIVE SPECIFICALLY DESIGNED FOR PERMANENT MAGNET ROTOR PERFORMANCE.

RPM AC, Inverter Duty, Three Phase

5 thru 1000 Hp FL1838 thru L446l

Applications: Extruders, conveyors, crane & hoist systems, converting, pumps, web processing, test stands, traction duty, winders, printing.

Features: Compact square laminated steel frame FL210-L440 (FL180 is extruded aluminum) for inverter duty and vector duty 1000:1 constant torque. Premium class H insulation, 40 C ambient, 1.0 S.F., Ball bearing. Three normally closed thermostats (one per phase). Surpasses the requirements of MG1, Part 31. VPI insulation & insulated O.D.E. bearing is standard on all L440 frames. Exclusive optimum pole Inverter Duty - not for across the line operation.

Hp	Base Speed RPM	C.H. Speed RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Voltage	Full Load Amps	Notes (a)
5	1800	3500	FL1838C	TENV	**IDNRPM18054C**	3,666	E2	18.37	143	230/460	7.2	90
7 1/2	1800	3500	FL1852C	TENV	**IDNRPM18074C**	4,215	E2	21.87	194	230/460	11	91
10	1800	3500	FL1844C	TEFC	**IDFRPM18104C**	4,376	E2	23.26	179	230/460	13.9	91
			FL2162C	TENV	**IDNRPM21104C**	4,990	E2	23.11	280	230/460	13.6	91
15	1800	3500	FL1844C	TEBC	**IDBRPM18154C**	4,522	E2	25.33	180	460	21	92
			FL2162C	TEFC	**IDFRPM21154C**	5,450	E2	26.49	290	460	20	92
20	1800	3500	FL1852C	TEBC	**IDBRPM18204C**	4,983	E2	27.33	209	460	27	92
			FL2162C	TEFC	**IDFRPM21204C**	5,450	E2	26.49	290	460	27	92
25	1800	3500	FL2162C	TEBC	**IDBRPM21254C**	5,800	E2	28.55	290	460	34	92
		3150	FL1844C	DPG-FV	**IDDRPM18254C**	5,244	E2	19.87	200	460	33	92
		3500	FL2173C	TEFC	**IDFRPM21254C**	5,886	E2	29.50	355	460	34	92
30	1800	3500	FL2162C	TEBC	**IDBRPM21304C**	5,800	E2	28.55	290	460	40	92
		3475	FL1852C	DPG-FV	**IDDRPM18304C**	5,456	E2	21.87	230	460	39	92
		3500	FL2570C	TEFC	**IDFRPM25304C**	6,195	E2	29.79	475	460	39	92
40	1800	3500	FL2173	TEBC	**IDBRPM21404**	6,409	E2	31.31	355	460	51	93
		2000	RL2162	DPG-FV	**IDDRPM21404**	6,356	E2	23.12	305	460	52	93
		3550	FL2586	TEFC	**IDFRPM25404**	6,739	E2	33.79	605	460	51	93
50	1800	3500	FL2570	TEBC	**IDBRPM25504**	7,147	E2	31.85	475	460	65	93
		2400	RL2168	DPG-FV	**IDDRPM21504**	8,556	E2	24.62	345	460	62	93
		3550	FL2882	TEFC	**IDFRPM28504**	11,510	E2	34.59	720	460	64	93
	1200	1300	RL2570	DPG-FV	**IDDRPM25506**	10,275	E2	26.38	480	460	64	93
60	1800	3500	FL2578	TEBC	**IDBRPM25604**	10,549	E2	33.85	540	460	75	93
		2200	RL2168	DPG-FV	**IDDRPM21604**	8,556	E2	24.62	345	460	74	93
		3550	FL2890	TEFC	**IDFRPM28604**	11,510	E2	36.59	795	460	76	93
	1200	1300	RL2578	DPG-FV	**IDDRPM25606**	12,458	E2	28.38	545	460	73	93
75	1800	3500	FL2586	TEBC	**IDBRPM25754**	12,599	E2	35.85	605	460	95	93
		2000	RL2570	DPG-FV	**IDDRPM25754**	10,275	E2	26.38	480	460	95	93
		3550	FL2898	TEFC	**IDFRPM28754**	13,751	E2	38.59	880	460	94	93
	1200	1300	RL2586	DPG-FV	**IDDRPM25756**	16,509	E2	30.38	615	460	91	93
100	1800	3550	FL2890	TEBC	**IDBRPM281004R1**	14,259	E2	41.11	805	460	124	93
		2000	RL2578	DPG-FV	**IDDRPM251004**	12,458	E2	28.38	545	460	119	93
	1200	1445	RL2882	DPG-FV	**IDDRPM281006**	18,432	E2	31.14	770	460	124	93
125	1800	3550	FL2898	TEBC	**IDBRPM281254**	15,089	E2	43.11	890	460	156	93
		3500	L3203	TEBC	**IDBRPM321254**	21,135	E2	44.25	1170	460	150	93
		2330	RL2586	DPG-FV	**IDDRPM251254**	16,509	E2	30.38	615	460	148	93
	1200	1970	RL2898	DPG-FV	**IDDRPM281256**	24,030	E2	35.14	930	460	150.9	93
150	1800	3500	L3213	TEBC	**IDBRPM321504**	28,276	E2	55.13	1310	460	177	93
		2000	RL2882	DPG-FV	**IDDRPM281504**	18,432	E2	31.14	770	460	180	93
	1200	1600	L3203	DPG-FV	**IDDRPM321506**	28,276	E2	39.88	1185	460	180	93
200	1800	3500	FL3698	TEBC	**IDBRPM362004R1**	29,277	E2	56.30	1950	460	227	93
			L3614	TEBC	**IDBRPM362004**	31,281	E2	52.87	1700	460	229	93
			L4022	TEBC	**IDBRPM402004**	33,751	E2	54.12	1750	460	234	93
		2700	RL2898	DPG-FV	**IDDRPM282004**	24,030	E2	35.14	930	460	237	93
	1200	2000	L3213	DPG-FV	**IDDRPM322006**	32,927	E2	42.38	1325	460	236	93

(a) See notes on the last page of this catalog.

All TEBC and DPG-FV have integral blower rated 230/460 volts 3 phase. All TENV, TEFC and TEBC have top mounted conduit box. All DPG-FV are F1.

ENCODER MOUNTING PROVISIONS - INCLUDE MACHINED ODE BRACKET AND SHAFT TAPPED FOR STUB SHAFT. FOR CLOSED LOOP CONTROL SEE ENCODER FEEDBACK KITS AT THE BACK OF THIS SECTION FOR USE WITH ID-RPM AC MOTORS. FOR RPM AC MOD EXPRESS, CONTACT YOUR ABB SALES REPRESENTATIVE.

RPM AC, Inverter Duty, Three Phase

Hp	Base Speed RPM	C.H. Speed RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Voltage	Full Load Amps	Notes (a)
250	1800	3500	FL3614	TEBC	**IDBRPM362504R1**	31,279	E2	43.47	2000	460	283	93
			L4034	TEBC	**IDBRPM402504**	39,164	E2	57.12	2150	460	290	93
		2945	L3203	DPG-FV	**IDDRPM322504**	28,276	E2	39.88	1185	460	295	93
	1200	2000	RL3698	DPG-FV	**IDDRPM362504R1**	35,848	E2	39.47	1680	460	289	93
			L3614	DPG-FV	**IDDRPM362504**	41,696	E2	45.00	1715	460	290	93
300	1800	3500	FL4034	TEBC	**IDBRPM403004R1**	39,163	E2	65.46	2620	460	336	93
			L4046	TEBC	**IDBRPM403004**	48,044	E2	60.12	2450	460	346	93
		3000	L3213	DPG-FV	**IDDRPM323004**	32,927	E2	42.38	1325	460	350	93
	1200	2000	RL3614	DPG-FV	**IDDRPM363006R1**	41,695	E2	43.47	2000	460	360	93
			L4034	DPG-FV	**IDDRPM403006**	55,045	E2	52.00	2000	460	355	93
350	1800	2200	RL3698	DPG-FV	**IDDRPM363504R1**	35,848	E2	39.47	1680	460	401	93
			L3614	DPG-FV	**IDDRPM363504**	41,696	E2	45.00	1715	460	413	93
400	1800	2700	RL3614	DPG-FV	**IDDRPM364004R1**	41,696	E2	43.47	2000	460	477	93
			L3614	DPG-FV	**IDDRPM364004**	41,696	E2	45.00	1715	460	459	93
		2500	FL4440	TEBC	**IDBRPM444004**	64,562	E2	78.57	3940	460	479	93
	1200	2000	RL4034	DPG-FV	**IDDRPM404006R1**	55,042	E2	48.62	2530	460	451	93
			L4046	DPG-FV	**IDDRPM404006**	67,104	E2	55.00	2000	460	465	93
500	1800	2500	FL4451	TEBC	**IDBRPM445004**	74,643	E2	78.57	4260	460	591	93
		2400	RL4022	DPG-FV	**IDDRPM405004R1**	48,367	E2	45.62	2260	460	557	93
			L4034	DPG-FV	**IDDRPM405004**	55,045	E2	52.00	2050	460	557	94
	1200	2380	RL4461	DPG-FV	**IDDRPM445006R1**	104,952	E2	63.61	3505	460	669	93
			L4461	DPG-FV	**IDDRPM445006**	104,952	E2	63.63	3889	460	669	95
600	1800	3000	RL4034	DPG-FV	**IDDRPM406004R1**	55,042	E2	48.62	2530	460	666	93
			L4046	DPG-FV	**IDDRPM406004**	67,104	E2	55.00	2000	460	666	94
		2500	FL4473	TEBC	**IDBRPM446004**	75,188	E2	86.82	4905	460	708	93
700	1800	2300	RL4058	DPG-FV	**IDDRPM407004R1**	70,456	E2	54.62	3080	460	875	94
			L4429	DPG-FV	**IDDRPM447004**	83,747	E2	55.63	3004	460	870	94
1000	1800	2550	RL4461	DPG-FV	**IDDRPM4410004R1**	104,952	E2	63.61	3505	460	1202	94
			L4461	DPG-FV	**IDDRPM4410004**	104,952	E2	66.63	3889	460	1202	94

(a) See notes on the last page of this catalog.

All TEBC and DPG-FV have integral blower rated 230/460 volts 3 phase. All TENV, TEFC and TEBC have top mounted conduit box. All DPG-FV are F1.

ENCODER MOUNTING PROVISIONS - INCLUDE MACHINED ODE BRACKET AND SHAFT TAPPED FOR STUB SHAFT. FOR CLOSED LOOP CONTROL SEE ENCODER FEEDBACK KITS AT THE BACK OF THIS SECTION FOR USE WITH ID-RPM AC MOTORS. FOR RPM AC MOD EXPRESS, CONTACT YOUR ABB SALES REPRESENTATIVE.

RPM AC, Vector Duty, Three Phase, Totally Enclosed

5 thru 200 Hp FL1838 thru L4022

Applications: Test stands, extruders, conveyors, crane & hoist systems, converting, web processing, traction duty, winders, printing.

Features: Compact square laminated steel frame FL210-L440 (FL180 is extruded aluminum) for vector duty 1000:1 constant torque. Premium class H insulation, 40 C ambient, 1.0 S.F. Ball bearing. Three normally closed thermostats (one per phase). Surpasses the requirements of MG1, Part 31. VPI insulation & insulated O.D.E. bearing is standard on all L440 frames. Exclusive optimum pole Inverter Duty - not for across the line operation. Includes BEI HS35 1024 ppr hollow shaft encoder with MS twist lock connector, mating connector and protective cover.

Hp	Base Speed RPM	C.H. Speed RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Voltage	Full Load Amps	Notes [a]
5	1800	3500	FL1838C	TENV	**ZDNRPM18054C**	5,692	E2	17.87	143	230/460	7.2	90
7 1/2	1800	3500	FL1852C	TENV	**ZDNRPM18074C**	6,241	E2	21.87	194	230/460	11	91
10	1800	3500	FL1844C	TEFC	**ZDFRPM18104C**	6,402	E2	23.26	179	230/460	13.9	91
			FL2162C	TENV	**ZDNRPM21104C**	7,017	E2	22.73	280	230/460	13.6	91
15	1800	3500	FL1844C	TEBC	**ZDBRPM18154C**	6,548	E2	25.33	180	460	21	92
20	1800	3500	FL1852C	TEBC	**ZDBRPM18204C**	7,010	E2	27.96	209	460	27	92
		3500	FL2162C	TEFC	**ZDFRPM21204C**	7,827	E2	28.55	290	460	27	92
25	1800	3500	FL2173C	TEFC	**ZDFRPM21254C**	7,912	E2	31.31	355	460	34	92
30	1800	3500	FL2162C	TEBC	**ZDBRPM21304C**	7,827	E2	28.55	290	460	40	92
			FL2570C	TEFC	**ZDFRPM25304C**	8,221	E2	29.54	475	460	39	92
40	1800	3500	FL2173	TEBC	**ZDBRPM21404**	8,242	E2	31.31	355	460	51	93
			FL2586	TEFC	**ZDFRPM25404**	8,572	E2	35.85	605	460	51	93
50	1800	3500	FL2570	TEBC	**ZDBRPM25504**	8,981	E2	31.85	475	460	65	93
60	1800	3500	FL2578	TEBC	**ZDBRPM25604**	12,383	E2	33.85	540	460	75	93
75	1800	3500	FL2586	TEBC	**ZDBRPM25754**	14,432	E2	35.85	605	460	95	93
100	1800	3550	FL2890	TEBC	**ZDBRPM281004R1**	16,091	E2	41.27	805	460	124	93
125	1800	3550	FL2898	TEBC	**ZDBRPM281254**	16,923	E2	43.27	890	460	156	93
		3500	L3203	TEBC	**ZDBRPM321254**	22,967	E2	44.25	1170	460	150	93
150	1800	3500	L3213	TEBC	**ZDBRPM321504**	30,109	E2	55.13	1310	460	177	93
200	1800	3500	L3614	TEBC	**ZDBRPM362004**	33,113	E2	52.87	1700	460	229	93
			L4022	TEBC	**ZDBRPM402004**	35,581	E2	54.12	1750	460	234	93

(a) See notes on the last page of this catalog.
All TEBC have integral blower rated 230/460 volts 3 phase.
CONTINUOUS CONSTANT TORQUE TO ZERO SPEED

Encoder Feedback Kits

1024 PPR, Includes all Mounting Hardware and Mating Connector
The following kits for use with RPM AC motors on prior pages.

Catalog Number	Motor Enclosure	Type	Frame Size	Mfg.	Mag or Optical	Conn Type	Input Voltage VDC	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.
417077-136	TENV	HS35	FL180-FL/RL280 (1)	BEI	O	MS-ST	5-15	1,442	E8	4
417077-208TL	TENV	HS35	FL180-FL280 (1)	BEI	O	MS-TL	5-28	1,442	E8	6
417077-153	TENV	H20	FL180-FL/RL280 (1)	Dynapar	O	MS-ST	5-15	1,598	E8	9
417077-156	TENV	RL67	FL180-FL/RL280 (1)	Dynapar	M	Latch	5-15	2,060	E8	9
417077-170	TENV	HS35M	FL180-FL/RL280 (1)	Avtron	M	MS-ST	5-24	1,442	E8	10
417077-133	TEFC	HS35	FL180-FL/RL280 (1)	BEI	O	MS-ST	5-15	1,442	E8	5
417077-165	TEBC	HS35	FL180	BEI	O	MS-ST	5-15	1,442	E8	15
417077-188	TEBC	HS35	FL210 Only	BEI	O	MS-ST	5-15	1,442	E8	10
417077-189	TEBC	HS35	FL250 Only	BEI	O	MS-ST	5-15	1,442	E8	10
417077-212TL	TEBC	HS35	FL250	BEI	O	MS-TL	5-28	1,442	E8	6
417708-140	TEBC	HS35	L320	BEI	O	MS-ST	5-15	1,442	E8	10
417708-142	TEBC	HS35	L400	BEI	O	MS-ST	5-15	1,442	E8	15
417077-173	TEBC	HS35M	FL180	Avtron	M	MS-ST	5-24	1,442	E8	10
417077-182	TEBC	HS35M	FL210 Only	Avtron	M	MS-ST	5-24	1,442	E8	10
417077-176	TEBC	HS35M	FL280	Avtron	M	MS-ST	5-24	1,442	E8	15
417077-177	TEBC	HS35M	L320	Avtron	M	MS-ST	5-24	1,442	E8	35
417077-179	TEBC	HS35M	L400	Avtron	M	MS-ST	5-24	1,442	E8	35
417077-167	TEBC	H20	FL180	Dynapar	O	MS-ST	5-15	1,598	E8	20
417077-191	TEBC	H20	FL250 Only	Dynapar	O	MS-ST	5-15	1,598	E8	10
417708-90	TEBC	H20	L280	Dynapar	O	MS-ST	5-15	1,598	E8	13
417708-91	TEBC	H20	L320	Dynapar	O	MS-ST	5-15	1,598	E8	15
417077-168	TEBC	RL67	FL180	Dynapar	M	Latch	5-15	2,060	E8	10
417077-193	TEBC	RL67	FL250 Only	Dynapar	M	Latch	5-15	2,060	E8	10
417077-242TL	DPFV	HS35R	RL180-RL440	Dynapar	O	MS-TL	5-26	1,442	E8	6
417077-136	DPFV	HS35	FL180-RL280 (2)	BEI	O	MS-ST	5-15	1,442	E8	4
417077-208TL	DPFV	HS35	FL180-RL280 (2)	BEI	O	MS-TL	5-28	1,442	E8	6
417708-130	DPFV	HS35	L280-L400	BEI	O	MS-ST	5-15	1,442	E8	5
417077-218TL	DPFV	HS35	L320-L400	BEI	O	MS-TL	5-28	1,442	E8	6
417077-170	DPFV	HS35M	FL180-RL280 (2)	Avtron	M	MS-ST	5-24	1,442	E8	10
417077-171	DPFV	HS35M	L280-L400	Avtron	M	MS-ST	5-24	1,442	E8	5

Encoder Feedback Kits RPM AC Designs

Catalog Number	Motor Enclosure	Type	Frame Size	Mfg.	Mag or Optical	Conn Type	Input Voltage VDC	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.
417077-153	DPFV	H20	FL180-RL280 (2)	Dynapar	O	MS-ST	5-15	1,598	E8	9
417708-85	DPFV	H20	L280-L400	Dynapar	O	MS-ST	5-15	1,598	E8	5
417077-156	DPFV	RL67	FL180-RL280 (2)	Dynapar	M	Latch	5-15	2,060	E8	9
417708-87	DPFV	RL67	L280-L400	Dynapar	M	Latch	5-15	2,060	E8	6
417708-120	DPFV	RL67	L440	Dynapar	M	Latch	5-15	2,060	E8	23

(1) Includes FL180, FL210, FL250, RL210, RL250, FL280 and RL280
(2) Includes FL180, RL210, RL250 and RL280

Encoder Mounting Kits – no encoder

Kit includes stub shaft only (no encoder) - unmounted - for RPM AC motor frames FL180-L440.

Encoder (reference)	Frame	Enclosure	Catalog Number	List Price	Mult. Sym.
BEI HS35 (1 inch dia.)	FL180-FL/RL250 (3)	DPFV,TENV,TEFC,TEBC (2)	**417708-201**	165	E8
	FL/RL280 thru L400	DPFV & TEBC (2)	**417708-202**	165	E8
	L440	DPFV & TEAO-P/B	**417708-203**	165	E8

(2) Note: encoder addition requires an extended blower cover on TEBC motors in all frames except L320. Cover is included in complete kits only.
(3) Includes FL180, FL210, FL250, RL210, RL250

RPM AC Slide Bases

Application: Used for adjustable belt tension on belted application not suitable for wall or ceiling mounting.

Frame	Catalog Number	List Price	Mult. Symbol	Dimension Sheet	Approx. Wt. (Lb.)
FL1831	**419914-9A**	469	E8	609957-9	13
FL1838	**419914-9B**	469	E8	609957-9	14
FL1844	**419914-9C**	469	E8	609957-9	15
FL1852	**419914-9D**	469	E8	609957-9	17
FL/RL2153	**419914-10A**	469	E8	609957-10	39
FL/RL2158	**419914-10B**	469	E8	609957-10	27
FL/RL2162	**419914-10D**	547	E8	609957-10	48
FL/RL2168	**419914-10L**	547	E8	609957-10	52
FL/RL2173	**419914-10M**	547	E8	609957-10	28
FL/RL2570	**419914-10G**	547	E8	609957-10	55
FL/RL2578	**419914-10N**	703	E8	609957-10	58
FL/RL2586	**419914-10P**	703	E8	609957-10	56
L2875	**419914-10J**	703	E8	609957-10	37
FL/RL/L2882	**419914-10K**	1,006	E8	609957-10	80
FL/RL/L2890	**419914-10R**	1,006	E8	609957-10	80
FL/RL/L2898	**419914-10S**	1,006	E8	609957-10	90
L3203	**419914-11P**	1,110	E8	609977-10	90
L3213	**419914-11R**	1,110	E8	609977-10	90
UL3698	**419914-11M**	1,300	E8	609977-10	105
UL3699	**419914-11C**	1,300	E8	609977-10	105
UL3607	**419914-11D**	1,300	E8	609977-10	74
UL3614	**419914-11N**	1,300	E8	609977-10	124
UL4022	**419914-11E**	2,476	E8	609977-10	105
UL4034	**419914-11F**	2,476	E8	609977-10	132
UL4046	**419914-11G**	2,476	E8	609977-10	141
UL4429	**419914-11H**	4,672	E8	609977-10	140
UL4440	**419914-11J**	4,672	E8	609977-10	150
UL4451	**419914-11K**	4,672	E8	609977-10	160
UL4461	**419914-11L**	4,672	E8	609977-10	165

RPM AC Filter Kits

Application: For use with DPFV enclosures

Frame	Catalog Number	List Price	Mult. Symbol	Description	Approx. Wt. (Lb.)
FL180	**417077-57**	911	A8	Washable Wire Mesh Canister Type	2
RL210	**417077-59**	911	A8	Washable Wire Mesh Canister Type	4
RL250	**417077-59**	911	A8	Washable Wire Mesh Canister Type	4
RL/L280	**417077-59**	911	A8	Washable Wire Mesh Canister Type	4
L320	**417077-59**	911	A8	Washable Wire Mesh Canister Type	4
L360	**417077-65**	1,165	A8	Washable Wire Mesh Canister Type	7
L400	**417077-102**	1,642	A8	Washable Wire Mesh Canister Type	6
L440	**417077-124**	1,893	A8	Square Replaceable Polyester Type	18

RPM AC Mounting Conversion Kits for FL180-FL280 Frames

Kits are for relocation of the conduit box of stock FL180 - FL280 frame motors as noted.
Installation of this kit requires complete disassembly/reassembly of motor. Price is for kit only.

Frame	Catalog Number	List Price	Mult. Sym.	Enclosure	Relocate Conduit Box:
			For FL180-FL280 Frames		
FL180	**417077-184**	503	E8	TENV, TEBC, TEFC	From Top to F-1 or F-2
FL180	**417077-185**	503	E8	DPFV	From F-1 to F-2
FL210	**417077-186**	591	E8	TENV, TEBC, TEFC	From Top to F-1 or F-2
FL250	**417077-187**	591	E8	TENV, TEBC, TEFC	From Top to F-1 or F-2
FL280	**417077-201**	632	E8	TENV, TEBC, TEFC	From Top to F-1 or F-2
			For RL210-RL280 Frames		
RL2153 thru RL2173	**417077-129**	503	E8	DPFV	From F-1 to F-2
RL250 thru RL2586	**417077-131**	503	E8	DPFV	From F-1 to F-2
RL2153 thru RL2173	**417077-130**	591	E8	TENV, TEBC, TEFC	From Top to F-1 or F-2
RL2570 thru RL2586	**417077-132**	591	E8	TENV, TEBC, TEFC	From Top to F-1 or F-2
RL2882 thru RL2898	**417077-202**	632	E8	DPFV	From F-1 to F-2

Replacement Blower Kits for DPG-FV RPM AC Motors

Kit includes blower motor and shroud, blower wheel and all mounting hardware. Filter is not included.

DPFV Frame	Catalog Number	List Price	Mult. Sym.
RL210	**417077-144**	897	E8
RL250	**417077-145**	1,753	E8
RL280	**419947-40**	1,747	E8
L280 (4)	**419947-31**	1,747	E8
L320	**419947-33**	1,944	E8
RL360	**419947-41**	2,123	A8
L360 (4)	**417077-127**	2,123	A8
RL400	**419947-42**	2,324	A8
L400 (4)	**417077-75**	2,324	A8
L440	**417077-126**	4,738	A8

Kit includes terminal box and blower motor only.

TEBC Frame	Catalog Number	List Price	Mult. Sym.
FL180 (3)	**417077-143**	897	E8
FL/RL210-320(3)	**417077-141**	1,142	E8

(3) Compact inline blower used on stock models (IP44 rating)
(4) Being phased out

V*S Master Inverter Drive, Three Phase, Totally Enclosed

1/3 thru 300 Hp **NEMA 56C thru 449T**

Applications: Conveyors, extruders, printing lines, converting, test stands, anywhere constant torque is required over a wide speed range.

Features: Designed specifically for Inverter operation where up to 1000:1 constant torque speed range is required. Includes provisions for stub shaft for hollow shaft encoder, three thermostats, and all 440T frames include an ODE insulated bearing. Meets NEMA MG 1, Part 31. Continuous constant torque to zero speed.

Hp	Base Speed RPM	C.H. Speed RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1/3	1800	2700	56C	TENV	**IDVSNM3534**	495	E2	13.84	32	80	230/460	0.6	2, 48
1/2	1800	2700	56C	TENV	**IDVSNM3538**	579	E2	13.84	35	84	230/460	0.9	2, 48
3/4	1800	2700	56C	TENV	**IDVSNM3542**	645	E2	13.84	36	84	230/460	1.2	2, 48
1	1800	2700	56C	TENV	**IDVSNM3546**	1048	E2	14.84	45	87.5	230/460	1.5	2, 48
			143TC	TENV	**IDVSNM3581T**	1315	E2	14.65	58	85.5	230/460	1.5	2, 48
			143TC	TENV	**IDVSNM3581T-5**	1256	E2	14.65	58	85.5	575	1.2	2, 48
	1200	2800	145TC	TENV	**IDVSNM3582T**	1715	E2	14.65	61	82.5	230/460	1.8	2, 48
1 1/2	1800	2700	145TC	TENV	**IDVSNM3584T-5**	1451	E2	14.65	64	86.5	575	1.7	2, 48
		2700	145TC	TENV	**IDVSNM3584T**	1451	E2	14.65	64	82.5	230/460	2.1	2, 48
2	1800	2700	145TC	TENV	**IDVSNM3587T-5**	1448	E2	14.65	62	86.5	575	2.3	2, 48
			145TC	TENV	**IDVSNM3587T**	1516	E2	14.65	63	86.5	230/460	2.8	2, 48
3	1800	2700	182TC	TEFC	**IDVSM3661T**	1674	E2	20.23	105	89.5	230/460	4.1	2, 48
			182TC	TENV	**IDVSNM3661T**	1722	E2	17.85	111	89.5	230/460	4.3	2, 48
5	1800	2700	L184TC	TEFC	**IDVSM3665T**	1941	E2	20.23	120	89.5	230/460	6.6	2, 48
			L184TC	TENV	**IDVSNM3665T**	1995	E2	17.85	124	89.5	230/460	6.6	2, 48
7 1/2	1800	2700	213TC	TEFC	**IDVSM3770T**	2497	E2	24.59	180	91.7	230/460	9.5	2, 48
			L215TC	TENV	**IDVSNM2237T**	2567	E2	20.86	212	91.7	230/460	10.1	2, 48
10	1800	2700	L215TC	TEFC	**IDVSM3774T**	3255	E2	24.59	231	92.4	230/460	12.5	2, 48
			254TC	TENV	**IDVSNM2238T**	3521	E2	24.05	305	91.7	230/460	13	2, 48
15	1800	2700	254TC	TEFC	**IDVSM2333T**	3787	E2	26.71	291	92.4	230/460	18	2, 48
			256TC	TENV	**IDVSNM2333T**	4235	E2	24.05	284	93.6	230/460	18.5	2, 48
20	1800	2700	256TC	TEFC	**IDVSM2334T**	4106	E2	26.71	321	93	230/460	24	2, 48
25	1800	2700	284TC	TEFC	**IDVSM4103T**	5214	E2	30.42	446	93.6	230/460	30	2, 48
30	1800	2700	286TC	TEFC	**IDVSM4104T**	5696	E2	30.42	457	94.1	230/460	36	2, 48
40	1800	2700	324T	TEFC	**IDVSM4110T**	6571	E2	30.44	619	94.1	230/460	50	2, 48
50	1800	2700	326T	TEFC	**IDVSM4115T**	8031	E2	30.28	670	94.5	230/460	60	2, 48
60	1800	2700	364T	TEFC	**IDVSM4314T**	9948	E2	33.44	869	94.2	230/460	71.2	2, 48
75	1800	2700	365T	TEFC	**IDVSM4316T**	12459	E2	33.44	873	94.3	230/460	89.2	2, 48
100	1800	2700	405T	TEFC	**IDVSM4400T-4**	16102	E2	38.31	1218	94.1	460	115	2, 48
125	1800	2700	444T	TEFC	**IDVSM4410T-4**	19987	E2	44.62	1637	94.1	460	150	2, 48
150	1800	2700	445T	TEFC	**IDVSM4406T-4**	23853	E2	44.62	1789	95	460	177	2, 48
200	1800	2700	447T	TEFC	**IDVSM4407T-4**	28263	E2	48.4	2189	95.4	460	226	2, 48
250	1800	2700	449T	TEFC	**IDVSM4408T-4**	39946	E2	53.4	2511	95.8	460	277	2, 48
300	1800	2700	449T	TEFC	**IDVSM44304T-4**	39946	E2	53.4	2816	96.2	460	338	2, 48

(a) See notes on the last page of this catalog.

CONTINUOUS CONSTANT TORQUE TO ZERO SPEED

Cast Iron Frame

V*S Master Vector Drive, Three Phase, Totally Enclosed

1/2 thru 300 Hp NEMA 56C thru 449T

Applications: Conveyors, extruders, printing lines, converting, test stands, anywhere constant torque is required over a wide speed range.

Features: Designed specifically for Inverter operation where up to 1000:1 constant torque speed range is required. Includes 1024 ppr hollow shaft encoder, three thermostats, and all 440T frames include an ODE insulated bearing. Meets NEMA MG 1, Part 31. Continuous constant torque to zero speed.

Hp	Base Speed RPM	C.H. Speed RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1/2	1800	2700	56C	TENV	**ZDVSNM3538**	2,136	E2	13.84	37	84	230/460	0.9	2, 46, 48
3/4	1800	2700	56C	TENV	**ZDVSNM3542**	2,201	E2	13.84	38	82.5	230/460	1.1	2, 46, 48
1	1800	2700	145TC	TENV	**ZDVSNM3581T**	2,872	E2	14.65	59	85.5	230/460	1.5	2, 46, 48
1 1/2	1800	2700	145TC	TENV	**ZDVSNM3584T**	3,006	E2	14.65	70	86.5	230/460	2.1	2, 46, 48
2	1800	2700	145TC	TENV	**ZDVSNM3587T**	3,315	E2	14.65	66	86.5	230/460	2.8	2, 46, 48
3	1800	2700	182TC	TEFC	**ZDVSM3661T**	3,508	E2	20.23	118	89.5	230/460	4.1	2, 46, 48
			182TC	TENV	**ZDVSNM3661T**	3,556	E2	17.85	111	89.5	230/460	4.3	2, 46, 48
5	1800	2700	L184TC	TEFC	**ZDVSM3665T**	3,773	E2	20.23	129	89.5	230/460	6.6	2, 46, 48
			L184TC	TENV	**ZDVSNM3665T**	3,828	E2	17.85	124	89.5	230/460	6.6	2, 46, 48
7 1/2	1800	2700	213TC	TEFC	**ZDVSM3770T**	4,329	E2	24.59	184	91.7	230/460	9.5	2, 46, 48
			L215TC	TENV	**ZDVSNM2237T**	4,399	E2	20.86	211	91.7	230/460	10.1	2, 46, 48
10	1800	2700	L215TC	TEFC	**ZDVSM3774T**	5,088	E2	24.59	210	92.4	230/460	12.5	2, 46, 48
			254TC	TENV	**ZDVSNM2238T**	5,354	E2	24.05	325	91.7	230/460	13	2, 46, 48
15	1800	2700	254TC	TEFC	**ZDVSM2333T**	5,620	E2	26.83	295	92.4	230/460	18	2, 46, 48
			256TC	TENV	**ZDVSNM2333T**	6,069	E2	24.05	348	93.6	230/460	18.5	2, 46, 48
20	1800	2700	256TC	TEFC	**ZDVSM2334T**	5,939	E2	26.83	317	93	230/460	24	2, 46, 48
25	1800	2700	284TC	TEFC	**ZDVSM4103T**	7,046	E2	30.42	458	93.6	230/460	30	2, 46, 48
30	1800	2700	286TC	TEFC	**ZDVSM4104T**	7,528	E2	30.42	472	94.1	230/460	36	2, 46, 48
40	1800	2700	324T	TEFC	**ZDVSM4110T**	8,404	E2	33.14	716	94.1	230/460	50	2, 46, 48
50	1800	2700	326T	TEFC	**ZDVSM4115T**	9,863	E2	33.14	721	94.5	230/460	60	2, 46, 48
60	1800	2700	364T	TEFC	**ZDVSM4314T**	11,781	E2	33.44	907	94.2	230/460	71.2	2, 46, 48
75	1800	2700	365T	TEFC	**ZDVSM4316T**	14,292	E2	33.44	944	94.3	230/460	89.2	2, 46, 48
100	1800	2700	405T	TEFC	**ZDVSM4400T-4**	17,935	E2	38.31	1230	94.1	460	115	2, 46, 48
125	1800	2700	444T	TEFC	**ZDVSM4410T-4**	21,819	E2	49.07	1667	94.1	460	150	2, 46, 48
150	1800	2700	445T	TEFC	**ZDVSM4406T-4**	25,685	E2	49.07	1806	95	460	177	2, 46, 48
200	1800	2700	447T	TEFC	**ZDVSM4407T-4**	30,096	E2	52.36	2203	95.4	460	226	2, 46, 48
250	1800	2700	449T	TEFC	**ZDVSM4408T-4**	41,779	E2	57.56	2550	95.8	460	277	2, 46, 48
300	1800	2700	449T	TEFC	**ZDVSM44304T-4**	41,779	E2	57.56	2817	96.2	460	338	2, 46, 48

(a) See notes on the last page of this catalog.

CONTINUOUS CONSTANT TORQUE TO ZERO SPEED

Cast Iron Frame

V*S Master Severe Duty Vector Drive, Three Phase, Totally Enclosed

1 thru 50 Hp **NEMA 143TC thru 326TC**

Applications: Conveyors, extruders, printing lines, converting, test stands, anywhere constant torque is required over a wide speed range. These Severe Duty motors are designed for harsh industrial environments by protecting motor components from moisture, chemicals, corrosion and abrasives.

Features: Designed specifically for Inverter operation where up to 1000:1 constant torque speed range is required. Includes 1024 ppr hollow shaft encoder and three thermostats. Uses Dynapar HSD38M encoder on 180 frame and up. Meets NEMA MG 1, Part 31. Continuous constant torque to zero speed.

Hp	Base Speed RPM	C.H. Speed RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1	1800	2700	143TC	TENV	**ZDVSNCP3581T**	3,016	E2	14.61	65	87.5	230/460	1.5	2, 46, 48
1 1/2	1800	2700	145TC	TENV	**ZDVSNCP3584T**	3,150	E2	14.61	72	86.5	230/460	2.1	2, 46, 48
2	1800	2700	145TC	TENV	**ZDVSNCP3587T**	3,459	E2	14.61	73	86.5	230/460	2.8	2, 46, 48
3	1800	2700	182TC	TEFC	**ZDVSCP3661T**	3,902	E2	20.23	135	89.5	230/460	4.1	2, 46, 48
5	1800	2700	L184TC	TEFC	**ZDVSCP3665T**	4,234	E2	20.23	128	89.5	230/460	6.6	2, 46, 48
7 1/2	1800	2700	213TC	TEFC	**ZDVSCP3770T**	4,905	E2	24.58	201	91.7	230/460	9.5	2, 46, 48
10	1800	2700	L215TC	TEFC	**ZDVSCP3774T**	5,368	E2	24.58	218	92.4	230/460	12.5	2, 46, 48
15	1800	2700	254TC	TEFC	**ZDVSCP2333T**	6,421	E2	28.14	374	92.4	230/460	18	2, 46, 48
20	1800	2700	256TC	TEFC	**ZDVSCP2334T**	6,819	E2	28.14	388	93	230/460	24	2, 46, 48
25	1800	2700	284TC	TEFC	**ZDVSCP4103T**	8,157	E2	30.79	481	93.6	230/460	30	2, 46, 48
30	1800	2700	286TC	TEFC	**ZDVSCP4104T**	8,760	E2	30.79	494	94.1	230/460	36	2, 46, 48
40	1800	2700	324T	TEFC	**ZDVSCP4110T**	10,047	E2	33.14	762	94.1	230/460	50	2, 46, 48
50	1800	2700	326T	TEFC	**ZDVSCP4115T**	11,872	E2	33.14	757	94.5	230/460	60	2, 46, 48

(a) See notes on the last page of this catalog.
CONTINUOUS CONSTANT TORQUE TO ZERO SPEED
Cast Iron Frame

V*S Master Encoder Feedback Kits 360-440 Frame Size

Encoder kits below feature 1024 pulses per revolution unless otherwise noted in the encoder type column. Connector styles include the MS twist lock (MS-TL), military style 10 pin screw tight (MS-ST), and the EPIC latch style (Latch). HS35, RAHS35M and HSD35 feature hollow shaft mounting. The HSD35 carry the Northstar brand. Encoder kits include the encoder and all mounting hardware. IDVSM & IDRPM kits include the mating connector.

Catalog Number	Motor Enclosure	Type	PPR	Frame Size	Mfg.	Mag or Optical	Conn Type	Input Voltage VDC	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.
K99G72	TENV	HS35	1024	180T-250T	BEI	O	MS-ST	5-15	1,442	E8	6
K99G74	TENV	HS35-2048	2048	180T-250T	BEI	O	MS-ST	5-15	1,442	E8	6
K99G76	TENV	HS35	1024	180T-250T	BEI	O	MS-ST	5-24	1,442	E8	6
K99G70	TENV	RAHS35M	1024	180T-250T	Avtron	M	MS-ST	5-24	1,442	E8	9
K99G82	TENV	HS35R	1024	180T-250T	Dynapar	O	MS-TL	5-26	1,412	E8	6
K99G78	TENV	HSD35	1024	180T-250T	Dynapar	O	Latch	5-26	1,622	E8	8
K99G73	TEFC	HS35	1024	180T-440T	BEI	O	MS-ST	5-15	1,442	E8	6
K99G75	TEFC	HS35-2048	2048	180T-440T	BEI	O	MS-ST	5-24	1,442	E8	6
K99G77	TEFC	HS35	1024	180T-440T	BEI	O	MS-ST	5-24	1,442	E8	6
K99G71	TEFC	RAHS35M	1024	180T-440T	Avtron	M	MS-ST	5-24	1,442	E8	9
K00G83	TEFC	HS35R	1024	180T-440T	Dynapar	O	MS-TL	5-26	1,442	E8	6
K99G79	TEFC	HSD35	1024	180T-440T	Dynapar	O	Latch	5-26	1,622	E8	8
K99G80	TENV	HS35	1024	180T-250T	BEI	O	MS-TL	5-28	1,442	E8	6
K99G81	TEFC	HS35	1024	180T-440T	BEI	O	MS-TL	5-28	1,442	E8	6

NOTE: For 56-320 IDVSM frame sizes use the kits from the IDM product table.

Inverter, Three Phase, TEBC and TENV, C-Face, Foot Mounted

1/3 thru 50 Hp NEMA 56C thru 326T

Applications: Conveyors, pumps, fans, metal processing, compressors, test stands, and material handling equipment.

Features: Designed for inverter or vector applications where up to a 1000:1 constant torque speed range is required. Compatible with optional encoder feedback devices for use in closed loop velocity or position control. Meets NEMA MG 1, Part 31. Can operate across the line.

Hp	Base Speed RPM	C.H. Speed RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1/3	1800	2700	56C	TENV	**IDNM3534**	495	E2	13.84	33	80	230/460	0.6	2, 8, 60
1/2	1800	2700	56C	TENV	**IDNM3538**	579	E2	13.84	31	80	230/460	0.8	2, 8, 60
3/4	1800	2700	56C	TENV	**IDNM3542**	645	E2	13.84	33	78.5	230/460	1.4	2, 8, 60
1	1800	2700	143TC	TENV	**IDNM3581T**	1315	E2	14.65	58	85.5	230/460	1.5	2, 8, 60
			143TC	TEBC	**IDM3581T**	1737	E2	19	65	87.5	230/460	1.5	2, 8
			143TC	TEBC	**IDM3581T-5**	1737	E2	19.02	65	85.5	575	1.2	2, 8
	1200	1800	145TC	TEBC	**IDM3582T**	2040	E2	19.02	68	82.5	230/460	1.8	2, 8
1.5	1800	2700	145TC	TENV	**IDNM3584T**	1451	E2	14.65	58	84	230/460	2.3	2, 8, 60
			145TC	TEBC	**IDM3584T**	1837	E2	19.02	70	88.5	230/460	2.1	2, 8
			145TC	TEBC	**IDM3584T-5**	1837	E2	19.02	70	88.5	575	1.7	2, 8
	1200	1800	182TC	TEBC	**IDM3667T**	2294	E2	21.71	107	87.5	230/460	2.5	2, 8
2	1800	2700	145TC	TEBC	**IDM3587T**	1964	E2	19.02	72	88.5	230/460	2.7	2, 8
			145TC	TEBC	**IDM3587T-5**	1964	E2	19.02	73	88.5	575	2.3	2, 8
			145TC	TENV	**IDNM3587T**	1516	E2	14.65	67	86.5	230/460	2.8	2, 8, 60
			182TC	TENV	**IDNM3669T**	1759	E2	17.21	94	84	230/460	2.9	2, 8, 60
	1200	1800	184TC	TEBC	**IDM3664T**	2356	E2	21.71	124	88.5	230/460	3.2	2, 8
3	1800	2700	184TC	TEBC	**IDM3661T**	2509	E2	21.71	111	89.5	230/460	4.1	2, 8
			184TC	TEBC	**IDM3661T-5**	2509	E2	21.71	112	89.5	575	3.3	2, 8
			184TC	TENV	**IDNM3661T**	1986	E2	17.21	108	88.5	230/460	4.2	2, 8, 60
	1200	1800	213TC	TEBC	**IDM3764T**	3082	E2	29.14	187	90.2	230/460	4.5	2, 8, 70
5	1800	2700	184TC	TEBC	**IDM3665T**	2654	E2	21.71	124	90.2	230/460	6.5	2, 8
			184TC	TEBC	**IDM3665T-5**	2654	E2	21.71	124	90.2	575	5.2	2, 8
			184TC	TENV	**IDNM3665T**	2215	E2	17.21	116	89.5	230/460	6.6	2, 8, 60
			213TC	TENV	**IDNM3767T**	2469	E2	20.4	170	89.5	230/460	6.7	2, 8, 60
	1200	1800	215TC	TEBC	**IDM3768T**	3772	E2	29.14	226	90.2	230/460	7.3	2, 8, 70
7.5	1800	2700	213TC	TEBC	**IDM3770T**	3200	E2	29.14	170	91.7	230/460	9.5	2, 8, 70
			213TC	TEBC	**IDM3770T-5**	3200	E2	30.07	170	91.7	575	7.5	2, 8, 70
			254TC	TENV	**IDNM2237T**	3071	E2	24.05	242	90.2	230/460	9.1	2, 8, 60
			213TC	TENV	**IDNM3770T**	2563	E2	20.4	196	91.7	230/460	10.1	2, 8, 60
	1200	1800	254TC	TEBC	**IDM2276T**	5423	E2	33.07	332	91	230/460	10.7	2, 8, 70
10	1800	2700	215TC	TEBC	**IDM3774T**	3428	E2	29.14	231	92.4	230/460	12.5	2, 8, 70
			215TC	TEBC	**IDM3774T-5**	3428	E2	30.07	231	92.4	575	10	2, 8, 70
			256TC	TENV	**IDNM2238T**	3213	E2	24.05	286	91.7	230/460	13	2, 8, 60
	1200	1800	256TC	TEBC	**IDM2332T**	6626	E2	33.07	352	91.7	230/460	14.2	2, 8, 70
15	1800	2700	256TC	TEBC	**IDM2333T**	3726	E2	33.07	318	92.4	230/460	18.1	2, 8, 70
			256TC	TEBC	**IDM2333T-5**	3726	E2	34.15	318	92.4	575	14.5	2, 8, 70
			254TC	TENV	**IDNM2333T**	3310	E2	24.05	286	93.6	230/460	18.5	2, 8, 60
	1200	1800	284T	TEBC	**IDM4100T**	7855	E2	36.48	450	93	230/460	19.7	2, 8, 45, 70
20	1800	2700	256TC	TEBC	**IDM2334T**	3980	E2	33.07	333	93	230/460	24	2, 8, 70
			256TC	TEBC	**IDM2334T-5**	3980	E2	34.15	333	93	575	19	2, 8, 70
			284T	TENV	**IDNM2334T**	4573	E2	27.36	406	94.5	230/460	25.5	2, 8, 45, 60
	1200	1800	286T	TEBC	**IDM4102T**	8844	E2	36.48	455	93	230/460	26	2, 8, 45, 70
25	1800	2700	286T	TEBC	**IDM4103T**	4908	E2	36.48	417	93.6	230/460	30	2, 8, 45, 70
	1200	1800	324T	TEBC	**IDM4111T**	10079	E2	39.24	557	93	230/460	32	2, 8, 45, 70
30	1800	2700	286T	TEBC	**IDM4104T**	5629	E2	36.48	464	93.6	230/460	38	2, 8, 45, 70
	1200	1800	326T	TEBC	**IDM4117T**	11217	E2	39.24	628	93	230/460	39	2, 8, 45, 70
40	1800	2700	324T	TEBC	**IDM4110T**	7612	E2	39.24	605	94.5	230/460	47	2, 8, 45, 70
50	1800	2700	326T	TEBC	**IDM4115T**	8543	E2	39.24	622	94.5	230/460	57	2, 8, 45, 70

(a) See notes on the last page of this catalog. Cast Iron Frame Constant velocity fan: 115 volts, single phase from 143TC through 184TC and all 575 volt drive motors. Constant velocity fan: 230/460, three phase from 213 TC through 447T. May be converted to C-Face in Mod Express or built as custom motors. Consult ABB sales representative for availability of 2 pole motors and C-Face motors for 284T through 5009L frames.

Vector, Three Phase, TEBC and TENV, C-Face

1 thru 50 Hp NEMA 56 thru 326T

Applications: Test stands, material handling, packaging equipment, printing presses, etc.

Features: Applications requiring adjustable speed operation with full torque from zero to base speed and constant horsepower to maximum speed. Includes HS25 or HS35 encoder feedback with MS connector. Meets NEMA MG 1, Part 31. Can operate across the line.

Hp	Base Speed RPM	C.H. Speed RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes [a]
1	1800	2700	143TC	TEBC	**ZDM3581T**	3,291	E2	19.02	66	87.5	230/460	1.5	2, 8, 46, 60
			143TC	TEBC	**ZDM3581T-5**	3,291	E2	19.02	65	85.5	575	1.2	2, 8, 46
			143TC	TENV	**ZDNM3581T**	2,872	E2	14.65	59	85.5	230/460	1.5	2, 8, 46
	1200	1800	143TC	TEBC	**ZDM3582T**	3,594	E2	19.02	62	82.5	230/460	1.8	2, 8, 46
1 1/2	1800	2700	145TC	TEBC	**ZDM3584T**	3,392	E2	19.02	70	88.5	230/460	2.1	2, 8, 46, 60
			145TC	TEBC	**ZDM3584T-5**	3,392	E2	19.02	62	87.5	575	1.7	2, 8, 46
			145TC	TENV	**ZDNM3584T**	3,006	E2	14.65	58	84	230/460	2.3	2, 8, 46
	1200	1800	182TC	TEBC	**ZDM3667T**	3,849	E2	21.71	99	87.5	230/460	2.5	2, 8, 46
2	1800	2700	145TC	TEBC	**ZDM3587T**	3,517	E2	19.02	75	88.5	230/460	2.8	2, 8, 46
			145TC	TEBC	**ZDM3587T-5**	3,517	E2	19.02	74	88.5	575	2.3	2, 8, 46
			182TC	TENV	**ZDNM3669T**	3,315	E2	17.21	95	84	230/460	2.9	2, 8, 46, 60
	1200	1800	184TC	TEBC	**ZDM3664T**	3,913	E2	21.71	113	88.5	230/460	3.2	2, 8, 46
3	1800	2700	182TC	TEBC	**ZDM3661T**	4,065	E2	21.71	112	89.5	230/460	4.1	2, 8, 46
			182TC	TEBC	**ZDM3661T-5**	4,065	E2	21.71	110	89.5	575	3.2	2, 8, 46
			184TC	TENV	**ZDNM3661T**	3,543	E2	17.21	104	88.5	230/460	4.2	2, 8, 46, 60
	1200	1800	213TC	TEBC	**ZDM3764T**	4,636	E2	29.14	187	90.2	230/460	4.5	2, 8, 46, 70
5	1800	2700	184TC	TEBC	**ZDM3665T**	4,209	E2	21.71	125	90.2	230/460	6.5	2, 8, 46
			184TC	TEBC	**ZDM3665T-5**	4,209	E2	21.71	125	90.2	575	5.2	2, 8, 46
			213TC	TENV	**ZDNM3767T**	4,024	E2	20.40	173	91	230/460	6.7	2, 8, 46, 60
	1200	1800	215TC	TEBC	**ZDM3768T**	5,328	E2	29.14	226	90.2	230/460	7.3	2, 8, 46, 70
7 1/2	1800	2700	213TC	TEBC	**ZDM3770T**	4,754	E2	29.14	170	91.7	230/460	9.5	2, 8, 46, 70
			213TC	TEBC	**ZDM3770T-5**	4,754	E2	30.07	170	91.7	575	7.5	2, 8, 46, 70
			256TC	TENV	**ZDNM2237T**	4,627	E2	24.05	242	90.2	230/460	9.1	2, 8, 46, 60
	1200	1800	254TC	TEBC	**ZDM2276T**	6,979	E2	33.07	333	91	230/460	10.7	2, 8, 46, 70
10	1800	2700	215TC	TEBC	**ZDM3774T**	4,982	E2	29.14	231	92.4	230/460	12.5	2, 8, 46, 70
			215TC	TEBC	**ZDM3774T-5**	4,982	E2	30.07	231	92.4	575	10	2, 8, 46, 70
			256TC	TENV	**ZDNM2238T**	4,770	E2	24.05	284	91.7	230/460	13	2, 8, 46, 60
	1200	1800	256TC	TEBC	**ZDM2332T**	8,180	E2	33.07	356	91.7	230/460	14.2	2, 8, 46, 70
15	1800	2700	256TC	TEBC	**ZDM2333T**	5,282	E2	33.07	317	92.4	230/460	18.1	2, 8, 46, 70
			256TC	TEBC	**ZDM2333T-5**	5,282	E2	34.15	289	92.4	575	14.5	2, 8, 46, 70
			254TC	TENV	**ZDNM2333T**	4,866	E2	24.05	286	92.4	230/460	18.5	2, 8, 46, 60
	1200	1800	284T	TEBC	**ZDM4100T**	9,409	E2	36.48	445	93	230/460	19.7	2, 8, 45, 46, 70
20	1800	2700	256TC	TEBC	**ZDM2334T**	5,537	E2	33.07	342	93	230/460	24	2, 8, 46, 70
			256TC	TEBC	**ZDM2334T-5**	5,537	E2	34.15	340	93	575	19	2, 8, 46, 70
			284T	TENV	**ZDNM2334T**	6,129	E2	27.36	405	94.5	230/460	25.5	2, 8, 45, 46, 60
	1200	1800	286T	TEBC	**ZDM4102T**	10,401	E2	36.48	462	93	230/460	26	2, 8, 45, 46, 70
25	1800	2700	284T	TEBC	**ZDM4103T**	6,461	E2	36.48	416	93.6	230/460	30	2, 8, 45, 46, 70
	1200	1800	324T	TEBC	**ZDM4111T**	11,636	E2	38.92	615	93	230/460	32	2, 8, 45, 46, 70
30	1800	2700	286T	TEBC	**ZDM4104T**	7,186	E2	36.48	445	93.6	230/460	38	2, 8, 45, 46, 70
	1200	1800	326T	TEBC	**ZDM4117T**	12,773	E2	38.92	624	93	230/460	39	2, 8, 45, 46, 70
40	1800	2700	324T	TEBC	**ZDM4110T**	9,166	E2	38.92	610	94.5	230/460	47	2, 8, 45, 46, 70
50	1800	2700	326T	TEBC	**ZDM4115T**	10,099	E2	38.92	631	94.5	230/460	57	2, 8, 45, 46, 70

(a) See notes on the last page of this catalog.
Consult ABB sales representative for availability of 2 pole motors and C-Face motors for 284T through 5009L frames.
FULL TORQUE AT ZERO SPEED, 1000:1 CONSTANT TORQUE SPEED RANGE.
Cast Iron Frame

Inverter Gearmotors - Right Angle and Parallel Shaft

IDGM3301

IDGMP25021

Applications: Conveyors, material handling equipment, packaging machinery, agricultural, medical and laboratory equipment, and other applications requiring adjustable speed.

Features: Inverter Ready insulation system – meets NEMA MG 1 Part 31.4.4.2. Industry standard foot prints. High strength bronze gearing in right angle motors. Induction hardened helical and spur gearing in parallel shaft motors. Factory lubricated for life with synthetic lubricant. Non-vented gear housings for flexible mounting and to prevent lubricant contamination. Supplied with conduit box as standard. UL recognized and CSA certified.

Right Angle Gearmotors

Input Motor Hp	Output RPM 60 Hz.	Gear Ratio	Speed Range (VT)	Maximum Safe Torque In-Lbs @ 60 Hz	Catalog Number (a)	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Motor Type & Gear Style	Voltage @ 60 Hz
FTA Style										
1/25	85	20:1	14.1 - 127	13	**IDGM2401**	505	E2	7	2416M-FTA	230
	170	10:1	28.3 - 255	9	**IDGM2402**	505	E2	7	2416M-FTA	230
	340	5:1	56.6 - 510	5	**IDGM2403**	505	E2	7	2416M-FTA	230
D Style										
1/20	5.4	310:1	0.9 - 8.1	75	**IDGM2301**	660	E2	10	2416M-DB	230
	18.1	90:1	3.1 - 27	75	**IDGM2302**	660	E2	10	2416M-DB	230
E Style										
1/12	9.3	180:1	1.6 - 13.9	175	**IDGM2512**	840	E2	15	2512M-EB	230
	16.8	100:1	2.8 - 25.2	125	**IDGM2511**	840	E2	15	2512M-EB	230
B Style										
1/20	28.7	60:1	4.7 - 42.4	30	**IDGM2406**	612	E2	13	2512M-BB	230
1/15	85	20:1	14.1 - 127.5	25	**IDGM2405**	612	E2	13	2512M-BB	230
1/8	340	5:1	56.6 - 510	15	**IDGM2404**	612	E2	13	2520M-BB	230
G Style										
1/8	6	280:1	1 - 9	400	**IDGM2515**	1036	E2	20	2516M-G	230
1/6	14	120:1	2.3 - 21	375	**IDGM2514**	1036	E2	20	2516M-G	230
	28	60:1	4.6 - 42	250	**IDGM2513**	1036	E2	20	2516M-G	230
K Style										
3/8	22	75:1	3.4 - 33	315	**IDGM2509**	868	E2	17	2528M-K	230
	28	60:1	4.5 - 41	252	**IDGM2508**	868	E2	17	2528M-K	230
	41	40:1	6.6 - 62	228	**IDGM2506**	868	E2	17	2528M-K	230
	83	20:1	12 - 123	138	**IDGM2503**	868	E2	17	2528M-K	230
	165	10:1	23 - 246	105	**IDGM2501**	868	E2	17	2528M-K	230
	330	5:1	43 - 490	68	**IDGM2500**	868	E2	17	2528M-K	230
J Style										
1/2	28.7	60:1	4.8 - 43	413	**IDGM3303**	942	E2	28	3324M-JH	230
	57.5	30:1	9.6 - 86	355	**IDGM3302**	942	E2	28	3324M-JH	230
3/4	170	10:1	28.6 - 258	230	**IDGM3301**	961	E2	30	3332M-JH	230
	340	5:1	57.5 - 517	125	**IDGM3300**	961	E2	30	3332M-JH	230

NOTE: (a) Vertical motor below gearhead not recommended. Avoiding those positions where the high speed oil seal is immersed in oil, will provide greater security against high speed input seal wear.
(b) See notes on inside back flap.

ATTENTION: Additional ratios, voltages, and ratings are available. Application specific modifications are common, such as custom shaft dimensions, addition of brakes or encoders, specific power cords, and washdown features. Contact your ABB sales representative for assistance.
See Gearmotor Section for dimension drawings.

Parallel Shaft Gearmotors

Input Motor Hp	Output RPM 60 Hz.	Gear Ratio	Stages	Speed Range	Maximum Safe Torque In-Lbs @ 60 Hz	Catalog Number (a)	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Motor Type & Gear Style	Voltage @ 60 Hz
PSSH Style											
1/30	9.6	180:1	4	1.6-14.4	144	**IDGMP24180**	613	E2	11	2412M-PSSH	230
1/15	18.8	90:1	4	3.1-28.2	144	**IDGMP24090**	613	E2	13	2416M-PSSH	230
	27.9	60:1	3	4.6-41.8	130	**IDGMP24060**	595	E2	11	2416M-PSSH	230
1/8	55	30:1	3	9.2-82.5	125	**IDGMP24030**	595	E2	14	2424M-PSSH	230
1/5	84.5	20:1	2	14-126	142	**IDGMP24020**	561	E2	12	2524M-PSSH	230
1/4	167	10:1	2	27.8-250	86	**IDGMP24010**	561	E2	12	2524M-PSSH	230
	335	5:1	2	55.8-502	44	**IDGMP24005**	561	E2	12	2524M-PSSH	230
PSM Style											
1/25	9.4	180:1	4	1.6-14.1	184	**IDGMP25181**	729	E2	16	2412M-PSM	230
1/15	18.6	90:1	4	3.1-27.9	176	**IDGMP25091**	729	E2	16	2416M-PSM	230
1/8	27.5	60:1	3	4.6-41.2	204	**IDGMP25061**	698	E2	14	2424M-PSM	230
1/4	55.8	30:1	3	9.3-83.7	230	**IDGMP25031**	698	E2	18	2524M-PSM	230
	83.5	20:1	2	13.9-125	166	**IDGMP25021**	698	E2	16	2524M-PSM	230
	167	10:1	2	27.8-250	86	**IDGMP25011**	667	E2	16	2524M-PSM	230
	335	5:1	2	55.8-502	44	**IDGMP25006**	667	E2	16	2524M-PSM	230
PSL & PSLH Styles											
1/12	9.6	180:1	4	1.6-14	369	**IDGMP25182**	1,059	E2	20	2516M-PSL	230
1/8	18.8	90:1	4	3.1-28	360	**IDGMP25092**	1,059	E2	20	2516M-PSL	230
1/6	28	60:1	3	4.7-42	325	**IDGMP25063**	1,044	E2	18	2516M-PSL	230
1/4	56	30:1	3	9.4-84	247	**IDGMP25033**	1,044	E2	18	2524M-PSL	230
	84	20:1	2	14-126	167	**IDGMP25023**	1,025	E2	17	2524M-PSL	230
	167	10:1	2	27.8-250	85	**IDGMP25013**	1,025	E2	17	2524M-PSL	230
	335	5:1	2	55.8-502	44	**IDGMP25008**	1,025	E2	17	2524M-PSL	230
3/8	41	40:1	3	6.8-61	500	**IDGMP25062**	1,037	E2	20	2528M-PSL	230
	55	30:1	3	8.0-82	350	**IDGMP2505**	1,037	E2	20	2528M-PSL	230
	83	20:1	2	12-123	233	**IDGMP2503**	1,012	E2	18	2528M-PSL	230
	165	10:1	2	23-246	116	**IDGMP2501**	1,012	E2	18	2528M-PSL	230
	330	5:1	2	43-490	58	**IDGMP2500**	1,012	E2	18	2528M-PSL	230
1/2	43	40:1	3	7.2-64	637	**IDGMP33040**	1,037	E2	28	3324M-PSLH	230
	57	30:1	3	9.5-85	482	**IDGMP33030**	1,037	E2	28	3324M-PSLH	230
	86	20:1	2	14.3-129	326	**IDGMP33020**	1,012	E2	25	3324M-PSLH	230
	115	15:1	2	19.2-172	245	**IDGMP33015**	1,012	E2	25	3324M-PSLH	230
	172	10:1	2	28.6-258	164	**IDGMP33010**	1,012	E2	25	3324M-PSLH	230
	345	5:1	2	57.6-517	82	**IDGMP33005**	1,012	E2	25	3324M-PSLH	230

NOTE: (a) Vertical motor below gearhead not recommended. Avoiding those positions where the high speed oil seal is immersed in oil, will provide greater security against high speed input seal wear.
(b) See notes on inside back flap.

ATTENTION: Additional ratios, voltages, and ratings are available. Application specific modifications are common, such as custom shaft dimensions, addition of brakes or encoders, specific power cords, and washdown features. Contact your ABB sales representative for assistance.
See Gearmotor Section for dimension drawings.

Feedback Cable Assembly with MS Connector

For the convenience of our customers, we offer a connector plug/cable assembly for Vector and DC motors. This assembly provides the connection from the encoder to the control. The twisted pair shielded cable provides additional noise protection. The assembly decreases installation time and effort. Recommended for Vector Drive and DC applications. For ZDM, ZDNM, ZDWNM, ZDNRPM, ZDBRPM and ZDVS motors. Uses MS twist lock connector.

Catalog Number	Cable Extension Length	List Price	Mult. Sym.	Ap'x Shpg. Wgt.
CBL015ZD-2	5 Ft = 1.5 Meters	198	E8	1
CBL030ZD-2	10 Ft = 3 Meters	230	E8	1
CBL046ZD-2	15 Ft = 4.6 Meters	263	E8	2
CBL061ZD-2	20 Ft = 6.1 Meters	291	E8	2
CBL091ZD-2	30 Ft = 9.1 Meters	355	E8	3
CBL152ZD-2	50 Ft = 15.2 Meters	477	E8	6
CBL229ZD-2	75 Ft = 22.9 Meters	632	E8	8
CBL305ZD-2	100 Ft = 30.5 Meters	787	E8	8
CBL379ZD-2	125 Ft = 37.9 Meters	943	E8	14
CBL455ZD-2	150 Ft = 45.5 Meters	1,023	E8	15
CBL606ZD-2	200 Ft = 60.6 Meters	1,407	E8	16

Encoder Feedback Kits for IDM, IDNM and IDWNM Motors

For use with Legacy Motor Designs

Does not fit some legacy 180-440 EM, CP or ECP motors.

ENC00NV-B1

ENC02BC-B2

Encoder kits below feature 1024 pulses per revolution unless otherwise noted in the encoder type column. Connector style MS twist lock (MS-TL). HS35, HS35M and HSD35 feature hollow shaft mounting. The HSD35 carry the Northstar brand. The H20 is a couple mount encoder. The RL67 and SL85 are bearingless encoders and both carry the Northstar brand. Encoder kits include the encoder and all mounting hardware.

Catalog Number	Type Enclosure	Description	Magnetic or Optical	Connector Type	Input Voltage	Output Voltage Limited	NEMA Frame	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.
ENC00NV-A2	TENV	HS35M Avtron	Magnetic	TL	5-24 VDC	24	213T-215T	1,442	E8	1
ENC00NV-B1	TENV	HS25 BEI	Optical	TL	5-15 VDC	15	56-215T	1,442	E8	2
ENC00NV-D2	TENV	HS35R Dynapar	Optical	TL	5-26 VDC	26	56-215T	1,622	E8	4
ENC00NV-D1 (1)	TENV	HS35 Dynapar	Optical	TL	5-24 VDC	5	56-215T	1,622	E8	4
ENC01BC-B1	TEBC	HS25 BEI	Optical	TL	5-15 VDC	15	143T-215T	1,442	E8	3
ENC01BC-D2	TEBC	HS35R Dynapar	Optical	TL	5-26 VDC	26	56-215T	1,622	E8	4
ENC01BC-D1 (1)	TEBC	HS35 Dynapar	Optical	TL	5-24 VDC	5	56-215T	1,622	E8	4
ENC01NV-A2	TENV	HS35M Avtron	Magnetic	TL	5-24 VDC	24	254T-256T	1,442	E8	1
ENC01NV-B2	TENV	HS35 BEI	Optical	TL	5-15 VDC	15	254T-284T	1,442	E8	2
ENC01NV-D2	TENV	HS35R Dynapar	Optical	TL	5-26 VDC	26	254T-256T	1,622	E8	4
ENC01NV-D1 (1)	TENV	HS35 Dynapar	Optical	TL	5-24 VDC	5	254T-256T	1,622	E8	4
ENC02BC-A2	TEBC	HS35M Avtron	Magnetic	TL	5-24 VDC	24	254T-447T	1,442	E8	1
ENC02BC-B2	TEBC	HS35 BEI	Optical	TL	5-15 VDC	15	254T-447T	1,631	E8	2
ENC02BC-D2	TEBC	HS35R Dynapar	Optical	TL	5-26 VDC	26	254T-447T	1,622	E8	4
ENC02BC-D1 (1)	TEBC	HS35 Dynapar	Optical	TL	5-24 VDC	5	254T-447T	1,622	E8	4

NOTE: For 56 and 140 IDVSM frame sizes use the kits from the table above.
(1) Being phased out

Constant Velocity Blower Cooling Conversion Kits

For use with Legacy Motor Designs

Does not fit some legacy 180-440 EM, CP or ECP motors.

NEMA 143TC thru 447TC

These kits convert TENV or TEFC AC motors to a Totally Enclosed Blower Cooled (TEBC) design. This is advantageous where continuous cooling is required regardless of motor shaft speed. These kits can be mounted on the back of the motor after removing the fan guard and fan. Removing the TEFC fan shaft is not required. Does not fit some legacy 180-440 EM, CP or ECP motors.

Voltage	Phase	NEMA Frame	Catalog Number	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.
115	1	143TC-145TC	**BLWL05-L**	814	E8	7
		182TC-184TC	**BLWL06-L**	917	E8	8
		213TC-215TC	**BLWL07-L**	962	E8	21
		254TC-256TC	**BLWL09-L**	988	E8	28
		284TC-286TC	**BLWL10-L**	1,068	E8	35
		324TC-326TC	**BLWL12-L**	1,134	E8	46
		364TC-365TC	**BLWL14-L**	1,206	E8	55
230/380/460	3	213TC-215TC	**BLWM07-F**	962	E8	20
		254TC-256TC	**BLWM09-F**	999	E8	30
		284TC-286TC	**BLWM10-F**	1,068	E8	35
		324TC-326TC	**BLWM12-F**	1,134	E8	46
		364TC-365TC	**BLWM14-F**	1,219	E8	55
		404TC-405TC	**BLWM16-F**	1,704	E8	70
		444TC-447TC	**BLWM18-F**	2,387	E8	87

NOTE: Blower cooling conversion kits should be further selected by motor type as noted within the catalog number.
As an example: BLWM10-F fits a 310M type also built as a 324-326TC. Does not fit Athens-built 180-440 M, CP or ECP motors.

Connector Transition (Patch) Cables

MS Twist Lock (MS-TL) to MS Screw Tight (MS-ST) and MS Screw Tight (MS-ST) to MS Twist Lock (MS-TL)

These cables will provide a transition from the MS twist lock 10 pin (female) connector to the 10 pin (male) MS screw tight connector or from a MS screw tight (female) to a MS twist lock (male) connector. The MS-ST to MS-TL is compatible with the stock cable lengths for extended cable runs up to 200 feet.

Catalog Number	Type	List Price	Mult. Sym.	Ap'x Shpg. Wgt.
CBLTL2ST	MS-TL to MS-ST	400	E8	2
CBLST2TL	MS-ST to MS-TL	400	E8	2

Subfractional Permanent Magnet DC Motor, TENV, Rigid Base

1/50 thru 1/4 Hp

Applications: General purpose including conveyors, material handling equipment and packaging machinery.

Features: High quality ball bearing motors with precision machined die cast aluminum or steel housings. Dynamically balanced for smooth, vibration-free operation.

Input Motor Hp	Output Base Speed	Voltage Direct Current Armature	Full Load Amperage Armature	Catalog Number	List Price	Mult. Sym.	Gear Style	Ap'x. Shpg. Wgt.	Notes [a]
1/50	1800	90	0.3	**AP231001**	294	DS	2308P	4	20,60
1/25	1725	90	0.5	**AP232001**	322	DS	2314P	5	20,60
1/15	1800	90	0.8	**AP233001**	346	DS	2318P	5	20,60
		180	0.4	**AP233021**	346	DS	2318P	5	20,60
1/8	1725	90	1.3	**AP7401**	484	DS	2424P	12	20,60
		180	0.7	**AP7421**	484	DS	2424P	12	20,60
1/4	3450	90	2.5	**AP7402**	484	DS	2424P	12	20,60
		180	1.3	**AP7422**	484	DS	2424P	12	20,60

NOTE: Supplied with type SJO, three foot 18/3 AWG grounded cord. (a) See notes on the last page of this catalog.

SCR Drive Fractional Permanent Magnet Motor, TENV and TEFC, C-Face with Base

1/4 thru 5 Hp NEMA 56C thru 1810ATC

Applications: Conveyors, mixers, packaging machinery.

Features: NEMA C-face with removable base. Tach adaptable. Class F insulation, double sealed ball bearings. 20:1 constant torque speed range. UL and CSA recognized. 1/4 - 1/2 Hp motors are TENV, all others are TEFC. No dual mounting base holes on 1/4 - 1/2 Hp.

Hp	Base Speed	NEMA Frame	Voltage D.C. Arm.	Full Load Amperage Arm.	Enclosure	Catalog Number	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Notes [a]	Reliance M/N
1/4	1750	56C	90	2.5	TENV	**CDP3310**	695	K	24	20,60	T56S1001
			180	1.25	TENV	**CDP3306**	695	K	23	20,60	
1/3	1750	56C	90	3.2	TENV	**CDP3320**	733	K	27	20,60	T56S1003
			180	1.6	TENV	**CDP3316**	733	K	27	20,60	
1/2	1750	56C	90	4.8	TENV	**CDP3330**	820	K	32	20,60	T56S1005
			180	2.5	TENV	**CDP3326**	820	K	31	20,60	T56S1027
	2500	56C	90	5	TENV	**CDP3335**	733	K	26	20,60	T56S1006
3/4	1750	56C	90	7.6	TEFC	**CDP3440**	996	K	38	20	T56S1009
			180	3.7	TEFC	**CDP3436**	996	K	38	20	T56S1029
	2500	56C	90	7.5	TEFC	**CDP3443**	881	K	36	20	
1	1750	56C	90	10	TEFC	**CDP3445**	1,211	K	44	20	T56S1011
			180	5	TEFC	**CDP3455**	1,211	K	44	20	T56S1013
	2500	56C	90	9.7	TEFC	**CDP3450**	996	K	38	20	
			180	4.85	TEFC	**CDP3460**	996	K	38	20	T56S1012
1 1/2	1750	145TC	180	7.7	TEFC	**CDP3575**	2,231	L1	65	20	
	2500	145TC	180	7	TEFC	**CDP3580**	1,941	L1	53	20	
2	1750	145TC	180	9.6	TEFC	**CDP3585**	2,662	L1	74	20	
	2500	145TC	180	10	TEFC	**CDP3590**	2,231	L1	66	8	
3	1750	182TC	180	14	TEFC	**CDP3603**	3,278	L1	112	20	
	1750	182C	180	14	TEFC	**CDP3604**	3,260	L1	112	20	
5		1810ATC	180	21.6	TEFC	**CDP3605**	5,564	L1	161	20	

NOTE: See Tach Generators and Mounting Kits. (a) See notes on the last page of this catalog.

Integral DC Tach Permanent Magnet SCR Drive Motor - TENV and TEFC, C-Face with Base

1/4 thru 5 Hp NEMA 56C thru 1810ATC

Applications: Conveyors and metering pumps (precise speed regulation).

Features: Provides an integral 50 VDC per 1000 RPM precision tachometer for closed loop drive system. Class F insulation. 20:1 constant torque speed range with NEMA Type K control. 1/4 - 1/2 motors are TENV, all others are TEFC.

Hp	Base Speed	NEMA Frame	Voltage D.C. Arm.	Full Load Amperage Arm.	Enclosure	Catalog Number	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Notes [a]
1/4	1750	56C	90	2.5	TENV	**CDPT3310**	1,984	K	27	20,60
			180	1.25	TENV	**CDPT3306**	1,984	K	27	20,60
1/3	1750	56C	90	3.2	TENV	**CDPT3320**	2,024	K	30	20,60
			180	1.6	TENV	**CDPT3316**	2,024	K	30	20,60
1/2	1750	56C	90	4.8	TENV	**CDPT3330**	2,151	K	35	20,60
			180	2.5	TENV	**CDPT3326**	2,151	K	36	20,60
3/4	1750	56C	90	7.6	TEFC	**CDPT3440**	2,275	K	44	20
			180	3.7	TEFC	**CDPT3436**	2,275	K	45	20
1	1750	56C	90	10	TEFC	**CDPT3445**	2,538	K	50	20
			180	5	TEFC	**CDPT3455**	2,538	K	50	20
1 1/2	1750	143TC	180	7.7	TEFC	**CDPT3575**	3,523	L1	71	20
2	1750	143TC	180	9.6	TEFC	**CDPT3585**	3,953	L1	79	20
3	1750	182ATC	180	14	TEFC	**CDPT3603**	4,598	L1	122	20
5	1750	1810ATC	180	24.5	TEFC	**CDPT3605**	6,878	L1	164	20

(a) See notes on the last page of this catalog.

Explosion Proof Permanent Magnet SCR Drive Motor - TEFC, C-Face with Base

1/4 thru 1 1/2 Hp NEMA 56C thru 145TC

Applications: Conveyors, feeders, and pumps (adjustable speed and constant torque for hazardous locations).

Features: NEMA C-Face with welded on base. 20:1 constant torque speed range. UL and CSA. Division 1, Class I, Group D; Class II, Group F & G, T3C. Thermostat and explosion proof conduit box included.
Not tach adaptable.

Hp	Base Speed	NEMA Frame	Voltage D.C. Arm.	Full Load Amperage Arm.	Catalog Number	XP Cls/Grp	Temp Code	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Notes [a]
1/4	1750	56C	90	2.7	**CDPX3410**	②	T3C	1,907	K	38	20
			180	1.3	**CDPX3406**	②	T3C	1,907	K	38	20
1/3	1750	56C	90	3.6	**CDPX3420**	②	T3C	2,396	K	43	20
			180	1.7	**CDPX3416**	②	T3C	2,396	K	44	20
1/2	1750	56C	90	5.2	**CDPX3430**	②	T3C	2,705	K	46	20
			180	2.5	**CDPX3426**	②	T3C	2,705	K	46	20
3/4	1750	56C	90	7	**CDPX3440**	②	T3C	3,344	K	51	20
			180	3.5	**CDPX3436**	②	T3C	3,344	K	51	20
1	1750	56C	90	9.6	**CDPX3545**	②	T3C	4,454	K	73	20
			180	4.9	**CDPX3555**	②	T3C	4,454	K	71	20
1 1/2	1750	145TC	180	7.1	**CDPX3575**	②	T3C	4,761	L1	81	20

② Class I, Group D; Class II, Group F&G

CAUTION: Explosion-proof motors have a tight fit between mating parts to ensure the integrity of the explosion-proof enclosure. This can lead to an accumulation of moisture inside the motors due to condensation. Care should be used when selecting an explosion-proof motor, especially when installed outdoors and on intermittent duty.

Washdown Duty Permanent Magnet SCR Drive Motor - TENV and TEFC, C-Face with Base

1/4 thru 5 Hp NEMA 56C thru 1810ATC

Applications: Food processing conveyors and feeders exposed to high pressure wash down.

Features: Moisture sealant on bolt heads between frame and endplates, neoprene gasketed conduit box. Double sealed ball bearings. Forsheda® running contact v-ring slinger. Stainless steel shaft. Electrostatic epoxy paint coating. Class F insulation. 20:1 constant torque speed range. Tach adaptable. 3300P motors are TENV, all others are TEFC.

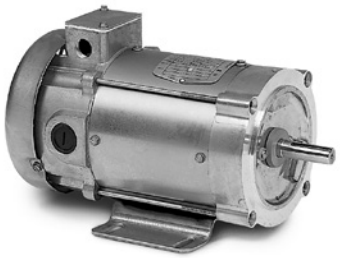
Hp	Base Speed	NEMA Frame	Voltage D.C. Arm.	Full Load Amperage Arm.	Enclosure	Catalog Number	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Notes [a]
1/4	1750	56C	90	2.5	TENV	**CDPWD3310**	900	K	25	20,60
			180	1.25	TENV	**CDPWD3306**	900	K	24	20,60
1/3	1750	56C	90	3.2	TENV	**CDPWD3320**	950	K	27	20,60
			180	1.6	TENV	**CDPWD3316**	950	K	27	20,60
1/2	1750	56C	90	4.8	TENV	**CDPWD3330**	1,068	K	32	20,60
			180	2.5	TENV	**CDPWD3326**	1,068	K	32	20,60
3/4	1750	56C	90	7.6	TEFC	**CDPWD3440**	1,289	K	38	20
			180	3.7	TEFC	**CDPWD3436**	1,289	K	38	20
1	1750	56C	90	10	TEFC	**CDPWD3445**	1,572	K	44	20
			180	5	TEFC	**CDPWD3455**	1,572	K	44	20
1 1/2	1750	145TC	180	7.7	TEFC	**CDPWD3575**	3,008	L1	66	20
2	1750	145TC	180	9.6	TEFC	**CDPWD3585**	3,590	L1	75	20
3	1750	182TC	180	14	TEFC	**CDPWD3603**	4,595	L1	116	20
5	1750	1810ATC	180	24.5	TEFC	**CDPWD3605**	7,783	L1	157	20

NOTE: See Tach Generators and Mounting Kits.

(a) See notes on the last page of this catalog.

Paint Free Washdown Duty Permanent Magnet SCR Drive Motor, TEFC, C-Face with Base

1/4 thru 1 Hp NEMA 56C



Applications: Food processing, packaging exposed to high pressure washdown with caustic solutions.

Features: Class F insulation; 20:1 constant torque speed range. Moisture resistant 200°C magnet wire. Sealed ball bearings with moisture resistant grease. Contact lip seals on shaft extensions. Neoprene gaskets. Special processed endplates. 300 series stainless steel motor frame, base, shaft and hardware. No exterior paint. Not tach adaptable.

Hp	Base Speed	NEMA Frame	Voltage D.C. Arm.	Full Load Amperage Arm.	Catalog Number	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Notes [a]
1/4	1750	56C	90	2.7	**CDPSWD3410**	1,077	K	29	20
			180	1.3	**CDPSWD3406**	1,077	K	28	20
1/2	1750	56C	90	5.2	**CDPSWD3430**	1,276	K	37	20
			180	2.5	**CDPSWD3426**	1,276	K	38	20
1	1750	56C	90	9.6	**CDPSWD3545**	1,886	K	63	20
			180	4.9	**CDPSWD3555**	1,886	K	63	20

(a) See notes on the last page of this catalog.

Metric Flange Permanent Magnet SCR Drive Motor, TENV and TEFC, Flange and Face Mount

0.15 thru 5 kW
0.2 thru 3.7 Hp

IEC D63 thru D112D

Applications: Metric SCR Drive Motor replacement.

Features: Metric Flange or C-Face per IEC 60072-1 Standards. Bolt on non-metric base. Class F insulation. Tach adaptable except type .15kW 20:1 constant torque speed range. Conforms to IEC 60034-1.

kW/Hp	Base Speed	NEMA Frame	Voltage D.C. Arm.	Full Load Amperage Arm.	Enclosure	Catalog Number	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Notes [a]
B5 Flange										
.15/.20	1800	D63D	180	1.1	TENV	**VP7424D**	485	DS	10	60
.18/.25	1750	D71D	180	1.25	TENV	**VP3311D**	695	K	23	20,60
.25/.33	1750	D71D	180	1.6	TENV	**VP3316D**	733	K	27	20,60
.37/.5	1750	D71D	180	2.5	TENV	**VP3326D**	820	K	31	20,60
	3000	D71D	180	2.5	TEFC	**VP3428D**	850	K	33	20
.57/.75	1750	D80D	180	3.7	TEFC	**VP3436D**	996	K	40	20
	3000	D80D	180	3.6	TEFC	**VP3439D**	881	K	37	20
.75/1	1750	D80D	180	5	TEFC	**VP3455D**	1,211	K	46	20
	3000	D80D	180	5.1	TEFC	**VP3458D**	996	K	41	20
1.1/1.5	3000	D90D	180	7.7	TEFC	**VP3468D**	1,110	L1	47	20
	1750	D90D	180	7.7	TEFC	**VP3575D**	2,244	L1	71	20
1.5/2	1750	D90D	180	9.6	TEFC	**VP3585D**	2,677	L1	78	20
	3000	D90D	180	10	TEFC	**VP3588D**	2,244	L1	69	20
2.2/3	1750	D112D	180	14	TEFC	**VP3603D**	3,294	L1	121	20
3.7/5	1750	D112D	180	24.5	TEFC	**VP3605D**	5,592	L1	166	20
B14 Face										
.15/.20	1800	D63D	180	1.1	TENV	**VP7424-14**	485	DS	10	60
.18/.25	1750	D71C	180	1.4	TEFC	**VP3411-14**	781	K	30	20
.25/.33	1750	D71C	180	1.7	TEFC	**VP3416-14**	832	K	31	20
1.37/.50	3000	D71C	180	2.5	TEFC	**VP3428-14**	850	K	31	20
	1750	D71C	180	2.5	TEFC	**VP3426-14**	881	K	37	20
.56/.75	3000	D80C	180	3.6	TEFC	**VP3439-14**	881	K	35	20
	1750	D80C	180	3.7	TEFC	**VP3436-14**	996	K	40	20
.75/1	3000	D80C	180	5.1	TEFC	**VP3458-14**	996	K	38	20
	1750	D80C	180	5	TEFC	**VP3455-14**	1,211	K	45	20
1.1/1.5	3000	D80C	180	7.7	TEFC	**VP3468-14**	1,110	L1	43	20
	1750	D90C	180	7.7	TEFC	**VP3575-14**	2,244	L1	73	20
1.5/2	3000	D90C	180	10.0	TEFC	**VP3588-14**	2,244	L1	70	20
	1750	D90C	180	9.6	TEFC	**VP3585-14**	2,677	L1	80	20

NOTE: Above motors D71 and larger with B5 flange, fitted with oil seal. Catalog numbers VP7424D and VP7424-14 are not tach adaptable. Tach Generators and Tach Mounting Kits available.

(a) See notes on the last page of this catalog.

Low Voltage Permanent Magnet Motor - TENV and TEFC

1/4 thru 1 Hp NEMA 56C

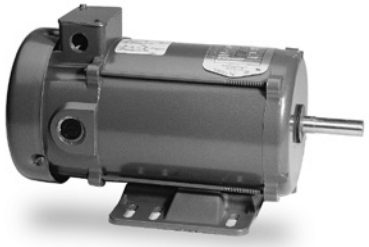
Applications: Battery operation for portable pumps, fans, augers, winches and lifts.

Features: NEMA C-face, Class F insulation, double sealed ball bearings. Top-mounted terminal studs for power connection on ratings 40-amps and up. Not tach adaptable. 1/4 - 1/2 Hp are TENV, 3/4 - 1 Hp are TEFC.

Hp	Base Speed	NEMA Frame	Voltage D.C.	Full Load Amperage	Catalog Number	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Notes [a]
1/4	1800	56C	12	22.5	**CDP3410-V12**	747	K	23	20,60
			24	10.6	**CDP3410-V24**	708	K	23	20,60
1/3	1800	56C	12	28.6	**CDP3420-V12**	820	K	31	20,60
			24	13.6	**CDP3420-V24**	782	K	31	20,60
1/2	1800	56C	12	40	**CDP3430-V12**	850	K	37	20,60
			24	19.6	**CDP3430-V24**	810	K	35	20,60
3/4	1800	56C	12	66	**CDP3440-V12**	1,220	K	42	20
		56C	24	29.4	**CDP3440-V24**	845	K	41	20
1	1800	56C	12	85.6	**CDP3445-V12**	1,765	K	45	20
			24	40.9	**CDP3445-V24**	1,757	K	46	20

(a) See notes on the last page of this catalog.

DC Power Motor - TEFC, Rigid Base



1/3 thru 1 1/2 Hp NEMA 56 and 184

Applications: Cranes, hoists, conveyors, augers and marine duty DC applications. Powered from generators or batteries.

Features: 20% Compound Wound. Weather proof, VPI insulation meets IEEE 45 specifications. Suitable for mounting in any position. Continuous duty. Easy access brushes. Not tach adaptable.

Hp	Speed	NEMA Frame	Rated Current	Catalog Number	List Price	Mult. Sym.	Ap'x Shpg. Wgt.	Notes [a]
				115 VDC				
1/3	1750	56	3.2	**D1151**	1,658	K	23	20
1/2	1750	56	4.8	**D1152**	1,755	K	29	20
3/4	1750	56	6.6	**D1153**	2,005	K	34	20
1	1750	56	8	**D1154**	2,305	K	62	20
				230 VDC				
1/3	1750	56	1.7	**D2301**	1,658	K	41	20
1/2	1750	56	2.1	**D2302**	1,755	K	29	20
3/4	1750	56	3.3	**D2303**	2,005	K	34	20
1	1750	56	4	**D2304**	2,305	K	62	20
1 1/2	1750	184	6.1	**D2305**	3,921	L1	84	20

NOTE: Not for SCR control applications. Base welded on 3513D type only. Not tach adaptable.

(a) See notes on the last page of this catalog.

Shunt Wound SCR Drive Motors, TEFC, C-Face with Base

1/4 thru 3 Hp — NEMA 56C thru 215C

Applications: Conveyors, printing, textile equipment, machine tools (adjustable speeds with constant torque).

Features: Designed for use with NEMA Type K SCR control, 20:1 constant torque speed range (except where noted). NEMA C-face and removable base. NEMA 182 frame and larger have a normally closed thermostat on the field winding. Class F insulation, 1.0 service factor.

Hp	Base Speed	NEMA Frame	Voltage D.C.		Full Load Amperage		Catalog Number	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Notes [a]
			Arm.	Field	Arm.	Field					
1/4	1750	56C	90	100/50	3	.3/.6	**CD3425**	699	K	23	20
1/3	1750	56C	90	100/50	3.4	.4/.8	**CD3433**	764	K	24	20
			180	200/100	1.9	.21/.42	**CD3434**	764	K	24	20
			90	100/50	3.7	.5/1	**CD5333** [b][c]	1,101	K	31	20
1/2	1750	56C	90	100/50	5.2	.5/1	**CD3450**	868	K	29	20
			180	200/100	2.6	.25/.5	**CD3451**	868	K	29	20
			90	100/50	5	.44/.88	**CD5350** [c]	1,216	K	38	20
3/4	1750	56C	90	100/50	7.8	.6/1.2	**CD3475**	1,080	K	34	20
			180	200/100	3.9	.3/.6	**CD3476**	1,080	K	34	20
			90	100/50	8	.6/1.2	**CD5375** [c]	1,432	K	45	20
1	1750	56C	180	200/100	5	.3/.6	**CD5318** [c]	1,525	K	54	20
			90	100/50	10	.6/1.2	**CD5319** [c]	1,525	K	53	20
		182C	180	200/100	5	.25/.5	**CD6218**	2,037	L1	65	20
			90	100/50	9.6	.55/1.1	**CD6219**	2,037	L1	66	20
1 1/2	1750	182C	180	200/100	7.5	.25/.5	**CD6215**	2,281	L1	84	20
2	1750	182C	180	200/100	9.5	.4/.8	**CD6202**	2,698	L1	98	20
		213C	180	200/100	9.5	.4/.8	**CD7502**	4,734	L1	105	20
3	1750	184TC	180	200/100	14.7	.6/1.2	**CD6203**	3,064	L1	135	8, 73
		215C	180	200/100	14.7	.6/1.2	**CD7503**	5,035	L1	137	20

NOTE: See Tach Generators and Mounting Kits. Tach Mounting Kits are not available for explosion-proof motors.
(a) See notes on the last page of this catalog. (b) Base welded on type 3513D only. (c) No dual mounting base holes on 35D, 75D or 91D type.

Shunt Wound SCR Drive Motors, Explosion Proof TEFC, C-Face with Base

1/2 thru 2 Hp — NEMA 182CZ thru 182C

Applications: Conveyors, printing, textile equipment, machine tools (adjustable speeds with constant torque).

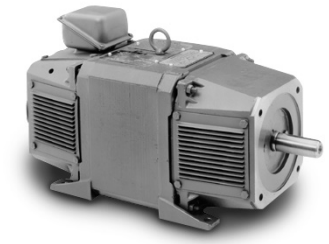
Features: Designed for use with NEMA Type K SCR control, 20:1 constant torque speed range. Normally closed thermostat on the field winding. Class F insulation, 1.0 service factor. UL and CSA Division 1, Class I, Group D, Class II, Group F & G.

Hp	Base Speed	NEMA Frame	Voltage D.C.		Full Load Amperage		Catalog Number	XP Cls/Grp	Temp Code	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Notes [a]
			Arm.	Field	Arm.	Field							
Explosion-Proof - Continuous Duty - Division 1, Class I, Group D & Class II, Group F & G - 1.0 S.F.													
1/2	1750	182CZ	90	100/50	4.9	.55/1.1	**CDX1850** [b]	②	T3B	2,768	L1	100	2
3/4	1750	182CZ	90	100/50	7	.55/1.1	**CDX1875** [b]	②	T3B	3,666	L1	100	2
1	1750	182CZ	180	200/100	5	.25/.5	**CDX2001** [b]	②	T3B	4,560	L1	102	2
		182C	180	200/100	5	.25/.5	**CDX7100**	②	T3B	3,785	L1	102	2
1 1/2	1750	182C	180	200/100	7.5	.25/.5	**CDX7150**	②	T3B	5,012	L1	121	2
2	1750	182C	180	200/100	9.5	.4/.8	**CDX7200** [b]	②	T3B	5,629	L1	135	2

(a) See notes on the last page of this catalog. ② Class I, Group D; Class II, Group F&G
(b) Refers to shaft and/or face mounting dimensions only. Base mounting dimensions and shaft height differ from NEMA frames shown.
CAUTION: Explosion-proof motors have a tight fit between mating parts to ensure the integrity of the explosion-proof enclosure. This can lead to an accumulation of moisture inside the motors due to condensation. Care should be used when selecting an explosion-proof motor, especially when installed outdoors and on intermittent duty.

RPM III DC Shunt Wound SCR Drive Motors, 180V Armature Power Code K

1.5 thru 5 Hp NEMA 189ATY thru 2112ATCZ



Applications: Metals, paper, web processes, extruders, cranes, conveyors, packaging, printing, machine tools.

Features: Unique laminated square frame for improved commutation on rectified power supplies. The square configuration allows for increased rating per frame size. Class F rated insulation system. Service Line brushes with convenient wear indicating reference lines. PLS™ (Positive Lubrication System) for longer bearing and motor life. F-3 mounting. Tach adaptable with thermostat.

Hp	Base Speed	NEMA Frame	Voltage D.C.		Full Load Amperage		Enclosure	Catalog Number	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Reliance M/N	Field Type	XPY Tach Kit
			Arm.	Field	Arm.	Field (a)(b)								
1.5	1750	DC189ATY (c)	180	100/200	7.2	0.72	TENV	**D1815R**	6,040	N2	169	T18R1119	STR	413336-1R
2	1750	DC189ATY (c)	180	100/200	9.5	0.72	TENV	**D1802R**	6,040	N2	86	T18R1117	STR	413336-1R
3	1750	DC1811ATCZ (d)	180	100/200	14.1	1.17	TENV	**CD1803R**	9,906	N2	212	T18R1102	STR	413336-1R
		DC189ATY (c)(e)	180	100/200	14.8	0.95	DPG	**D1803R**	6,040	N2	165	T18R1118	STR	413336-1R
		DC189ATCZ (d)(e)	180	100/200	14.8	0.95	DPG	**CDD1803R**	6,040	N2	160	T18R1120	STR	413336-1R
5	1750	DC1810ATCZ (d)(e)	180	100/200	24	1.68	DPG	**CD1805R**	7,266	N2	175	T18R1105	STR	413336-1R
		DC2112ATCZ (d)	180	100/200	23	1.34	TENV	**CD2105R**	14,534	N2	355	T21S1101	STR	413336-1R

NOTE: Encoder and tachometer kits available.

(a) Field amps at 25°C
(b) Field amps for high voltage connection
(c) 140TC C-face
(d) 180TC C-face
(e) Top mounted conduit box, if blower added, blower must be mounted F-1 or F-2.

RPM III DC Shunt Wound SCR Drive Motors, 240V Armature 240V Field, Power Code C

3 thru 10 Hp NEMA 1811ATCZ thru 2113ATCZ

Applications: Textile range drives, roofing machines, tube mills, and similar applications.

Features: Range drive motors have matched IR drops within approximately 5 volts and good regulation characteristics out to the maximum field weakened speed of 2300 rpm. Capable of operation at 25% base speed with 67% armature current and motor field pre-weakened to 2100 rpm. Specially designed for use on multi-motor drives operating on a common voltage power supply such as textile range drives, roofing machines, tube mills, etc. F-1 mounting. Tach adaptable with thermostat.

* Splash-Proof Guarded (SPG) is an open machine in which the ventilating openings are so constructed that successful operation is not interfered with when drops of liquid or solid particles strike or enter the enclosure at any angle not greater than 60 degrees downward from the vertical.

Hp	Base Speed	NEMA Frame	Voltage D.C.		Full Load Amperage		Enclosure *	Catalog Number	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Reliance M/N	Field Type	XPY Tach Kit
			Arm.	Field	Arm.	Field (a)								
3	1750/2300	C1811ATCZ (b)	240	240	11	0.99	SPG	**CD2003R-2**	11,067	N2	198	T18R1009	STAB	413336-1R
5	1750/2300	C1811ATCZ (b)	240	240	18.1	1.11	SPG	**CD2005R-2**	11,067	N2	209	T18R1010	STAB	413336-1R
7.5	1750/2300	C1812ATCZ (b)	240	240	27	1.4	SPG	**CD2007R-2**	12,042	N2	235	T18R1011	STAB	413336-1R
10	1750/2300	SC2113ATCZ (c)	240	240	37	2.20	SPG	**D2010R-2**	16,661	N2	346	T21S1001	STAB	417708-21

NOTE: Encoder and tachometer kits available.

(a) Field amps at 25°C
(b) 180TC C-face
(c) 210TC C-face

RPM III DC Shunt Wound SCR Drive TEFC Motors, 240V & 500V Armature, Power Code C

5 thru 50 Hp NEMA 1812ATZ thru 3212ATZ

Applications: Metals, paper, web processes, extruders, cranes, conveyors, packaging, printing, machine tools.

Features: Unique laminated square frame for improved commutation on rectified power supplies. The square configuration allows for increased rating per frame size. Class F rated insulation system. Service Line brushes with convenient wear indicating reference lines. PLS™ (Positive Lubrication System) for longer bearing and motor life. F-1 mounting unless otherwise specified. Tach adaptable with thermostat.

Hp	Base/Max Speed	NEMA Frame	Voltage D.C.		Full Load Amperage		Catalog Number	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Notes	Reliance M/N	Field Type	XPY Tach Kit
			Arm.	Field	Arm.	Field (a)(b)								
5	1750/2300	C1812ATZ	240	150	18.5	1.80	**D2505R**	13,081	N2	251	87	T18R1005 (d)	STAB	417709-17
		SC2113ATZ	500	150/300	9	1.06	**D5505R**	15,311	N2	340	87	T21S201 (c)	STAB	417708-21
7.5	1750/2300	SC2113ATZ	240	150	27	3.25	**D2507R**	17,059	N2	359	87	T21S301	STAB	417709-65
		SC2113ATZ	500	150/300	13.5	1.41	**D5507R**	17,059	N2	360	87	T21S302 (d)	STAB	417709-65
10	1750/2300	MC2113ATZ	240	150	35.5	3.13	**D2510R**	18,820	N2	379	87	T21S303	STAB	417709-65
		MC2113ATZ	500	150/300	17.5	1.55	**D5510R**	18,820	N2	405	87	T21S304	STAB	417709-65
15	1750/2300	SC2512ATZ	240	150	53.5	2.18	**D2515R**	28,213	N2	560	6,87	T25S301	STAB	417709-66
		SC2512ATZ	500	150/300	25.6	1.71	**D5515R**	28,213	N2	547	87	T25S302	STAB	417709-66
20	1750/2300	LC2512ATZ	240	150	71	4.14	**D2520R**	30,464	N2	640	87	T25S303	STAB	417709-66
		LC2512ATZ	500	150/300	33	2.06	**D5520R**	30,464	N2	640	87	T25S304	STAB	417709-66
25	1750/2300	MC2812ATZ	240	150	87	4.05	**D2525R**	43,228	N2	805	87	T28S301	STAB	417709-67
		MC2812ATZ	500	150/300	41	2.23	**D5525R**	43,228	N2	815	87	T28S302	STAB	417709-67
30	1750/2300	LC2812ATZ	500	150/300	50	1.74	**D5530R**	48,066	N2	895	87	T28S303	STAB	417709-67
40	1750/2300	MC3212ATZ	500	150/300	65	1.82	**D5540R**	65,449	N2	1120	87	T32S301	STAB	417709-68
50	1750/2300	LC3212ATZ	500	150/300	84	1.98	**D5550R**	69,186	N2	1270	87	T32S302	STAB	417709-68

NOTE: Encoder and tachometer kits available.

(a) Field amps at 25°C
(b) Field amps for high voltage connection
(c) TENV enclosure
(d) Power Code D

RPM III Wound Field SCR Drive DPG-FV Motors, 240V & 500V Armature, Power Code C

10 thru 500 Hp NEMA 2113ATZ thru 4414ATZ

Applications: Metals, printing, extruders, cranes, conveyors, machine tools

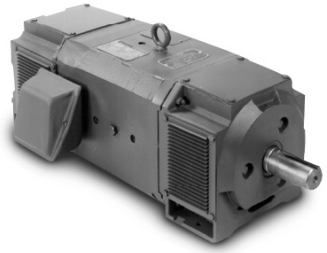
Features: Laminated square frame for improved commutation. Tach adaptable with thermostat. F1 mount unless otherwise specified.

Hp	Base/Max Speed	NEMA Frame	Voltage D.C.		Full Load Amperage		Catalog Number	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Notes	Reliance M/N	Field Type	XPY Tach Kit
			Arm.	Field	Arm.	Field (a)								
10	1750/2300	SC2113ATZ	500	300	18	1.11	**D5010RS-BV**	19,133	N2	345 (c)	101,102	T21T1342	STAB	417708-21
15	1750/2300	SC2113ATZ	240	150	56	4.73	**D2015R-BV**	16,556	N2	345 (d)	103	T21T1359	STR	417708-21
		SC2113ATCZ	240	150	56	4.73	**CD2015R-BV**	17,153	N2	345 (b)	103	T21T1384	STR	417708-21
		SC2113ATZ	500	300	27	2.22	**D5015R-BV**	16,556	N2	375	103	T21T1364	STR	417708-21
		SC2113ATZ	500	300	27	3.03	**D5015RS-BV**	19,133	N2	345 (c)	101,102	T21T1346	STAB	417708-21
20	1750/2300	SC2113ATZ	240	150	76.5	7.12	**D2020R-BV**	16,556	N2	345 (d)	103	T21T1363	STR	417708-21
		SC2113ATZ	500	300	37	3.03	**D5020R-BV**	16,556	N2	390	103	T21T1350	STR	417708-21
		MC2113ATZ	500	300	37	2.24	**D5020RS-BV**	20,894	N2	370 (c)	101,102	T21T1344	STAB	417708-21
25	1750/2300	MC2113ATZ	240	150	96	8.43	**D2025R-BV**	18,317	N2	370 (d)	103	T21T1371	STR	417708-21
		MC2113ATZ	500	300	46	3.32	**D5025R-BV**	18,317	N2	410	6,104	T21T1351	STR	417708-21
		LC2113ATZ	500	300	43	3.07	**D5025RS-BV**	22,483	N2	472 (c)	101,102	T21T1345	STAB	417708-21
30	1750/2300	LC2113ATZ	240	150	109	10	**D2030R-BV**	19,905	N2	400	103	T21T1375	STR	417708-21
		LC2113ATZ	500	300	52	3.3	**D5030R-BV**	19,905	N2	445	103	T21T1352	STR	417708-21
	1750/2300	SC2512ATZ	500	300	51	2.84	**D5030RS-BV**	30,609	N2	535 (c)	101,102	T25T1342	STAB	417708-21
	1150/1800	LC2115ATZ	500	300	54	3.95	**D5130R-BV**	26,587	N2	480	104	T21T1378	STR	417708-21
40	1750/2300	LC2115ATZ	240	150	146	5.63	**D2040R-BV**	26,587	N2	480	6,103	T21T1380	STR	417708-21
	1750/2100	MC2115ATZ	500	300	69	4.49	**D5040R-BV**	23,683	N2	501	103	T21T2353	STR	417708-21
		MC2512ATZ	500	300	68.5	2.88	**D5040RS-BV**	31,738	N2	570 (c)	6,101,102	T25T1344	STAB	417708-21
	1150/2000	LC2512ATZ	500	300	72	5.27	**D5140R-BV**	29,962	N2	640	104	T25T1355	STR	417708-21
50	1750/2100	LC2115ATZ	500	300	87	3.95	**D5050R-BV**	26,587	N2	520	103	T21T2354	STR	417708-21
		LC2512ATZ	500	300	84	3.38	**D5050RS-BV**	32,860	N2	660 (c)	6,101,102	T25T1339	STAB	417708-21
	1150/1900	C2514ATZ	500	300	87	4.06	**D5150R-BV**	34,634	N2	695	6,104	T25T1359	STR	417708-21
60	1750/2300	LC2512ATZ	500	300	102	4.61	**D5060R-BV**	29,962	N2	610	103	T25T2348	STR	417708-21
	1750/2100	MC2812ATZ	500	300	100	3.43	**D5060RS-BV**	45,623	N2	860 (c)	6,101,102	T28T1330	STAB	417708-26
	1150/1900	C2515ATZ	500	300	102	5.18	**D5160R-BV**	39,995	N2	805	6,103	T25T1364	STR	417708-21
75	1750/2100	C2514ATZ	500	300	124	6.21	**D5075R-BV**	34,634	N2	767	103	T25T2349	STR	417708-21
		LC2812ATZ	500	300	124	3.63	**D5075RS-BV**	50,462	N2	885 (c)	6,101,102	T28T1327	STAB	417708-26
	1150/2000	C2815ATZ	500	300	125	4.15	**D5175R-BV**	56,918	N2	1125	6,103	T28T1342	STR	417708-26
100	1750/2000	C2515ATZ	500	300	167	6.7	**D50100R-BV**	39,995	N2	890	103	T25T2350	STR	417708-21
		MC3212ATZ	500	300	162	3.34	**D50100RS-BV**	67,915	N2	1210(c)	6,101,102	T32T1314	STAB	417708-26
	1150/1850	C2815ATZ	500	300	168	4.15	**D51100R-BV**	56,918	N2	1239	6,104	T28T1344	STR	417708-26
125	1750/2000	C2813ATZ	500	300	204	6.93	**D50125R-BV**	49,873	N2	997	6,103	T28T1333	STR	417708-26
		UC2813ATZ	500	300	204	6.93	**D50125UR-BV**	51,108	N2	945	5,6,103	T28T1349	STR	417708-26
	1750/2000	LC3212ATZ	500	300	203	4.4	**D50125RS-BV**	71,773	N2	1290 (c)	6,101,102	T32T1318	STAB	417708-26
	1150/2000	UC3214ATZ	500	300	204	8.37	**D51125RR-BV**	73,535	N2	1475	5,6,103	T32T1327	STR	417708-26
150	1750/2000	C2815ATZ	500	300	250	10.64	**D50150RE-BV**	56,918	N2	1197	6, 103	T28T1352	STR	417708-26
		UC2815ATZ	500	300	250	10.64	**D50150URE-BV**	58,152	N2	1197	5,6,103	T28T1351	STR	417708-26
		MC3612ATZ	500	300	240	4.81	**D50150RS-BV**	88,976	N2	1630 (c)	6,105	T36S1313	STAB	417708-26
	1150/2000	ULC3612ATZ	500	300	246	8.45	**D51150RR-BV**	89,964	N2	1850	5,6,104	T36S1323	STR	417708-26
200	1750/2100	UC3214ATZ	500	300	322	8.37	**D50200RR-BV**	73,535	N2	1475	5,6,103	T32T1322	STR	417708-26
	1750/2000	LC3612ATZ	500	300	321	5.41	**D50200RS-BV**	91,619	N2	1905 (c)	6,105	T36S1314	STAB	417708-26
	1150/2000	C3613ATZ	500	300	323	10.7	**D51200R-BV**	106,410	N2	1850	6,104	T36S1325	STR	417708-26
250	1750/2000	ULC3612ATZ	500	300	405	8.87	**D50250RR-BV**	89,964	N2	1891	5,6,104	T36S1318	STR	417708-26
		C4011ATZ	500	300	400	6.63	**D50250RS-BV**	124,469	N2	2310 (c)	6,105	T40S1306	STAB	417708-26
	1150/2000	MC4013ATZ	500	300	406	10.7	**D51250R-BV**	145,465	N2	2735	6,104	T40S1317	STR	417708-26
300	1750/2000	LC3613ATZ	500	300	478	12.5	**D50300R-BV**	113,818	N2	2190	6,104	T36S1319	STR	417708-26
	1750/2100	MC4013ATZ	500	300	478	6.5	**D50300RS-BV**	150,442	N2	2815 (c)	6,105	T40S1309	STAB	417708-26
	1150/2000	LC4013ATZ	500	300	485	13.2	**D51300R-BV**	163,196	N2	3015	6,104	T40S1320	STR	417708-26
400	1750/2000	MC4013ATZ	500	300	640	11.9	**D50400R-BV**	145,465	N2	3040	6,104	T40S1314	STR	417708-26
		LC4013ATZ	500	300	635	7.97	**D50400RS-BV**	168,174	N2	3040 (c)	6,105	T40S1311	STAB	417708-26
	1150/1600	C4413ATZ	500	300	644	13	**D51400R-BV**	201,741	N2	3830	6,101,104	T44T1304	STR	417708-156
500	1750/2050	C4412ATZ	500	300	797	10.8	**D50500R-BV**	196,381	N2	3480	6,101,104	T44T1305	STR	417708-156
	1150/1450	C4414ATZ	500	300	805	12.3	**D51500R-BV**	206,180	N2	4560	6,101,104	T44T1306	STR	417708-156

NOTE: Encoder and tachometer kits available.

(a) Field amps at 25°C
(b) 210TC C-Face
(c) Extruder duty enclosed commutator design
(d) Power Code D

RPM III Wound Field SCR Drive DPG Motors, 240V & 500V Armature Power Code C



3 thru 60 Hp NEMA 189ATCZ thru 2812ATZ

Applications: Metals, paper, web processes, extruders, cranes, conveyors, packaging, printing, machine tools.

Features: Unique laminated square frame for improved commutation on rectified power supplies. The square configuration allows for increased rating per frame size. High limit thermostat. Provision for adding adapter mounted feedback device. Class F rated insulation system. Service Line brushes with convenient wear indicating reference lines. PLS™ (Positive Lubrication System) for longer bearing and motor life. F-1 mounting unless otherwise specified.

Hp	Base/Max Speed	NEMA Frame	Voltage D.C.		Full Load Amperage		Catalog Number	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Notes	Reliance M/N	Field Type	XPY Tach Kit
			Arm.	Field	Arm.	Field(a)(b)								
3	1750/2300	DC189ATCZ (c)(e)	240	150	11	1.52	**D2003R**	6,431	N2	161	80,83	T18R1127	STAB	413336-1R
		C1811ATZ	500	300	5.2	0.72	**D5003R**	9,967	N2	197	80	T18R1333 (d)	STR	413336-1R
5	1750/2300	C1811ATZ	240	150	19.2	1.77	**D2005R**	10,358	N2	194	80,83	T18R1318 (d)	STAB	413336-1R
		C1811ATZ	500	300	9	1	**D5005R**	9,967	N2	194	80	T18R1334 (d)	STR	413336-1R
7.5	1750/2300	C1811ATZ	240	150	28	1.95	**D2007R**	10,358	N2	210	80,83	T18R1301 (d)	STAB	413336-1R
		C1811ATZ	500	300	13.5	1.29	**D5007R**	9,967	N2	197	80	T18R1335 (d)	STR	413336-1R
10	1750/2300	C1812ATZ	240	150	37	2.13	**D2010R**	11,335	N2	233	80,84	T18R1302 (d)	STAB	413336-1R
		C1812ATZ	500	300	17.4	1.09	**D5010R**	11,335	N2	227	80,85	T18R1307 (d)	STAB	413336-1R
15	1750/2300	SC2113ATZ	240	150	56	4.12	**D2015R**	15,311	N2	315	87	T21S1330	STAB	417708-21
		SC2113ATZ	500	150/300	27	1.76	**D5015R**	15,311	N2	320	87	T21S1322	STAB	417708-21
20	1750/2300	LC2113ATZ	240	150	74	4.23	**D2020R**	18,661	N2	403	87	T21S1331	STAB	417708-21
		MC2113ATZ	500	150/300	35	1.98	**D5020R**	17,074	N2	372	87	T21S1323	STAB	417708-21
25	1750/2300	LC2113ATZ	240	150	91.5	5.84	**D2025R**	18,661	N2	415	87	T21S1332	STAB	417708-21
		LC2113ATZ	500	150/300	43	2.63	**D5025R**	18,661	N2	394	87	T21S1324	STAB	417708-21
30	1750/2300	SC2512ATZ	240	150	111	3.45	**D2030R**	26,466	N2	515	87	T25S1330	STAB	417708-21
		SC2512ATZ	500	150/300	52	1.71	**D5030R**	26,466	N2	520	87	T25S1322	STAB	417708-21
40	1750/2300	LC2512ATZ	500	150/300	68	2.4	**D5040R**	28,717	N2	605	6,87	T25S1323	STAB	417708-21
50	1750/2300	MC2812ATZ	500	150/300	85	2.02	**D5050R**	41,092	N2	766	6,87	T28S1313	STAB	417708-26
60	1750/2100	LC2812ATZ	500	300	100	2.78	**D5060R**	45,931	N2	860	6,87	T28S1314	STAB	417708-26

NOTE: Encoder and tachometer kits available.

(a) Field amps at 25°C
(b) Field amps for high voltage connection
(c) 180 TC C-face
(d) Power Code D
(e) Top mounted conduit box, if blower added, blower must be mounted F-1 or F-2

RPM III DC Motor
Encoder and Tachometer Kits

Applications: Encoder and Tachometer Kits for Field Installation

Features: Kits include the encoder or tachometer and all mounting hardware required for installation on RPM III DC Motors.

Device Type	Output	Catalog Number	Frames	Enclosure	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.
RD120-1	1 x 120 ppr	**417708-30**	DC180, C180, DC2112	DPG, DPFV	3,164	E8	5
		417708-32	C210-C250	DPG, DPFV, TENV	3,164	E8	5
		417708-33	C280-C400	DPG, DPFV, TENV	3,164	E8	5
		417708-153	C440	DPG, DPFV, TENV	3,164	E8	5
RD120-2	2 x 120 ppr	**417708-34**	DC180, C180, DC2112	DPG, DPFV	3,764	E8	5
		417708-36	C210-C250	DPG, DPFV, TENV	3,764	E8	5
		417708-37	C280-C400	DPG, DPFV, TENV	3,764	E8	5
		417708-154	C440	DPG, DPFV, TENV	3,764	E8	5
H20	1024 ppr	**417708-133**	DC180, C180, DC2112	DPG, DPFV, TENV	4,036	E8	5
		417708-134	C210-C250	DPG, DPFV, TENV	4,036	E8	5
		417708-135	C280-C400	DPG, DPFV, TENV	4,036	E8	5
		417708-151	C440	DPG, DPFV, TENV	4,036	E8	5
RL67	1024z ppr	**417708-126**	DC180, C180, DC2112	DPG, DPFV, TENV	5,128	E8	4
		417708-136	C210-C250	DPG, DPFV, TENV	5,128	E8	6
		417708-137	C280-C400	DPG, DPFV, TENV	5,128	E8	6
		417708-138	C440	DPG, DPFV	5,128	E8	4
PTG4590AC	45/90VAC/ 1000RPM	**417708-244**	DC180, C180, DC2112	DPG, DPFV, TENV	4,673	N5	35
		417708-245	C210-C250	DPG, DPFV, TENV	4,673	N5	22
		417708-246	C280-C400	DPG, DPFV, TENV	4,673	N5	22
		417708-247	C440	DPG, DPFV, TENV	4,673	N5	35

Encoder and Tachometer Mounting Kits (less tach)

Applications: Encoder and Tachometer mounting kits for field installation

Features: Kits include all mounting hardware required for installation on RPM III DC motors. Feedback device not included.

Device Type	Catalog Number	Frames	Enclosure	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.
XC42, XC46, BC42, BC46, H56, 800123-R & -S	**413336-2R**	DC180, C180, DC2112	DPG, DPFV, TENV	1,689	A8	9
	417708-22	C210-C250	DPG, DPFV, TENV	1,689	A8	9
	417708-27	C280-C400	DPG, DPFV, TENV	1,689	A8	9
	417708-155	C440	DPG, DPFV, TENV	1,689	A8	9
	417709-21	C180	TEFC	4,245	A8	19
	417709-58	C210	TEFC	4,245	A8	20
	417709-59	C250	TEFC	4,245	A8	23
	417709-60	C280	TEFC	4,245	A8	23
	417709-61	C320	TEFC	4,245	A8	29
XPY, XPYII, 5PY, RPY444	**413336-1R**	DC180, C180, DC2112	DPG, DPFV, TENV	1,689	A8	7
	417708-21	C210-C250	DPG, DPFV, TENV	1,689	A8	7
	417708-26	C280-C400	DPG, DPFV, TENV	1,689	A8	7
	417708-156	C440	DPG, DPFV, TENV	1,689	A8	8
	417709-17	C180	TEFC	4,245	A8	6
	417709-65	C210	TEFC	4,245	A8	6
	417709-66	C250	TEFC	4,245	A8	9
	417709-67	C280	TEFC	4,245	A8	15
	417709-68	C320	TEFC	4,245	A8	18
RL67	**417708-40**	DC180, C180, DC2112	DPG, DPFV, TENV	1,091	A8	1
	417708-41	C210 - C250	DPG, DPFV, TENV	1,091	A8	2
	417708-42	C280 - C400	DPG, DPFV, TENV	1,091	A8	1
	417708-157	C440	DPG, DPFV, TENV	1,091	A8	1

Blower Kits for use with RPM III DC Motors
Suitable for operation on 230/460V or 240/480V, 3-Phase, 50/60 Hz

Motor Frame	Catalog Number	List Price	Mult. Sym.	Ap'x. Shpg. Wgt. (lb)	Description
C180ATZ, DC180ATZ	**417077-51**	1,491	A8	44	Blower Kit Without Filter
C210ATZ	**419947-29**	1,491	A8	83	Blower Kit Without Filter
C250ATZ	**419947-30**	1,491	A8	39	Blower Kit Without Filter
C280ATZ	**419947-32**	1,823	A8	84	Blower Kit Without Filter
C320ATZ	**419947-34**	2,123	A8	90	Blower Kit Without Filter
C3612ATZ	**417077-74**	2,123	A8	90	Blower Kit Without Filter
C3613ATZ	**417077-127**	2,123	A8	110	Blower Kit Without Filter
C400ATZ	**417077-75**	2,324	A8	85	Blower Kit Without Filter
C440ATZ	**417077-126**	4,738	A8	225	Blower Kit Without Filter

Filter Kits for use with DPG-FV, RPM III DC Motors

Motor Frame	Catalog Number	List Price	Mult. Sym.	Ap'x. Shpg. Wgt. (lb)	Description
C180ATZ, DC180ATZ	**417077-57**	911	A8	2	Washable Wire Mesh Canister Type
C2113ATZ	**417077-58**	911	A8	4	Washable Wire Mesh Canister Type
C2115ATZ	**417077-59**	911	A8	4	Washable Wire Mesh Canister Type
C2512ATZ	**417077-58**	911	A8	4	Washable Wire Mesh Canister Type
C2514ATZ	**417077-59**	911	A8	4	Washable Wire Mesh Canister Type
C2515ATZ	**417077-59**	911	A8	4	Washable Wire Mesh Canister Type
C2812ATZ	**417077-59**	911	A8	4	Washable Wire Mesh Canister Type
C2813ATZ	**417077-59**	911	A8	4	Washable Wire Mesh Canister Type
C2815ATZ	**417077-59**	911	A8	4	Washable Wire Mesh Canister Type
C3210ATZ	**417077-59**	911	A8	4	Washable Wire Mesh Canister Type
C3212ATZ	**417077-59**	911	A8	4	Washable Wire Mesh Canister Type
C3214ATZ	**417077-59**	911	A8	4	Washable Wire Mesh Canister Type
C3612ATZ	**417077-65**	1,165	A8	7	Washable Wire Mesh Canister Type
C3613ATZ	**417077-102**	1,642	A8	6	Washable Wire Mesh Canister Type
C400ATZ	**417077-102**	1,642	A8	6	Washable Wire Mesh Canister Type
C440ATZ	**417077-124**	1,893	A8	22	Square Replaceable Polyester Type

Sliding Bases for RPM III DC Motors

Applications: Used for adjusting belt tension on belted applications. Not suitable for wall or ceiling mounting.

Motor Frame	Catalog Number	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Description	Dimension Sheet
DC1810ATZ	**42384-26D**	319	A8	14	Standard Duty	609987-501
DC1811ATZ	**42384-26BE**	319	A8	17	Heavy Duty	609987-501
C1811ATZ	**42384-26BE**	278	A8	17	Heavy Duty	609987-1
C1812ATZ	**42384-26BF**	319	A8	17	Heavy Duty	609987-1
DC2112ATZ	**42384-26BH**	545	A8	29	Heavy Duty	609958-51
C2113ATZ	**419914-1A**	545	A8	50	Heavy Duty	609957-1
C2115ATZ	**419914-1P**	545	A8	36	Heavy Duty	609957-1
C2512ATZ	**419914-1B**	634	A8	33	Heavy Duty	609957-1
C2514ATZ	**419914-1R**	634	A8	59	Heavy Duty	609957-1
C2515ATZ	**419914-1S**	634	A8	36	Heavy Duty	609957-1
UC2812ATZ	**419914-1C**	1,223	A8	37	Heavy Duty	609957-1
UC2813ATZ	**419914-1T**	1,223	A8	26	Heavy Duty	609957-1
UC2815ATZ	**419914-1U**	1,223	A8	42	Heavy Duty	609957-1
UC3212ATZ	**419914-1D**	1,606	A8	69	Heavy Duty	609977-1
UC3214ATZ	**419914-1W**	1,606	A8	76	Heavy Duty	609977-1
UC3612ATZ	**419914-1E**	2,166	A8	76	Heavy Duty	609977-1
UC3613ATZ	**419914-1X**	2,166	A8	81	Heavy Duty	609977-1

SCR Drive Motors Shunt and Stabilized Shunt Wound - DPFG, Self Ventilated, Rigid Base

5 thru 250 Hp NEMA L186AT thru 506AT

Applications: Conveyors, plastic extruders, packaging machinery and other constant torque applications for DC SCR motors.

Features: Includes thermostat on interpole. Class F insulation system resistant to dirt, carbon, dust and moisture. High dielectric stability. Low moment of inertia armature for fast response. Constant pressure brush springs and longer brushes for reduced maintenance. Includes grease fittings and reliefs for bearing maintenance. Power code C and D or M-G sets. Maximum RPM by field weakening. Provisions for tach mounting. (See tach mounting kits). May be converted to blower ventilated (DPBV) for extended constant torque speed range.

Hp	Base/Max Speed [a]	NEMA Frame	Voltage D.C.		ull Load Amperage		Catalog Number	List Price Motors Only [c]	Mult. Sym.	Ap'x. Shpg. Wgt. [d]	XPY Tach Kit	Blower Catalog Number	Notes [e]
			Arm.	Field	Arm.	Field [b]							
5	1750/2300	L186AT	240	150/300	17.7	.74	**D2005P**	6,242	N2	180	TKP1836XP	FVB3180	2,20
			500	150/300	8.5	.669	**D5005P**	6,242	N2	162	TKP1836XP	FVB3180	2,20
7 1/2	1750/2300	1810AT	240	150/300	27.8	.92	**D2007P**	7,258	N2	218	TKP1836XP	FVB3180	2,20
		218AT	500	150/300	13.2	.685	**D5007P**	8,009	N2	235	TKP1836XP	FVB3210	2,20
10	1750/2300	219AT	240	150/300	36.6	2.14	**D2010P**	8,238	N2	245	TKP1836XP	FVB3210	2,20
			500	150/300	17.2	1.36	**D5010P**	8,238	N2	255	TKP1836XP	FVB3210	2,20
15	1750/2300	258AT	240	150/300	55	2.60	**D2015P**	9,861	N2	375	TKP1836XP	FVB3250	2,20
			500	150/300	25.2	1.39	**D5015P**	9,861	N2	375	TKP1836XP	FVB3250	2,20
20	1750/2300	259AT	240	150/300	70.5	2.48	**D2020P**	11,273	N2	430	TKP1836XP	FVB3250	2,20
			500	150/300	35.1	1.24	**D5020P**	11,273	N2	430	TKP1836XP	FVB3250	2,20
25	1750/2300	288AT	240	150/300	89.2	2.96	**D2025P**	15,236	N2	575	TKP1836XP	FVB4280	2,20
		287-8AT	500	150/300	43.4	1.64	**D5025P**	15,236	N2	490	TKP1836XP	FVB4280	2,20
30	1750/2300	288AT	240	150/300	106	2.96	**D2030P**	15,236	N2	595	TKP1836XP	FVB4280	2,20
			500	150/300	50	2	**D5030P**	15,236	N2	590	TKP1836XP	FVB4280	2,20
40	1750/2100	328AT	500	150/300	67.9	2.16	**D5040P**	20,393	N2	784	TKP1836XP	FVB6320	2,20
50	1750/2100	328AT	500	150/300	83.7	1.99	**D5050P**	20,393	N2	822	TKP1836XP	FVB6320	2,20
60	1750/2100	365-6AT	500	150/300	98.6	1.74	**D5060P**	27,343	N2	790	TKP1836XP	FVB6400	2,20
75	1750/2100	366AT	500	150/300	123	1.48	**D5075P**	27,343	N2	905	TKP1836XP	FVB6400	2,20
100	1750/2000	368AT	500	150/300	158	3	**D50100P**	36,878	N2	1100	TKP1836XP	FVB6400	2,20
125	1750/2000	407AT	500	150/300	200	3	**D50125P**	42,414	N2	1445	TKP400XP	FVB6400	2,20
150	1750/2000	409AT	500	150/300	237	2.34	**D50150P**	52,882	N2	1785	TKP400XP	FVB6400	2,20
200	1750/1900	504AT	500	150/300	320	3.9	**D50200P**	65,981	N2	2095	TKP500XP	FVB8500	2,20
250	1750/1900	506AT	500	150/300	392	5.01	**D50250P**	79,067	N2	2540	TKP500XP	FVB8500	2,20

NOTES:

(a) DPFG enclosure is self-ventilated. Speed can be reduced to approximately 60% of base speed with constant torque. See performance data in CA608 catalog for specific speed-torque curves. Separate blower can be used to increase operating range below 60% of base speed.

(b) Field amps are for 150V connection on 240VDC motors; 300V connection on 500VDC motors. Others are 2 pole shunt.

(c) Does not include price of blower.

(d) Does not include weight of blower.

(e) See notes on the last page of this catalog.

180 frame motors are supplied without external conduit box.

SCR Drive Motor Shunt and Stabilized Shunt Wound DPBV Enclosure - Rigid Base

40 thru 500 Hp — NEMA 328AT thru 5010AT

Applications: Conveyors, plastic extruders, packaging machinery and other constant torque applications for DC SCR motors.

Features: Includes thermostat on interpole. Class F insulation system resistant to dirt, carbon, dust and moisture. High dielectric stability. Low moment of inertia armature for fast response. Constant pressure brush springs and longer brushes for reduced maintenance. Includes grease fittings and reliefs for bearing maintenance. Power code C or M-G sets. Maximum RPM by field weakening. Provisions for tach mounting. (See tach kits). Blower-ventilated, includes filter.

Hp	Base/Max Speed	NEMA Frame	Voltage D.C.		Full Load Amperage		Catalog Number	List Price w/Blower & Filter	Mult. Sym.	Ap'x. Shpg. Wgt.	XPY Tach Kit	Notes (b)
			Arm.	Field	Arm.	Field (a)						
40	1750/2100	328AT	240	150/300	138	2.64	**D2040P-BV**	23,764	N2	855	TKP1836XP	2,20
			500	150/300	67.9	2.16	**D5040P-BV**	23,764	N2	830	TKP1836XP	2,20
50	1750/2100	328AT	240	150/300	175	2.64	**D2050P-BV**	23,764	N2	873	TKP1836XP	2,20
			500	150/300	83.7	1.99	**D5050P-BV**	23,764	N2	885	TKP1836XP	2,20
60	1750/2100	366AT	240	150/300	201	5.58	**D2060P-BV**	30,715	N2	980	TKP1836XP	2,20
		365-6AT	500	150/300	98.6	1.74	**D5060P-BV**	30,715	N2	880	TKP1836XP	2,20
75	1750/2100	366AT	240	150/300	256	5.58	**D2075P-BV**	30,715	N2	975	TKP1836XP	2,20
			500	150/300	123	1.48	**D5075P-BV**	30,715	N2	960	TKP1836XP	2,20
100	1750/2000	368AT	500	150/300	158	3	**D50100P-BV**	40,250	N2	1145	TKP1836XP	2,20
125	1750/2000	368AT	500	150/300	197	3	**D50125P-BV**	40,250	N2	1170	TKP1836XP	2,20
150	1750/2000	407-9AT	500	150/300	238	2.69	**D50150P-BV**	46,126	N2	1519	TKP400XP	2,20
200	1750/1900	409AT	500	150/300	311	3.75	**D50200P-BV**	57,457	N2	1830	TKP400XP	2,20
250	1750/1900	504-6AT	500	150/300	405	4.85	**D50250P-BV**	70,339	N2	2175	TKP500XP	2,20
300	1750	506AT	500	150/300	478	6.2	**D50300P-BV**	83,425	N2	2629	TKP500XP	2,20
400	1750/1900	508AT	500	150/300	624	6.07	**D50400P-BV**	117,765	N2	3285	TKP5006XP	2,20
500	1750/1900	5010AT	500	150/300	788	6.03	**D50500P-BV**	154,655	N2	4170	TKP500XP	2,20

NOTE: (a) Field amps are for 150V connection on 240VDC motors; 300V connection on 500VDC motors.
360 through 500 frames are 4 pole stabilized shunt. Others are 2 pole shunt. Tach mounting kits available.
(b) See notes on the last page of this catalog..

SCR Drive Motor 240V Armature - 240V Field Shunt Wound DPFG - Self-Ventilated Rigid Base and C-Face

3 thru 15 Hp — NEMA L186ATC thru 258ATC

Applications: Conveyors, plastic extruders, packaging machinery and other constant torque applications for DC SCR motors.

Features: Includes thermostat on interpole. Class F insulation system resistant to dirt, carbon, dust and moisture. High dielectric stability. Low moment of inertia armature for fast response. Constant pressure brush springs and longer brushes for reduced maintenance. Includes grease fittings and reliefs for bearing maintenance. Power code C or M-G sets. Maximum RPM by field weakening.

Hp	Base/Max Speed	NEMA Frame	Voltage D.C.		Full Load Amperage		Catalog Number	List Price Motor (b)	Mult. Sym.	Ap'x. Shpg. Wgt. (c)	XPY Tach Kit	Blower Catalog Number	Notes (d)
			Arm.	Field	Arm.	Field (a)							
3	1750/2300	L186ATC	240	120/240	10.6	.445	**CD2003P-2**	6,453	N2	170	TKP1836XP	FVB3180	2
5	1750/2300	L186ATC	240	120/240	17.7	.484	**CD2005P-2**	6,453	N2	170	TKP1836XP	FVB3180	2
7 1/2	1750/2300	1810ATC	240	120/240	28.1	.458	**CD2007P-2**	7,468	N2	222	TKP1836XP	FVB3180	2
10	1750/2300	219ATC	240	120/240	36.6	1.26	**CD2010P-2**	8,834	N2	250	TKP1836XP	FVB3210	2
15	1750/2300	258ATC	240	120/240	55	1.25	**CD2015P-2**	10,458	N2	408	TKP1836XP	FVB3250	2

NOTE: (a) Field amps for 240VDC connection. (b) Does not include price of blower and filter.
(c) Does not include weight of blower and filter.
(d) See notes on the last page of this catalog. 180 frame motors are supplied without external conduit box.

Shunt Wound SCR Drive Motor - TEFC, Rigid Base

5 thru 25 Hp NEMA 1810AT THRU 328AT

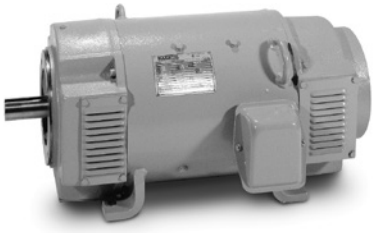
Applications: Conveyors and packaging machinery.

Features: Includes thermostat on interpole, grease fittings and reliefs. Class F insulation system. Constant pressure brush springs and precision brush holders. Provisions for tach mounting (See tach mounting kits).

Hp	Base/Max Speed	NEMA Frame	Voltage D.C.		Full Load Amperage		Catalog Number	List Price Motors Only	Mult. Sym.	Ap'x. Shpg. Wgt.	XPY Tach Kit	Notes (b)
			Arm.	Field	Arm.	Field (a)						
5	1750/2300	1810AT	240	150/300	17.6	0.764	**D2505P**	9,004	N2	220	N/A	2
			500	150/300	8.3	0.382	**D5505P**	9,004	N2	214	N/A	2
7 1/2	1750/2300	2110AT	240	150/300	26.6	2.10	**D2507P**	10,480	N2	300	TKP2136XPT	2
			500	150/300	12.3	1.05	**D5507P**	10,480	N2	310	TKP2136XPT	2
10	1750/2300	259AT	240	150/300	34.3	1.72	**D2510P**	13,020	N2	250	TKP2136XPT	2
			500	150/300	16.3	0.86	**D5510P**	13,020	N2	250	TKP2136XPT	2
15	1750/2300	288AT	240	150/300	51.7	1.96	**D2515P**	17,374	N2	630	TKP2136XPT	2
			500	150/300	24.5	0.99	**D5515P**	17,374	N2	630	TKP2136XPT	2
20	1750/2300	328AT	240	150/300	68.8	2.22	**D2520P**	22,882	N2	850	TKP2136XPT	2
			500	150/300	32.7	1.11	**D5520P**	22,882	N2	875	TKP2136XPT	2
25	1750/2300	328AT	240	150/300	84.8	2.22	**D2525P**	22,882	N2	872	TKP2136XPT	2
			500	150/300	40.9	1.11	**D5525P**	22,882	N2	875	TKP2136XPT	2

NOTE: (a) Field amps are for 150V connection on 240VDC motors; 300V connection on 500VDC motors. Tach mounting kits available.
(b) See notes on the last page of this catalog.
180 frame motors are supplied without external conduit box.

Lifting Magnet Generators



5 thru 40 kW NEMA 1810AT thru 329AT

Applications: Crane mounted lifting magnets for recyclers and steel mills.

Features: Heavy duty steel frame. Cast iron endplates. Class H insulation with Class F temperature rise. Precision brush holders. Constant force brush springs. Double sealed ball bearings. Compound wound with drooping voltage characteristics. DPFG enclosure. Weather resistant paint. F-2 conduit box. CDMG generators have C-face and base mounting for hydraulic pump or PTO mounting.

kW	Base Speed	NEMA Frame	Voltage D.C.		Full Load Amperage		Catalog Number	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Field Control Rheostat		Notes (a)
			Arm.	Field	Arm.	Field					Ohms	Amp Max.	
5	2500	1810AT	230	230	21.7	0.62	**DMG2305**	7,521	N2	220	300	0.85	2
7 1/2	2500	219AT	230	230	32.6	1.15	**DMG2307**	8,652	N2	245	150	1.6	2
10	2500	219AT	230	230	43.5	0.878	**DMG2310**	9,589	N2	250	200	1.4	2
		219ATC	230	230	43.5	0.878	**CDMG2310**	10,190	N2	250	200	1.4	2
15	1750	259AT	230	230	65	1.33	**DMG2315**	16,097	N2	250	200	1.82	2
		259ATC	230	230	65	1.33	**CDMG2315**	16,684	N2	250	200	1.82	2
20	1750	288AT	230	230	87	1.8	**DMG2320**	17,622	N2	595	125	2.52	2
		288ATC	230	230	87	1.8	**CDMG2320**	18,625	N2	613	125	2.52	2
25	1750	328AT	230	230	109	2.13	**DMG2325**	19,269	N2	820	100	3.0	2
		328ATC	230	230	109	2.13	**CDMG2325**	20,265	N2	886	100	3.0	2
33	1750	328AT	230	230	144	2.13	**DMG2333**	24,435	N2	840	100	3.0	2
		328ATC	230	230	144	2.13	**CDMG2333**	25,423	N2	880	100	3.0	2
40	1750	329AT	230	230	174	3.7	**DMG2340**	26,785	N2	910	50	5.2	2

NOTE: Field control rheostat and meters are not included in price or available.
(a) See notes on the last page of this catalog..

Tach Mounting Kits and Cooling Blowers for DC Integral Hp Motors

Applications: Allows addition of DC, AC and digital tachometers to large DC motors for closed-loop operation.

Features: Tach mounting kits supply adapter, coupling, accessory shaft and mounting hardware. Allows mounting to 8.5 inch accessory face on most large DC motors.

Tach Mounting Kits for DC Integral Hp Motor Catalog No. Ending With "P"

Tach Type	Motor Frame	Motor Enclosure	Catalog Number	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.
XPYII	180/360	DPFG, DPBV	**TKP1836XP**	1,142	A8	1
XPY, DPY	210/360	TEFC	**TKP2136XPT**	1,142	A8	13
BTG1000	400	DPFG, DPBV	**TKP400XP**	1,142	A8	2
	500	DPFG, DPBV	**TKP500XP**	1,142	A8	3
XC42 or	210/360	DPFG, DPBV	**TKP2136XC**	1,689	A8	16
XC46	500	DPFG, DPBV	**TKP500XC**	1,689	A8	7
	180/360	DPFG, DPBV	**TKP1836ENC**	867	A8	17
ENC00NV	400	DPFG, DPBV	**TKP400ENC**	867	A8	16
ENCODER	500	DPFG, DPBV	**TKP500ENC**	867	A8	17
	210/360	DPFG, DPBV	**TKP2136NC**	65	A8	3
NCS	400	DPFG, DPBV	**TKP400NC**	65	A8	1
PANCAKE	500	DPFG, DPBV	**TKP500NC**	65	A8	1
	210/360	DPFG, DPBV	**TKP2136AC**	65	A8	2
AC	400	DPFG, DPBV	**TKP400AC**	65	A8	1
PANCAKE	500	DPFG, DPBV	**TKP500AC**	65	A8	1

Blower and Mounting Kits for DC Integral Hp Motor Catalog No. Ending With "P"

Motor Frame	Catalog Number	Blower Power	Blower Size	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.
Blower and Mounting Kit						
180	**FVB3180**	1 PH	LM 3	1,491	A8	18
210	**FVB3210**	3 PH	LM 3	1,491	A8	25
250	**FVB3250**	3 PH	LM 3	1,491	A8	19
280	**FVB4280**	3 PH	LM 4	1,823	A8	44
320	**FVB6320**	3 PH	LM 6	2,123	A8	46
360-400	**FVB6400**	3 PH	LM 6	2,323	A8	59
504-506	**FVB8500**	3 PH	LM 8	2,750	A8	93
508-5012	**FVB95010** [a]	3 PH	LM 9	4,738	A8	171
Filter and Hardware for Above Blowers						
180, 210, 250	**FLT3210-250** [b]	-	LM 3	791	A8	2
280	**FLT4280**	-	LM 4	791	A8	9
320,360,400	**FLT6320-400**	-	LM 6	791	A8	14
504-506	**FLT8500**	-	LM 8	965	A8	9

NOTE: [a] Includes Blower and Filter. [b] Also used with FVB3180.

Tach Generators DC, AC and Digital Output

Applications: Speed feedback for controls (encoders also offer position feedback).

Features: Ball bearing construction, standard mounting flanges and/or feet.

Generator Type	Voltage	Catalog Number	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.
XPY Flange Mount (DC)					
30AFL-O	50VDC	**BTG1000**	559	DS	7
XPYIII	100VDC	**BTG100XPS**	1,021	N5	6
XPYII	100VDC	**PTG100XPS**	1,509	N5	10
XPY	100VDC	**PTG100XP**	1,453	N5	6
XPYIII	50VDC	**BTG50XPS**	1,021	N5	2
XPYII	50VDC	**PTG50XPS**	1,509	N5	8
XPY	50VDC	**PTG50XP**	1,453	N5	6
XPY Washdown Flange Mount (DC)					
XPYII	100VDC	**PTGWD100XPS**	1,607	N5	10
XPYIII	100VDC	**BTGWD100XPS**	1,214	N5	2
XPYII	50VDC	**PTGWD50XPS**	1,607	N5	10
XPYIII	50VDC	**BTGWD50XPS**	1,214	N5	2
Encoder Based Digital PY Flange Mount					
DPY	1024PPR	**PTG1024LD** (a)	1,895	N5	1
Electrically Isolated Encoder					
E-ACC	1024PPR	**ENC00NV** (a) (b)	1,932	E8	2
Metric Flange Mount (DC)					
XPY	60VDC	**PTG60XP-M** (c)	1,453	N5	5
XPYII	60VDC	**PTG60XPS-M** (c)	1,509	N5	11
XPYIII	60VDC	**BTG60XPS-M** (c)	1,021	N5	2
Foot Mount (DC)					
XPY	100VDC	**PFTG100XP**	1,453	N5	6
XPY	50VDC	**PFTG50XP**	1,453	N5	6
Foot Mount with Face (DC)					
XC42	100VDC	**PFTG42100X**	2,857	N5	33
XC42	50VDC	**PFTG4250XC**	2,920	N5	32
XC46	100VDC	**PFTG46100X**	5,021	N5	43
XC46	50VDC	**PFTG4650XC**	5,021	N5	44
Pancake Mount (AC & DC)					
AC	45/90VAC	**PTG4590AC** (d) **	1,396	N5	8
NCS	50VDC	**PTG50NC** (d) **	2,085	N5	8

NOTE: Flange mounted tachs require tach adapters shown in the Tach Mounting Kits. XPY tachs have UL listing, file number E109527, CSA file number LR36841-5, XPYII tachs are pending approval.

(a) See feedback cables.

(b) Electrically isolated encoder & kit: Mounts to SCR motors using appropriate adapter shown In Tach Mounting Kits may eliminate the need for EXB00801 isolated encoder feedback board.

(c) Requires adapter for metric flange tach. Will not mount on adapters for PY flanges.

(d) Does not mount to TEFC. See catalog MN605 for details.

Field Conversion Tach Mounting Kits for Permanent Magnet and Shunt Wound Motor

For PY Flange mounted BTG1000, XPY, XPYII and DPY tachometers

Complete kits consisting of fan cover (except TK3300), shaft extension coupling and tach adapter bracket with miscellaneous hardware. If you prefer, the conversion can be ordered through Mod Express program. Tach kits will not work with Explosion Proof Motors (CDPX or CDX). See PY flange mount tachs.

Motor Type	Kit Catalog Number	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.
3300P	**TK3300**	202	A8	1
3400D/P	**TK3400**	358	A8	4
3500D/P	**TK3500**	377	A8	9
3600D	**TK3600**	498	A8	10
3600P	**TK3600PM**	498	A8	7
7500D	**TK7500**	516	A8	17
9100D	**TK9100**	557	A8	23

NEMA 1 Enclosed DC Controls for PMDC and Shunt Wound Motors

1/100 thru 2 Hp 115/230 VAC Single Phase 50/60 Hz.

BC140-FBR
Enclosed
(NEMA 1)

BC138
Enclosed
(NEMA 1)

Applications: General purpose industrial use with permanent magnet or shunt wound DC motors.

Features: SCR controls have a free-wheeling diode and feature adjustable accel, decel, current limit, IR comp, min. and max speed pots to match applications. The anti-demag feature protects PM motors and helps protect the SCR power bridge against direct shorts. The controls have US and Canadian UL component recognition.

A Plug-in Horsepower Resistor® and armature fuse **must** be ordered and installed in BC138, BC139, BC140 and BC140-FBR.

Hp Range	Catalog Number	List Price	Mult. Sym.	Ap'x Shpg. Wgt. Lbs.	Input Voltage
1/100-1/3	**BC138**	218	E9	1	115
1/50-3/4	**BC139**	218	E9	1	230
1/100-2 [(a)]	**BC140**	369	E9	3	115/230
1/100-2 [(a)]	**BC140-FBR**	510	E9	3	115/230

NOTE: [(a)] 1 Hp at 115V and 2 Hp at 230V requires BC143 heatsink kit. See specification pages at the end of this section for details. FBR=Forward/Brake/Reverse.

DC Control Accessories

Catalog Number	Description	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.
BC24-LF	Ac Line Filter for use with CE Applications	75	E9	1
BC143	External Heatsink Kit (BC140, BC140-FBR, BC141, BC142, BC204)	72	E9	2
BC144	Forward-Brake-Reverse Switch Kit for BC140	124	E9	1
BC145	Signal Isolator Board	211	E9	1
BC147	Barrier Terminal Board (BC141 and BC142)	30	E9	1
BC148	Replacement Potentiometer Kit (5K ohm)	13	E9	1
BC149	Knob and Dial Kit	15	E9	1
BC152	Barrier Terminal Board With Signal Isolator (BC141 and BC142)	193	E9	1
BC218	DIN-rail mounting kit for BC141, BC142 or BC204	36	E9	1

NOTE: BC24-LF is an AC line filter required for applications where CE is required if the control is not filtered elsewhere in the application. This filter may be used on most 115 or 230 VAC, single phase applications where CE is required.

Chassis Mount DC Controls

1/100 thru 1.5 Hp **115 VAC Single Phase 50/60 Hz.**
1/50 thru 5 Hp **230 VAC Single Phase 50/60 Hz.**

BC142

Applications: General purpose industrial use with permanent magnet or shunt wound DC motors.

Features: Chassis-mount SCR controls have a free-wheeling diode and feature adjustable accel, decel, current limit, IR comp, min and max speed pots to match applications. The anti-demag feature protects PM motors and helps protect the SCR power bride against direct shorts. The controls have US and Canadian UL component recognition.

A Plug-in Horsepower Resistor® and armature fuse **must** be ordered and installed in all versions of BC141 and BC142.

Hp Range	Catalog Number	Description Input Voltage / Max. Hp	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Input Voltage
1/100-1 1/2 (a)	**BC141**	Standard Model, single voltage	202	E9	1	115
1/100-1 1/2	**BC141-SIH**	BC141 with BC152 Signal Isolator and BC143 Heatsink factory installed	477	E9	2	115
1/100-3 (a)	**BC142**	Standard Model, single voltage	202	E9	2	230
1/100 - 3	**BC142-SIH**	BC142 with BC152 Signal Isolator and BC143 Heatsink factory installed	499	E9	2	230
1/100-1 1/2 (a) 1/50-3	**BC142-5**	Dual voltage, without fuse holders	225	E9	1	115/230
1/100 - 1 1/2 (a) 1/50 - 3	**BC142-6**	Standard Model, dual voltage	224	E9	1	115/230
1/100 - 1 1/2 1/50 - 3	**BC142-6SIH**	BC142-6 with BC152 signal isolator board and BC143 heatsink factory installed	499	E9	1	115/230
5 (b)	**BC155**	230V - 5 Hp	660	E9	5	230

NOTE: Above controls include 5k speed potentiometer.
(a) 1-1.5 Hp at 115 Volts and 2-3 Hp at 230 Volts, requires BC143 Heatsink kit.
(b) BC155 Includes integral heatsink. No fuses are needed. See specification pages at the end of this section for details.

Plug-in Horsepower Resistor and Fuse Kit

These should be selected based on the motor's **rated current**. The price of the Hp resistor and fuse is included in the BC138, BC139, BC140, BC140-FBR, BC141 and BC142 list price.

See selection below for catalog number.

Spare resistor kits are available for $11.00 list, **E9** multiplier.

Motor Hp Armature Voltage		Plug-In Hp Resistor Resistance Value (Ohms)	Catalog Number	Ap'x DC Current (Amps)	DC Fuse Rating For Armature
90-130V	180V				
1/100	1/50	1.0	**BR1000**	0.20	0.5
1/50	1/25	0.51	**BR0510**	0.30	0.5
1/30	1/15	0.35	**BR0350**	0.33	0.5
1/20	1/10	0.25	**BR0250**	0.5	0.75
1/15	1/8	0.25	**BR0251**	0.8	1.0
1/12	1/6	0.18	**BR0180**	0.85	1.25
1/8	1/4	0.1	**BR0100**	1.3	2.0
1/6	1/3	0.1	**BR0101**	2.0	2.5
1/4	1/2	0.05	**BR0050**	2.5	4.0
1/3	3/4	0.035	**BR0035**	3.3	5.0
1/2	1	0.025	**BR0025**	5.0	8.0
3/4	1 1/2	0.015	**BR0015SP**	7.5	12.0
1 (a)	2 (a)	0.01	**BR0010SP**	10	15.0
1 1/2 (a)	3 (a)	0.006	**BR0006**	15	25.0 (b)

NOTE: (a) External Heatsink required.
(b) Also used with AC Line Fuse. For AC line fuse rating see manual.

NEMA 4X DC Control and Accessories

1/4 thru 2 Hp **115/230 VAC** **Single Phase 50/60 Hz.**
3 Hp **230 VAC** **Single Phase 50/60 Hz.**

BC154 / BC160 / BCWD140 / BC354

Applications: Constant torque, new or replacement.

Features: BC154, BCWD140 and BC160 are non-regen controls with reversal by means of switching the armature leads (BCWD140 has a forward/brake/reverse switch mounted). BC254 is a line regenerative SCR control that can drive the motor to a timed stop. BC354 is a PWM control that provides low-ripple DC power to the motor allowing more Hp when used with a 130 or 260 VDC motor. All offer a choice of armature or tachometer feedback and a speed or torque mode. No Hp resistors are needed for these controls, current is jumper selectable. BC154, BC160, BC254 and BC354 are painted white and come with a start-stop switch. BCWD140 comes with white epoxy paint and also forward/brake/reverse and run-jog switches. See specification pages at the end of this section for details.

Hp Range	Catalog Number	Description Input Voltage / Max. Hp	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Input Voltage
		NEMA 4X SCR				
1/4-2	**BC154**	Standard model - 120V - 1 Hp, 230V - 2 Hp	467	E9	5	115/230
	BC154-P	BC154 with POWER SWITCH instead of START/STOP SW.	467	E9	5	115/230
	BC154-R	BC154 with BC156 - FBR Switch factory installed	616	E9	5	115/230
	BC154-SI	BC154 with BC145 Signal Isolator Board and BC158 Auto/Man Switch kit factory installed	751	E9	5	115/230
3	**BC160**	120V - 1.5 Hp, 230V - 3 Hp	537	E9	3	115/230
		NEMA 4X Washdown Duty SCR				
1/4-2	**BCWD140**	120V - 1 Hp, 230V - 2 Hp	625	E9	6	115/230
		NEMA 4X Washdown Duty Line Regen SCR				
1/8-2	**BC254**	120V - 1 Hp, 230V - 2 Hp (a)	673	E9	5	115/230
	BC254-FBR	BC254 with BC253 FWD-BRAKE-REV switch factory installed	706	E9	5	115/230
		NEMA 4X Washdown Duty PWM DC (b)				
1/4-2	**BC354**	120V - 1 Hp, 230V - 2 Hp	723	E9	5	115/230

NOTE: (a) See the next page for BC254 accessories.
(b) Output current is 7.5 amps; Output voltage is 130VDC for 115VAC input - 260VDC for 230VAC input. Motors designed for these voltages will give the best performance.

DC SCR NEMA 4X DC Control Accessories

Catalog Number	Description	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.
BC153	Electronic Forward-Dynamic Brake-Reverse Kit for BC154, BC354	223	E9	1
BC156	Mechanical Forward-Dynamic Brake-Reverse Switch for BC154, BC354	145	E9	1
BC157	Run/Jog switch for BC154 & BC160, BC354	27	E9	1
BC158	Auto/Manual Installation Kit for BC145 signal isolator for BC154, BC160, BC354	60	E9	1
BC159	AC Line Switch Kit for BC154, BCWD140, BC254, BC354	32	E9	1
BC145	Signal Isolator Board	211	E9	1

NOTE: BC159 AC Line Switch Kit is factory installed on BC154, BCWD140, BC254 and BC354. Listed here as replacement or spare parts.

Line Regenerative DC Controls and Accessories

1/4 thru 3 Hp **115/230 VAC** **Single Phase 50/60 Hz.**
5 Hp **230 VAC** **Single Phase 50/60 Hz.**

Applications: Frequent start/stop/reverse applications or where controlled braking is required.

Features: Single phase line regenerative open chassis control to operate permanent magnet or wound field DC motors. These line regen controls are ideal for applications with overhauling loads. In torque mode, it can be used for tensioning applications. Several accessory boards are available to further customize the control. Includes 5k speed potentiometer. Jumper selectable current settings.

BC200 / BC201

BC204

Hp Range	Catalog Number	Description Input Voltage / Max. Hp	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Input Voltage
		Line Regen SCR				
1/8-2 [(a)]	**BC204**	120V 1 Hp, 230V 2 Hp, Standard Model	377	E9	3	115/230
	BC204-BPSI	BC204 with BC215 Bi-polar Signal Isolator factory installed	487	E9	3	
1/4-2	**BC200**	120V 1 Hp, 230V 2 Hp	704	E9	4	115/230
1/4-3	**BC201**	120V 1-1/2 Hp, 230V 3 Hp	836	E9	1	115/230
5	**BC203**	230V 5Hp	1,052	E9	10	230
		NEMA 4X Washdown Duty Line Regen SCR				
1/8-2	**BC254**	120V - 1Hp, 230V - 2Hp Standard Model	673	E9	5	115/230
	BC254-FBR	BC254 with Power On/Off switch instead of Start/ Stop switch, and BC253. Forward-Brake-Reverse switch factory installed	706	E9	5	115/230

NOTE: (a) 1 Hp at 115 volts and 2 Hp at 230 volts requires BC143 heatsink kit.

Line Regenerative DC Control Accessories

Catalog Number	Description	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.
	Accessories for BC200, BC201 and BC203			
BC212	Bipolar signal isolator board	216	E9	1
	Accessories for BC204			
BC143	External Heatsink Kit	72	E9	2
BC215	Bipolar signal isolator board	100	E9	3
BC216	Multispeed board for BC204	77	E9	1
BC218	DIN rail mounting kit	36	E9	1
	Accessories for BC254			
BC245	Bipolar signal isolator for BC254	213	E9	1
BC253	Forward-Stop-Brake-Reverse Switch for BC254	27	E9	1
BC258	Auto-manual Switch for BC254	60	E9	1
BC259	AC Line Switch for BC254	27	E9	5

NEMA Enclosed DC Control Specifications

Features	Catalog Number					
	BC138	BC139	BC140 or BC140-FBR	BC154	BC160	BCWD140
Enclosure	NEMA 1	NEMA 1	NEMA 1	NEMA 4X	NEMA 4X	NEMA 4X Washdown
Control Type	NEMA K	NEMA K	NEMA K	NEMA K	NEMA K	NEMA K
AC Line Input	115	230	115 230	115 230	230	115 230
DC Armature Voltage Nominal	90	180	90 180	90 180	180	90 180
Shunt Field Power Supply Voltage - DC	50/100	100/200	50/100 100/200	50/100 100/200	100/200	50/100 100/200
Rated Horsepower Range	1/100 - 1/3	1/50-3/4	1/100-1 1/50-2	1/50-1 1/25-2	3	1/50-1 1/25-2
External Heat Sink (BC143) Required	No	No	1 Hp 2Hp	Not Required	Not Required	Not Required
Speed Range (Motor May Be 20: 1 Constant Torque)	50:1	50:1	50:1	50:1	50:1	50:1
Adjustable Acceleration Time	Yes	Yes	Yes	Yes	Yes	Yes
Adjustable Deceleration Time	Yes	Yes	Yes	Yes	Yes	Yes
Minimum Speed Adjustable	Yes	Yes	Yes	Yes	Yes	Yes
Maximum Speed Adjustable	Yes	Yes	Yes	Yes	Yes	Yes
Current Limit Adjustable	Yes	Yes	Yes	Yes	Yes	Yes
Adjustable Current Limit and Trip Out Type	No	No	No	Timed or Non-Timed	Timed or Non-Timed	Timed or Non-Timed
Control Of Speed or Torque	Speed	Speed	Speed	Speed or Torque	Speed or Torque	Speed or Torque
IR Compensation Adjustable	Yes	Yes	Yes	Yes	Yes	Yes
Tachometer Feedback Input	No	No	No	Yes	Yes	Yes
Plug-In Horsepower Resistor ®	Required	Required	Required	N/A	N/A	N/A
UL & cUL Listing, CE	Yes	Yes	Yes	Yes	Yes	Yes
AC Line Fuse	Included	Included	Included	External	External	External
DC Armature Fuse	Included with Hp Resistor	Included with Hp Resistor	Included with Hp Resistor	Not Supplied with Control	External	Not Supplied with Control
Options						
AC Line Switch	Standard	Standard	Standard	Opt - BC159	No	Standard
Forward/Brake/Reverse Switch	No	No	Opt-BC144	Opt-BC156	No	Standard
Mechanical	No	No	No	Opt-BC153	No	Opt-BC153
Electronic						
Run/Jog Switch	No	No	No	Opt-BC157	Opt-BC157	Standard
Input Signal Following Mode Capability Current (1-5, 4-20, 20-50mA)	No	No	External Mount Opt-BC145	Internal Mount Opt-BC145	Internal Mount Opt-BC145	Internal Mount Opt-BC145
Voltage (0-25,0-120, 0-550 VDC)			Opt-BC145	(0-5, 0-10 VDC) input standard	(0-5, 0-10 VDC) input standard	(0-5, 0-10 VDC) input standard
Electrical Connection To Control Barrier Terminal Block	Standard	Standard	Standard	Standard	Standard	Standard
Current Sensing Relay/Overload Protector	No	No	Opt - BC146 External Mount	Standard	Standard	Standard
AC Line Filter for CE	Opt-BC24-LF	Opt-BC24-LF	Opt-BC24-LF	Opt-BC24-LF	Opt-BC24-LF	Opt-BC24-LF

Chassis Mount DC Control Specifications

Features	Catalog Number							
	BC141	BC142	BC142-6	BC155	BC204	BC200	BC201	BC203
Enclosure	Chassis	Chassis	Chassis	Chassis	Chassis	Chassis	Chassis	Chassis
Control Type	NEMA K	NEMA K	NEMA K	NEMA K	Regenerative	Regenerative	Regenerative	Regenerative
AC Line Input	115	230	115 230	230	115 230	115 230	115 230	230
DC Armature Voltage Nominal	90	180	90 180	180	90 180	90 180	90 180	180
Shunt Field Power Supply Voltage - DC	50/100	100/200	50/100 100/200	50/100 100/200	50/100 100/200	50/100 100/200	100/200	100/200
Rated Horsepower Range	1/100-1.5	1/50-3	1/100-1 1/2 1/50-3	5	1/8-1 1/4-2	1/4-1 1/2-2	1/4-1-1/2 1/2-3	5
External Heat Sink (BC143) Required	1 Hp-Up	2 Hp-Up	1/2 Hp-Up 1 Hp-Up	Not Required	90V-1Hp 180V-2Hp	Not Required	Not Required	Not Required
Speed Range (Motor may be 20:1Constant Torque)	50:1	50:1	50:1	50:1	50:1	50:1	50:1	50:1
Adjustable Acceleration	Yes	Yes	Yes	Yes	Yes Fwd & Rev	Yes Fwd & Rev	Yes Fwd & Rev	Yes Fwd & Rev
Adjustable Deceleration	Yes	Yes	Yes	Yes	Regen	Regen	Regen	Regen
Min.. Speed Adjustable	Yes	Yes	Yes	Yes	No	No	No	No
Max. Speed Adjustable	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adjustable Current Limit and Tripout Type	Non Timed	Non Timed	Non Timed	Non Timed	Non Timed	Timed	Timed	Timed
Control of Speed or Torque	Speed	Speed	Speed	Speed Torque	Speed or Torque	Speed or Torque	Speed or Torque	Speed
IR Compensation Adjustment	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Tachometer Feedback Input	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Plug-in Horsepower Resistor®	Required	Required	Required	N/A	N/A	N/A	N/A	N/A
UL & cUL Listing, CE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
AC Line Fuse	Included	Included	Included	External	External	Included	Included	External
DC Armature Fuse	Included with Hp Resistor	Included with Hp Resistor	Included with Hp Resistor	Included with Hp Resistor	External	N/A	N/A	External
Options								
Input Signal Following Mode Capability								
Current (4-20 mA)	Plug on Mount Opt-BC152	Plug on Mount Opt-BC152	Plug on Mount Opt-BC152	External Mount Opt-BC145	No	No	No	No
Current (1-5, 4-20, 20-50 mA)	External Mount Opt-BC145	External Mount Opt-BC145	External Mount Opt-BC145					
Input Signal Voltage (must be isolated)	0-9 VDC Standard	0-9 VDC Standard	0-9 VDC Standard	0-9 VDC Standard	0 to ± 10 VDC Standard	0 to ± 10 VDC Standard	0 to ± 10 VDC Standard	0 to ± 10 VDC Standard
Voltage (0-5, 0-10, 0-100, 0-200, VDC)	Plug on Mount Opt-BC152	Plug on Mount Opt-BC152	Plug on Mount Opt-BC152	External Mount Opt-BC145	±5 to ±25 VDC Opt-BC215	±25 to ±250 VDC Opt-BC212	±25 to ±250 VDC Opt-BC212	±25 to ±250 VDC Opt-BC212
Voltage (0-25, 0-120, 0-550 VDC)	External Mount Opt-BC145	External Mount Opt-BC145	External Mount Opt-BC145					
Electrical Connection To Control Push-On Quick Connects Barrier Terminal Block	Standard Opt-BC147	Standard Opt-BC147	Standard Opt-BC147	No Standard	Standard N/A	No Standard	No Standard	No Standard
Current Sensing Relay/ Overload Protector	Opt-BC146	Opt-BC146	Opt-BC146	Opt-BC146	N/A	Standard	Standard	No Standard
Regenerative Accel / Decel Board	No	No	No	No	No	Opt - BC211	Opt - BC211	Opt - BC211
AC Line Filter for CE	Opt-BC24-LF	Opt-BC24-LF	Opt-BC24-LF	Opt-BC24-LF	Opt-BC24-LF	Opt-BC24-LF	Opt-BC24-LF	Opt-BC24-LF

Soft Starter

30 thru 1040 Amps 208-575V 50/60 Hz.

Applications: Controlled ramp start and stop, minimize spillage in material handling, reduced water hammer in pumping, reduced wear on mechanical gears, eliminate high inrush current. Typical applications include: pumps, conveyors, fans, reciprocating compressors and screw and rotary compressors, crushers and mills.

Features: Six SCR three phase voltage control with programmable starting ramp and current limit. Application software allows easy load type selection and starting/stopping parameter settings. Current sensing provides true starting torque control and motor overload protection during starting and running. Open panel design, with quick ship program for enclosed combination starters.

Design Specifications
- MOV protection
- Current feedback
- Microprocessor Control
- Open chassis
- Keypad interface
- Two programmable inputs
- Three programmable form C outputs

Quick Ship
- NEMA 12/4 enclosures with bypass contactor
- Door mounted disconnect
- Input circuit breaker
- 2 wire Hand-Off-Auto switch
- Indicating lights
- Enclosed combination starters, with circuit breaker disconnect

Environmental and Operating Conditions
- Input voltage 3 phase 208-575V
- Control voltage 120VAC
- Input frequency 50/60 Hz
- Humidity 90% RH condensing
- 3000 feet altitude
- 40°C ambient temperature

Protective Features
- Selectable class motor overload
- Starting and running motor overload
- Locked rotor
- Underload
- Current phase imbalance
- High current
- Phase reversal (input voltage)
- Motor PTC input
- Low/high current warning
- Phase loss

Output	Voltage (Ue)	208-460V, 230-575V
	Current (Ie)	30-1040A
	Horsepower	Voltage and application rated, 7.5 Hp @ 208V to 1000 Hp @ 600V
	Short Circuit	Size dependent 10 kA (30A) to 85 kA (1040A)
	Altitude Derate	0.7% per 330 feet above 3300 feet
	Temperature Derate	0.8% per one °C above 40°C up to 50°C
	Starts per Hour	MST-030 - MST-300 – 30 starts; MST-370 - MST-1050 – 10 starts (50% on / 50% off time)
Overload	Normal Duty	400% of motor current for 30 seconds starting capacity and Class 10 moor running protection
	Heavy Duty	350-400% of motor current for 60 seconds starting capacity and Class 30 motor running protection
Input Ratings	Voltage	208 - 575V
	Frequency	50/60 Hz
	Phase	Three Phase
Control Spec	Control Method	Microprocessor controlled full wave, three phase, six thyristor firing
	Start Time	Programmable 1-30 seconds, (Normal Range) 1-120 seconds (Heavy Duty Range)
	Stop Time	Programmable 0-255 seconds
	Voltage Pedestal	Programmable: Start 10-60%, Kick 60-90%, Stop 10-60%
	Current Limit	800% of rated current
	Power Factor	Continuously monitored to eliminate motor over-flux for power optimizing
	Control Power (U_s)	110-130VAC, 50/60 Hz
SCR Spec	Peak Inverse Voltage	460VAC controllers 1400V
		575VAC controllers 1600V
	Heat Loss	3.3 Watts per 1 Ampere running current
Ambient Conditions	Temperature	Storage: -13°F to 158°F (-25°C to +70°C) operation; 32°F to 104°F (0°C to +40°C)
	Cooling	Convection / Forced Air included / Additional cooling required when installed in enclosure
	Altitude	3300 feet above sea level
Tools	Simulator	Windows® based application tool for programming simulation and settings navigation learning
	Sizing ProSoft	Windows® based starter selection tool with motor information to aim with proper rating choice for starter and motor

Soft Starter - Typical Applications

Normal Starting

- Agitator
- Axial Blower
- Axial Fan
- Band Saw
- Centrifugal Pump
- Chiller
- Escalator
- Low Inertia Fan
- Propeller Fan
- Small Pump
- Large Pump
- Circular Saw
- Conveyor, Screw Feeder
- Drilling Press

Open Starter

Normal Starting (Class 10) 400% torque for 30 seconds					IEC Amps	Catalog Number	List Price	Mult. Sym.	Size
HP				UL Amps					
208V	230V	460V	575V						
7.5	10	20	25	28	30	**MST-030-CA** (1)	1,509	E7	A
10	10	25	30	34	37	**MST-037-CA** (1)	1,543	E7	A
10	15	30	40	42	44	**MST-044-CA** (1)	1,577	E7	A
15	20	40	50	54	50	**MST-050-CA** (1)	1,963	E7	A
20	25	50	60	68	72	**MST-072-CA** (1)	1,992	E7	A
25	30	60	75	80	85	**MST-085-CA**	2,701	E7	B
30	40	75	100	104	105	**MST-105-CA**	2,735	E7	B
40	50	100	125	130	142	**MST-142-CA**	3,830	E7	B
50	60	125	150	156	175	**MST-175-CA**	3,881	E7	C
60	75	150	200	192	210	**MST-210-CA**	4,392	E7	C
75	100	200	250	248	250	**MST-250-CA**	4,936	E7	C
100	100	250	300	302	300	**MST-300-CA**	5,095	E7	C
125	150	300	350	361	370	**MST-370-CA**	6,423	E7	D
150	200	400	500	480	470	**MST-470-CA**	7,944	E7	D
200	250	500	600	590	570	**MST-570-CA**	9,703	E7	E
250	300	600	700	720	720	**MST-720-CA**	10,928	E7	E
300	350	700	800	840	840	**MST-840-CA**	12,369	E7	E
400	450	900	1000	1062	1050	**MST-1050-CA**	20,427	E7	E

(1) IP10 degree of protection

Enclosed NEMA Type 12/4 Combination Starter with Disconnect (2)

Normal Starting (Class 10) 400% torque for 30 seconds					IEC Amps	Catalog Number	List Price	Mult. Sym.	Approx. Weight (lbs)
HP				UL Amps					
208V	230V	460V	575V						
15	20	40	50	54	50	**MST-050-GD**	5,973	E7	70
20	25	50	60	68	72	**MST-072-GD**	6,190	E7	72
25	30	60	75	80	85	**MST-085-GD**	6,807	E7	105
30	40	75	100	104	105	**MST-105-GD**	7,477	E7	110
40	50	100	125	130	142	**MST-142-GD**	8,187	E7	118
50	60	125	150	156	175	**MST-175-GD**	10,092	E7	210
60	75	150	200	192	210	**MST-210-GD**	10,669	E7	226
75	100	200	250	248	250	**MST-250-GD**	11,586	E7	230
100	100	250	300	302	300	**MST-300-GD**	12,327	E7	240
125	150	300	350	361	370	**MST-370-GD**	15,427	E7	343
150	200	400	500	480	470	**MST-470-GD**	17,507	E7	352

(2) Included “2-wire” control circuit with “Hand-Off-Auto” selector switch

Soft Starter - Typical Applications

Heavy Starting

- Centrifugal Blower
- Centrifugal Fan
- Chipper
- Disintegrator
- Loaded Centrifuge
- Loaded Mixer
- Loaded Screw Compressor
- Loaded Reciprocating Compressor
- Pulverizer
- Rock Crusher
- Separator
- Elevator
- Flywheel Press
- Grinder
- Hammer Press
- High Inertia Fan
- Mill Mixer
- Pelletizer / Pulper
- Positive Displacement Pump
- Reciprocating Compressor
- Vibrating Screen

Open Starter

Heavy Starting (Class 30) 350% torque for 60 seconds					IEC Amps	Catalog Number	List Price	Mult. Sym.	Size
HP				UL Amps					
208V	230V	460V	575V						
7.5	10	20	25	28	37	**MST-037-CA** (1)	1,543	E7	A
10	10	25	30	34	44	**MST-044-CA** (1)	1,577	E7	A
10	15	30	40	42	50	**MST-050-CA** (1)	1,963	E7	A
15	20	40	50	54	72	**MST-072-CA** (1)	1,992	E7	A
20	25	50	60	68	85	**MST-085-CA**	2,701	E7	B
25	30	60	75	80	105	**MST-105-CA**	2,735	E7	B
30	40	75	100	104	142	**MST-142-CA**	3,830	E7	B
40	50	100	125	130	175	**MST-175-CA**	3,881	E7	C
50	60	125	150	156	210	**MST-210-CA**	4,392	E7	C
60	75	150	200	192	250	**MST-250-CA**	4,936	E7	C
75	100	200	250	248	300	**MST-300-CA**	5,095	E7	C
100	100	250	300	302	370	**MST-370-CA**	6,423	E7	D
125	150	300	350	361	470	**MST-470-CA**	7,944	E7	D
150	200	400	500	480	570	**MST-570-CA**	9,703	E7	E
200	250	500	600	590	720	**MST-720-CA**	10,928	E7	E
250	300	600	700	720	840	**MST-840-CA**	12,369	E7	E
300	350	700	800	840	1050	**MST-1050-CA**	20,427	E7	E

(1) IP10 degree of protection

Enclosed NEMA Type 12/4 Combination Starter with Circuit Breaker Disconnect (2)

Heavy Starting (Class 30) 350% torque for 60 seconds					IEC Amps	Catalog Number	List Price	Mult. Sym.	Approx. Weight (lbs)
HP				UL Amps					
208V	230V	460V	575V						
15	20	40	50	54	72	**MST-072-GD**	6,190	E7	72
20	25	50	60	68	85	**MST-085-GD**	6,807	E7	105
25	30	60	75	80	105	**MST-105-GD**	7,477	E7	110
30	40	75	100	104	142	**MST-142-GD**	8,187	E7	118
40	50	100	125	130	175	**MST-175-GD**	10,092	E7	210
50	60	125	150	156	210	**MST-210-GD**	10,669	E7	226
60	75	150	200	192	250	**MST-250-GD**	11,586	E7	230
75	100	200	250	248	300	**MST-300-GD**	12,327	E7	240
100	100	250	300	302	370	**MST-370-GD**	15,427	E7	343
—	—	300	350	480	470	**MST-470-GD**	17,507	E7	352

Severe Duty NEMA Type 4 Combination Starter with Circuit Breaker Disconnect (2)(3)

Heavy Starting (Class 30) 350% torque for 60 seconds					IEC Amps	Catalog Number	List Price	Mult. Sym.	Approx. Weight (lbs)
HP				UL Amps					
208V	230V	460V	575V						
40	50	100	125	130	175	**MST-175-GS**	10,329	E7	223
50	60	125	150	156	210	**MST-210-GS**	12,327	E7	228
60	75	150	200	192	250	**MST-250-GS**	11,740	E7	237
75	100	200	250	248	300	**MST-300-GS**	13,058	E7	244
100	100	250	300	302	370	**MST-370-GS**	16,992	E7	373
125	150	300	350	361	470	**MST-470-GS**	19,875	E7	399
150	200	400	500	480	570	**MST-570-GS**	27,568	E7	649
200	250	500	—	590	720	**MST-720-GS**	30,822	E7	681
250	300	600	—	720	840	**MST-840-GS**	38,587	E7	687

(2) Included "2-wire" control circuit with "Hand-Off-Auto" selector switch

(3) Included AC-3 rated direct on line starting emergency contactor and redundant Class 30 overload relay.

Soft Starters - Dimensions

Dimensions

Size	Outside			Mounting		Ap'x. Shpg. Wgt. lbs. (kg)
	Height Inches (mm)	Width Inches (mm)	Depth Inches (mm)	Height Inches (mm)	Width Inches (mm)	
A	10.24 (260)	6.3 (160)	7.7 (196)	9.6 (244)	5.7 (145)	9 (4.1) MST030, MST037 11 (5) MST044 – MST072
B	15.35 (390)	7.32 (186)	10.62 (270)	14.49 (368)	6.1 (155)	27 (12.2) MST085, MST105 33 (15) MST142
C	16.54 (420)	14.17 (360)	10.63 (270)	15.67 (398)	13 (330)	44 (20) MST175 49 (22.2) MST210, MST250 53 (24) MST300
D	18.1 (460)	14.37 (365)	14.21 (361)	17.24 (438)	8.23 (209)	84 (38.1) MST370 93 (42.2) MST470
E	20.28 (515)	17.13 (435)	15 (381)	19.4 (493)	15.95 (405)	97 (44) MST 570 119 (54) MST720 124 (56.2) MST840 137 (62.1) MST1050

Digital Soft Starter Controls - Accessories

External MOV

(Metal Oxide Varistor type voltage surge suppressor)

- Protects from line-to-line voltage spikes
- Recommended for all low line impedance applications

Catalog Number	Volts	List Price	Mult. Sym.
MOV505L	460	118	E7
MOV620EL	575	141	E7

Remote Keypad with Cable

- 32 Character English alphanumeric display
- NEMA 4X indoor enclosure
- Backlit LCD

Catalog Number	Cable Length	List Price	Mult. Sym.
MSTEK	10 ft.	475	E7

ProSoft Sizing software

Simulator Programming and Setting learning and aid tool

GC231003

GC24003 Shown
FTA Style

Applications: Conveyors, material handling equipment, packaging machinery, medical and laboratory equipment, printing presses, commercial ovens, and machine tools.

Features: Bronze sleeve bearing on output for smooth torque transmission. High strength bronze gearing with hardened and ground worm for quiet operation. Permanently lubricated with synthetic grease for long maintenance free operation. Can be mounted in all positions including vertical with motor below gearhead. Class F insulation.

Fixed Speed AC

Input Motor Hp	Output RPM 50/60 Hz	Gear Ratio	Max. Safe Torque In. Lbs. @ 60 Hz	Catalog Number	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Motor Type & Gear Style	Enclosure	Voltage	Notes (a)	Drawing Number
Single Phase – Permanent Split Capacitor												
1/50	59/71.4	24:1	7.5	**GC24003**	406	DS	7	2412C-FTA	TENV	115	19	1

Variable Speed AC

Input Motor Hp	Output RPM 60 Hz	Gear Ratio	Speed Range (VT)	Max. Safe Torque In. Lbs. @ 60 Hz	Catalog Number	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Motor Type & Gear Style	Voltage @ 60 Hz	Notes (a)	Drawing Number
Three Phase – Inverter Duty												
1/25	85	20:1	14-127	13	**IDGM2401**	505	E2	7	2416M-FTA	230	77	3
	170	10:1	28-255	9	**IDGM2402**	505	E2	7	2416M-FTA	230	77	3
	340	5:1	56-510	5	**IDGM2403**	505	E2	7	2416M-FTA	230	77	3

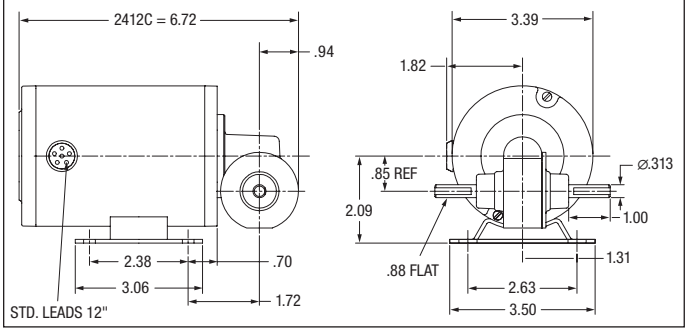
Permanent Magnet DC

Input Motor Hp	Output Base Speed	Gear Ratio	Max. Safe Torque In. Lbs.	Catalog Number	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Motor Type & Gear Style	Voltage D.C. Armature	Full Load Amperage Armature	Notes (a)	Drawing Number
90 VDC												
1/50	87	20:1	7.5	**GP231003**	407	DS	5	2308P-FTA	90	0.34		2
1/25	140	12:1	11	**GP231002**	439	DS	5	2314P-FTA	90	0.54		2
1/17	312	8:1	6	**GP231001**	439	DS	5	2314P-FTA	90	0.62		2
1/25	344	5:1	5.1	**GP232001**	439	DS	5	2314P-FTA	90	0.49		2

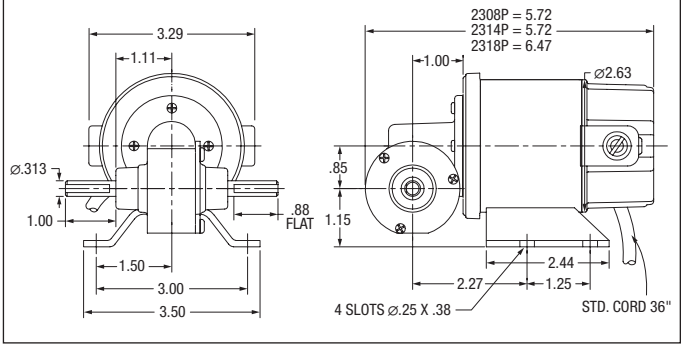
(a) See notes on the last page of this catalog..

ATTENTION: Additional ratios, voltages, and ratings are available. Application specific modifications are the common, such as custom shaft dimensions, addition of brakes or encoders, specific power cords, and washdown features. Contact your local ABB representative for assistance.

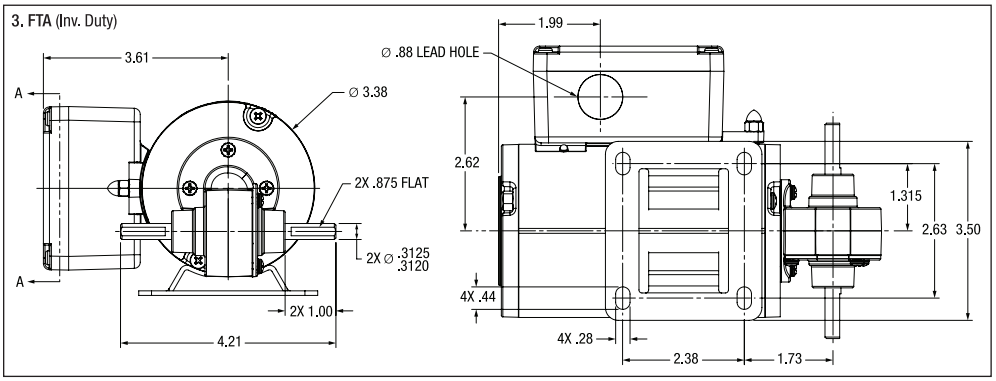
1. **FTA** (AC Voltage)



2. **FTA** (DC Voltage)



3. **FTA** (Inv. Duty)



GP231005 Shown
GNA Style

Applications: Conveyors, material handling equipment, packaging machinery, medical and laboratory equipment, printing presses, commercial ovens, and machine tools.

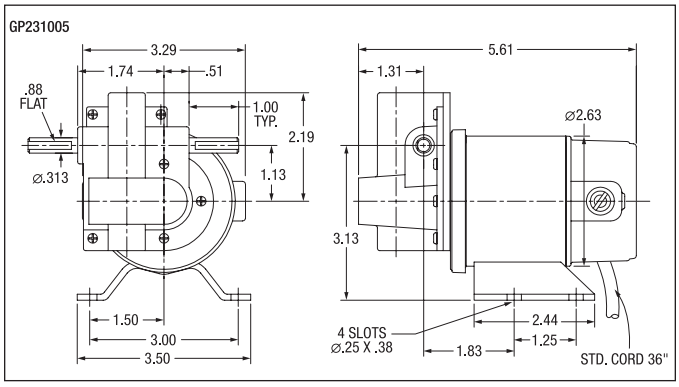
Features: Bronze sleeve bearing on output for smooth torque transmission. High strength bronze gearing with hardened and ground worm for quiet operation. Permanently lubricated with synthetic grease for long maintenance free operation. Can be mounted in all positions including vertical with motor below gearhead. Class F insulation.

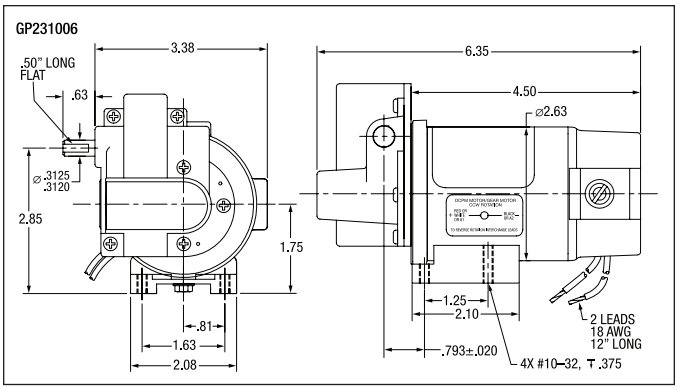
Permanent Magnet DC

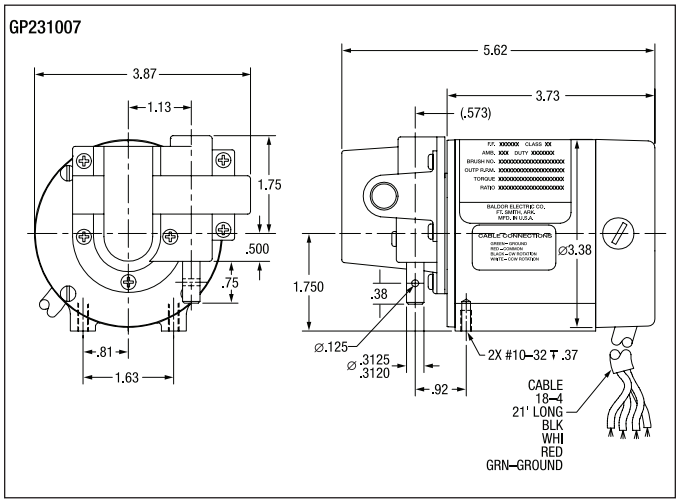
Input Motor Hp	Output Base Speed	Gear Ratio	Max. Safe Torque In. Lbs.	Catalog Number	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Motor Type & Gear Style	Voltage D.C. Armature	Full Load Amperage Armature	Notes [a]
90 VDC											
1/97	8.2	225:1	15	**GP231005**	427	DS	5	2308P-GNA	90	0.19	
115 VDC											
1/30	1.6	1200:1	15	**GP231006**	438	DS	8	2314P-GNA	115	0.12	
115 VAC Wound Field											
1/28	50	132:1	10	**GP231007**	684	DS	5	2308D-GNA	115	0.92	
115 VAC Wound Field with Brake											
1/28	60	132:1	10	**GPB231008**	722	DS	10	2308D-GNA	115	0.86	

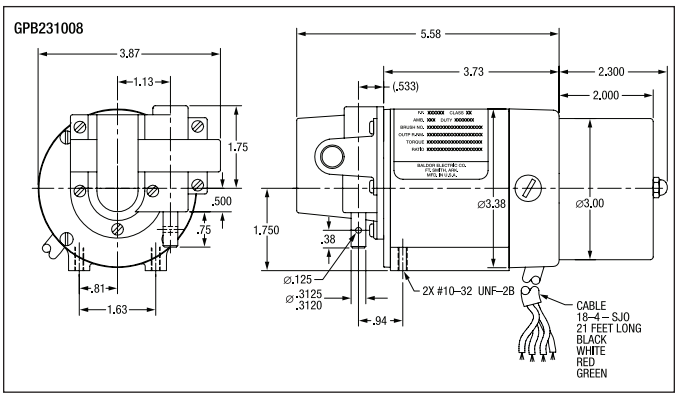
(a) See notes on the last page of this catalog.

ATTENTION: Additional ratios, voltages, and ratings are available. Application specific modifications are the common, such as custom shaft dimensions, addition of brakes or encoders, specific power cords, and washdown features. Contact your local ABB representative for assistance.









GC24208 Shown
DB Style

GP232004 Shown
DA Style

Applications: Conveyors, material handling equipment, packaging machinery, medical and laboratory equipment, printing presses, commercial ovens, and machine tools.

Features: Bronze sleeve bearing on output for smooth torque transmission. High strength bronze gearing with hardened and ground worm for quiet operation. High performance low friction, bidirectional motor seals. Permanently lubricated with synthetic oil. Internal oil expansion bladder allows for multi-position mounting without the need to relocate breather vents. Class F insulation.

Fixed Speed AC

Input Motor Hp	Output RPM 50/60 Hz	Gear Ratio	Max. Safe Torque In. Lbs. @ 60 Hz	Catalog Number (a)	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Motor Type & Gear Style	Enclosure	Voltage	Notes (b)	Drawing Number
Single Phase – Permanent Split Capacitor												
1/40	11.8/14	117:1	40	**GC24208**	540	DS	10	2412C-DB	TENV	115	19, 78	1

Variable Speed AC

Input Motor Hp	Output RPM 60 Hz	Gear Ratio	Speed Range (VT)	Max. Safe Torque In. Lbs. @ 60 hz	Catalog Number (a)	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Motor Type & Gear Style	Voltage @ 60 Hz	Notes (b)	Drawing Number
Three Phase – Inverter Duty												
1/25	5.4	310:1	1 - 8	75	**IDGM2301**	660	E2	10	2416M-DB	230	77	3
1/20	18.1	90:1	3 - 28	75	**IDGM2302**	660	E2	10	2416M-DB	230	77	3

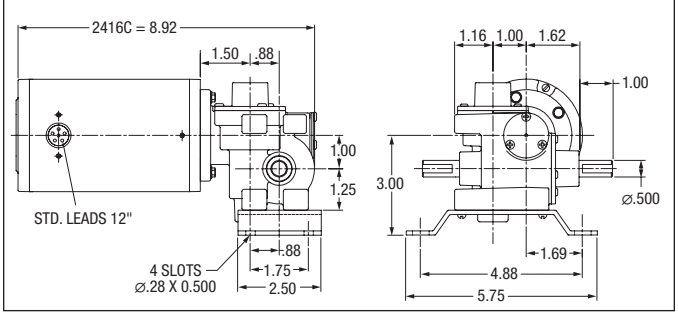
Permanent Magnet DC

Input Motor Hp	Output Base Speed	Gear Ratio	Max. Safe Torque In. Lbs.	Catalog Number (a)	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Motor Type & Gear Style	Voltage D.C. Armature	Full Load Amperage Armature	Notes (b)	Drawing Number
90 VDC												
1/66	1.7	1100:1	75	**GP232004**	606	DS	7	2308P-DA	90	0.18		2
1/49	3.7	660:1	75	**GP232005**	606	DS	7	2308P-DA	90	0.34		2
1/27	8.7	310:1	66	**GP232006**	606	DS	7	2314P-DA	90	0.44		2
1/15	19.6	130:1	64	**GP232007**	632	DS	7	2314P-DA	90	0.68		2
180 VDC												
1/83	1.9	1100:1	75	**GP233020**	632	DS	7	2314P-DA	180	0.11		2
1/31	4.1	660:1	75	**GP233029**	632	DS	7	2314P-DA	180	0.20		2
1/22	8.5	310:1	66	**GP233028**	632	DS	7	2314P-DA	180	0.26		2
1/20	19.7	130:1	64	**GP233027**	660	DS	7	2314P-DA	180	0.31		2

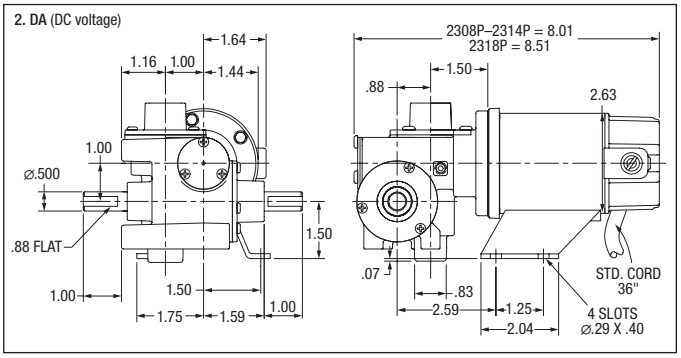
(a) Vertical motor below gearhead not recommended. Avoiding those positions where the high speed oil seal is immersed in oil, will provide greater security against high speed input seal wear. (b) See notes on the last page of this catalog.

ATTENTION: Additional ratios, voltages, and ratings are available. Application specific modifications are the common, such as custom shaft dimensions, addition of brakes or encoders, specific power cords, and washdown features. Contact your local ABB representative for assistance.

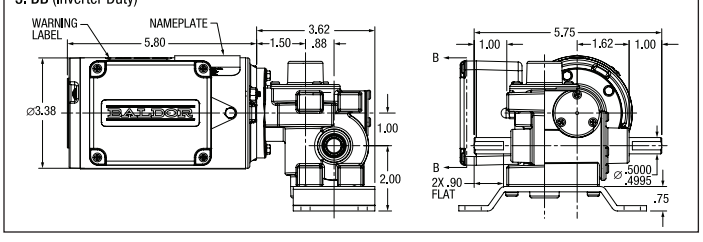
1. **DB** (AC voltage)



2. **DA** (DC voltage)



3. **DB** (Inverter Duty)



GP7429 Shown

GC24314 Shown
EB Style

Applications: Conveyors, material handling equipment, packaging machinery, medical and laboratory equipment, printing presses, commercial ovens, and machine tools.

Features: Bronze sleeve bearing on output for smooth torque transmission. High strength bronze gearing with hardened and ground worm for quiet operation. High performance low friction, bidirectional motor seals. Permanently lubricated with synthetic oil. Internal oil expansion bladder allows for multi-position mounting without the need to relocate breather vents. Class F insulation.

Fixed Speed AC

Input Motor Hp	Output RPM 50/60 Hz	Gear Ratio	Max. Safe Torque In. Lbs. @ 60 Hz	Catalog Number (a)	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Motor Type & Gear Style	Enclosure	Voltage	Notes (b)	Drawing Number
Single Phase												
1/13	7.7/9.3	180:1	175	**GC24314**	690	DS	14	2416C-EB	TENV	115	19, 78	1
1/20	12.7/16	100:1	100	**GC24312**	690	DS	12	2416C-EB	TENV	115	19, 78	1
Three Phase												
1/12	1.5	1200:1	175	**GM25021**	730	DS	15	2516M-EB	TENV	208/230-460	33	2
	11.3	150:1	125	**GM25016**	730	DS	15	2516M-EB	TENV	208/230-460	33	2

Variable Speed AC

Input Motor Hp	Output RPM 60 Hz	Gear Ratio	Speed Range (VT)	Max. Safe Torque In. Lbs. @ 60 Hz	Catalog Number (a)	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Motor Type & Gear Style	Voltage @ 60 Hz	Notes (b)	Drawing Number
Three Phase – Inverter Duty												
1/12	9.3	180:1	2 - 14	175	**IDGM2512**	840	E2	15	2512M-EB	230	77	4
	16.8	100:1	3 - 25	125	**IDGM2511**	840	E2	15	2512M-EB	230	77	4

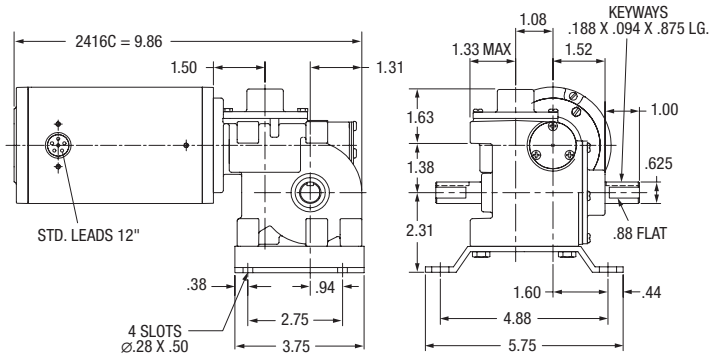
Permanent Magnet DC

Input Motor Hp	Output Base Speed	Gear Ratio	Max. Safe Torque In. Lbs.	Catalog Number (a)	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Motor Type & Gear Style	Voltage D.C. Armature	Full Load Amperage Armature	Notes (b)	Drawing Number
90 VDC												
1/8	6	600:1	150	**GP7304**	889	DS	13	2412P-EB	90	1.00		3
1/4	20	180:1	175	**GP7409**	848	DS	15	2424P-EB	90	2.00		3
180 VDC												
1/4	20	180:1	175	**GP7429**	875	DS	15	2424P-EB	180	1.00		3

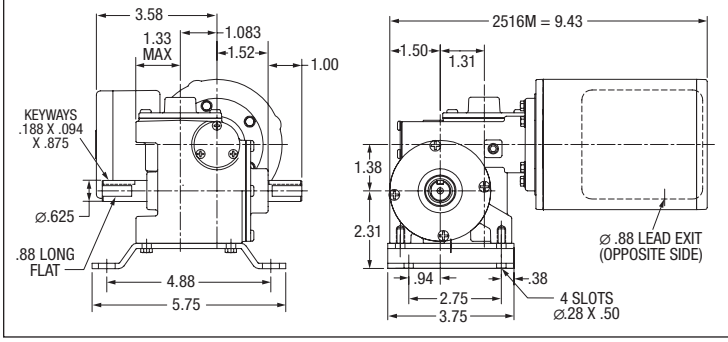
(a) Vertical motor below gearhead not recommended.
Avoiding those positions where the high speed oil seal is immersed in oil, will provide greater security against high speed input seal wear.
(b) See notes on the last page of this catalog.

ATTENTION: Additional ratios, voltages, and ratings are available. Application specific modifications are the common, such as custom shaft dimensions, addition of brakes or encoders, specific power cords, and washdown features. Contact your local ABB representative for assistance.

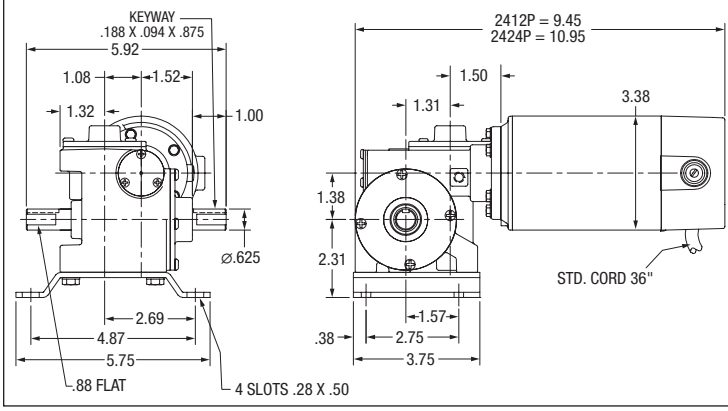
1. 24 EB (AC voltage)



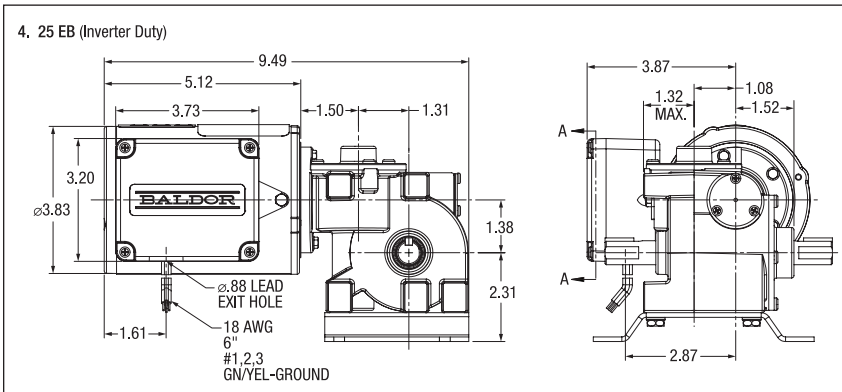
2. 25 EB (AC voltage)



3. 24 EB (DC voltage)



4. 25 EB (Inverter Duty)



GC24310 Shown
BB Style

GM3329 Shown
BA Style

Applications: Conveyors, material handling equipment, packaging machinery, medical and laboratory equipment, printing presses, commercial ovens, and machine tools.

Features: Permaglide sleeve bearing on output for smooth torque transmission. High strength bronze gearing with hardened and ground worm for quiet operation. High performance low friction, bidirectional motor seals. Permanently lubricated with synthetic oil. Internal oil expansion bladder allows for multi-position mounting without the need to relocate breather vents. Class F insulation.

Fixed Speed AC

Input Motor Hp	Output RPM 50/60 Hz	Gear Ratio	Max. Safe Torque In. Lbs. @ 60 Hz	Catalog Number (a)	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Motor Type & Gear Style	Enclosure	Voltage	Notes (b)	Drawing Number
Single Phase – Permanent Split Capacitor												
1/15	23.3/28.3	60:1	40	**GC24313**	503	DS	10	2418C-BB	TENV	115	19, 78	1
	35/42.5	40:1	37	**GC24310**	503	DS	10	2418C-BB	TENV	115	19, 78	1
	46/56	30:1	32	**GC24305**	503	DS	10	2418C-BB	TENV	115	19, 78	1
	70/85	20:1	29	**GC24306**	503	DS	10	2418C-BB	TENV	115	19, 78	1
	93/113	15:1	24	**GC24304**	503	DS	10	2418C-BB	TENV	115	19, 78	1
	140/170	10:1	18	**GC24302**	503	DS	10	2418C-BB	TENV	115	19, 78	1
Three Phase												
1/12	95/115	15:1	30	**GM25026**	542	DS	12	2516M-BA	TENV	190/380//230/460	19	2
1/8	143/174	10:1	30	**GM25024**	558	DS	13	2516M-BA	TENV	190/380//230/460	19	3
	285/345	5:1	15	**GM25022**	558	DS	13	2516M-BA	TENV	190/380//230/460	19	3
1/6	230	15:1	27	**GM3329**	703	DS	11	2512M-BA	TEFC	208 - 230/460	33	4

Variable Speed AC

Input Motor Hp	Output RPM 60 Hz	Gear Ratio	Speed Range (VT)	Max. Safe Torque In. Lbs. @ 60 Hz	Catalog Number (a)	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Motor Type & Gear Style	Voltage @ 60 Hz	Notes (b)	Drawing Number
Three Phase – Inverter Duty												
1/20	28.7	60:1	5-42	30	**IDGM2406**	612	E2	13	2512M-BB	230	77	6
1/15	85	20:1	14-128	25	**IDGM2405**	612	E2	13	2512M-BB	230	77	6
1/8	340	5:1	57-510	15	**IDGM2404**	612	E2	13	2520M-BB	230	77	6

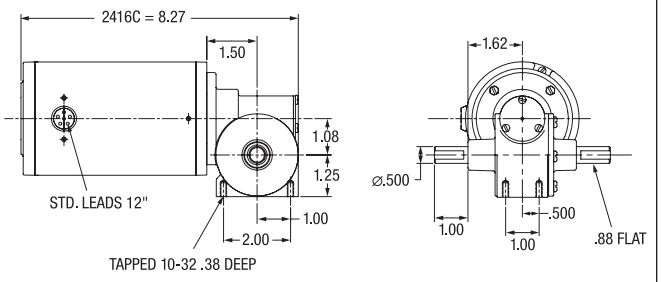
Permanent Magnet DC

Input Motor Hp	Output Base Speed	Gear Ratio	Max. Safe Torque In. Lbs.	Catalog Number (a)	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Motor Type & Gear Style	Voltage D.C. Armature	Full Load Amperage Armature	Notes (b)	Drawing Number
90 VDC												
1/22	40	40:1	30	**GP232002**	542	DS	7	2314P-BA	90	0.60		5
1/16	60	30:1	33	**GP233003**	561	DS	8	2318P-BA	90	0.72		5
	90	20:1	27	**GP233002**	561	DS	7	2318P-BA	90	0.75		5
	120	15:1	22	**GP233007**	561	DS	7	2318P-BA	90	0.78		5
	173	10:1	17	**GP233001**	561	DS	7	2318P-BA	90	0.85		5
180 VDC												
1/16	60	30:1	33	**GP233023**	561	DS	7	2318P-BA	180	0.42		5
1/14	86	20:1	28	**GP233022**	561	DS	7	2318P-BA	180	0.42		5
1/13	175	10:1	17	**GP233021**	561	DS	7	2318P-BA	180	0.42		5

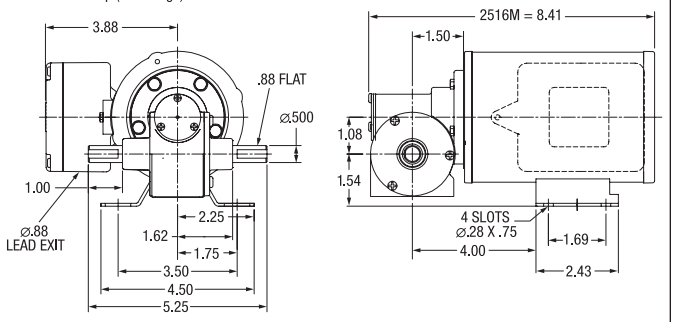
(a) Vertical motor below gearhead not recommended.
Avoiding those positions where the high speed oil seal is immersed in oil, will provide greater security against high speed input seal wear.
(b) See notes on the last page of this catalog.

ATTENTION: Additional ratios, voltages, and ratings are available. Application specific modifications are the common, such as custom shaft dimensions, addition of brakes or encoders, specific power cords, and washdown features. Contact your local ABB representative for assistance.

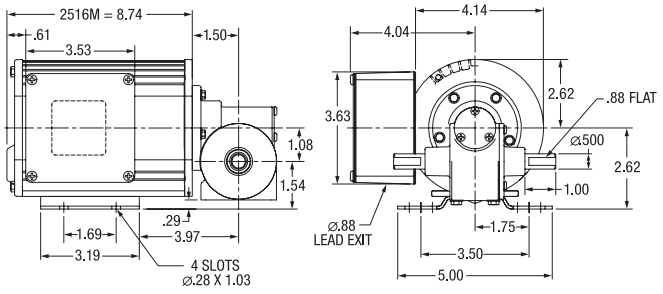
1. 24 BB (AC voltage)



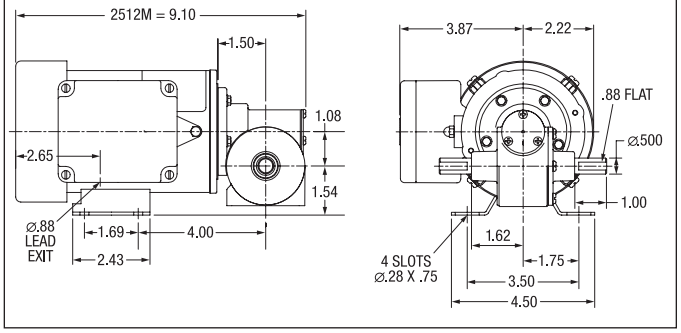
2. 25 BA 1/12 Hp (AC voltage)



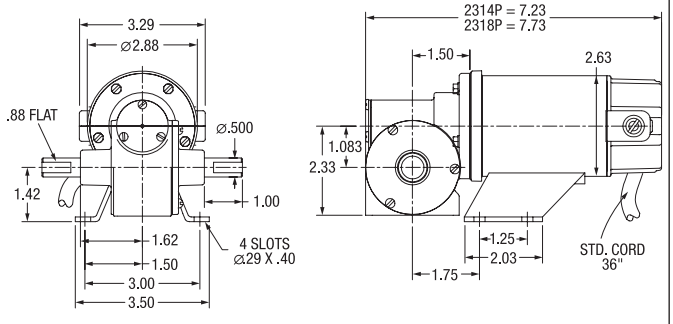
3. 25 BA 1/8 Hp (AC voltage)



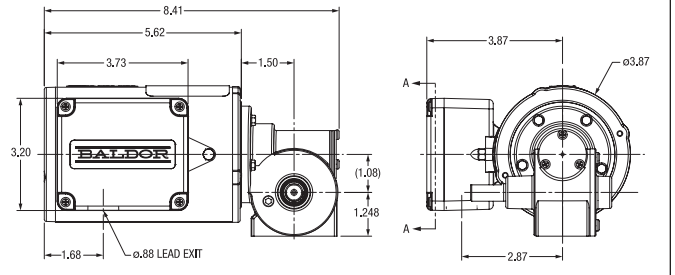
4. 25 BA 1/6 Hp (AC voltage)



5. 23 BA (DC voltage)



6. 25 BB (AC voltage)



GP24280 Shown

GC25280 Shown
GC Style

Applications: Conveyors, material handling equipment, packaging machinery, medical and laboratory equipment, printing presses, commercial ovens, and machine tools.

Features: High strength bronze gear with hardened and ground worm first stage, hardened steel helical output stage for improved overall efficiency and dependable torque transmission. High performance low friction, bidirectional motor seals. Factory lubricated for life with synthetic oil, no maintenance required. Completely sealed from the environment. Class F insulation.

Fixed Speed AC

Input Motor Hp	Output RPM 50/60 Hz	Gear Ratio	Max. Safe Torque In. Lbs. @ 60 Hz	Catalog Number (a)	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Motor Type & Gear Style	Enclosure	Voltage	Notes (b)	Drawing Number
Single Phase – Permanent Split Capacitor												
1/6	4.8/5.7	280:1	400	**GC25280**	881	DS	21	2520C-G	TEFC	115	19	1
	7.1/8.4	190:1	385	**GC25190**	881	DS	21	2520C-G	TEFC	115	19	1
	11.3/13.3	120:1	300	**GC25120**	881	DS	21	2520C-G	TEFC	115	19	1
	16.8/20	80:1	290	**GC25080**	881	DS	21	2520C-G	TEFC	115	19	1
	22.5/26.7	60:1	220	**GC25060**	881	DS	21	2520C-G	TEFC	115	19	1
Three Phase												
1/6	4.9/5.9	280:1	400	**GM25280**	959	DS	19	2516M-G	TEFC	190/380//230/460	19	1
	7.3/8.9	190:1	385	**GM25190**	959	DS	19	2516M-G	TEFC	190/380//230/460	19	1
	11.3/13.3	120:1	300	**GM25120**	959	DS	19	2516M-G	TEFC	190/380//230/460	19	1
	16.5/20.4	80:1	310	**GM25080**	959	DS	19	2516M-G	TEFC	190/380//230/460	19	1
	22.5/27.5	60:1	250	**GM25060**	959	DS	19	2516M-G	TEFC	190/380//230/460	19	1

Variable Speed AC

Input Motor Hp	Output RPM 60 Hz	Gear Ratio	Speed Range (VT)	Max. Safe Torque In. Lbs. @ 60 Hz	Catalog Number (a)	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Motor Type & Gear Style	Voltage @ 60 Hz	Notes (b)	Drawing Number
Three Phase – Inverter Duty												
1/8	6	280:1	1-9	400	**IDGM2515**	1,036	E2	20	2516M-G	230	77	1
1/6	14	120:1	2-21	375	**IDGM2514**	1,036	E2	20	2516M-G	230	77	1
	28	60:1	5-42	250	**IDGM2513**	1,036	E2	20	2516M-G	230	77	1

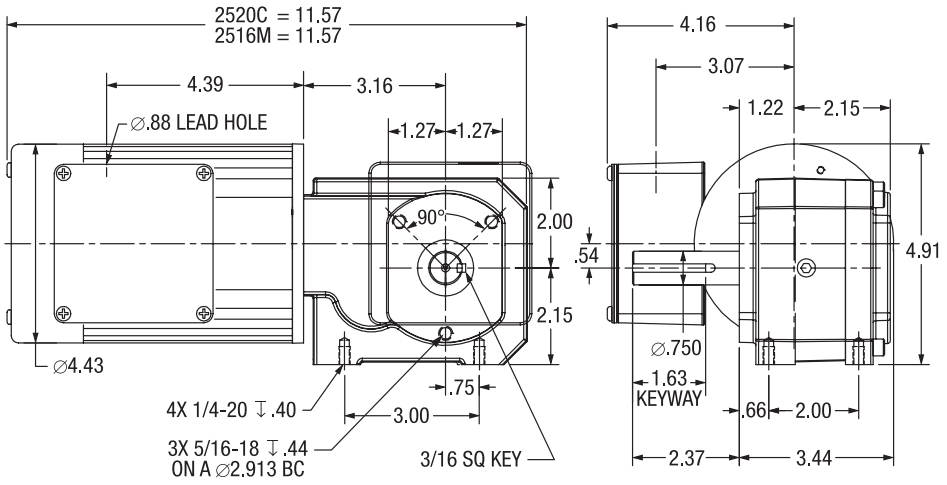
Permanent Magnet DC

Input Motor Hp	Output Base Speed	Gear Ratio	Max. Safe Torque In. Lbs.	Catalog Number (a)	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Motor Type & Gear Style	Voltage D.C. Armature	Full Load Amperage Armature	Notes (b)	Drawing Number
90 VDC												
1/8	6.2	280:1	400	**GP24280**	965	DS	16	2424P-G	90	1.04		2
	9.1	190:1	385	**GP24190**	965	DS	16	2424P-G	90	1.21		2
	14	120:1	280	**GP24120**	965	DS	16	2424P-G	90	1.36		2
	29	60:1	163	**GP24060**	965	DS	16	2424P-G	90	1.54		2

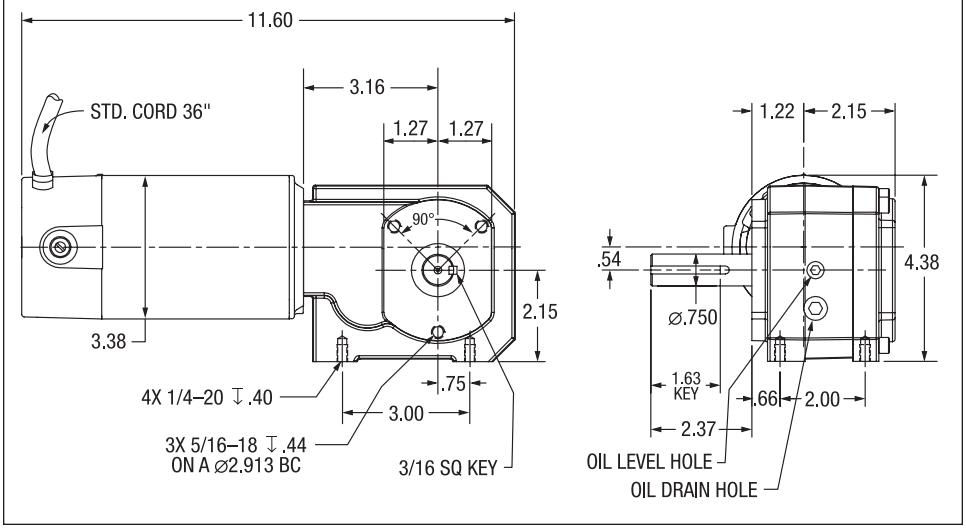
(a) Vertical motor below gearhead not recommended.
Avoiding those positions where the high speed oil seal is immersed in oil, will provide greater security against high speed input seal wear.
(b) See notes on the last page of this catalog.

ATTENTION: Additional ratios, voltages, and ratings are available. Application specific modifications are common, such as custom shaft dimensions, addition of brakes or encoders, specific power cords, and washdown features. Contact your local ABB representative for assistance.
Matching DC drives available. See DC controls.

1. G (AC voltage)



2. G (DC voltage)



GC24307 Shown
KA Style

GP13530 Shown
K Style

Applications: Conveyors, material handling equipment, packaging machinery, medical and laboratory equipment, printing presses, commercial ovens, and machine tools.

Features: Ball bearing on output for smooth torque transmission. High strength bronze gearing with hardened and ground worm for quiet operation and increased radial load capacity. High performance low friction, bidirectional motor seals. Permanently lubricated with synthetic oil. Internal oil expansion bladder allows for multi-position mounting without the need to relocate breather vents. Class F insulation.

Fixed Speed AC

Input Motor Hp	Output RPM 50/60 Hz	Gear Ratio	Max. Safe Torque In. Lbs. @ 60 Hz	Catalog Number (a)	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Motor Type & Gear Style	Enclosure	Voltage	Notes (b)	Drawing Number
Single Phase – Permanent Split Capacitor												
1/15	23/28	60:1	45	**GC24307**	537	DS	11	2416C-KA	TEFC	110/115	19	1
	35/42	40:1	49	**GC24308**	537	DS	11	2416C-KA	TEFC	110/115	19	1
	68/82.5	20:1	32	**GC24309**	537	DS	11	2416C-KA	TEFC	110/115	19	1
	135/165	10:1	18	**GC24311**	537	DS	11	2416C-KA	TEFC	110/115	19	1
1/8	34/41	40:1	90	**GC25004**	635	DS	16	2520C-KA	TEFC	110/115	19	2
	46/55	30:1	78	**GC25006**	635	DS	16	2520C-KA	TEFC	110/115	19	2
	69/82	20:1	57	**GC25007**	635	DS	16	2520C-KA	TEFC	110/115	19	2
	130/160	10:1	33	**GC25008**	635	DS	16	2520C-KA	TEFC	110/115	19	2
1/6	33/41	40:1	130	**GC3320**	701	DS	15	2524C-K	TEFC	110/115	19	3
	67/82	20:1	75	**GC3321**	701	DS	15	2524C-K	TEFC	110/115	19	3
	135/165	10:1	43	**GC3322**	701	DS	15	2524C-K	TEFC	110/115	19	3
	265/320	5:1	23	**GC3324**	701	DS	15	2524C-K	TEFC	110/115	19	3
Single Phase - Split Phase												
1/8	36/43	40:1	90	**GC25009**	635	DS	15	2420S-KA	TEFC	110/115	19	1
	48/57	30:1	78	**GC25011**	635	DS	15	2420S-KA	TEFC	110/115	19	1
	71/86	20:1	57	**GC25012**	635	DS	15	2420S-KA	TEFC	110/115	19	1
	140/170	10:1	33	**GC25014**	635	DS	15	2520S-KA	TEFC	110/115	19	2
Single Phase - Capacitor Start Induction Run												
1/6	35/42	40:1	130	**GL3326**	701	DS	18	2528L-K	TEFC	110/115	19	4
	71/85	20:1	75	**GL3327**	701	DS	18	2528L-K	TEFC	110/115	19	4
	135/165	10:1	43	**GL3328**	701	DS	18	2528L-K	TEFC	110/115	19	4
	280/335	5:1	23	**GL3329**	701	DS	18	2528L-K	TEFC	110/115	19	4
Three Phase												
1/4	35/42.8	40:1	170	**GM3340**	848	DS	16	2524M-K	TEFC	190/380//230/460	19	3
	70/85	20:1	112	**GM3345**	848	DS	16	2524M-K	TEFC	190/380//230/460	19	3
	140/170	10:1	72	**GM3347**	848	DS	16	2524M-K	TEFC	190/380//230/460	19	3
	279/340	5:1	36	**GM3349**	848	DS	16	2524M-K	TEFC	190/380//230/460	19	3

(a) Vertical motor below gearhead not recommended.
Avoiding those positions where the high speed oil seal is immersed in oil, will provide greater security against high speed input seal wear.
(b) See notes on the last page of this catalog.

ATTENTION: Additional ratios, voltages, and ratings are available. Application specific modifications are common, such as custom shaft dimensions, addition of brakes or encoders, specific power cords, and washdown features. Contact your local ABB representative for assistance.

Variable Speed AC

Input Motor Hp	Output RPM 60 Hz	Gear Ratio	Speed Range (VT)	Max. Safe Torque In. Lbs. @ 60 Hz	Catalog Number (a)	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Motor Type & Gear Style	Voltage @ 60 Hz	Notes (b)	Drawing Number See pg 288
Three Phase – Inverter Duty												
3/8	22	75:1	4-33	315	**IDGM2509**	868	E2	17	2528M-K	230	77	3
	28	60:1	5-41	252	**IDGM2508**	868	E2	17	2528M-K	230	77	3
	41	40:1	7 6-62	228	**IDGM2506**	868	E2	17	2528M-K	230	77	3
	83	20:1	12-123	138	**IDGM2503**	868	E2	17	2528M-K	230	77	3
	165	10:1	23-246	105	**IDGM2501**	868	E2	17	2528M-K	230	77	3
	330	5:1	43-490	68	**IDGM2500**	868	E2	17	2528M-K	230	77	3

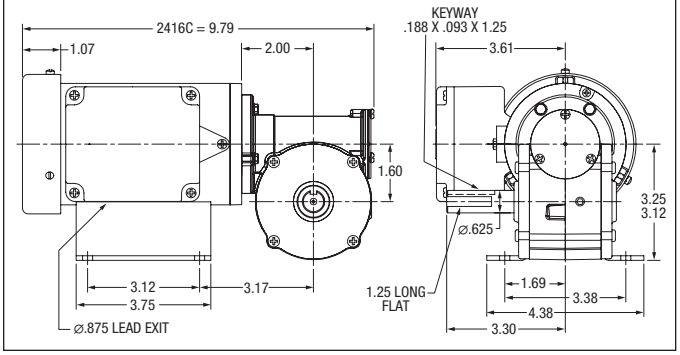
Permanent Magnet DC

Input Motor Hp	Output Base Speed	Gear Ratio	Max. Safe Torque In. Lbs.	Catalog Number (a)	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Motor Type & Gear Style	Voltage D.C. Armature	Full Load Amperage Armature	Notes (b)	Drawing Number See pg 288
90 VDC												
1/12	43	40:1	73	**GP12511**	690	DS	10	2416P-K	90	1.00		5
	86	20:1	39	**GP12512**	690	DS	10	2416P-K	90	1.00		5
	173	10:1	22	**GP12514**	690	DS	10	2416P-K	90	0.90		5
	346	5:1	10	**GP12516**	690	DS	10	2416P-K	90	0.90		5
1/6	43	40:1	135	**GP13530**	725	DS	13	2428P-K	90	1.73		5
	57	30:1	111	**GP13531**	725	DS	13	2428P-K	90	1.73		5
	88	20:1	88	**GP13532**	725	DS	13	2428P-K	90	1.73		5
	173	10:1	48	**GP13533**	725	DS	13	2428P-K	90	1.73		5
	346	5:1	24	**GP13536**	725	DS	13	2428P-K	90	1.73		5

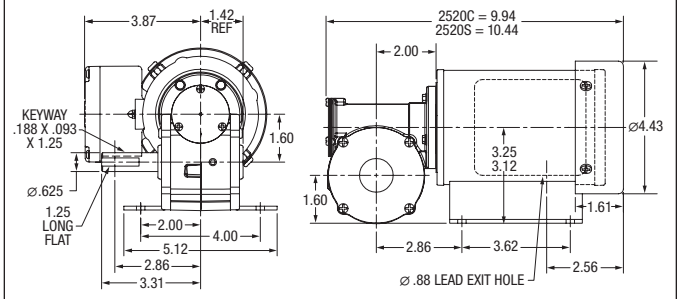
(a) Vertical motor below gearhead not recommended.
Avoiding those positions where the high speed oil seal is immersed in oil, will provide greater security against high speed input seal wear.
(b) See notes on the last page of this catalog.

ATTENTION: Additional ratios, voltages, and ratings are available. Application specific modifications are the common, such as custom shaft dimensions, addition of brakes or encoders, specific power cords, and washdown features. Contact your local ABB representative for assistance.
Matching DC drives available. See DC controls.

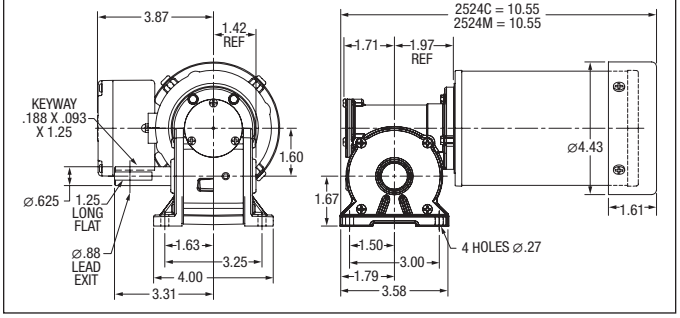
1. 24 KA (AC voltage)



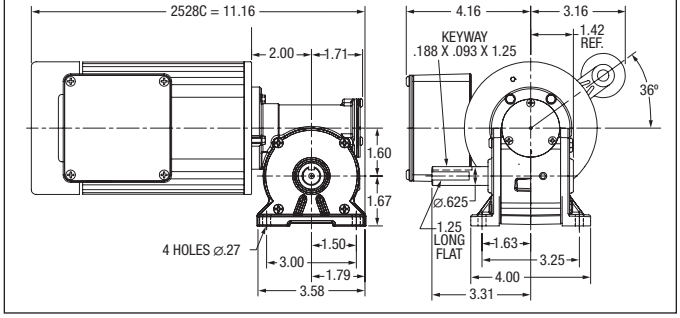
2. 25 KA (AC voltage)



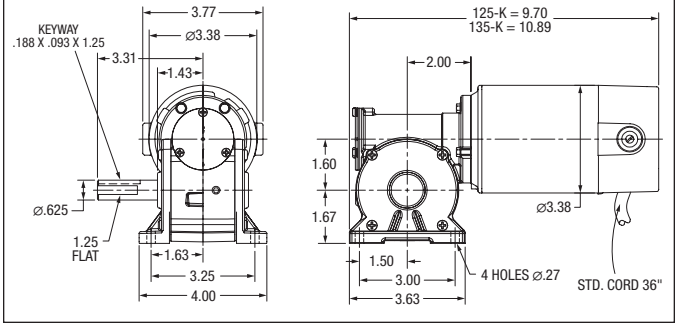
3. 25 K (AC voltage)

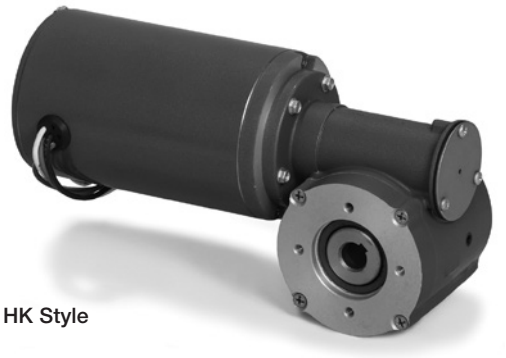


4. 25 K (AC voltage)



5. K (DC voltage)





HK Style

Applications: Conveyors, material handling equipment, packaging machinery, medical and laboratory equipment, printing presses, commercial ovens, and machine tools.

Features: Ball bearing on output for smooth torque transmission. High strength bronze gearing with hardened and ground worm for quiet operation and increased radial load capacity. High performance low friction, bidirectional motor seals. Permanently lubricated with synthetic oil. Internal oil expansion bladder allows for multi-position mounting without the need to relocate breather vents. Class F insulation.

Variable Speed AC

Input Motor Hp	Output RPM 60 Hz	Gear Ratio	Speed Range	Max. Safe Torque In. Lbs. @ 60 Hz	Catalog Number (a)	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Motor Type & Gear Style	Voltage @ 60 Hz	Notes (b)	Drawing Number
Three Phase – Inverter Duty												
3/8	22	75:1	3 - 33	315	**IDGHM2509**	998	E2	19	2528M-HK	230	77	1
	28	60:1	5 - 41	252	**IDGHM2508**	998	E2	19	2528M-HK	230	77	1
	41	40:1	7 - 62	228	**IDGHM2506**	998	E2	19	2528M-HK	230	77	1
	55	30:1	9 - 82	195	**IDGHM2504**	998	E2	19	2528M-HK	230	77	1
	83	20:1	12 - 123	138	**IDGHM2503**	998	E2	19	2528M-HK	230	77	1
	165	10:1	23 - 246	105	**IDGHM2501**	998	E2	19	2528M-HK	230	77	1
	330	5:1	43 - 490	68	**IDGHM2500**	998	E2	19	2528M-HK	230	77	1

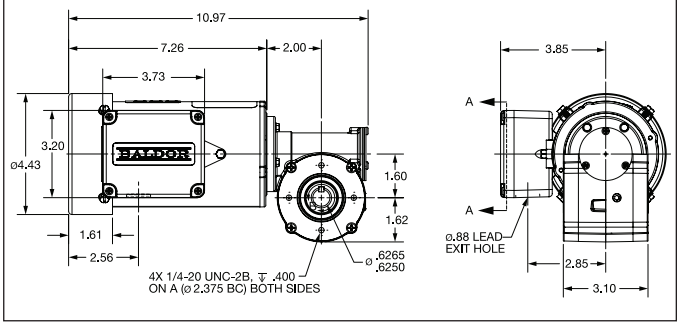
Permanent Magnet DC

Input Motor Hp	Output Base Speed	Gear Ratio	Max. Safe Torque In. Lbs.	Catalog Number (a)	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Motor Type & Gear Style	Voltage D.C. Armature	Full Load Amperage Armature	Notes (b)	Drawing Number
90 VDC												
1/6	43	40:1	135	**GHP13530**	834	DS	15	2528P-HK	90	1.73		2
	57	30:1	111	**GHP13531**	834	DS	15	2528P-HK	90	1.73		2
	88	20:1	88	**GHP13532**	834	DS	15	2528P-HK	90	1.73		2
	173	10:1	48	**GHP13533**	834	DS	15	2528P-HK	90	1.73		2
	346	5:1	24	**GHP13536**	834	DS	15	2528P-HK	90	1.73		2

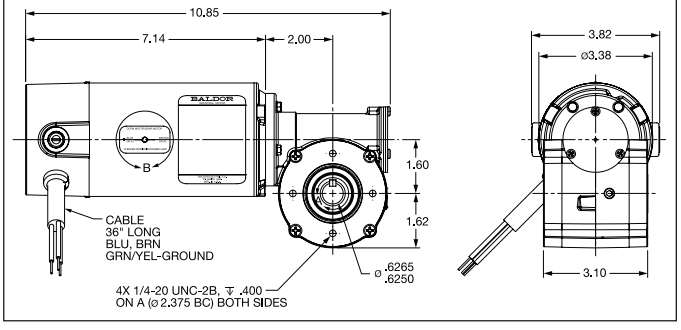
(a) Vertical motor below gearhead not recommended.
Avoiding those positions where the high speed oil seal is immersed in oil, will provide greater security against high speed input seal wear.
(b) See notes on the last page of this catalog.

ATTENTION: Additional ratios, voltages, and ratings are available. Application specific modifications are the common, such as custom shaft dimensions, addition of brakes or encoders, specific power cords, and washdown features. Contact your local ABB representative for assistance.
Matching DC drives available. See DC controls.

1. HK (Inverter Duty)



2. HK (DC Voltage)



GP231004 Shown

GC24322 Shown
CB Style

Applications: Conveyors, material handling equipment, packaging machinery, medical and laboratory equipment, printing presses, commercial ovens, and machine tools.

Features: Permaglide sleeve bearing on output for smooth torque transmission. High strength bronze gearing with hardened and ground worm for quiet operation. High performance low friction, bidirectional motor seals. Permanently lubricated with synthetic oil. Internal oil expansion bladder allows for multi-position mounting without the need to relocate breather vents. Class F insulation.

Fixed Speed AC

Input Motor Hp	Output RPM 50/60 Hz	Gear Ratio	Max. Safe Torque In. Lbs. @ 60 Hz	Catalog Number (a)	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Motor Type & Gear Style	Enclosure	Voltage	Notes (b)	Drawing Number
Single Phase – Permanent Split Capacitor												
1/12	23/27.7	58:1	75	**GC24322**	540	DS	13	2420C-CB	TENV	110/115	19, 78	1
	41/49.6	33:1	62	**GC24320**	540	DS	13	2420C-CB	TENV	110/115	19, 78	1
	60/71	22:5	49	**GC24318**	540	DS	13	2420C-CB	TENV	110/115	19, 78	1
	123/148	11:1	25	**GC24316**	540	DS	13	2420C-CB	TENV	110/115	19, 78	1
Three Phase												
1/6	156	22.5:1	42	**GM3331**	738	DS	13	2512M-CA	TENV	208/230-460	33	2

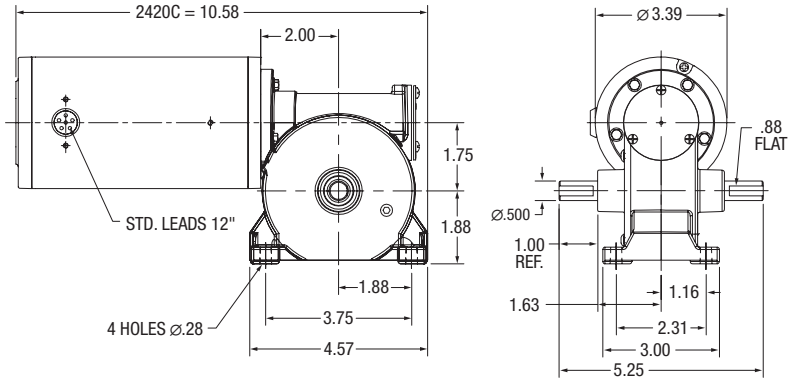
Permanent Magnet DC

Input Motor Hp	Output Base Speed	Gear Ratio	Max. Safe Torque In. Lbs.	Catalog Number (a)	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Motor Type & Gear Style	Voltage D.C. Armature	Full Load Amperage Armature	Notes (b)	Drawing Number
90 VDC												
1/25	22	72:1	45	**GP231004**	542	DS	8	2314P-CB	90	0.53		3
	30	58:1	38	**GP232003**	542	DS	8	2314P-CB	90	0.53		3
1/16	38	45:1	57	**GP233006**	561	DS	8	2318P-CB	90	0.80		3
	52	33:1	48	**GP233005**	561	DS	8	2318P-CB	90	0.75		3
	76	22.5:1	33	**GP233004**	561	DS	8	2318P-CB	90	0.85		3
180 VDC												
1/16	41	45:1	57	**GP233026**	561	DS	8	2318P-CB	180	0.42		3
	53	33:1	48	**GP233025**	561	DS	8	2318P-CB	180	0.40		3
1/14	20	22.5:1	76	**GP233024**	561	DS	8	2318P-CB	180	0.42		3

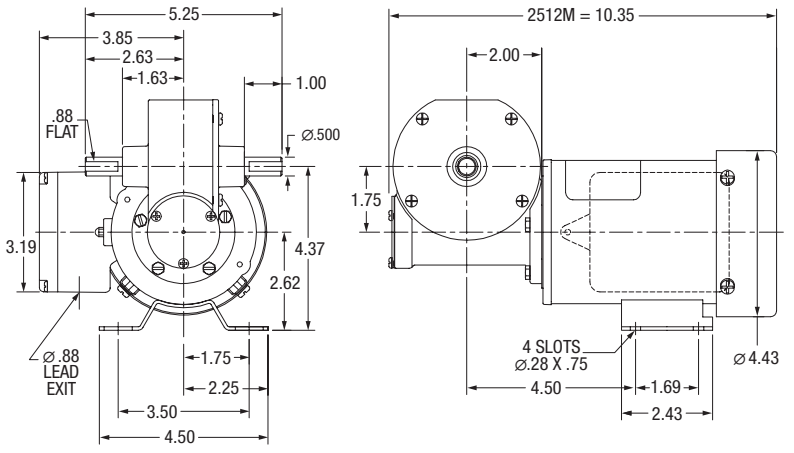
(a) Vertical motor below gearhead not recommended.
Avoiding those positions where the high speed oil seal is immersed in oil, will provide greater security against high speed input seal wear.
(b) See notes on the last page of this catalog.

ATTENTION: Additional ratios, voltages, and ratings are available. Application specific modifications are the common, such as custom shaft dimensions, addition of brakes or encoders, specific power cords, and washdown features. Contact your local ABB representative for assistance.
Matching DC drives available. See DC controls.

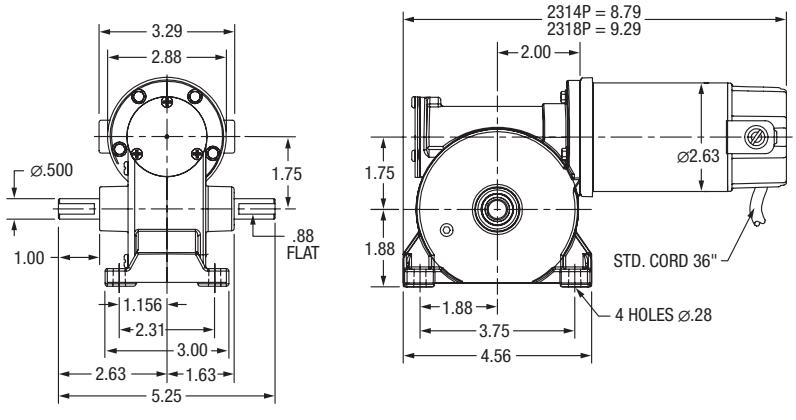
1. 24 CB (AC voltage)



2. 25 CA (AC voltage)



3. 23 CB (DC voltage)



GM2503 Shown
JH Style

Applications: Conveyors, material handling equipment, packaging machinery, medical and laboratory equipment, printing presses, commercial ovens, and machine tools.

Features: Ball bearing on output for smooth torque transmission. High strength bronze gearing with hardened and ground worm for quiet operation and increased radial load capacity. High performance low friction, bidirectional motor seals. Permanently lubricated with synthetic oil. Internal oil expansion bladder allows for multi-position mounting without the need to relocate breather vents.

Fixed Speed AC

Input Motor Hp	Output RPM 50/60 Hz	Gear Ratio	Max. Safe Torque In. Lbs. @ 60 Hz	Catalog Number (a)	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Motor Type & Gear Style	Enclosure	Voltage	Notes (b)	Drawing Number
Single Phase – Split Phase												
1/8	30/37	45:1	125	**GC25020**	643	DS	16	2524S-JK	TEFC	115	19, 20	1
	43/50	33:1	10	**GC25015**	643	DS	16	2524S-JK	TEFC	115	19, 20	1
	62/74	22.5:1	79	**GC25010**	643	DS	16	2524S-JK	TEFC	115	19, 20	1
	126/152	11:1	41	**GC25005**	643	DS	16	2524S-JK	TEFC	115	19, 20	1
1/4	74	22.5:1	152	**GC3330**	701	DS	26	3324S-JK	TEFC	115	33	2
	151	11:1	70	**GC3325**	701	DS	26	3324S-JK	TEFC	115	33	2
Three Phase												
1/6	38	40:1	125	**GM3337**	852	DS	16	2520M-JK	TEFC	208-230/460	20, 33	3
	75	22.5:1	85	**GM3334**	852	DS	15	2520M-JK	TEFC	208-230/460	20, 33	3
1/4	104	33:1	75	**GM3338**	852	DS	16	2520M-JK	TEFC	208-230/460	20, 33	3
1/3	34	50:1	256	**GM2507**	867	DS	18	2528M-JH	TEFC	208-230/460	20, 33	4
	42	40:1	230	**GM2506**	867	DS	18	2528M-JH	TEFC	208-230/460	20, 33	4
	84	20:1	155	**GM2503**	867	DS	18	2528M-JH	TEFC	208-230/460	20, 33	4
	168	10:1	90	**GM2501**	867	DS	18	2528M-JH	TEFC	208-230/460	20, 33	4
1/2	35	50:1	295	**GM3307**	873	DS	26	3320M-JH	TEFC	208-230/460	33	5
	44	40:1	280	**GM3306**	873	DS	26	3320M-JH	TEFC	208-230/460	33	5
	88	20:1	200	**GM3303**	873	DS	27	3320M-JH	TEFC	208-230/460	33	5
	175	10:1	135	**GM3301**	873	DS	26	3320M-JH	TEFC	208-230/460	33	5

Variable Speed AC

Input Motor Hp	Output RPM 60 Hz	Gear Ratio	Speed Range (VT)	Max. Safe Torque In. Lbs. @ 60 Hz	Catalog Number (a)	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Motor Type & Gear Style	Voltage @ 60 Hz	Notes (b)	Drawing Number
Three Phase – Inverter Duty												
1/2	28.7	60:1	4.8-43	413	**IDGM3303**	942	E2	28	3324M-JH	230	20, 77	9
	57.5	30:1	9.6-86	355	**IDGM3302**	942	E2	28	3324M-JH	230	20, 77	9
3/4	170	10:1	28.6-258	230	**IDGM3301**	961	E2	30	3332M-JH	230	20, 77	9
	340	5:1	57.5-517	125	**IDGM3300**	961	E2	30	3332M-JH	230	20, 77	9

(a) Vertical motor below gearhead not recommended.
Avoiding those positions where the high speed oil seal is immersed in oil, will provide greater security against high speed input seal wear.
(b) See notes on the last page of this catalog.

ATTENTION: Additional ratios, voltages, and ratings are available. Application specific modifications are the common, such as custom shaft dimensions, addition of brakes or encoders, specific power cords, and washdown features. Contact your local ABB representative for assistance.

Permanent Magnet DC

Input Motor Hp	Output Base Speed	Gear Ratio	Max. Safe Torque In. Lbs. @ 60 Hz	Catalog Number (a)	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Motor Type & Gear Style	Voltage D.C. Armature	Full Load Amperage Armature	Notes (b)	Drawing Number
						90 VDC						
1/8	30	58:1	120	**GP7404**	770	DS	13	2424P-JK	90	1.3	20	6
	38	45:1	100	**GP7403**	770	DS	14	2424P-JK	90	1.3	20	6
	52	33:1	75	**GP7402**	770	DS	14	2424P-JK	90	1.3	20	6
	75	22.5:1	60	**GP7401**	770	DS	14	2424P-JK	90	1.3	20	6
	173	11:1	32	**GP7400**	770	DS	14	2424P-JK	90	1.3	20	6
1/5	50	45:1	120	**GP7408**	770	DS	14	2428P-JK	90	2	20	6
1/4	68	33:1	112	**GP7405**	770	DS	14	2428P-JK	90	2.5	20	6
	76	45:1	100	**GP7407**	770	DS	14	2428P-JK	90	2.5	20	6
	104	33:1	75	**GP7406**	770	DS	14	2428P-JK	90	2.5	20	6
	314	8:1	32	**GP7413**	770	DS	14	2428P-JK	90	2.5	20	6
1/3	48	50:1	150	**GP2507**	944	DS	21	2532P-JH	90	3.4	20	7
	62	40:1	137	**GP2506**	944	DS	21	2532P-JH	90	3.4	20	7
	123	20:1	95	**GP2503**	944	DS	21	2532P-JH	90	3.4	20	7
	245	10:1	65	**GP2501**	944	DS	21	2532P-JH	90	3.4	20	7
1/2	50	50:1	234	**GP3307**	1,096	DS	30	3327P-JH	90	5	20	8
	63	40:1	215	**GP3306**	1,096	DS	30	3327P-JH	90	5	20	8
	125	20:1	145	**GP3303**	1,096	DS	30	3327P-JH	90	5	20	8
	250	10:1	100	**GP3301**	1,096	DS	30	3327P-JH	90	5	20	8
						180 VDC						
1/8	30	58:1	120	**GP7424**	770	DS	14	2420P-JK	180	0.64	20	6
	38	45:1	100	**GP7423**	770	DS	14	2420P-JK	180	0.64	20	6
	52	33:1	75	**GP7422**	770	DS	14	2420P-JK	180	0.64	20	6
	78	22.5:1	60	**GP7421**	770	DS	14	2420P-JK	180	0.64	20	6
	173	11:1	32	**GP7420**	770	DS	14	2424P-JK	180	0.65	20	6
1/5	50	45:1	120	**GP7428**	770	DS	14	2428P-JK	180	1.1	20	6
1/4	68	45:1	135	**GP7425**	770	DS	14	2428P-JK	180	1.3	20	6
	76	45:1	100	**GP7427**	770	DS	14	2428P-JK	180	1.3	20	6
	104	33:1	75	**GP7426**	770	DS	14	2428P-JK	180	1.3	20	6
	314	11:1	32	**GP7433**	770	DS	14	2428P-JK	180	1.3	20	6

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(b)See notes on the last page of this catalog.

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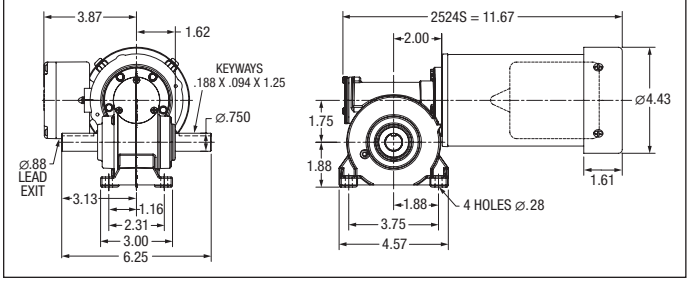
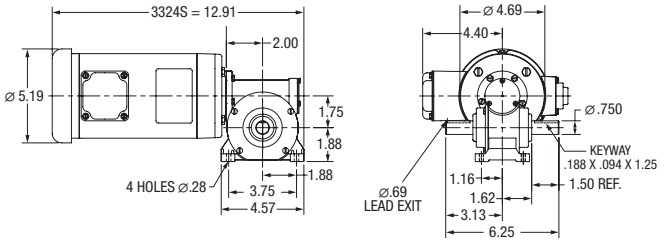
Matching DC drives available. See DC controls.

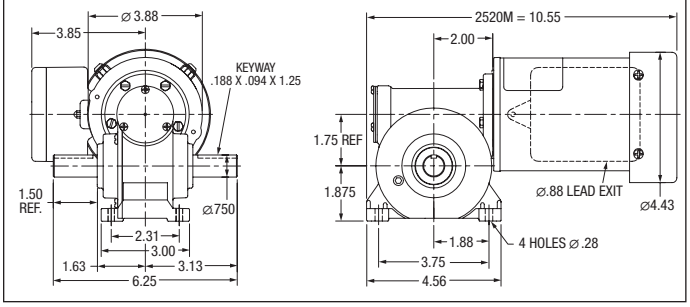
1. 25 JK (Single Phase)



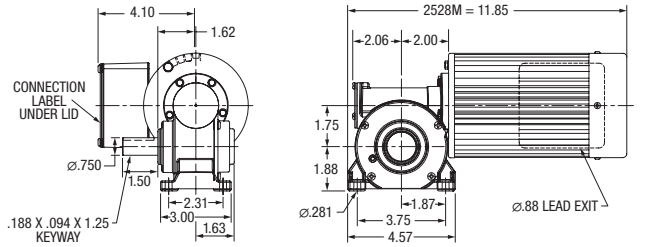
2. 33 JK (Single Phase)



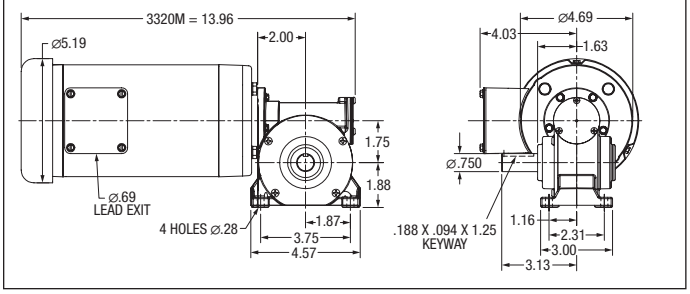
3. 25 JK (Three Phase)



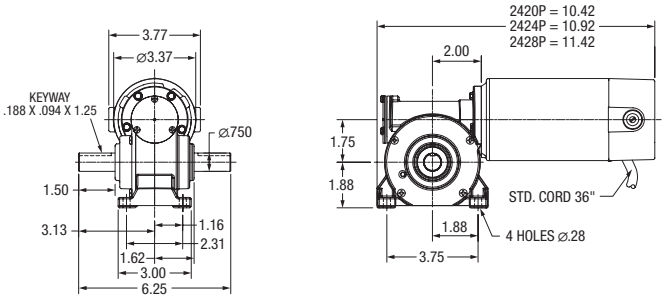
4. 25 JH (Three Phase)



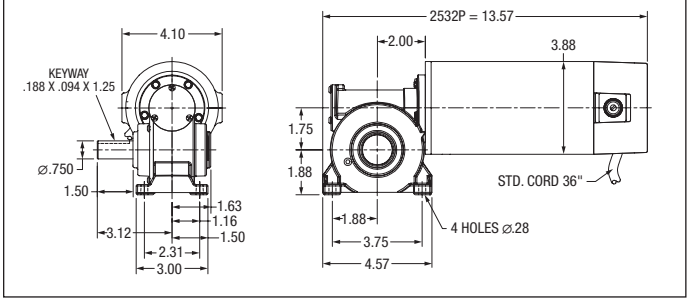
5. 33 JH (Three Phase)



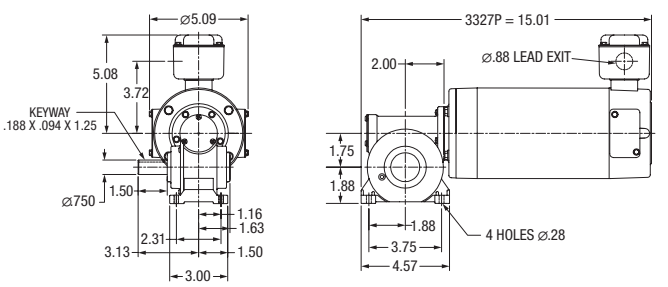
6. 24 JK (DC voltage)



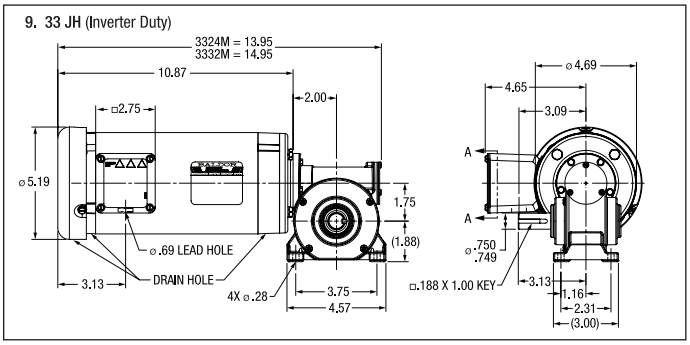
7. 25 JH (DC voltage)



8. 33 JH (DC voltage)



9. 33 JH (Inverter Duty)



GPF13517 Shown
JAF Style

Applications: Conveyors, material handling equipment, packaging machinery, medical and laboratory equipment, printing presses, commercial ovens, and machine tools.

Features: DCPM motor provides exceptional starting torque, adjustable speed, and predictable operating conditions. Ball bearing on output for smooth torque transmission. High strength bronze gearing with hardened and ground worm for quiet operation and increased radial load capacity. High performance low friction, bidirectional motor seals. Permanently lubricated with synthetic oil. Internal oil expansion bladder allows for multi-position mounting without the need to relocate breather vents. Class F insulation.

Permanent Magnet DC

Input Motor Hp	Output Base Speed	Gear Ratio	Max. Safe Torque In. Lbs.	Catalog Number (a)	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Motor Type & Gear Style	Voltage D.C. Armature	Full Load Amperage Armature	Notes (b)
90 VDC											
1/4	312	8:1	38	**GPF13514**	799	DS	15	2428P-JAF	90	2.50	
	167	15:1	69	**GPF13515**	799	DS	15	2428P-JAF	90	2.50	
	111	22.5:1	96	**GPF13516**	799	DS	15	2428P-JAF	90	2.50	
	76	33:1	110	**GPF13517**	799	DS	15	2428P-JAF	90	2.50	
180 VDC											
1/5	167	15:1	55	**GPF13530**	799	DS	15	135-JAF	180	1.00	
	76	33:1	88	**GPF13532**	799	DS	15	135-JAF	180	1.00	

(a) Vertical motor below gearhead not recommended.
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(b) See notes on the last page of this catalog.

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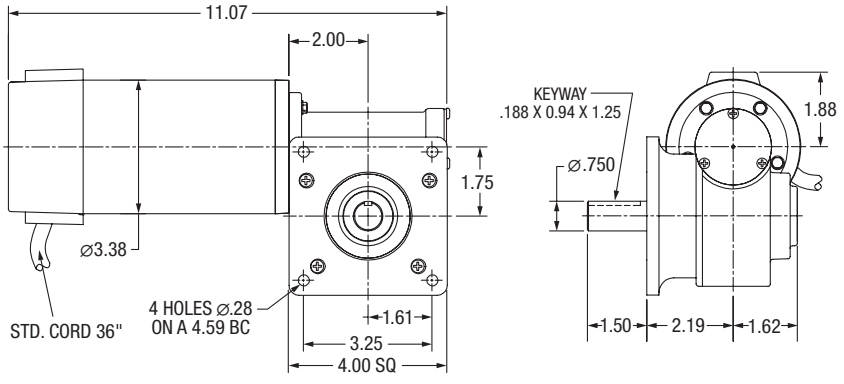
Matching DC drives available. See DC controls.

JAF (DC voltage)



GHL and GHM Shown
H Style

Applications: Conveyors, material handling equipment, packaging machinery, medical and laboratory equipment, printing presses, commercial ovens, and machine tools.

Features: Ball bearing on output for smooth torque transmission. High strength bronze gearing with hardened and ground worm for quiet operation and increased radial load capacity. High performance low friction, bidirectional motor seals. Permanently lubricated with synthetic oil. Internal oil expansion bladder allows for multi-position mounting without the need to relocate breather vents.

Fixed Speed AC

Input Motor Hp	Output RPM 60 Hz	Gear Ratio	Max. Safe Torque In. Lbs. @ 60 Hz	Catalog Number (a)	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Motor Type & Gear Style	Enclosure	Voltage	Notes (b)
Single Phase											
1/2	29	60:1	600	**GHL35060**	1,123	DS	45	3421L-H	TEFC	115/230	33
	58	30:1	350	**GHL35030**	1,123	DS	45	3421L-H	TEFC	115/230	33
	88	20:1	250	**GHL35020**	1,123	DS	45	3421L-H	TEFC	115/230	33
	175	10:1	150	**GHL35010**	1,123	DS	45	3421L-H	TEFC	115/230	33
3/4	58	30:1	550	**GHL37530**	1,208	DS	50	3428LC-H	TEFC	115/230	33
	88	20:1	420	**GHL37520**	1,208	DS	50	3428LC-H	TEFC	115/230	33
	175	10:1	230	**GHL37510**	1,208	DS	50	3428LC-H	TEFC	115/230	33
1	58	30:2	750	**GHL31030**	1,379	DS	55	3524L-H	TEFC	115/230	33
	88	20:1	550	**GHL31020**	1,379	DS	55	3524L-H	TEFC	115/230	33
	175	10:1	300	**GHL31010**	1,379	DS	55	3524L-H	TEFC	115/230	33
Three Phase											
1/2	29	60:1	600	**GHM35060**	1,083	DS	40	3416M-H	TEFC	230/460	30, 33
	35	50:1	609	**GHM35050**	1,083	DS	40	3416M-H	TEFC	230/460	30, 33
	44	40:1	528	**GHM35040**	1,083	DS	40	3416M-H	TEFC	230/460	30, 33
	58	30:1	350	**GHM35030**	1,083	DS	40	3416M-H	TEFC	230/460	30, 33
	87	20:1	200	**GHM35020**	1,083	DS	40	3416M-H	TEFC	230/460	30, 33
	174	10:1	135	**GHM35010**	1,083	DS	40	3416M-H	TEFC	230/460	30, 33
3/4	58	30:1	550	**GHM37530**	1,114	DS	42	3420M-H	TEFC	208-230/460	33
	88	20:1	420	**GHM37520**	1,114	DS	42	3420M-H	TEFC	208-230/460	33
	175	10:1	230	**GHM37510**	1,114	DS	42	3420M-H	TEFC	208-230/460	33
1	58	30:1	750	**GHM31030**	1,114	DS	45	3426M-H	TEFC	208-230/460	33
	88	20:1	550	**GHM31020**	1,114	DS	45	3426M-H	TEFC	208-230/460	33
	175	10:1	300	**GHM31010**	1,114	DS	45	3426M-H	TEFC	208-230/460	33

(a) Vertical motor below gearhead not recommended.
Avoiding those positions where the high speed oil seal is immersed in oil, will provide greater security against high speed input seal wear.
(b) See notes on the last page of this catalog.

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H Gearbox Accessories

Optional base and shaft kits for H style gearmotors. Adding a base and shaft kit allows them to be used in applications requiring a rightangle shaft extension. The shaft can be used for either right or left hand output applications.

Catalog Number	Description	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.
B19H71	Horiz Base Kit	82	A8	1
SH10HS	Output Shaft Kit	26	A8	2
TA05HK	Torque Arm Kit	88	A8	2

GCP24114 Shown
PSSH Style

Applications: Conveyors, packaging machinery, medical and laboratory equipment, printing presses, commercial ovens, and machine tools.

Features: Induction hardened helical and spur gears for extra strength. Ball and needle-bearing construction for improved torque capacity. Factory lubricated for life, no maintenance required. Industry standard dimensions. An optional bolt-on base is available for foot mounting ("L" Type Mtg Bracket).

Fixed Speed AC

Input Motor Hp	Output RPM 50/60 Hz.	Gear Ratio	Stages	Max. Safe Torque In. Lbs. @ 60 Hz	Catalog Number (a)	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Motor Type & Gear Style	Enclosure	Voltage	Notes (b)	Drawing Number
Single Phase – Permanent Split Capacitor													
1/100	1.1/1.3	1320	5	101	**GCP24369**	595	DS	10	2412C-PSSH	TENV	115	19, 20, 78	2
	1.9/2.3	720	5	100	**GCP24702**	595	DS	10	2412C-PSSH	TENV	115	19, 20, 78	2
1/80	4.3/5.2	320	4	100	**GCP24362**	567	DS	10	2412C-PSSH	TENV	115	19, 20, 78	2
	7.7/9.2	180	4	76	**GCP24186**	567	DS	10	2412C-PSSH	TENV	115	19, 20, 78	2
1/40	7.6/9.4	180:1	4	120	**GCP24114**	567	DS	10	2412C-PSSH	TENV	115	19, 20, 78	2
1/25	15.3/18	90:1	4	120	**GCP24122**	567	DS	10	2416C-PSSH	TENV	115	19, 20, 78	2
	23/27.3	60:1	3	80.7	**GCP24124**	561	DS	10	2416C-PSSH	TENV	115	19, 20, 78	1
1/20	14/16	100	3	100	**GCP24100**	561	DS	10	2416C-PSSH	TENV	115	19, 20, 78	1
	18/22	75	3	100	**GCP24072**	561	DS	10	2416C-PSSH	TENV	115	19, 20, 78	1
	28/33	50	3	96	**GCP24050**	561	DS	10	2416C-PSSH	TENV	115	19, 20, 78	1
	36/43	37.95	3	62	**GCP24037**	561	DS	10	2416C-PSSH	TENV	115	19, 20, 78	1
	55/66	25	2	49	**GCP24026**	542	DS	10	2416C-PSSH	TENV	115	19, 20, 78	1
	84/100	16.43	2	30	**GCP24017**	542	DS	10	2416C-PSSH	TENV	115	19, 20, 78	1
	109/130	12.65	2	25	**GCP24013**	542	DS	10	2416C-PSSH	TENV	115	19, 20, 78	1
	138/165	10	2	20	**GCP24010**	542	DS	10	2416C-PSSH	TENV	115	19, 20, 78	1
	210/252	6.55	2	13	**GCP24007**	542	DS	10	2416C-PSSH	TENV	115	19, 20, 78	1
	275/330	5	2	10	**GCP24005**	542	DS	10	2416C-PSSH	TENV	115	19, 20, 78	1
1/12	45/54.8	30:1	3	83.7	**GCP24134**	561	DS	10	2424C-PSSH	TENV	115	19, 20, 78	1
	68/82.5	20:1	2	55.8	**GCP24136**	542	DS	10	2424C-PSSH	TENV	115	19, 20, 78	1
	90/109	15:1	2	42.8	**GCP24138**	542	DS	10	2424C-PSSH	TENV	115	19, 20, 78	1
	136/163	10:1	2	28.5	**GCP24140**	542	DS	10	2424C-PSSH	TENV	115	19, 20, 78	1
	272/326	5:1	2	14.3	**GCP24142**	542	DS	10	2424C-PSSH	TENV	115	19, 20, 78	1

Variable Speed AC

Input Motor Hp	Output RPM 60 Hz	Gear Ratio	Stages	Speed Range (VT)	Max. Safe Torque In. Lbs. @ 60 Hz	Catalog Number (a)	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Motor Type & Gear Style	Voltage @ 60 Hz	Notes (b)	Drawing Number
Three Phase – Inverter Duty													
1/25	10	180:1	4	1.6-14.4	144	**IDGMP24180**	613	E2	11	2412M-PSSH	230	77	3
1/15	19	90:1	4	3.1-28.2	144	**IDGMP24090**	613	E2	11	2416M-PSSH	230	77	3
	29	60:1	3	4.6-41.8	130	**IDGMP24060**	595	E2	11	2416M-PSSH	230	77	3
1/8	58	30:1	3	9.2-82.5	125	**IDGMP24030**	595	E2	10	2424M-PSSH	230	77	4
1/4	86	20:1	2	14-126	142	**IDGMP24020**	561	E2	10	2524M-PSSH	230	77	5
	172	10:1	2	27.8-250	86	**IDGMP24010**	561	E2	10	2524M-PSSH	230	77	5
	345	5:1	2	55.8-502	44	**IDGMP24005**	561	E2	10	2524M-PSSH	230	77	5

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(b) See notes on the last page of this catalog.

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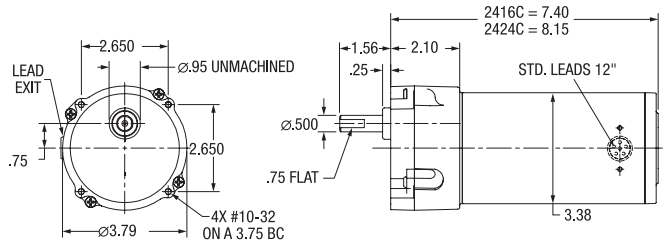
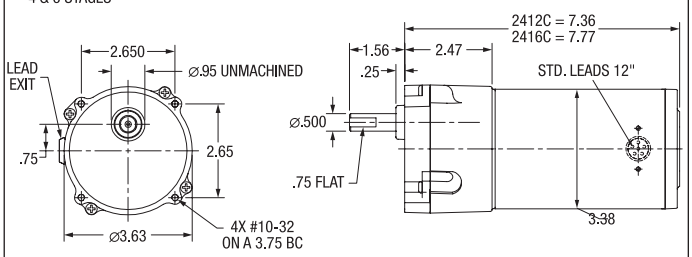
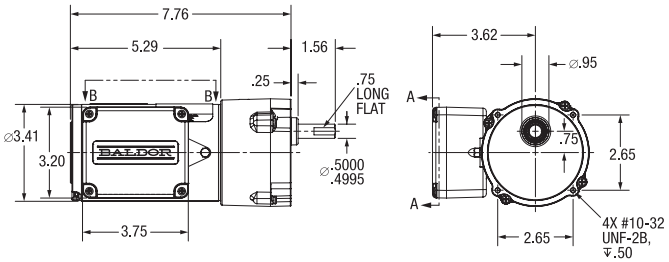
1. 24 - PSSH
2 & 3 STAGES



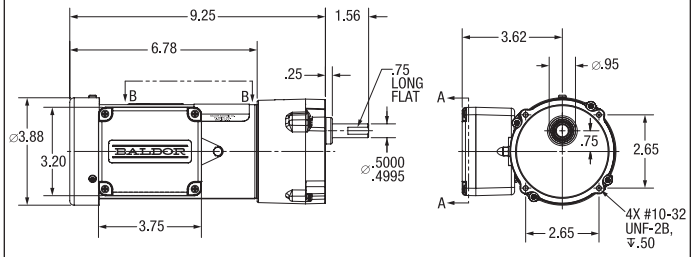
2. 24 - PSSH
4 & 5 STAGES



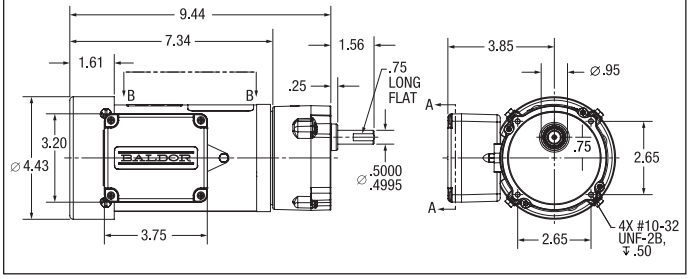
3. 24 - PSSH
4 STAGES



4. 24 - PSSH
3 STAGES



5. 25 - PSSH
2 STAGES



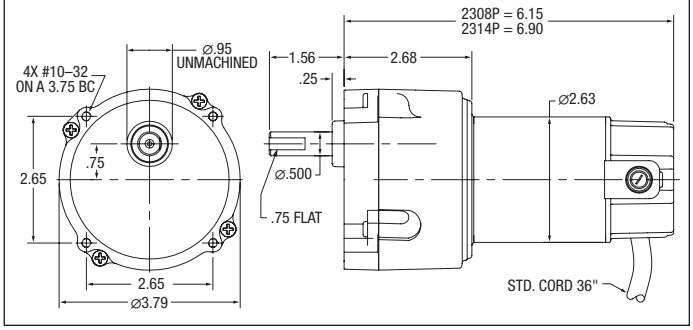
Permanent Magnet DC

Input Motor Hp	Output Base Speed	Gear Ratio	Stages	Max. Safe Torque In. Lbs.	Catalog Number (a)	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Motor Type & Gear Style	Voltage D.C. Armature	Full Load Amperage Armature	Notes (b)	Drawing Number
90 VDC													
1/40	10	180:1	4	100	**GPP230186**	552	DS	7	2314P-PSSH	90	0.30	20	1
	13	135:1	4	100	**GPP230139**	552	DS	7	2314P-PSSH	90	0.30	20	1
1/45	9	180:1	4	100	**GPP231108**	552	DS	7	2308P-PSSH	90	0.30	20	1
1/21	19	90:1	4	118	**GPP232110**	552	DS	8	2314P-PSSH	90	0.50	20	1
1/50	29	60:1	3	40	**GPP231109**	542	DS	8	2308P-PSSH	90	0.30	20	2
1/20	25	75:1	3	100	**GPP230072**	542	DS	8	2318P-PSSH	90	0.60	20	2
	30	60:1	3	100	**GPP233112**	542	DS	8	2318P-PSSH	90	0.50	20	2
	49	37.95:1	3	55	**GPP230037**	542	DS	8	2318P-PSSH	90	0.60	20	2
	71	25:1	2	40	**GPP230025**	537	DS	7	2318P-PSSH	90	0.60	20	2
	95	20:1	2	30	**GPP230019**	537	DS	7	2318P-PSSH	90	0.60	20	2
	139	12.65:1	2	20	**GPP230013**	537	DS	7	2318P-PSSH	90	0.60	20	2
	185	10:1	2	15	**GPP230010**	537	DS	7	2318P-PSSH	90	0.60	20	2
	269	6.55:1	2	11	**GPP230007**	537	DS	7	2318P-PSSH	90	0.60	20	2
	359	5:1	2	8	**GPP230005**	537	DS	7	2318P-PSSH	90	0.60	20	2
1/17	60	30:1	3	50	**GPP233111**	542	DS	8	2318P-PSSH	90	0.50	20	2
1/35	120	20:1	2	9.5	**GPP231110**	537	DS	6	2308P-PSSH	90	0.20	20	2
1/12	43	60:1	3	112	**GPP12505**	542	DS	8	2412P-PSSH	90	0.90	20	3
	58	44:1	3	83	**GPP12504**	542	DS	8	2412P-PSSH	90	0.90	20	3
	125	20:1	2	38.5	**GPP12502**	537	DS	7	2412P-PSSH	90	0.90	20	3
	115	22:1	2	43	**GPP12503**	537	DS	7	2412P-PSSH	90	0.90	20	3
	250	10:1	2	19.7	**GPP12501**	537	DS	7	2412P-PSSH	90	0.90	20	3
180 VDC													
1/22	19	90:1	4	118	**GPP233120**	552	DS	8	2314P-PSSH	180	0.30	20	1
1/12	43	40:1	3	112	**GPP12525**	552	DS	11	2420P-PSSH	180	0.45	20	3
1/20	60	30:1	3	50	**GPP233121**	542	DS	8	2318P-PSSH	180	0.35	20	2
1/12	250	10:1	2	19.7	**GPP12521**	537	DS	7	2416P-PSSH	180	0.49	20	3

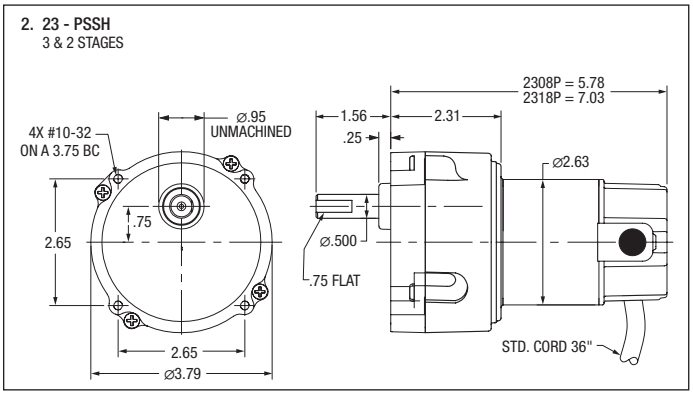
(a) Vertical motor below gearhead not recommended.
Avoiding those positions where the high speed oil seal is immersed in oil, will provide greater security against high speed input seal wear.
(b) See notes on the last page of this catalog.

ATTENTION: Additional ratios, voltages, and ratings are available. Application specific modifications are common, such as custom shaft dimensions, addition of brakes or encoders, specific power cords, and washdown features. Contact your local ABB representative for assistance. Matching DC drives available. See DC controls.

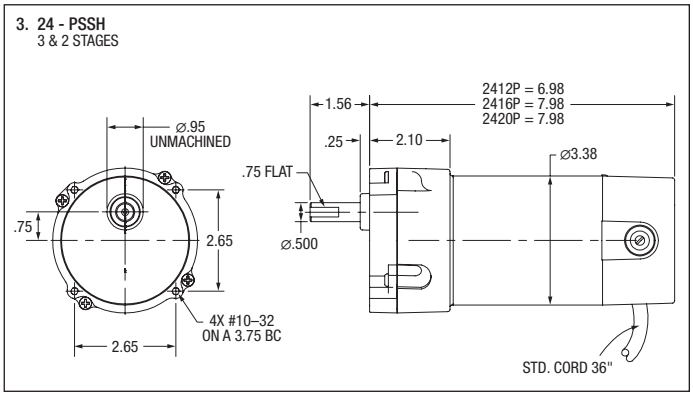
1. 23 - PSSH
5 & 4 STAGES



2. 23 - PSSH
3 & 2 STAGES



3. 24 - PSSH
3 & 2 STAGES



GCP24232 Shown
PSM Style

Applications: Conveyors, packaging machinery, medical and laboratory equipment, printing presses, commercial ovens, and machine tools.

Features: Induction hardened helical and spur gears for extra strength. Ball and needle-bearing construction for improved torque capacity. Factory lubricated for life, no maintenance required. Industry standard dimensions. Optional bases for foot or 3-point face mounting.

Fixed Speed AC

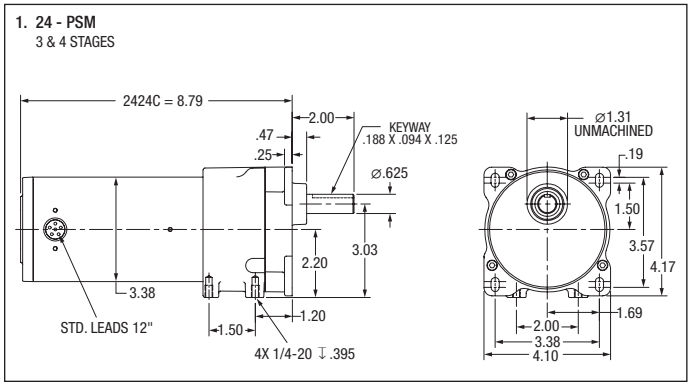
Input Motor Hp	Output RPM 50/60 Hz.	Gear Ratio	Stages	Max. Safe Torque In. Lbs. @ 60 Hz	Catalog Number (a)	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Motor Type & Gear Style	Enclosure	Voltage	Notes (b)	Drawing Number
Single Phase – Permanent Split Capacitor													
1/15	15/18	90:1	4	237	**GCP24232**	647	DS	14	2424C-PSM	TENV	115	19, 20, 78	1
1/12	23/27	60:1	3	167	**GCP24234**	617	DS	14	2424C-PSM	TENV	115	19, 20, 78	1
Single Phase – Split Phase													
1/9	43/36	40:1	3	149	**GCP25052**	617	DS	14	2524S-PSM	TEFC	115	19, 20	2
	47/57	30:1	3	11	**GCP25054**	617	DS	14	2524S-PSM	TEFC	115	19, 20	2
	84/70	20:1	3	74	**GCP25056**	587	DS	14	2524S-PSM	TEFC	115	19, 20	2
	92/111	15:1	2	57	**GCP25058**	587	DS	14	2524S-PSM	TEFC	115	19, 20	2
	138/166	10:1	2	38	**GCP25060**	587	DS	14	2524S-PSM	TEFC	115	19, 20	2
	275/330	5:1	2	19	**GCP25062**	587	DS	14	2524S-PSM	TEFC	115	19, 20	2

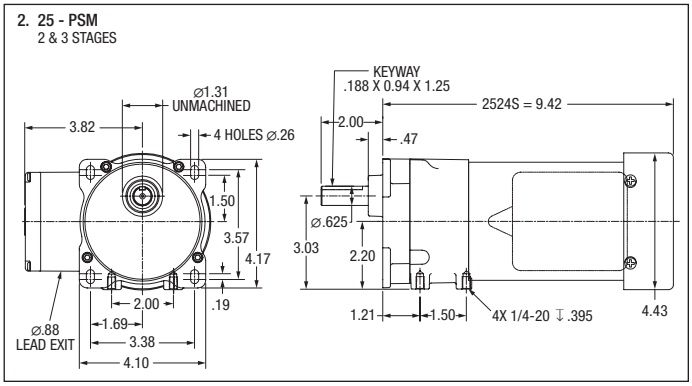
Variable Speed AC

Input Motor Hp	Output RPM 60 Hz	Gear Ratio	Stages	Speed Range (VT)	Max. Safe Torque In. Lbs. @ 60 Hz	Catalog Number (a)	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Motor Type & Gear Style	Voltage @ 60 Hz	Notes (b)	Drawing Number
Three Phase – Inverter Duty													
1/25	10	180:1	4	1.6-14.1	184	**IDGMP25181**	729	E2	14	2412M	230	77	3
1/15	19	90:1	4	3.1-27.9	176	**IDGMP25091**	729	E2	14	2416M	230	77	3
	29	60:1	3	4.6-41.25	204	**IDGMP25061**	698	E2	14	2424M	230	77	4
1/8	58	30:1	3	9.3-83.7	230	**IDGMP25031**	698	E2	14	2524M	230	77	5
1/4	86	20:1	2	13.9-125	162	**IDGMP25021**	698	E2	14	2524M	230	77	5
	172	10:1	2	27.8-250	86	**IDGMP25011**	667	E2	14	2524M	230	77	5
	345	5:1	2	55.8-502	44	**IDGMP25006**	667	E2	14	2524M	230	77	5

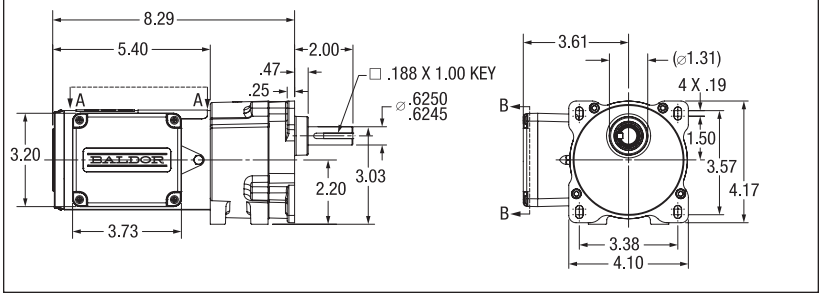
(a) Vertical motor below gearhead not recommended.
Avoiding those positions where the high speed oil seal is immersed in oil, will provide greater security against high speed input seal wear.
(b) See notes on the last page of this catalog.

ATTENTION: Additional ratios, voltages, and ratings are available. Application specific modifications are common, such as custom shaft dimensions, addition of brakes or encoders, specific power cords, and washdown features. Contact your local ABB representative for assistance.

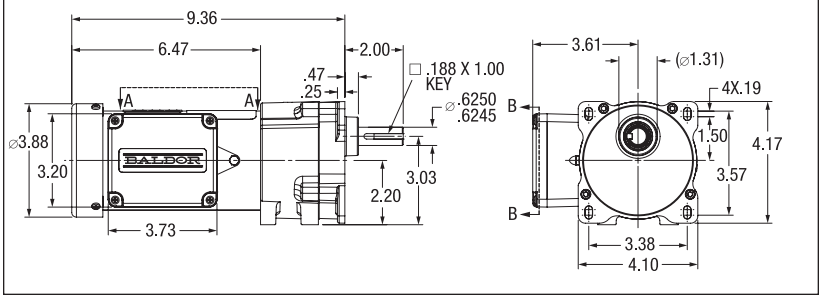




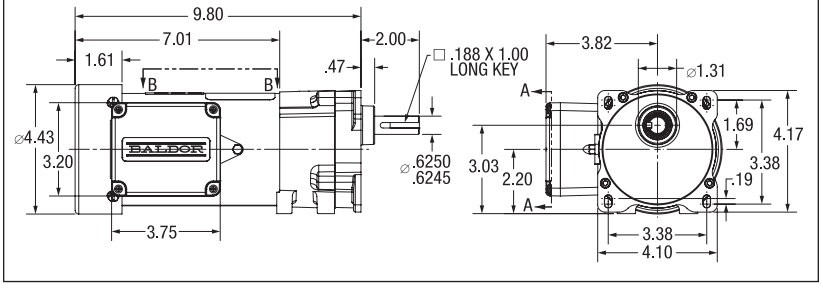
3. 24 - PSM
4 STAGES



4. 24 - PSM
3 STAGES



5. 25 - PSM
2 & 3 STAGES



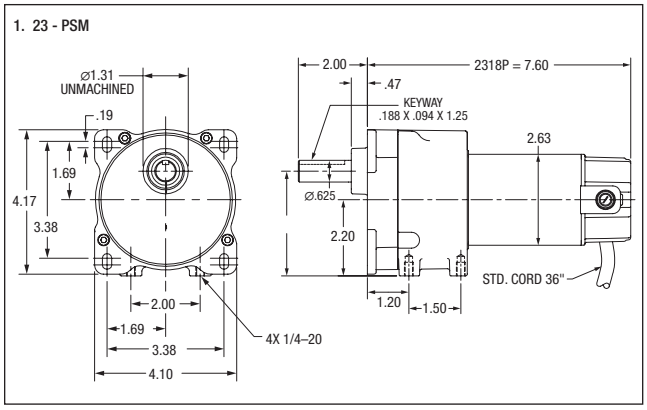
Permanent Magnet DC

Input Motor Hp	Output Base Speed	Gear Ratio	Stages	Max. Safe Torque In. Lbs.	Catalog Number (a)	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Motor Type & Gear Style	Voltage D.C. Armature	Full Load Amperage Armature	Notes (b)	Drawing Number
90 VDC													
1/20	34	50:1	3	85	**GPP230053**	675	DS	7	2318P-PSM	90	0.70	20	1
	7.5	240:1	4	190	**GPP231329**	693	DS	7	2318P-PSM	90	0.50	20	1
1/16	15.4	120:1	4	197	**GPP233141**	693	DS	8	2318P-PSM	90	0.80	20	1
1/15	18.6	90:1	4	180	**GPP233140**	693	DS	10	2318P-PSM	90	0.50	20	1
1/8	30	80:1	3	174	**GPP12556**	694	DS	12	2416P-PSM	90	1.30	20	2
	42	60:1	3	165	**GPP12547**	694	DS	12	2416P-PSM	90	1.30	20	2
	63	40:1	3	116	**GPP12545**	694	DS	12	2416P-PSM	90	1.30	20	2
	83	30:1	3	90	**GPP12544**	694	DS	12	2416P-PSM	90	1.30	20	2
	94	25:1	2	76	**GPP12559**	663	DS	12	2416P-PSM	90	1.30	20	2
	125	20:1	2	58	**GPP12543**	663	DS	12	2416P-PSM	90	1.30	20	2
	167	15:1	2	45	**GPP12542**	663	DS	10	2416P-PSM	90	1.30	20	2
	360	7:1	2	20	**GPP12555**	663	DS	12	2416P-PSM	90	1.30	20	2
	250	10:1	2	30	**GPP12541**	663	DS	10	2416P-PSM	90	1.30	20	2
	500	5:1	2	15	**GPP12540**	663	DS	10	2416P-PSM	90	1.30	20	2
1/4	94	25:1	2	160	**GPP24019**	726	DS	12	2428P-PSM	90	2.50	20	2
	170	15	2	90	**GPP24011**	726	DS	12	2428P-PSM	90	2.50	20	2
	360	7:1	2	40	**GPP24005**	726	DS	12	2428P-PSM	90	2.50	20	2
180 VDC													
1/8	42	60:1	3	174	**GPP12567**	670	DS	11	2416P-PSM	180	0.70	20	2
	83	30:1	3	87	**GPP12564**	670	DS	11	2416P-PSM	180	0.70	20	2
	250	10:1	2	30	**GPP12561**	663	DS	11	2416P-PSM	180	0.70	20	2
	500	5:1	2	15	**GPP12560**	663	DS	11	2416P-PSM	180	0.70	20	2

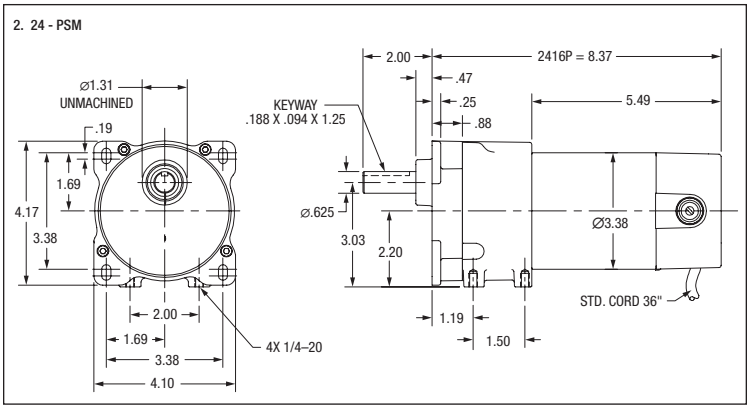
(a) Vertical motor below gearhead not recommended.
Avoiding those positions where the high speed oil seal is immersed in oil, will provide greater security against high speed input seal wear.
(b) See notes on the last page of this catalog.

ATTENTION: Additional ratios, voltages, and ratings are available. Application specific modifications are common, such as custom shaft dimensions, addition of brakes or encoders, specific power cords, and washdown features. Contact your local ABB representative for assistance.
Matching DC drives available. See DC controls.

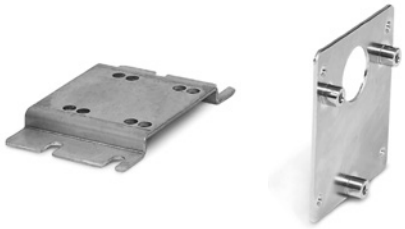
1. 23 - PSM



2. 24 - PSM



PSM Mounting Adapters



B92 is a formed steel mounting base that bolts to the machined surface on bottom of the PSM gear box. Provides secure foot mounting of gearmotor and drop-in interchangeability with other major manufacturers.

B93 is a three point face mounting adapter. Provides interchangeability with other manufacturers.

Catalog Number	Description	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.
B92	Foot Mount	49	A8	1
B93	3 Point Face Mount	62	A8	1

PSL Style
Fixed Speed AC

Applications: Conveyors, packaging machinery, medical and laboratory equipment, printing presses, commercial ovens, and machine tools.

Features: Induction hardened helical and spur gears for extra strength. Ball and needle-bearing construction for improved torque capacity. Factory lubricated for life, no maintenance required. Industry standard dimensions. An optional bolt-on base is available for foot mounting in Motor Accessories.

Input Motor Hp	Output RPM 50/60 Hz.	Gear Ratio	Stages	Max. Safe Torque In. Lbs. @ 60 Hz	Catalog Number (a)	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Motor Type & Gear Style	Enclosure	Voltage	Notes (b)	Drawing Number
Single Phase – Permanent Split Capacitor													
1/25	4.5/5.5	300:1	4	325	**GCP24002**	896	DS	15	2416C-PSL	TENV	115	19, 20, 78	1
	7.6/9.1	180:1	4	235	**GCP24004**	896	DS	15	2416C-PSL	TENV	115	19, 20, 78	1
1/12	11/13.7	120:1	4	330	**GCP24020**	896	DS	15	2424C-PSL	TENV	115	19, 20, 78	1
	15/18.2	90:1	4	250	**GCP24022**	896	DS	15	2424C-PSL	TENV	115	19, 20, 78	1
1/6	6.3/7.6	225:1	4	369	**GCP25216**	896	DS	15	2520C-PSL	TEFC	115/230	19, 20	2
	13.9/16.7	100:1	3	450	**GCP25102**	881	DS	20	2524C-PSL	TEFC	115/230	19, 20	2
	17.5/21	80:1	3	400	**GCP25082**	881	DS	20	2524C-PSL	TEFC	115/230	19, 20	2
	23/28	60:1	3	313	**GCP25658**	881	DS	20	2524C-PSL	TEFC	115/230	19, 20	2
	58	30:1	3	164	**GCP3305**	881	DS	24	3316C-PSLH	TENV	115	33	4
	86	20:1	2	112	**GCP3310**	849	DS	24	3316C-PSLH	TENV	115	33	4
	173	10:1	2	56	**GCP3315**	849	DS	24	3316C-PSLH	TENV	115	33	4
Single Phase – Split Phase													
1/8	23/28	60:1	3	270	**GCP25002**	870	DS	18	2524S-PSL	TEFC	115	19, 20	2
	45/55	30:1	3	135	**GCP25004**	870	DS	18	2524S-PSL	TEFC	115	19, 20	2
	71/85	20:1	2	92	**GCP25006**	840	DS	18	2524S-PSL	TEFC	115	19, 20	3
	141/170	10:1	2	46	**GCP25008**	840	DS	18	2524S-PSL	TEFC	115	19, 20	3
	283/340	5:1	2	23	**GCP25010**	840	DS	18	2524S-PSL	TEFC	115	19, 20	3
Single Phase – Capacitor Start Induction Run													
1/4	29	60:1	3	483	**GLP3310**	990	DS	25	3320L-PSLH	TEFC	115/208-230	33	5
1/3	35	50:1	3	438	**GLP3328**	990	DS	25	3324L-PSLH	TEFC	115/208-230	20, 33	5
	57.5	30:1	3	320	**GLP3330**	990	DS	25	3324L-PSLH	TEFC	115/208-230	20, 33	5
	86.3	20:1	2	218	**GLP3332**	931	DS	25	3324L-PSLH	TEFC	115/208-230	20, 33	5
	172.5	10:1	2	109	**GLP3336**	931	DS	27	3324L-PSLH	TEFC	115/208-230	20, 33	5
	345	5:1	2	55	**GLP3338**	931	DS	25	3324L-PSLH	TEFC	115/208-230	20, 33	5
Single Phase – Capacitor Start Capacitor Run													
1/4	36/44	37.5:1	3	294	**GLP25036**	870	DS	24	2528LC-PSL	TEFC	115/230	19, 20	7
	45/55	30:1	3	250	**GLP25029**	870	DS	24	2528LC-PLS	TEFC	115/230	19, 20	7
	68/82	20:1	2	177	**GLP25019**	819	DS	24	2528LC-PSL	TEFC	115/230	19, 20	7
	91/110	15:1	2	128	**GLP25015**	819	DS	24	2528LC-PSL	TEFC	115/230	19, 20	7
	137/165	10:1	2	91	**GLP25011**	819	DS	24	2528LC-PSL	TEFC	115/230	19, 20	7
	275/330	5:1	2	41	**GLP25005**	819	DS	24	2528LC-PSL	TEFC	115/230	19, 20	7
1/2	58	30:1	3	484	**GLP3342**	1,044	DS	32	3328LC-PSL	TEFC	115/208-230	20, 33	8
	88	20:1	2	326	**GLP3344**	985	DS	31	3328LC-PSL	TEFC	115/208-230	20, 33	8
	117	15:1	2	245	**GLP3346**	985	DS	31	3328LC-PSL	TEFC	115/208-230	20, 33	8
	175	10:1	2	164	**GLP3348**	985	DS	31	3328LC-PSL	TEFC	115/208-230	20, 33	8
Three Phase													
1/3	57	30:1	3	320	**GMP3330**	980	DS	27	3320M-PSLH	TEFC	208-230/460	33	6
	86	20:1	2	218	**GMP3332**	921	DS	25	3320M-PSLH	TEFC	208-230/460	33	6
	173	10:1	2	109	**GMP3336**	921	DS	25	3320M-PSLH	TEFC	208-230/460	33	6
	345	5:1	2	55	**GMP3338**	921	DS	25	3320M-PSLH	TEFC	208-230/460	33	6
1/2	43	40:1	3	627	**GMP3340**	1,035	DS	27	3320M-PSLH	TEFC	208-230/460	33	6
	58	30:1	3	484	**GMP3342**	1,035	DS	27	3320M-PSLH	TEFC	208-230/460	33	6
	86	20:1	2	326	**GMP3344**	977	DS	25	3320M-PSLH	TEFC	208-230/460	33	6
	173	10:1	2	164	**GMP3348**	977	DS	25	3320M-PSLH	TEFC	208-230/460	33	6

(a) Vertical motor below gearhead not recommended. Avoiding those positions where the high speed oil seal is immersed in oil, will provide greater security against high speed input seal wear. (b) See notes on the last page of this catalog.

ATTENTION: Additional ratios, voltages, and ratings are available. Application specific modifications are common, such as custom shaft dimensions, addition of brakes or encoders, specific power cords, and washdown features. Contact your local ABB representative for assistance.

Variable Speed AC

Input Motor Hp	Output RPM 60 Hz	Gear Ratio	Stages	Speed Range	Max. Safe Torque In. Lbs.	Catalog Number (a)	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Motor Type & Gear Style	Voltage @ 60 Hz	Notes (b)	Drawing Number
Three Phase – Inverter Duty													
1/12	9.6	180:1	4	1.6-14	445	**IDGMP25182**	1,059	E2	20	2516M-PSL	230	77	9
1/8	18.8	90:1	4	3.1-28	360	**IDGMP25092**	1,059	E2	20	2516M-PSL	230	77	9
1/6	28	60:1	3	4.7-42	325	**IDGMP25063**	1,044	E2	18	2516M-PSL	230	77	9
1/4	56	30:1	3	9.4-84	247	**IDGMP25033**	1,044	E2	18	2524M-PSL	230	77	9
	84	20:1	2	14-126	167	**IDGMP25023**	1,025	E2	17	2524M-PSL	230	77	10
	167	10:1	2	27.8-250	85	**IDGMP25013**	1,025	E2	17	2524M-PSL	230	77	10
	335	5:1	2	55.8-502	44	**IDGMP25008**	1,025	E2	17	2524M-PSL	230	77	10
3/8	41	60:1	3	6.8-61	500	**IDGMP25062**	1,037	E2	20	2528M-PSL	230	77	9
	55	30:1	3	9.2-82	350	**IDGMP2505**	1,037	E2	20	2528M-PSL	230	77	11
	83	20:1	2	13.8-124	233	**IDGMP2503**	1,012	E2	18	2528M-PSL	230	77	11
	165	10:1	2	27.5-247	116	**IDGMP2501**	1,012	E2	18	2528M-PSL	230	77	11
	330	5:1	2	55-495	58	**IDGMP2500**	1,012	E2	18	2528M-PSL	230	77	11
1/2	43	40:1	3	7.2-64	637	**IDGMP33040**	1,037	E2	28	3324M-PSLH	230	77	6
	57	30:1	3	9.5-85	482	**IDGMP33030**	1,037	E2	28	3324M-PSLH	230	77	6
	86	20:1	2	14.3-129	326	**IDGMP33020**	1,012	E2	25	3324M-PSLH	230	77	12
	115	15:1	2	19.2-172	245	**IDGMP33015**	1,012	E2	25	3324M-PSLH	230	77	12
	172	10:1	2	28.6-258	164	**IDGMP33010**	1,012	E2	25	3324M-PSLH	230	77	12
	345	5:1	2	57.6-517	82	**IDGMP33005**	1,012	E2	25	3324M-PSLH	230	77	12

(a) Vertical motor below gearhead not recommended.
Avoiding those positions where the high speed oil seal is immersed in oil, will provide greater security against high speed input seal wear.
(b) See notes on the last page of this catalog.

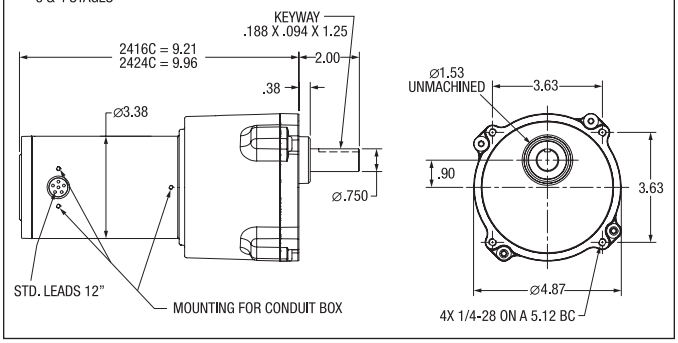
ATTENTION: Additional ratios, voltages, and ratings are available. Application specific modifications are common, such as custom shaft dimensions, addition of brakes or encoders, specific power cords, and washdown features. Contact your local ABB representative for assistance.

"L" Type Mounting Brackets

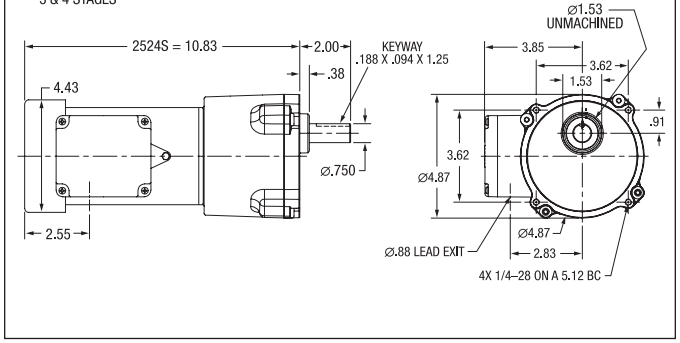
Applications: Mounting bracket for PSSH and PSL gearmotors. Securely mounts to gear face in 90 degree locations for floor, wall or ceiling mount. Catalog Number LB74 is not recommended for PSL/PSLH units weighing over 20 lbs. For units weighing more than 20 lbs. use Catalog Number LB75.

Catalog Number	Gearhead Style	List Price	Mult. Sym.	Color	Ap'x. Shpg. Wgt
LB73	PSSH	49	A8	Black	2
LB74	PSL	69	A8	Black	2
LB75	PSL/PSLH	96	A8	Black	7
LB73GR	PSSH	49	A8	Grey	2
LB74GR	PSL	69	A8	Grey	2
LB75GR	PSL/PSLH	96	A8	Grey	7

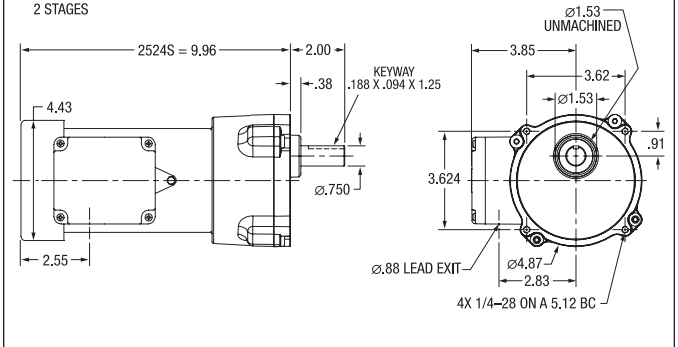
1. 24 - PSL
3 & 4 STAGES



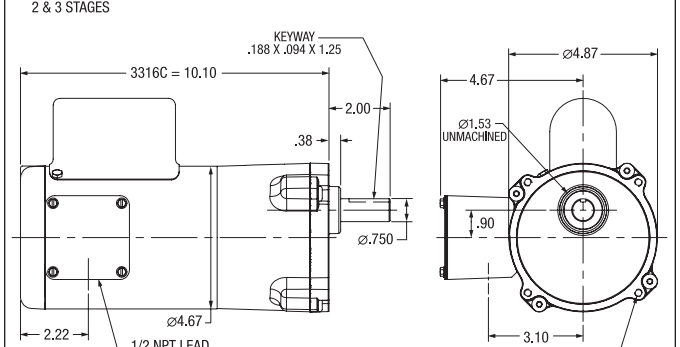
2. 25 - PSL
3 & 4 STAGES



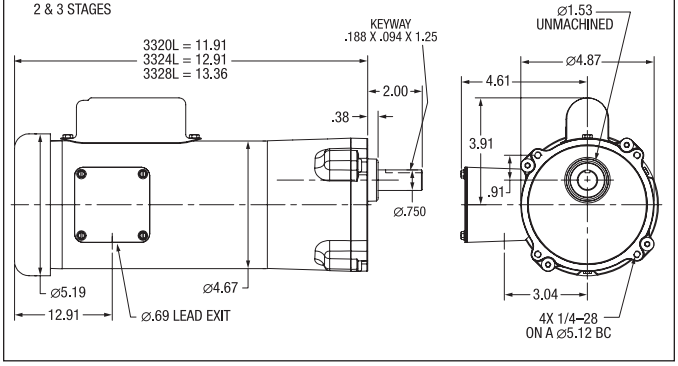
3. 25 - PSL
2 STAGES



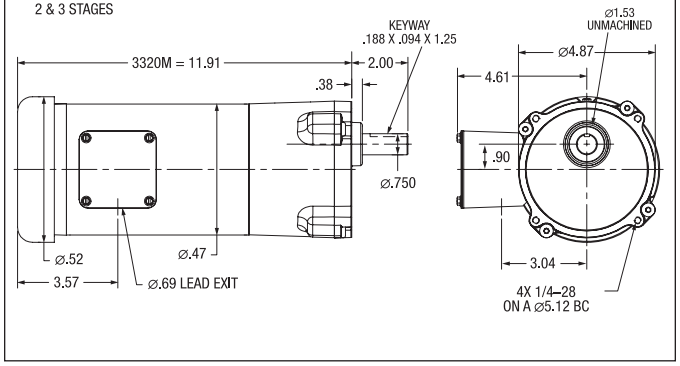
4. 33 - PSL
2 & 3 STAGES



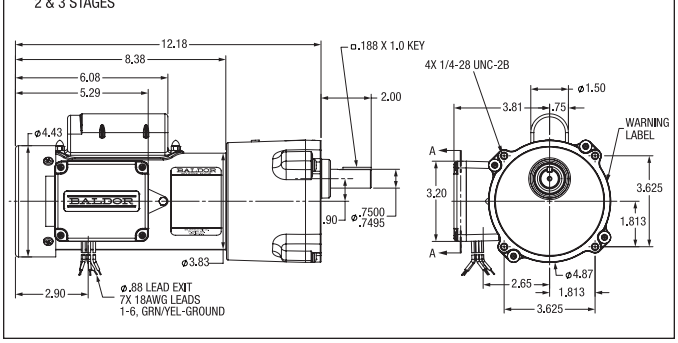
5. 33 - PSLH
2 & 3 STAGES



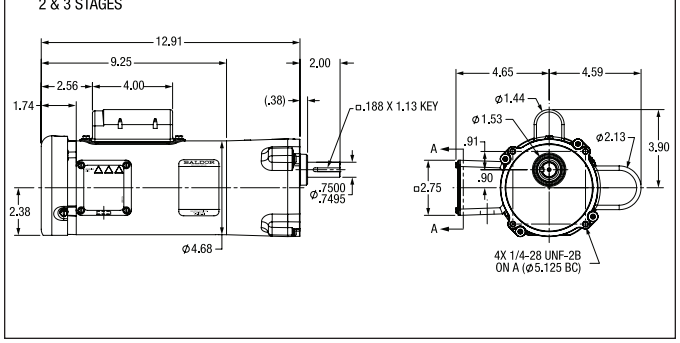
6. 33 - PSLH
2 & 3 STAGES



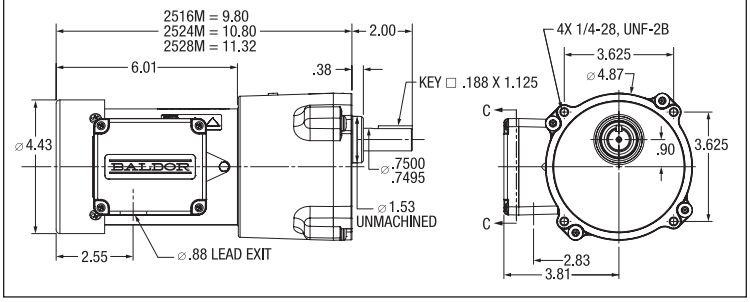
7. 25 - PSLH
2 & 3 STAGES



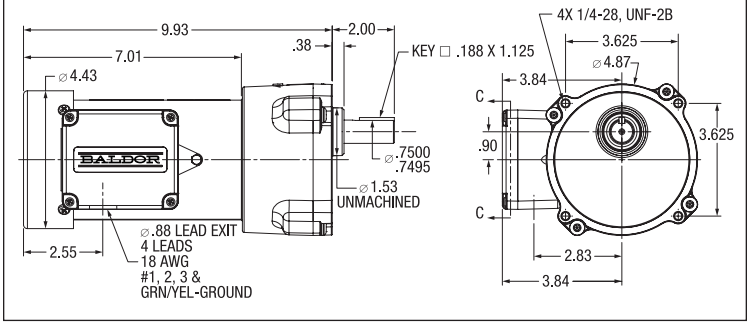
8. 33 - PSLH
2 & 3 STAGES



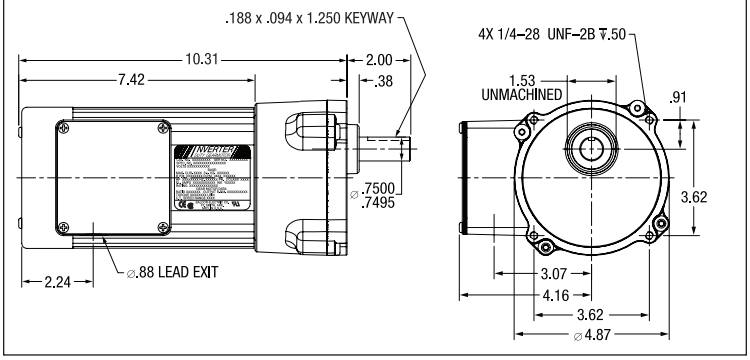
9. 25 - PSLH
3 & 4 STAGES



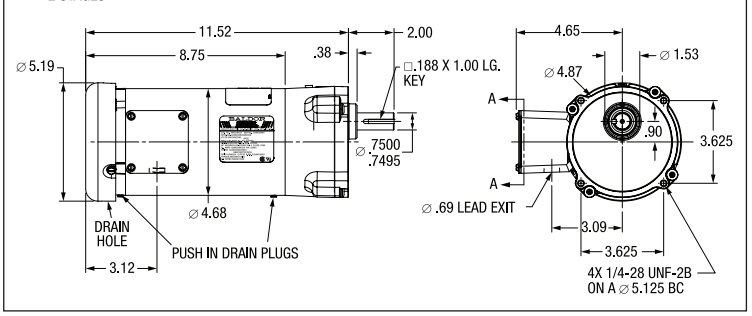
10. 25 - PSL
3 STAGES



11. 25 - PSL
ALUMINUM FRAME



12. 33 - PSL
2 STAGES



Permanent Magnet DC

Input Motor Hp	Output Base Speed	Gear Ratio	Stages	Max. Safe Torque In. Lbs.	Catalog Number (a)	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Motor Type & Gear Style	Voltage D.C. Armature	Full Load Amperage Armature	Notes (b)	Drawing Number
90 VDC													
1/8	8.3	300:1	4	330	**GPP7459**	875	DS	13	2416P-PSL	90	1.30	20	1
	10.4	240:1	4	330	**GPP7462**	875	DS	13	2416P-PSL	90	1.30	20	1
1/4	14	180:1	4	365	**GPP7458**	875	DS	15	2424P-PSL	90	2.50	20	1
	21	120:1	4	365	**GPP7457**	875	DS	15	2424P-PSL	90	2.50	20	1
	28	90:1	4	390	**GPP7461**	875	DS	15	2424P-PSL	90	2.50	20	1
	42	60:1	3	280	**GPP7456**	840	DS	14	2424P-PSL	90	2.50	20	1
	50	50:1	3	250	**GPP7460**	840	DS	14	2424P-PSL	90	2.50	20	1
	62	40:1	3	200	**GPP7455**	840	DS	14	2424P-PSL	90	2.50	20	1
	83	30:1	3	150	**GPP7454**	840	DS	14	2424P-PSL	90	2.50	20	1
	125	20:1	2	100	**GPP7453**	772	DS	13	2424P-PSL	90	2.50	20	2
	165	15:1	2	75	**GPP7452**	772	DS	13	2424P-PSL	90	2.50	20	2
	250	10:1	2	50	**GPP7451**	772	DS	13	2424P-PSL	90	2.50	20	2
	500	5:1	2	25	**GPP7450**	772	DS	13	2424P-PSL	90	2.50	20	2
1/3	58	30:1	3	320	**GPP2530**	1,146	DS	24	2532P-PSLH	90	3.20	20	3
	113	15:1	2	164	**GPP2534**	1,091	DS	24	2532P-PSLH	90	3.20	20	3
	345	5:1	2	55	**GPP2538**	1,091	DS	24	2532P-PSLH	90	3.20	20	3
1/2	83	30:1	3	337	**GPP3340**	1,288	DS	31	3327P-PSLH	90	5.00	20	4
	167	15:1	2	171	**GPP3344**	1,232	DS	31	3327P-PSLH	90	5.00	20	4
	500	5:1	2	57	**GPP3348**	1,232	DS	31	3327P-PSLH	90	5.00	20	4
180 VDC													
1/8	8.3	300:1	4	330	**GPP7479**	875	DS	14	2416P-PSL	180	0.70	20	1
1/4	14	180:1	4	365	**GPP7478**	875	DS	17	2424P-PSL	180	1.30	20	1
	21	120:1	4	365	**GPP7477**	875	DS	15	2424P-PSL	180	1.30	20	1
	42	60:1	3	280	**GPP7476**	840	DS	14	2424P-PSL	180	1.30	20	1
	62	40:1	3	200	**GPP7475**	840	DS	14	2424P-PSL	180	1.30	20	1
	83	30:1	3	155	**GPP7474**	840	DS	14	2424P-PSL	180	1.30	20	1
	125	20:1	2	100	**GPP7473**	772	DS	13	2424P-PSL	180	1.30	20	2
	165	15:1	2	75	**GPP7472**	772	DS	13	2424P-PSL	180	1.30	20	2
	250	10:1	2	50	**GPP7471**	772	DS	13	2424P-PSL	180	1.30	20	2
	500	5:1	2	25	**GPP7470**	772	DS	13	2424P-PSL	180	1.30	20	2
1/3	58	30:1	3	320	**GPP3370**	1,288	DS	31	3327P-PSLH	180	1.60	20	4
	115	15:1	2	164	**GPP3374**	1,232	DS	31	3327P-PSLH	180	1.60	20	4
	345	5:1	2	55	**GPP3378**	1,232	DS	31	3327P-PSLH	180	1.60	20	4
1/2	83	30:1	3	337	**GPP3380**	1,288	DS	31	3327P-PSLH	180	2.40	20	4
	167	15:1	2	171	**GPP3384**	1,232	DS	31	3327P-PSLH	180	2.40	20	4
	500	5:1	2	57	**GPP3388**	1,232	DS	31	3327P-PSLH	180	2.40	20	4

(a) Vertical motor below gearhead not recommended.
Avoiding those positions where the high speed oil seal is immersed in oil, will provide greater security against high speed input seal wear.
(b) See notes on the last page of this catalog.

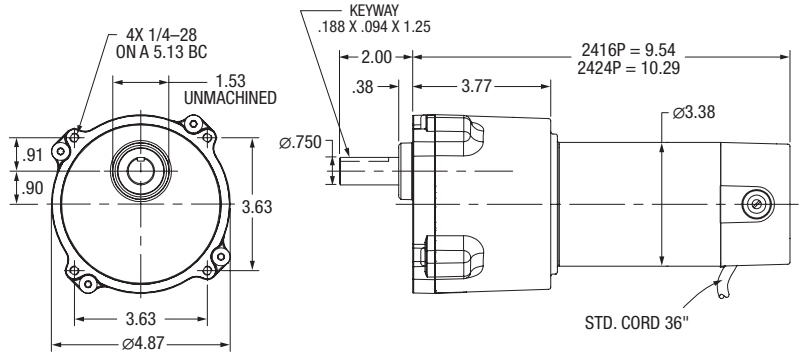
ATTENTION: Additional ratios, voltages, and ratings are available. Application specific modifications are common, such as custom shaft dimensions, addition of brakes or encoders, specific power cords, and washdown features. Contact your local ABB representative for assistance.
Matching DC drives available. See DC controls.

"L" Type Mounting Brackets

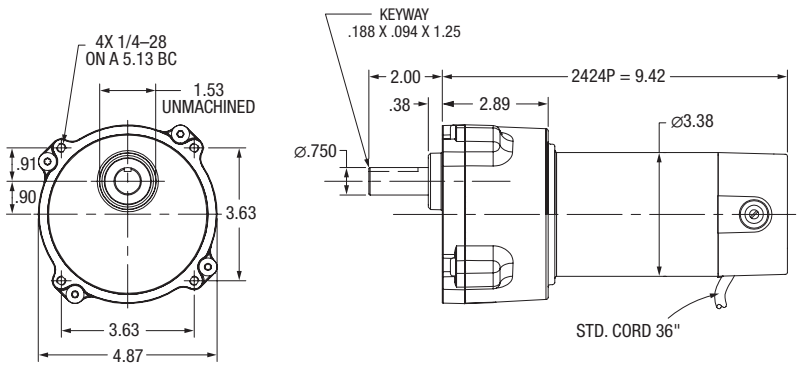
Applications: Mounting bracket for PSSH and PSL gearmotors. Securely mounts to gear face in 90 degree locations for floor, wall or ceiling mount. Catalog Number LB74 is not recommended for PSL/PSLH units weighing over 20 lbs. For units weighing more than 20 lbs. use Catalog Number LB75.

Catalog Number	Gearhead Style	List Price	Mult. Sym.	Color	Ap'x. Shpg. Wgt
LB73	PSSH	49	A8	Black	2
LB74	PSL	69	A8	Black	2
LB75	PSL/PSLH	96	A8	Black	7
LB73GR	PSSH	49	A8	Grey	2
LB74GR	PSL	69	A8	Grey	2
LB75GR	PSL/PSLH	96	A8	Grey	7

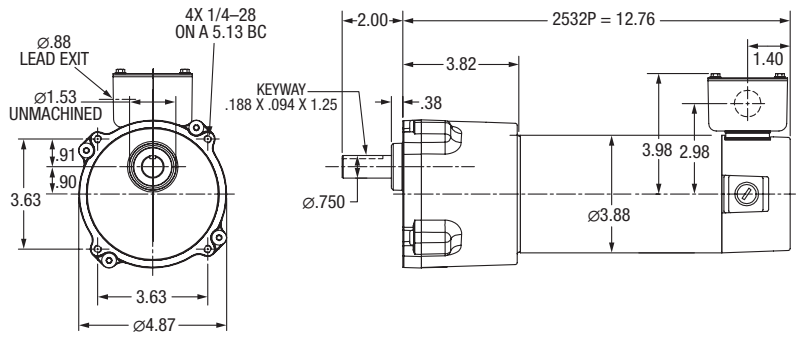
1. 24 - PSL
3 & 4 STAGES



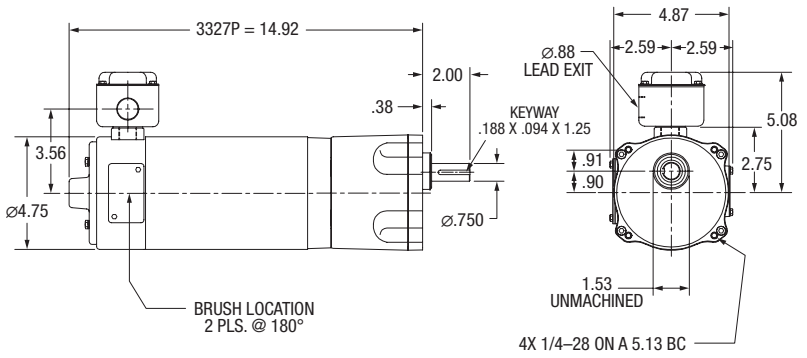
2. 24 - PSL
2 STAGES



3. 25 - PSLH
3 & 2 STAGES



4. 33 - PSLH
2 & 3 STAGES



H50 – Right Angle Hollow Shaft – Worm Gear Reducer

1.97 thru 50mm CD NEMA 56C

H50 Style

Applications: Conveyors, material handling equipment, packaging machinery, medical and laboratory equipment, printing presses, commercial ovens, and machine tools.

Features: Ball bearing on output for smooth torque transmission. High strength bronze gearing with hardened and ground worm for quiet operation and increased radial load capacity. High performance low friction, bidirectional motor seals. Permanently lubricated with synthetic oil. Internal oil expansion bladder allows for multi-position mounting without the need to relocate breather vents.

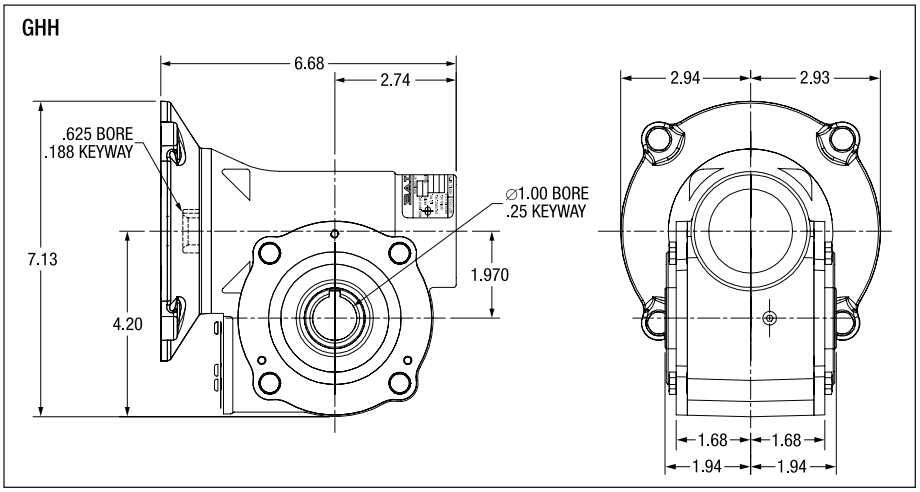
Nominal Output RPM @ 1750 RPM In	Gear Ratio	Continuous Duty Output Torque (In-Lbs) Based on 1750 RPM Motor							Max Input Hp	Max Output Torque Rating In-Lbs	Style Number	Catalog Number	List Price	Mult. Sym.	Ap'x Shpg. Wgt.
		0.25	0.33	0.5	0.75	1	1.5	2							
350	5:1					156	235	315	2.57	435	HF-H-05-H100	**GHH0556**	641	GB	11
175	10:1				230	300	450		1.88	600	HF-H-10-H100	**GHH1056**	641	GB	11
117	15:1			176	263	350			1.37	483	HF-H-15-H100	**GHH1556**	641	GB	11
88	20:1			275	394	550			1	550	HF-H-20-H100	**GHH2056**	641	GB	11
70	25:1		240	350	529				.83	583	HF-H-25-H100	**GHH2556**	641	GB	11
58	30:1		247	350	550				.76	562	HF-H-30-H100	**GHH3056**	641	GB	11
44	40:1	268	345	528					.64	672	HF-H-40-H100	**GHH4056**	641	GB	11
35	50:1	310	400	609					.56	685	HF-H-50-H100	**GHH5056**	641	GB	11
29	60:1	300	418	600					.5	600	HF-H-60-H100	**GHH6056**	641	GB	11

NOTE:
- Service Class I Torque Ratings (1.0 Service Factor)
- Service Class II Torque Ratings (≥ 1.4 Service Factor)
- Service Class III Torque Ratings (≥ 2.0 Service Factor)

ATTENTION: Additional ratios, ratings and mounting configurations are available. Need a fully assembled gearmotor? Have your reducer and motor coupled by utilizing M34D from the Motor Mod Express section. Please contact your local ABB representative for assistance.

Vertical motor below gearhead not recommended.
Avoiding those positions where the high speed oil seal is immersed in oil, will provide greater security against high speed input seal wear.
Replacement oil – 1 Qt P/N MJ0006A05SP (Klubersynth UH1-6-460)

GHH



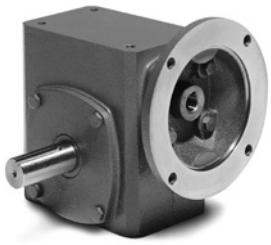
H Gearbox Accessories

Optional base and shaft kits are available for H style gearmotors. Adding a base and shaft kit allows them to be used in applications requiring a rightangle shaft extension. The shaft can be used for either right or left hand output applications.

Catalog Number	Description	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.
B19H71	Horiz Base Kit	82	A8	1
SH10HS	Output Shaft Kit	26	A8	2
TA05HK	Torque Arm Kit	88	A8	2

900 Series – Right Angle – Quill Type – Solid Shaft

1.33 thru 3.75 CD NEMA 56C thru 210TC



Applications: Ideal for conveyors, material handling, textile machines, packaging machinery. etc. (slow speed and high torque).

Features: Heavy duty cast iron housing, chill cast bronze gearing, precision ground hardened worm, ball bearing on input shaft, tapered roller bearings on output shaft. Industry-standard mounting dimensions. Pre-filled with food grade (H1) Klubersynth UH1-6-460 synthetic oil, sealed housing provides maintenance-free lubed for life operation.

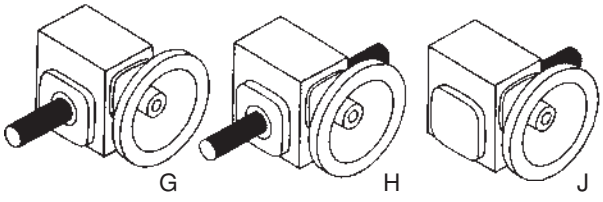
Nominal Output RPM @ 1750 RPM In	Gear Ratio	Continuous Duty Output Torque (In-Lbs) Based on 1750 RPM Motor											Max Input Hp	Max Output Torque Rating In-Lbs	NEMA Motor Mount	Style Number	Catalog Number	List Price	Mult. Sym.	Ap'x Shpg. Wgt.
		0.25	0.33	0.5	0.75	1	1.5	2	3	5	7.5	10								
350	5:1			75	112	149							1.11	165	56C	F-913-05-B5-G	**GF0513AG**	504	GB	20
				75	112	149							1.11	165	56C	F-913-05-B5-J	**GF0513AJ**	504	GB	20
					115	154	231						1.50	231	56C	F-915-05-B5-G	**GF0515AG**	539	GB	25
					115	154	231						1.50	231	140TC	F-915-05-B7-G	**GF0515BG**	539	GB	25
					115	154	231						1.50	231	56C	F-915-05-B5-H	**GF0515AH**	571	GB	25
						160	240	320					2.00	320	56C	F-918-05-B5-G	**GF0518AG**	552	GB	30
						160	240	320					2.00	320	140TC	F-918-05-B7-G	**GF0518BG**	552	GB	30
							246	327	491				3.14	514	140TC	F-921-05-B7-G	**GF0521BG**	691	GB	35
							246	327	491				3.14	514	140TC	F-921-05-B7-J	**GF0521BJ**	691	GB	35
								339	507				4.17	705	180TC	F-924-05-B9-G	**GF0524CG**	815	GB	49
								339	508	847			5.43	919	180TC	F-926-05-B9-G	**GF0526CG**	945	GB	59
									502	837	1255		7.64	1279	180TC	F-930-05-B9-G	**GF0530CG**	1,285	GB	68
										837	1255	1674	13.7	2315	210TC	F-938-05-B11-H	**GF0538DH**	1,798	GB	123
175	10:1		82	125	187								0.90	225	56C	F-913-10-B5-G	**GF1013AG**	504	GB	20
			82	125	187								0.90	225	56C	F-913-10-B5-J	**GF1013AJ**	504	GB	20
			82	125	187								0.90	225	56C	F-913-10-B5-H	**GF1013AH**	533	GB	20
				141	211	282							1.03	290	56C	F-915-10-B5-G	**GF1015AG**	539	GB	26
				141	211	282							1.03	290	140TC	F-915-10-B7-G	**GF1015BG**	539	GB	20
				141	211	282							1.03	290	56C	F-915-10-B5-H	**GF1015AH**	571	GB	25
					214	285	428						1.50	428	56C	F-918-10-B5-G	**GF1018AG**	552	GB	30
					214	285	428						1.50	428	56C	F-918-10-B5-J	**GF1018AJ**	552	GB	30
					214	285	428						1.50	428	56C	F-918-10-B5-H	**GF1018AH**	585	GB	29
					214	285	428						1.50	428	140TC	F-918-10-B7-G	**GF1018BG**	552	GB	30
						312	468	624					2.02	630	56C	F-921-10-B5-G	**GF1021AG**	691	GB	35
						312	468	624					2.02	630	56C	F-921-10-B5-J	**GF1021AJ**	691	GB	35
						312	468	624					2.02	630	56C	F-921G-10-B5-G	**GF10G21AG**	691	GB	30

NOTE: Service Class I Torque Ratings (1.0 Service Factor)
Service Class II Torque Ratings (≥ 1.4 Service Factor)
Service Class III Torque Ratings (≥ 2.0 Service Factor)

Vertical motor below gearhead not recommended.
Avoiding those positions where the high speed oil seal is immersed in oil, will provide greater security against high speed input seal wear.
Replacement oil – 1 Qt P/N MJ0006A05SP (Klubersynth UH1-6-460)

ATTENTION: Additional ratios, ratings and mounting configurations are available.
Need a fully assembled gearmotor? Have your reducer and motor coupled by utilizing M34D from the Motor Mod Express section.
Please contact your local ABB representative for assistance.

Assembly Types



900 Series – Right Angle – Quill Type – Solid Shaft continued…

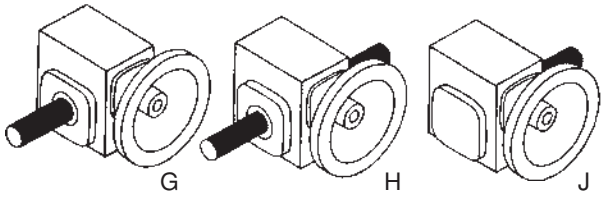
Nominal Output RPM @ 1750 RPM In	Gear Ratio	Continuous Duty Output Torque (In-Lbs) Based on 1750 RPM Motor										Max Input Hp	Max Output Torque Rating In-Lbs	NEMA Motor Mount	Style Number	Catalog Number	List Price	Mult. Sym.	Ap'x Shpg. Wgt.
		0.25	0.33	0.5	0.75	1	1.5	2	3	5	7.5								
175	10:1					312	468	624				2.02	630	56C	F-921-10-B5-H	**GF1021AH**	728	GB	35
						312	468	624				2.02	630	140TC	F-921-10-B7-G	**GF1021BG**	691	GB	35
						317	475	634				2.73	893	140TC	F-924-10-B7-G	**GF1024BG**	815	GB	40
								655	983			3.59	1177	140TC	F-926-10-B7-G	**GF1026BG**	945	GB	52
								655	983			3.59	1177	180TC	F-926-10-B9-G	**GF1026CG**	945	GB	60
								641	961	1602		5.48	1755	180TC	F-930-10-B9-G	**GF1030CG**	1,285	GB	72
									990	1649		6.36	2106	180TC	F-932-10-B9-G	**GF1032CG**	1,393	GB	97
									963	1604	2407	9.05	2905	210TC	F-938-10-B11-G	**GF1038DG**	1,701	GB	126
117	15:1	89	118	179								0.66	225	56C	F-913-15-B5-G	**GF1513AG**	504	GB	20
		89	118	179								0.66	225	56C	F-913-15-B5-J	**GF1513AJ**	504	GB	20
		89	118	179								0.66	225	56C	F-913-15-B5-H	**GF1513AH**	533	GB	20
			127	193	289							0.81	312	56C	F-915-15-B5-G	**GF1515AG**	539	GB	25
			127	193	289							0.81	312	56C	F-915-15-B5-H	**GF1515AH**	571	GB	25
				209	314	419						1.07	448	56C	F-918-15-B5-G	**GF1518AG**	552	GB	30
				209	314	419						1.07	448	56C	F-918-15-B5-J	**GF1518AJ**	552	GB	30
				209	314	419						1.07	448	56C	F-918-15-B5-H	**GF1518AH**	585	GB	30
				246	369	492						1.35	664	56C	F-921-15-B5-G	**GF1521AG**	691	GB	35
				246	369	492						1.35	664	56C	F-921-15-B5-J	**GF1521AJ**	691	GB	35
				246	369	492						1.35	664	56C	F-921-15-B5-H	**GF1521AH**	728	GB	35
				246	369	492						1.35	664	140TC	F-921-15-B7-G	**GF1521BG**	691	GB	35
						470	705	939				2.11	992	56C	F-924-15-B5-G	**GF1524AG**	815	GB	40
						470	705	939				2.11	992	56C	F-924-15-B5-J	**GF1524AJ**	815	GB	40
						470	705	939				2.11	992	140TC	F-924-15-B7-G	**GF1524BG**	815	GB	40
						473	710	947				2.58	1225	140TC	F-926-15-B7-G	**GF1526BG**	945	GB	55
							686	915	1373			4.14	1903	180TC	F-930-15-B9-G	**GF1530CG**	1,285	GB	68
								959	1438			4.66	2241	140TC	F-932-15-B7-G	**GF1532BG**	1,393	GB	87
								959	1438			4.66	2241	180TC	F-932-15-B9-G	**GF1532CG**	1,393	GB	97
									1409	2349		6.64	3118	180TC	F-938-15-B9-G	**GF1538CG**	1,701	GB	119
88	20:1	113	149	226								0.53	239	56C	F-913-20-B5-G	**GF2013AG**	504	GB	20
		113	149	226								0.53	239	56C	F-913-20-B5-H	**GF2013AH**	533	GB	20
		128	169	256								0.62	317	56C	F-915-20-B5-G	**GF2015AG**	539	GB	25
		128	169	256								0.62	317	56C	F-915-20-B5-H	**GF2015AH**	571	GB	25
			165	251	376							0.92	461	56C	F-918-20-B5-G	**GF2018AG**	552	GB	30
			165	251	376							0.92	461	56C	F-918-20-B5-J	**GF2018AJ**	552	GB	30
			165	251	376							0.92	461	56C	F-918-20-B5-H	**GF2018AH**	585	GB	30
				323	484	645						1.06	684	56C	F-921-20-B5-G	**GF2021AG**	691	GB	35
				323	484	645						1.06	684	56C	F-921-20-B5-J	**GF2021AJ**	691	GB	35
				323	484	645						1.06	684	56C	F-921G-20-B5-G	**GF20G21AG**	691	GB	35

NOTE: Service Class I Torque Ratings (1.0 Service Factor)
Service Class II Torque Ratings (≥ 1.4 Service Factor)
Service Class III Torque Ratings (≥ 2.0 Service Factor)

Vertical motor below gearhead not recommended.
Avoiding those positions where the high speed oil seal is immersed in oil, will provide greater security against high speed input seal wear.
Replacement oil – 1 Qt P/N MJ0006A05SP (Klubersynth UH1-6-460)

ATTENTION: Additional ratios, ratings and mounting configurations are available.
Need a fully assembled gearmotor? Have your reducer and motor coupled by utilizing M34D from the Motor Mod Express section.
Please contact your local ABB representative for assistance.

Assembly Types



900 Series – Right Angle – Quill Type – Solid Shaft continued...

Nominal Output RPM @ 1750 RPM In	Gear Ratio	Continuous Duty Output Torque (In-Lbs) Based on 1750 RPM Motor										Max Input Hp	Max Output Torque Rating In-Lbs	NEMA Motor Mount	Style Number	Catalog Number	List Price	Mult. Sym.	Ap'x Shpg. Wgt.
		0.25	0.33	0.5	0.75	1	1.5	2	3	5	7.5								
				323	484	645						1.06	684	56C	F-921-20-B5-H	**GF2021AH**	728	GB	35
				323	484	645						1.06	684	140TC	F-921-20-B7-G	**GF2021BG**	691	GB	35
				323	484	645						1.06	684	140TC	F-921G-20-B7-G	**GF20G21BG**	691	GB	30
					451	602	902					1.72	1038	56C	F-924-20-B5-G	**GF2024AG**	815	GB	40
					451	602	902					1.72	1038	140TC	F-924-20-B7-G	**GF2024BG**	815	GB	40
						609	913	1218				2.15	1308	56C	F-926-20-B5-G	**GF2026AG**	945	GB	55
88	20:1					609	913	1218				2.15	1308	140TC	F-926-20-B7-G	**GF2026BG**	945	GB	52
							880	1174	1761			3.31	1955	140TC	F-930-20-B7-G	**GF2030BG**	1,285	GB	68
							880	1174	1761			3.31	1955	180TC	F-930-20-B9-G	**GF2030CG**	1,285	GB	68
							880	1174	1761			3.31	1955	180TC	F-930-20-B9-J	**GF2030CJ**	1,285	GB	68
							924	1232	1848			3.85	2383	140TC	F-932-20-B7-G	**GF2032BG**	1,393	GB	87
							924	1232	1848			3.85	2383	180TC	F-932-20-B9-G	**GF2032CG**	1,393	GB	97
								1176	1764	2940		5.43	3193	180TC	F-938-20-B9-G	**GF2038CG**	1,701	GB	120
		119	157	238								0.50	238	56C	F-913-25-B5-G	**GF2513AG**	504	GB	20
		156	206	312								0.51	318	56C	F-915-25-B5-G	**GF2515AG**	539	GB	25
		156	206	312								0.51	318	56C	F-915-25-B5-H	**GF2515AH**	571	GB	25
			183	277	416							0.8	444	56C	F-918-25-B5-G	**GF2518AG**	552	GB	28
			183	277	416							0.8	444	56C	F-918-25-B5-J	**GF2518AJ**	552	GB	30
			250	379	569							0.89	675	56C	F-921-25-B5-G	**GF2521AG**	691	GB	35
			250	379	569							0.89	675	56C	F-921-25-B5-J	**GF2521AJ**	691	GB	35
70	25:1		250	379	569							0.89	675	56C	F-921G-25-B5-G	**GF25G21AG**	691	GB	40
				365	547	729						1.37	1002	56C	F-924-25-B5-G	**GF2524AG**	815	GB	36
				365	547	729						1.37	1002	140TC	F-924-25-B7-G	**GF2524BG**	815	GB	40
					567	756	1134					1.73	1307	140TC	F-926-25-B7-G	**GF2526BG**	945	GB	52
						711	1066	1422				2.78	1978	56C	F-930-25-B5-G	**GF2530AG**	1,285	GB	68
						711	1066	1422				2.78	1978	140TC	F-930-25-B7-G	**GF2530BG**	1,285	GB	68
							1134	1513	2269			3.13	2355	140TC	F-932-25-B7-G	**GF2532BG**	1,393	GB	91
								1440	2160			4.50	3222	180TC	F-938-25-B9-H	**GF2538CH**	1,798	GB	126
		148	195									0.42	248	56C	F-913-30-B5-G	**GF3013AG**	504	GB	20
		148	195									0.42	248	56C	F-913-30-B5-H	**GF3013AH**	533	GB	20
		159	210	318								0.50	318	56C	F-915-30-B5-G	**GF3015AG**	539	GB	25
		159	210	318								0.50	318	56C	F-915-30-B5-H	**GF3015AH**	571	GB	25
			216	327								0.72	470	56C	F-918-30-B5-G	**GF3018AG**	552	GB	30
			216	327								0.72	470	56C	F-918-30-B5-J	**GF3018AJ**	552	GB	30
			216	327								0.72	470	56C	F-918-30-B5-H	**GF3018AH**	585	GB	30
			275	416	624							0.83	691	56C	F-921-30-B5-G	**GF3021AG**	691	GB	35
			275	416	624							0.83	691	56C	F-921-30-B5-J	**GF3021AJ**	691	GB	35
			275	416	624							0.83	691	56C	F-921-30-B5-H	**GF3021AH**	728	GB	35
58	30:1		275	416	624							0.83	691	56C	F-921G-30-B5-G	**GF30G21AG**	691	GB	30
				420	630	840						1.32	1111	56C	F-924-30-B5-G	**GF3024AG**	815	GB	40
				420	630	840						1.32	1111	56C	F-924-30-B5-J	**GF3024AJ**	815	GB	40
				420	630	840						1.32	1111	140TC	F-924-30-B7-G	**GF3024BG**	815	GB	40
					641	854	1281					1.54	1313	56C	F-926-30-B5-G	**GF3026AG**	945	GB	52
					641	854	1281					1.54	1313	140TC	F-926-30-B7-G	**GF3026BG**	945	GB	55
						804	1206	1608				2.47	1978	56C	F-930-30-B5-G	**GF3030AG**	1,285	GB	68
						804	1206	1608				2.47	1978	56C	F-930-30-B5-J	**GF3030AJ**	1,285	GB	68
						804	1206	1608				2.47	1978	140TC	F-930-30-B7-G	**GF3030BG**	1,285	GB	65
						881	1322	1763				2.81	2482	140TC	F-932-30-B7-G	**GF3032BG**	1,393	GB	91
								1626	2438			3.97	3226	180TC	F-938-30-B9-G	**GF3038CG**	1,701	GB	126

NOTE: Service Class I Torque Ratings (1.0 Service Factor)
Service Class II Torque Ratings (≥ 1.4 Service Factor)
Service Class III Torque Ratings (≥ 2.0 Service Factor)

Vertical motor below gearhead not recommended.
Avoiding those positions where the high speed oil seal is immersed in oil, will provide greater security against high speed input seal wear.
Replacement oil – 1 Qt P/N MJ0006A05SP (Klubersynth UH1-6-460)

ATTENTION: Additional ratios, ratings and mounting configurations are available.
Need a fully assembled gearmotor? Have your reducer and motor coupled by utilizing M34D from the Motor Mod Express section.
Please contact your local ABB representative for assistance.

900 Series – Right Angle – Quill Type – Solid Shaft continued…

Nominal Output RPM @ 1750 RPM In	Gear Ratio	Continuous Duty Output Torque (In-Lbs) Based on 1750 RPM Motor										Max Input Hp	Max Output Torque Rating In-Lbs	NEMA Motor Mount	Style Number	Catalog Number	List Price	Mult. Sym.	Ap'x Shpg. Wgt.
		0.25	0.33	0.5	0.75	1	1.5	2	3	5	7.5								
44	40:1	174	230									0.33	230	56C	F-913-40-BG-G	**GF4013AG**	504	GB	20
		174	230									0.33	230	56C	F-913-40-B5-H	**GF4013AH**	533	GB	20
		208	275									0.38	317	56C	F-915-40-B5-G	**GF4015AG**	539	GB	25
		208	275									0.38	317	56C	F-915-40-B5-J	**GF4015AJ**	539	GB	25
		180	238	360								0.64	461	56C	F-918-40-B5-G	**GF4018AG**	552	GB	30
		180	238	360								0.64	461	56C	F-918-40-B5-J	**GF4018AJ**	552	GB	30
			340	515								0.66	680	56C	F-921-40-B5-G	**GF4021AG**	691	GB	35
			340	515								0.66	680	56C	F-921-40-B5-J	**GF4021AJ**	691	GB	35
				521	781							0.99	1030	56C	F-924-40-B5-G	**GF4024AG**	815	GB	40
				521	781							0.99	1030	56C	F-924-40-B5-J	**GF4024AJ**	815	GB	40
				521	781							0.99	1030	56C	F-924-40-B5-H	**GF4024AH**	861	GB	40
				524	786	1049						1.23	1296	56C	F-926-40-B5-G	**GF4026AG**	945	GB	55
				524	786	1049						1.23	1296	56C	F-926-40-B5-J	**GF4026AJ**	945	GB	52
				524	786	1049						1.23	1296	140TC	F-926-40-B7-G	**GF4026BG**	945	GB	55
					794	1059	1589					1.84	1960	56C	F-930-40-B5-G	**GF4030AG**	1,285	GB	68
					794	1059	1589					1.84	1960	140TC	F-930-40-B7-G	**GF4030BG**	1,285	GB	68
						1180	1620	2160				2.20	2374	140TC	F-932-40-B7-G	**GF4032BG**	1,393	GB	88
							1596	2129	3192			3.00	3192	180TC	F-938-40-B9-G	**GF4038CG**	1,701	GB	126
							1596	2129	3192			3.00	3192	180TC	F-938-40-B9-H	**GF4038CH**	1,798	GB	126
35	50:1	177	234									0.33	234	56C	F-913-50-B5-G	**GF5013AG**	504	GB	20
		177	234									0.33	234	56C	F-913-50-B5-H	**GF5013AH**	533	GB	20
		230	303									0.33	303	56C	F-915-50-B5-G	**GF5015AG**	539	GB	25
		222	294									0.49	436	56C	F-918-50-B5-G	**GF5018AG**	552	GB	30
		222	294									0.49	436	56C	F-918-50-B5-J	**GF5018AJ**	552	GB	30
		280	370	561								0.58	651	56C	F-921-50-B5-G	**GF5021AG**	691	GB	35
		280	370	561								0.58	651	56C	F-921-50-B5-J	**GF5021AJ**	691	GB	35
		280	370	561								0.58	651	56C	F-921-50-B5-H	**GF5021AH**	728	GB	35
			401	608	912							0.83	1014	56C	F-924-50-B5-G	**GF5024AG**	815	GB	40
				621	932	1242						1.00	1242	56C	F-926-50-B5-G	**GF5026AG**	945	GB	55
				621	932	1242						1.00	1242	140TC	F-926-50-B7-G	**GF5026BG**	945	GB	52
					850	1134	1701					1.67	1890	56C	F-930-50-B5-G	**GF5030AG**	1,285	GB	68
					850	1134	1701					1.67	1890	140TC	F-930-50-B7-G	**GF5030BG**	1,285	GB	68
					958	1278	1917					1.83	2366	56C	F-932-50-B5-G	**GF5032AG**	1,393	GB	87
					958	1278	1917					1.83	2366	140TC	F-932-50-B7-G	**GF5032BG**	1,393	GB	87
						1152	1729	2305				2.67	3076	140TC	F-938-50-B7-G	**GF5038BG**	1,701	GB	117
						1152	1729	2305				2.67	3076	140TC	F-938-50-B7-H	**GF5038BH**	1,798	GB	126
29	60:1	218	288									0.33	288	56C	F-915-60-B5-G	**GF6015AG**	539	GB	25
		218	288									0.33	288	56C	F-915-60-B5-H	**GF6015AH**	571	GB	25
		220	290									0.47	413	56C	F-918-60-B5-G	**GF6018AG**	552	GB	30
		220	290									0.47	413	56C	F-918-60-B5-J	**GF6018AJ**	552	GB	30
		220	290									0.47	413	56C	F-918-60-B5-H	**GF6018AH**	585	GB	30

NOTE: Service Class I Torque Ratings (1.0 Service Factor)
Service Class II Torque Ratings (≥ 1.4 Service Factor)
Service Class III Torque Ratings (≥ 2.0 Service Factor)

Vertical motor below gearhead not recommended.
Avoiding those positions where the high speed oil seal is immersed in oil, will provide greater security against high speed input seal wear.
Replacement oil – 1 Qt P/N MJ0006A05SP (Klubersynth UH1-6-460)

ATTENTION: Additional ratios, ratings and mounting configurations are available.
Need a fully assembled gearmotor? Have your reducer and motor coupled by utilizing M34D from the Motor Mod Express section.
Please contact your local ABB representative for assistance.

900 Series – Right Angle – Quill Type – Solid Shaft continued...

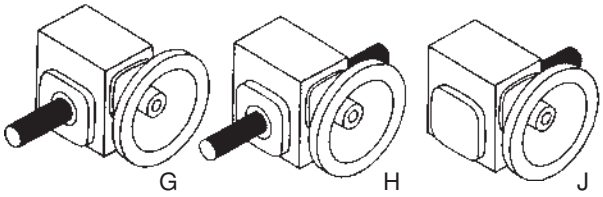
Nominal Output RPM @ 1750 RPM In	Gear Ratio	Continuous Duty Output Torque (In-Lbs) Based on 1750 RPM Motor										Max Input Hp	Max Output Torque Rating In-Lbs	NEMA Motor Mount	Style Number	Catalog Number	List Price	Mult. Sym.	Ap'x Shpg. Wgt.
		0.25	0.33	0.5	0.75	1	1.5	2	3	5	7.5								
29	60:1	317	418	634								0.50	634	56C	F-921-60-B5-G	**GF6021AG**	691	GB	35
		317	418	634								0.50	634	56C	F-921-60-B5-H	**GF6021AH**	728	GB	35
		317	418	634								0.50	634	56C	F-921-60-B5-J	**GF6021AJ**	691	GB	35
			458	693								0.69	958	56C	F-924-60-B5-G	**GF6024AG**	815	GB	40
			458	693								0.69	958	56C	F-924-60-B5-J	**GF6024AJ**	815	GB	40
			473	716	1074							0.82	1166	56C	F-926-60-B5-G	**GF6026AG**	945	GB	55
			473	716	1074							0.82	1166	56C	F-926-60-B5-J	**GF6026AJ**	945	GB	55
			473	716	1074							0.82	1166	56C	F-926-60-B5-H	**GF6026AH**	996	GB	55
					896	1195	1795					1.50	1795	56C	F-930-60-B5-G	**GF6030AG**	1,285	GB	68
					896	1195	1795					1.50	1795	140TC	F-930-60-B7-G	**GF6030BG**	1,285	GB	68
					1100	1467	2200					1.54	2255	56C	F-932-60-B5-G	**GF6032AG**	1,393	GB	90
					1100	1467	2200					1.54	2255	140TC	F-932-60-B7-G	**GF6032BG**	1,393	GB	91
						1254	1881	2508				2.33	2921	140TC	F-938-60-B7-G	**GF6038BG**	1,701	GB	117
						1254	1881	2508				2.33	2921	140TC	F-938-60-B7-H	**GF6038BH**	1,798	GB	126

NOTE: Service Class I Torque Ratings (1.0 Service Factor)
Service Class II Torque Ratings (≥ 1.4 Service Factor)
Service Class III Torque Ratings (≥ 2.0 Service Factor)

Vertical motor below gearhead not recommended.
Avoiding those positions where the high speed oil seal is immersed in oil, will provide greater security against high speed input seal wear.
Replacement oil – 1 Qt P/N MJ0006A05SP (Klubersynth UH1-6-460)

ATTENTION: Additional ratios, ratings and mounting configurations are available.
Need a fully assembled gearmotor? Have your reducer and motor coupled by utilizing M34D from the Motor Mod Express section.
Please contact your local ABB representative for assistance.

Assembly Types



900 Series – Right Angle – Quill Type – Hollow Shaft

1.33 thru 3.25 CD 56C thru 180TC

Applications: Ideal for conveyors, material handling, textile machines, packaging machinery. etc. (slow speed and high torque).

Features: Heavy duty cast iron housing, chill cast bronze gearing, precision ground hardened worm, ball bearing on input shaft, tapered roller bearings on output shaft. Industry-standard mounting dimensions. Pre-filled with food grade (H1) Klubersynth UH1-6-460 synthetic oil, sealed housing provides maintenance-free lubed for life operation.

Nominal Output RPM @ 1750 RPM In	Gear Ratio	Continuous Duty Output Torque (In-Lbs) Based on 1750 RPM Motor										Max Input Hp	Max Output Torque Rating In-Lbs	NEMA Motor Mount	Style Number	Catalog Number	List Price	Mult. Sym.	Ap'x Shpg. Wgt.
		0.25	0.33	0.5	0.75	1	1.5	2	3	5	7.5								
350	5:1			75	112	149						1.00	165	56C	HF-913-05-B5-H	**GHF0513AH**	664	GB	20
						160	240	320				2.00	320	56C	HF-918-05-B5-H	**GHF0518AH**	710	GB	30
175	10:1				214	285	428					1.50	428	56C	HF-918-10-B5-H	**GHF1018AH**	710	GB	30
						312	468	624				2.02	630	56C	HF-921-10-B5-H	**GHF1021AH**	842	GB	35
								641	961	1602		5.48	1755	180TC	HF-930-10-B9-H	**GHF1030CH**	1,527	GB	75
117	15:1	89	118	179								0.66	25	56C	HF-913-15-B5-H	**GHF1513AH**	664	GB	20
				209	314	419						1.07	448	56C	HF-918-15-B5-H	**GHF1518AH**	710	GB	30
				246	369	492						1.35	664	56C	HF-921-15-B5-H	**GHF1521AH**	842	GB	35
						470	705	939				2.11	992	56C	HF-924-15-B5-H	**GHF1524AH**	1,013	GB	45
							686	915	1373			4.14	1903	140TC	HF-930-15-B7-H	**GHF1530BH**	1,527	GB	75
88	20:1	113	149	226								0.53	239	56C	HF-913-20-B5-H	**GHF2013AH**	664	GB	20
			165	251	376							0.92	461	56C	HF-918-20-B5-H	**GHF2018AH**	710	GB	30
				323	484	645						1.06	684	56C	HF-921-20-B5-H	**GHF2021AH**	842	GB	35
					451	602	902					1.72	1038	56C	HF-924-20-B5-H	**GHF2024AH**	1,013	GB	42
						609	913	1218				2.15	1309	56C	HF-926-20-B5-H	**GHF2026AH**	1,195	GB	56
							880	1174	1761			3.31	1955	140TC	HF-930-20-B7-H	**GHF2030BH**	1,527	GB	72
70	25		183	277	416							0.80	444	56C	HF-918-25-B5-H	**GHF2518AH**	710	GB	23
			250	379	569							0.89	675	56C	HF-921-25-B5-H	**GHF2521AH**	842	GB	32
					567	756	1134					1.73	1307	140TC	HF-926-25-B7-H	**GHF2526BH**	1,195	GB	56
						711	1066	1422				2.78	1978	140TC	HF-930-25-B7-H	**GHF2530BH**	1,527	GB	88
58	30:1	148	195									0.42	248	56C	HF-913-30-B5-H	**GHF3013AH**	664	GB	20
			216	327								0.72	470	56C	HF-918-30-B5-H	**GHF3018AH**	710	GB	30
			275	416	624							0.83	691	56C	HF-921-30-B5-H	**GHF3021AH**	842	GB	35
				420	630	840						1.32	1111	56C	HF-924-30-B5-H	**GHF3024AH**	1,013	GB	45
					641	854	1281					1.54	1313	56C	HF-926-30-B5-H	**GHF3026AH**	1,195	GB	56
						804	1206	1608				2.47	1978	140TC	HF-930-30-B7-H	**GHF3030BH**	1,527	GB	75
						881	1322	1763				2.81	2462	140TC	HF-932-30-B7-H	**GHF3032BH**	1,655	GB	95
44	40:1	180	238	360								0.64	461	56C	HF-918-40-B5-H	**GHF4018AH**	710	GB	30
			340	515								0.66	680	56C	HF-921-40-B5-H	**GHF4021AH**	842	GB	35
				521	781							0.99	1030	56C	HF-924-40-B5-H	**GHF4024AH**	1,013	GB	42
				524	786	1049						1.23	1296	56C	HF-926-40-B5-H	**GHF4026AH**	1,195	GB	56
				524	786	1049						1.23	1296	140TC	HF-926-40-B7-H	**GHF4026BH**	1,195	GB	56
						1074	1611	2148				2.20	2374	140TC	HF-932-40-B7-H	**GHF4032BH**	1,655	GB	95
35	50:1	177	234									0.33	234	56C	HF-913-50-B5-H	**GHF5013AH**	664	GB	20
		222	294									0.49	436	56C	HF-918-50-B5-H	**GHF5018AH**	710	GB	30
		280	370	561								0.58	651	56C	HF-921-50-B5-H	**GHF5021AH**	842	GB	35
			401	608	912							0.83	1014	56C	HF-924-50-B5-H	**GHF5024AH**	1,013	GB	45
					850	1134	1701					1.67	1890	56C	HF-930-50-B5-H	**GHF5030AH**	1,527	GB	75
					958	1278	1917					1.83	2366	56C	HF-932-50-B5-H	**GHF5032AH**	1,655	GB	95
29	60:1	220	290									0.47	413	56C	HF-918-60-B5-H	**GHF6018AH**	710	GB	30
		317	418	634								0.50	634	56C	HF-921-60-B5-H	**GHF6021AH**	842	GB	35
			458	693								0.69	958	56C	HF-924-60-B5-H	**GHF6024AH**	1,013	GB	42
			473	716	1074							0.82	1166	56C	HF-926-60-B5-H	**GHF6026AH**	1,195	GB	56
					896	1195	1795					1.50	1795	56C	HF-930-60-B5-H	**GHF6030AH**	1,527	GB	71
					1100	1467	2200					1.54	2255	56C	HF-932-60-B5-H	**GHF6032AH**	1,655	GB	92

NOTE:
- Service Class I Torque Ratings (1.0 Service Factor)
- Service Class II Torque Ratings (≥ 1.4 Service Factor)
- Service Class III Torque Ratings (≥ 2.0 Service Factor)

ATTENTION: Additional ratios, ratings and mounting configurations are available. Need a fully assembled gearmotor? Have your reducer and motor coupled by utilizing M34D from the Motor Mod Express section. Please contact your local ABB representative for assistance.

Vertical motor below gearhead not recommended Replacement oil – 1 Qt P/N MJ0006A05SP (Klubersynth UH1-6-460)
Avoiding those positions where the high speed oil seal is immersed in oil, will provide greater security against high speed input seal wear.

900 Series – Stainless Steel – Right Angle – Quill Type – Solid Shaft

1.75 thru 2.62 CD 56C thru 140TC

Applications: Stainless speed reducers are easy to clean and sanitize, minimizing bacterial contamination for food processing equipment. Stainless steel provides the high protection for pharmaceutical and chemical processing applications where harsh chemicals and cleaning solutions can be extremely corrosive to aluminum, cast iron and other materials.

Features: Housing and covers are cast stainless steel to endure hostile environments. 300 Series stainless output shafts and all stainless steel hardware for long rust resistant life. O-ring sealed housing and motor interface helps keeps contaminants out. Pre-filled with food grade (H1) Klubersynth UH1-6-460 synthetic oil. Sealed housing provides maintenance-free lubed for life operation. BISSC certified (Baking Industry Sanitation Standards Committee).

Nominal Output RPM @ 1750 RPM In	Gear Ratio	Continuous Duty Output Torque (In-Lbs) Based on 1750 RPM Motor										Max Input Hp	Max Output Torque Rating In-Lbs	NEMA Motor Mount	Style Number	Catalog Number	List Price	Mult. Sym.	Ap'x Shpg. Wgt.
		0.25	0.33	0.5	0.75	1	1.5	2	3	5	7.5								
350	5:1					160	240	320				2.00	320	56C	SSF-918-05-B5-G	**SSGF0518AG**	1,710	GB	30
						160	240	320				2.00	320	140TC	SSF-918-05-B7-G	**SSGF0518BG**	1,710	GB	30
							246	327	491			3.14	514	140TC	SSF-921-05-B7-G	**SSGF0521BG**	2,001	GB	35
								339	508	847		5.43	919	140TC	SSF-926-05-B7-G	**SSGF0526BG**	2,813	GB	65
175	10:1				214	285	428					1.50	428	56C	SSF-918-10-B5-G	**SSGF1018AG**	1,710	GB	30
					214	285	428					1.50	428	140TC	SSF-918-10-B7-G	**SSGF1018BG**	1,710	GB	30
						312	468	624				2.02	630	140TC	SSF-921-10-B7-G	**SSGF1021BG**	2,001	GB	35
								655	983			3.59	1177	140TC	SSF-926-10-B7-G	**SSGF1026BG**	2,813	GB	65
117	15:1			209	314	419						1.07	448	56C	SSF-918-15-B5-G	**SSGF1518AG**	1,710	GB	30
				246	369	492						1.35	664	56C	SSF-921-15-B5-G	**SSGF1521AG**	2,001	GB	35
						473	710	947				2.58	1225	140TC	SSF-926-15-B7-G	**SSGF1526BG**	2,813	GB	65
88	20:1		165	251	376							0.92	461	56C	SSF-918-20-B5-G	**SSGF2018AG**	1,710	GB	30
				323	484	645						1.06	684	56C	SSF-921-20-B5-G	**SSGF2021AG**	2,001	GB	35
						609	913	1218				2.15	1308	140TC	SSF-926-20-B7-G	**SSGF2026BG**	2,813	GB	65
70	25:1		183	277	416							0.80	444	56C	SSF-918-25-B5-G	**SSGF2518AG**	1,710	GB	30
			250	379	569							0.89	675	56C	SSF-921-25-B5-G	**SSGF2521AG**	2,001	GB	35
					567	756	1134					1.73	1307	140TC	SSF-926-25-B7-G	**SSGF2526BG**	2,813	GB	65
58	30:1		216	327								0.72	470	56C	SSF-918-30-B5-G	**SSGF3018AG**	1,710	GB	30
			275	416	624							0.83	691	56C	SSF-921-30-B5-G	**SSGF3021AG**	2,001	GB	35
					641	854	1281					1.54	1313	140TC	SSF-926-30-B7-G	**SSGF3026BG**	2,813	GB	56
44	40:1	180	238	360								0.64	461	56C	SSF-918-40-B5-G	**SSGF4018AG**	1,710	GB	30
			340	515								0.66	680	56C	SSF-921-40-B5-G	**SSGF4021AG**	2,001	GB	35
				524	786	1049						1.23	1296	140TC	SSF-926-40-B7-G	**SSGF4026BG**	2,813	GB	56
35	50:1	222	294									0.49	436	56C	SSF-918-50-B5-G	**SSGF5018AG**	1,710	GB	30
		280	370	561								0.58	651	56C	SSF-921-50-B5-G	**SSGF5021AG**	2,001	GB	35
				621	932	1242						1.00	1242	56C	SSF-926-50-B5-G	**SSGF5026AG**	2,813	GB	60
29	60:1	220	290									0.47	413	56C	SSF-918-60-B5-G	**SSGF6018AG**	1,710	GB	30
		317	418	634								0.50	634	56C	SSF-921-60-B5-G	**SSGF6021AG**	2,001	GB	35
			473	716	1074							0.82	1166	56C	SSF-926-60-B5-G	**SSGF6026AG**	2,813	GB	56

NOTE: Service Class I Torque Ratings (1.0 Service Factor)
Service Class II Torque Ratings (≥ 1.4 Service Factor)
Service Class III Torque Ratings (≥ 2.0 Service Factor)

Refer to Brochure CA1600 for Dimensions and Engineering Information.

Vertical motor below gearhead not recommended.
Avoiding those positions where the high speed oil seal is immersed in oil, will provide greater security against high speed input seal wear.
Replacement oil – 1 Qt P/N MJ0006A05SP (Klubersynth UH1-6-460)

ATTENTION: Additional ratios, ratings and mounting configurations are available.
Need a fully assembled gearmotor? Have your reducer and motor coupled by utilizing M34D from the Motor Mod Express section.
Please contact your local ABB representative for assistance.

900 Series – Stainless Steel – Right Angle – Quill Type – Hollow Shaft

1.75 thru 2.62 CD 56C thru 140TC

SSGHF2026AH Shown

Applications: Stainless speed reducers are easy to clean and sanitize, minimizing bacterial contamination for food processing equipment. Stainless steel provides the high protection for pharmaceutical and chemical processing applications where harsh chemicals and cleaning solutions can be extremely corrosive to aluminum, cast iron and other materials.

Features: Housing and covers are cast stainless steel to endure hostile environments. 300 Series stainless output shafts and all stainless steel hardware for long rust resistant life. O-ring sealed housing and motor interface helps keeps contaminants out. Pre-filled with food grade (H1) Klubersynth UH1-6-460 synthetic oil. Sealed housing provides maintenance-free lubed for life operation. BISSC certified (Baking Industry Sanitation Standards Committee).

Nominal Output RPM @ 1750 RPM In	Gear Ratio	Continuous Duty Output Torque (In-Lbs) Based on 1750 RPM Motor										Max Input Hp	Max Output Torque Rating In-Lbs	NEMA Motor Mount	Style Number	Catalog Number	List Price	Mult. Sym.	Ap'x Shpg. Wgt.
		0.25	0.33	0.5	0.75	1	1.5	2	3	5	7.5								
350	5:1					160	240	320				2.00	320	56C	SSHF-918-05-B5-H	**SSGHF0518AH**	1,805	GB	30
175	10:1				214	285	428					1.50	428	56C	SSHF-918-10-B5-H	**SSGHF1018AH**	1,805	GB	30
						312	468	624				2.02	630	56C	SSHF-921-10-B5-H	**SSGHF1021AH**	2,091	GB	38
									990	1649		6.36	2106	180TC	SSHF-932-10-B9-H	**SSGHF1032CH**	4,633	GB	100
117	15:1			209	314	419						1.07	448	56C	SSHF-918-15-B5-H	**SSGHF1518AH**	1,805	GB	30
				246	369	492						1.35	664	56C	SSHF-921-15-B5-H	**SSGHF1521AH**	2,091	GB	38
								959	1438			4.66	2241	180TC	SSHF-932-15-B9-H	**SSGHF1532CH**	4,633	GB	100
88	20:1		165	251	376							0.92	461	56C	SSHF-918-20-B5-H	**SSGHF2018AH**	1,805	GB	30
				323	484	645						1.06	684	56C	SSHF-921-20-B5-H	**SSGHF2021AH**	2,091	GB	38
						609	913	1218				2.15	1309	56C	SSHF-926-20-B5-H	**SSGHF2026AH**	3,009	GB	60
							924	1232	1848			3.85	2383	180TC	SSHF-932-20-B9-H	**SSGHF2032CH**	4,633	GB	100
58	30:1		216	327								0.72	470	56C	SSHF-918-30-B5-H	**SSGHF3018AH**	1,805	GB	30
			275	416	624							0.83	691	56C	SSHF-921-30-B5-H	**SSGHF3021AH**	2,091	GB	38
					641	854	1281					1.54	1313	56C	SSHF-926-30-B5-H	**SSGHF3026AH**	3,009	GB	60
						881	1322	1763				2.81	2482	140TC	SSHF-932-30-B7-H	**SSGHF3032BH**	4,633	GB	100
44	40:1	180	238	360								0.64	461	56C	SSHF-918-40-B5-H	**SSGHF4018AH**	1,805	GB	30
			340	515								0.66	680	56C	SSHF-921-40-B5-H	**SSGHF4021AH**	2,091	GB	38
				524	786	1049						1.23	1296	56C	SSHF-926-40-B5-H	**SSGHF4026AH**	3,009	GB	60
				524	786	1049						1.23	1296	140TC	SSHF-926-40-B7-H	**SSGHF4026BH**	3,009	GB	60
						1180	1620	2160				2.20	2374	140TC	SSHF-932-40-B7-H	**SSGHF4032BH**	4,633	GB	100
35	50:1	222	294									0.49	436	56C	SSHF-918-50-B5-H	**SSGHF5018AH**	1,805	GB	30
		280	370	561								0.58	651	56C	SSHF-921-50-B5-H	**SSGHF5021AH**	2,091	GB	38
				621	932	1242						1.00	1242	56C	SSHF-926-50-B5-H	**SSGHF5026AH**	3,009	GB	53
					958	1278	1917					1.83	2366	140TC	SSHF-932-50-B7-H	**SSGHF5032BH**	4,633	GB	100
29	60:1	220	290									0.47	413	56C	SSHF-918-60-B5-H	**SSGHF6018AH**	1,805	GB	30
		317	418	634								0.50	634	56C	SSHF-921-60-B5-H	**SSGHF6021AH**	2,091	GB	38
			473	716	1074							0.82	1166	56C	SSHF-926-60-B5-H	**SSGHF6026AH**	3,009	GB	60
					1100	1467	2200					1.54	2255	140TC	SSHF-932-60-B7-H	**SSGHF6032BH**	4,633	GB	100

NOTE:
- Service Class I Torque Ratings (1.0 Service Factor)
- Service Class II Torque Ratings (≥ 1.4 Service Factor)
- Service Class III Torque Ratings (≥ 2.0 Service Factor)

Refer to Brochure CA1600 for Dimensions and Engineering Information.

Vertical motor below gearhead not recommended.
Avoiding those positions where the high speed oil seal is immersed in oil, will provide greater security against high speed input seal wear.
Replacement oil – 1 Qt P/N MJ0006A05SP (Klubersynth UH1-6-460)

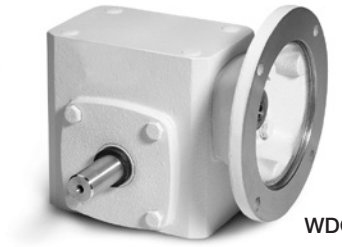
ATTENTION: Additional ratios, ratings and mounting configurations are available.
Need a fully assembled gearmotor? Have your reducer and motor coupled by utilizing M34D from the Motor Mod Express section.
Please contact your local ABB representative for assistance.

900 Series – Washdown – Right Angle – Quill Type – Solid Shaft

1.33 thru 3.25 CD 56C thru 140TC

Applications: Food processing and other applications which receive washdown on a regular basis.

Features: Epoxy coated, heavy-duty cast iron housing. Stainless steel output shaft and hardware. Sealed housing, provides maintenance-free, lubed for life operation. Pre-filled with food grade (H1) Klubersynth synthetic oil. Industry standard mounting dimensionally interchangeable with many other worm gear reducers. BISSC certified (Baking Industry Sanitation Standards Committee).



WDGF1018AG Shown

Nominal Output RPM @ 1750 RPM In	Gear Ratio	Continuous Duty Output Torque (In-Lbs) Based on 1750 RPM Motor										Max Input Hp	Max Output Torque Rating In-Lbs	NEMA Motor Mount	Style Number	Catalog Number	List Price	Mult. Sym.	Ap'x Shpg. Wgt.
		0.25	0.33	0.5	0.75	1	1.5	2	3	5	7.5								
350	5:1					160	240	320				2.00	320	56C	WDF-918-05-B5-G	**WDGF0518AG**	675	GB	30
175	10:1		82	125	187							0.90	225	56C	WDF-913-10-B5-G	**WDGF1013AG**	628	GB	20
				141	211	282						1.03	290	56C`	WDF-915-10-B5-G	**WDGF1015AG**	664	GB	25
				141	211	282						1.03	290	140TC	WDF-915-10-B7-G	**WDGF1015BG**	664	GB	25
					214	285	428					1.50	428	56C	WDF-918-10-B5-G	**WDGF1018AG**	675	GB	30
						312	468	624				2.20	630	56C	WDF-921-10-B5-G	**WDGF1021AG**	832	GB	35
						317	475	634				2.73	893	140TC	WDF-924-10-B7-G	**WDGF1024BG**	974	GB	40
117	15:1	89	118	179								0.66	225	56C	WDF-913-15-B5-G	**WDGF1513AG**	628	GB	20
			127	193	289							0.81	312	56C	WDF-915-15-B5-G	**WDGF1515AG**	664	GB	25
				209	314	419						1.07	448	56C	WDF-918-15-B5-G	**WDGF1518AG**	675	GB	30
				246	369	492						1.35	664	56C	WDF-921-15-B5-G	**WDGF1521AG**	832	GB	35
						470	705	939				2.11	992	56C	WDF-924-15-B5-G	**WDGF1524AG**	974	GB	40
88	20:1	113	149	226								0.53	239	56C	WDF-913-20-B5-G	**WDGF2013AG**	628	GB	20
		128	169	256								0.62	317	56C	WDF-915-20-B5-G	**WDGF2015AG**	664	GB	25
			165	251	376							0.92	461	56C	WDF-918-20-B5-G	**WDGF2018AG**	675	GB	30
						609	913	1218				2.15	1309	140TC	WDF-926-20-B7-G	**WDGF2026BG**	1,113	GB	52
58	30:1		216	327								0.72	470	56C	WDF-918-30-B5-G	**WDGF3018AG**	675	GB	30
			275	416	624							0.83	691	56C	WDF-921-30-B5-G	**WDGF3021AG**	832	GB	35
				420	630	840						1.32	111	56C	WDF-924-30-B5-G	**WDGF3024AG**	974	GB	40
					641	854	1281					1.54	1313	56C	WDF-926-30-B5-G	**WDGF3026AG**	1,113	GB	55
						881	1322	1763				2.81	2462	140TC	WDF-932-30-B7-G	**WDGF3032BG**	1,633	GB	87
44	40:1	208	275									0.44	317	56C	WDF-915-40-B5-G	**WDGF4015AG**	664	GB	25
		180	238	360								0.64	461	56C	WDF-918-40-B5-G	**WDGF4018AG**	675	GB	30
			340	515								0.66	680	56C	WDF-921-40-B5-G	**WDGF4021AG**	832	GB	35
				521	781							0.99	1030	56C	WDF-924-40-B5-G	**WDGF4024AG**	974	GB	40
				524	786	1049						1.23	1296	56C	WDF-926-40-B5-G	**WDGF4026AG**	1,113	GB	55
						1081	1622	2163				2.20	2374	140TC	WDF-932-40-B7-G	**WDGF4032BG**	1,633	GB	87
35	50:1	177	234									0.33	234	56C	WDF-913-50-B5-G	**WDGF5013AG**	628	GB	20
		230	303									0.33	303	56C	WDF-915-50-B5-G	**WDGF5015AG**	664	GB	25
		280	370	561								0.58	651	56C	WDF-921-50-B5-G	**WDGF5021AG**	832	GB	35
			401	608	912							0.83	1014	56C	WDF-924-50-B5-G	**WDGF5024AG**	974	GB	40
				621	932	1242						1.00	1242	56C	WDF-926-50-B5-G	**WDGF5026AG**	1,113	GB	55
					958	1278	1917					1.83	2366	140TC	WDF-932-50-B7-G	**WDGF5032BG**	1,633	GB	92
29	60:1	218	288									0.33	288	56C	WDF-915-60-B5-G	**WDGF6015AG**	664	GB	25
		220	290									0.47	413	56C	WDF-918-60-B5-G	**WDGF6018AG**	675	GB	30
		317	418	634								0.50	634	56C	WDF-921-60-B5-G	**WDGF6021AG**	832	GB	35
			458	693								0.69	956	56C	WDF-924-60-B5-G	**WDGF6024AG**	974	GB	40
			473	716	1074							0.82	1166	56C	WDF-926-60-B5-G	**WDGF6026AG**	1,113	GB	55
					1100	1467	2200					1.54	2255	56C	WDF-932-60-B5-G	**WDGF6032AG**	1,633	GB	92

NOTE:
- Service Class I Torque Ratings (1.0 Service Factor)
- Service Class II Torque Ratings (≥ 1.4 Service Factor)
- Service Class III Torque Ratings (≥ 2.0 Service Factor)

ATTENTION: Additional ratios, ratings and mounting configurations are available. Need a fully assembled gearmotor? Have your reducer and motor coupled by utilizing M34D from the Motor Mod Express section. Please contact your local ABB representative for assistance.

Vertical motor below gearhead not recommended Replacement oil – 1 Qt P/N MJ0006A05SP (Klubersynth UH1-6-460)
Avoiding those positions where the high speed oil seal is immersed in oil, will provide greater security against high speed input seal wear.

900 Series – Right Angle – Coupling Type – Solid Shaft

1.33 thru 3.75 CD 56C thru 180TC

Applications: Ideal for conveyors, material handling, textile machines, packaging machinery. etc. (slow speed and high torque).

Features: Heavy duty cast iron housings, chill cast bronze gears, precision ground hardened worm, ball bearings on input shaft, tapered roller bearings on output shaft. Industry-standard mounting dimensions. Pre-filled with food grade (H1) Klubersynth UH1-6-460 synthetic oil, sealed housing provides maintenance-free lubed for life operation. Motor coupling included.

GLF1018AG Shown

Nominal Output RPM @ 1750 RPM In	Gear Ratio	Continuous Duty Output Torque (In-Lbs) Based on 1750 RPM Motor										Max Input Hp	Max Output Torque Rating In-Lbs	NEMA Motor Mount	Style Number	Catalog Number	List Price	Mult. Sym.	Ap'x Shpg. Wgt.
		0.25	0.33	0.5	0.75	1	1.5	2	3	5	7.5								
350	5:1				115	154	231					1.50	231	56C	LF-915-05-B5-G	**GLF0515AG**	561	GB	30
223	7.5:1					237	356	474				2.70	640	56C	LF-921-7.5-B5-G	**GLF0821AG**	710	GB	38
						237	356	474				2.70	640	56C	LF-921-7.5-B5-J	**GLF0821AJ**	710	GB	38
						237	356	474				2.70	640	140TC	LF-921-7.5-B7-G	**GLF0821BG**	710	GB	38
								501	752			4.30	1079	140TC	LF-926-7.5-B7-G	**GLF0826BG**	974	GB	60
								501	752			4.30	1079	180TC	LF-926-7.5-B9-G	**GLF0826CG**	974	GB	60
175	10:1				214	285	428					1.50	428	56C	LF-918-10-B5-G	**GLF1018AG**	575	GB	32
						312	468	624				2.02	630	56C	LF-921-10-B5-G	**GLF1021AG**	710	GB	38
						312	468	624				2.02	630	140TC	LF-921-10-B7-G	**GLF1021BG**	710	GB	38
						312	468	624				2.02	630	140TC	LF-921-10-B7-J	**GLF1021BJ**	710	GB	38
						317	475	634				2.73	893	140TC	LF-924-10-B7-G	**GLF1024BG**	834	GB	45
								655	983			3.59	1177	140TC	LF-926-10-B7-G	**GLF1026BG**	974	GB	60
								655	983			3.59	1177	180TC	LF-926-10-B9-G	**GLF1026CG**	974	GB	60
									990	1649		6.36	2106	180TC	LF-932-10-B9-G	**GLF1032CG**	1,419	GB	104
117	15:1	89	118	179								0.66	2228	56C	LF-913-15-B5-G	**GLF1513AG**	516	GB	20
				246	369	492						1.35	664	56C	LF-921-15-B5-G	**GLF1521AG**	710	GB	38
				246	369	492						1.35	664	56C	LF-921-15-B5-J	**GLF1521AJ**	710	GB	38
						473	710	947				2.58	1225	140TC	LF-926-15-B7-G	**GLF1526BG**	974	GB	60
						473	710	947				2.58	1225	140TC	LF-926-15-B7-J	**GLF1526BJ**	974	GB	60
								959	1438			4.66	2241	180TC	LF-932-15-B9-G	**GLF1532CG**	1,419	GB	100
								959	1438			4.66	2241	180TC	LF-932-15-B9-J	**GLF1532CJ**	1,419	GB	105
									1409	2349		6.64	3118	180TC	LF-938-15-B9-G	**GLF1538CG**	1,733	GB	130
88	20:1	113	149	226								0.53	239	56C	LF-913-20-B5-G	**GLF2013AG**	516	GB	20
			165	251	376							0.92	464	56C	LF-918-20-B5-G	**GLF2018AG**	575	GB	32
				323	484	645						1.06	684	56C	LF-921-20-B5-G	**GLF2021AG**	710	GB	38

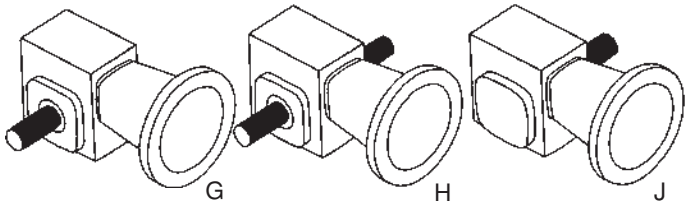
NOTE:
- Service Class I Torque Ratings (1.0 Service Factor)
- Service Class II Torque Ratings (≥ 1.4 Service Factor)
- Service Class III Torque Ratings (≥ 2.0 Service Factor)

Optional Shaft Positions, Base Installation and Motor Mounting available through Mod Express.

Vertical motor below gearhead not recommended.
Avoiding those positions where the high speed oil seal is immersed in oil, will provide greater security against high speed input seal wear.
Replacement oil – 1 Qt P/N MJ0006A05SP (Klubersynth UH1-6-460)

ATTENTION: Additional ratios, ratings and mounting configurations are available.
Need a fully assembled gearmotor? Have your reducer and motor coupled by utilizing M34D from the Motor Mod Express section.
Please contact your local ABB representative for assistance.

Assembly Types



900 Series – Right Angle – Coupling Type – Solid Shaft continued…

Nominal Output RPM @ 1750 RPM In	Gear Ratio	Continuous Duty Output Torque (In-Lbs) Based on 1750 RPM Motor										Max Input Hp	Max Output Torque Rating In-Lbs	NEMA Motor Mount	Style Number	Catalog Number	List Price	Mult. Sym.	Ap'x Shpg. Wgt.
		0.25	0.33	0.5	0.75	1	1.5	2	3	5	7.5								
88	20:1			323	484	645						1.06	684	56C	LF-921-20-B5-J	**GLF2021AJ**	710	GB	38
						609	913	1218				2.15	1308	140TC	LF-926-20-B7-G	**GLF2026BG**	974	GB	60
						609	913	1218				2.15	1308	140TC	LF-926-20-B7-J	**GLF2026BJ**	974	GB	60
							924	1232	1848			3.85	2383	180TC	LF-932-20-B9-G	**GLF2032CG**	1,419	GB	100
70	25:1	156	296	312								0.51	318	56C	LF-915-25-B5-G	**GLF2515AG**	561	GB	30
			183	277	416							0.80	444	56C	LF-918-25-B5-B	**GLF2518AG**	575	GB	32
			250	379	549							0.89	675	56C	LF-921-25-B5-G	**GLF2521AG**	710	GB	38
			250	379	569							0.89	675	56C	LF-921-25-B5-J	**GLF2521AJ**	710	GB	38
					567	756	1134					1.73	1307	56C	LF-926-25-B5-G	**GLF2526AG**	974	GB	60
					567	756	1134					1.73	1307	140TC	LF-926-25-B7-G	**GLF2526BG**	974	GB	60
					567	756	1134					1.73	1307	140TC	LF-926-25-B7-J	**GLF2526BJ**	974	GB	60
							1134	1513	2269			3.13	2355	140TC	LF-932-25-B7-G	**GLF2532BG**	1,419	GB	100
							1134	1513	2269			3.13	2355	180TC	LF-932-25-B9-G	**GLF2532CG**	1,419	GB	100
							1134	1513	2269			3.13	2355	180TC	LF-932-25-B9-J	**GLF2532CJ**	1,419	GB	100
58	30:1	148	195									0.42	248	56C	LF-913-30-B5-G	**GLF3013AG**	516	GB	20
		159	210	318								0.50	318	56C	LF-915-30-B5-G	**GLF3015AG**	561	GB	30
			216	327								0.72	470	56C	LF-918-30-B5-G	**GLF3018AG**	575	GB	32
			216	327								0.72	470	56C	LF-918-30-B5-J	**GLF3018AJ**	575	GB	32
			275	416	624							0.83	691	56C	LF-921-30-B5-G	**GLF3021AG**	710	GB	38
				420	630	840						1.32	1111	56C	LF-924-30-B5-G	**GLF3024AG**	834	GB	45
					641	854	1281					1.54	1313	140TC	LF-926-30-B7-G	**GLF3026BG**	974	GB	60
					641	854	1281					1.54	1313	140TC	LF-926-30-B7-J	**GLF3026BJ**	974	GB	60
						881	1322	1763				2.81	2482	180TC	LF-932-30-B9-G	**GLF3032CG**	1,419	GB	100
								1626	2438			3.97	3226	180TC	LF-938-30-B9-G	**GLF3038CG**	1,733	GB	130
44	40:1	180	238	360								0.64	461	56C	LF-918-40-B5-G	**GLF4018AG**	575	GB	32
				521	781							0.99	1030	56C	LF-924-40-B5-G	**GLF4024AG**	834	GB	45
				524	786	1049						1.23	1296	56C	LF-926-40-B5-G	**GLF4026AG**	974	GB	60
						1180	1620	2160				2.20	2374	140TC	LF-932-40-B7-G	**GLF4032BG**	1,419	GB	100
							1596	2129	3192			3.00	3192	180TC	LF-938-40-B9-G	**GLF4038CG**	1,733	GB	130
35	50:1	280	370	561								0.58	651	56C	LF-921-50-B5-G	**GLF5021AG**	710	GB	38
				621	932	1242						1.00	1242	56C	LF-926-50-B5-G	**GLF5026AG**	974	GB	60
29	60:1	218	288									0.33	288	56C	LF-915-60-B5-G	**GLF6015AG**	561	GB	30
		220	290									0.47	413	56C	LF-918-60-B5-G	**GLF6018AG**	575	GB	32
		317	418	634								0.50	634	56C	LF-921-60-B5-G	**GLF6021AG**	710	GB	38
			473	716	1074							0.82	1166	56C	LF-926-60-B5-G	**GLF6026AG**	974	GB	60
					1100	1467	2200					1.54	2255	56C	LF-932-60-B5-G	**GLF6032AG**	1,419	GB	100
					1100	1467	2200					1.54	2255	140TC	LF-932-60-B7-G	**GLF6032BG**	1,419	GB	100

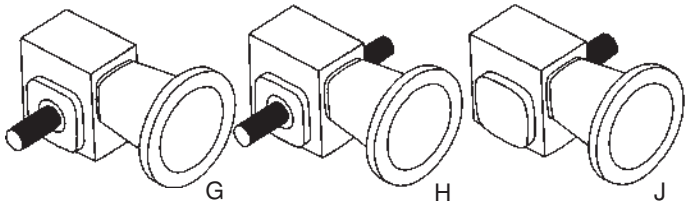
NOTE: Service Class I Torque Ratings (1.0 Service Factor)
Service Class II Torque Ratings (≥ 1.4 Service Factor)
Service Class III Torque Ratings (≥ 2.0 Service Factor)

Optional Shaft Positions, Base Installation and Motor Mounting available through Mod Express.

Vertical motor below gearhead not recommended.
Avoiding those positions where the high speed oil seal is immersed in oil, will provide greater security against high speed input seal wear.
Replacement oil – 1 Qt P/N MJ0006A05SP (Klubersynth UH1-6-460)

ATTENTION: Additional ratios, ratings and mounting configurations are available.
Need a fully assembled gearmotor? Have your reducer and motor coupled by utilizing M34D from the Motor Mod Express section.
Please contact your local ABB representative for assistance.

Assembly Types



900 Series – Right Angle – Solid Shaft

1.33 thru 2.62 CD

GS3018G Shown

Applications: Ideal for conveyors, material handling, textile machines, packaging machinery and more. Suitable for direct coupling or belted input (slow speed and high torque).

Features: Heavy duty cast iron housings, chill cast bronze gears, precision ground hardened worm, ball bearings on input shaft, tapered roller bearings on output shaft. Industry-standard mounting dimensions. Pre-filled with food grade (H1) Klubersynth UH1-6-460 synthetic oil, sealed housing provides maintenance-free lubed for life operation.

Nominal Output RPM @ 1750 RPM In	Gear Ratio	Continuous Duty Output Torque (In-Lbs) Based on 1750 RPM Motor										Max Input Hp	Max Output Torque Rating In-Lbs	Style Number	Catalog Number	List Price	Mult. Sym.	Ap'x Shpg. Wgt.
		0.25	0.33	0.5	0.75	1	1.5	2	3	5	7.5							
175	10:1				214	285	428					1.50	428	S-918-10-G	**GS1018G**	482	GB	25
						312	468	624				2.02	630	S-921-10-G	**GS1021G**	568	GB	28
								492	655			3.59	1177	S-926-10-G	**GS1026G**	798	GB	50
117	15:1	96	127	193								0.66	225	S-915-15-G	**GS1515G**	476	GB	21
				209	314	419						1.07	448	S-918-15-G	**GS1518G**	482	GB	25
				246	369	492						1.35	664	S-921-15-G	**GS1521G**	568	GB	28
88	20:1		165	251	376							0.92	461	S-918-20-G	**GS2018G**	482	GB	25
				323	484	645						1.06	684	S-921-20-G	**GS2021G**	568	GB	28
					451	602	902					1.72	1038	S-924-20-G	**GS2024G**	708	GB	38
						609	913	1218				2.15	1308	S-926-20-G	**GS2026G**	798	GB	50
		156	206	312								0.51	318	S-915-25-G	**GS2515G**	476	GB	21
58	30:1	148	195									0.42	248	S-913-30-G	**GS3013G**	461	GB	18
			216	327								0.72	470	S-918-30-G	**GS3018G**	482	GB	25
			275	416	624							0.83	691	S-921-30-G	**GS3021G**	568	GB	28
					641	854	1281					1.54	1313	S-926-30-G	**GS3026G**	798	GB	50
44	40:1	208	275									0.38	317	S-915-40-G	**GS4015G**	476	GB	21
		180	238	360								0.64	461	S-918-40-G	**GS4018G**	482	GB	25
			340	515								0.66	680	S-921-40-G	**GS4021G**	568	GB	28
				524	786	1049						1.23	1296	S-926-40-G	**GS4026G**	798	GB	50
35	50:1	222	294									0.49	436	S-918-50-G	**GS5018G**	482	GB	25
		280	370	561								0.59	651	S-921-50-G	**GS5021G**	568	GB	28
				621	932	1242						1.00	1242	S-926-50-G	**GS5026G**	798	GB	50
29	60:1	179										0.28	201	S-913-60-G	**GS6013G**	461	GB	15
		218	288									0.33	288	S-915-60-G	**GS6015G**	476	GB	21
		220	290									0.47	413	S-918-60-G	**GS6018G**	482	GB	25
		317	418	634								0.50	634	S-921-60-G	**GS6021G**	568	GB	31
			458	693								0.69	958	S-924-60-G	**GS6024G**	708	GB	38
			473	716	1074							0.82	1166	S-926-60-G	**GS6026G**	798	GB	50

NOTE:
- Service Class I Torque Ratings (1.0 Service Factor)
- Service Class II Torque Ratings (≥ 1.4 Service Factor)
- Service Class III Torque Ratings (≥ 2.0 Service Factor)

Optional Shaft Positions and Base Installation available through Mod Express.

Vertical motor below gearhead not recommended.
Avoiding those positions where the high speed oil seal is immersed in oil, will provide greater security against high speed input seal wear.
Replacement oil – 1 Qt P/N MJ0006A05SP (Klubersynth UH1-6-460)

ATTENTION: Additional ratios, ratings and mounting configurations are available.
Need a fully assembled gearmotor? Have your reducer and motor coupled by utilizing M34D from the Motor Mod Express section.
Please contact your local ABB representative for assistance.

Universal Series – Right Angle – Quill Type – Solid Shaft

1.33 thru 3.50 CD 56C thru 180TC

GSF2018AA Shown

Applications: Ideal for conveyors, material handling, textile machines, packaging machinery. etc. (slow speed and high torque).

Features: Heavy duty cast iron housings, forged bronze worm gears, hardened steel worms, ball bearing on input shaft, tapered roller bearings on output shaft. Integral heavy duty mounting feet cast on top and bottom of housing. Single output shaft, right hand facing input shaft. Pre-lubricated with Klubersynth UH1-6-460.

Nominal Output RPM @ 1750 RPM In	Gear Ratio	Continuous Duty Output Torque (In-Lbs) Based on 1750 RPM Motor										Max Input Hp	Max Output Torque Rating In-Lbs	NEMA Motor Mount	Style Number	Catalog Number	List Price	Mult. Sym.	Ap'x Shpg. Wgt.
		0.18	0.25	0.33	0.5	0.75	1	1.5	2	3	5								
175	10:1			109	163							0.64	207	56C	STF-133-10-A-A	**GSF1013AA**	629	GB	21
						245	327					1.22	396	56C	STF-175-10-A-A	**GSF1018AA**	689	GB	22
						245	327					1.22	396	140TC	STF-175-10-B-A	**GSF1018BA**	689	GB	23
						244	325	488				1.77	572	56C	STF-200-10-A-A	**GSF1020AA**	821	GB	30
							325	488				1.77	572	140TC	STF-200-10-B-A	**GSF1020BA**	821	GB	29
							325	488	651			2.44	788	140TC	STF-225-10-B-A	**GSF1023BA**	932	GB	32
								488	651			3.43	1109	140TC	STF-258-10-B-A	**GSF1026BA**	1,188	GB	49
									651	976		3.43	1109	180TC	STF-258-10-C-A	**GSF1026CA**	1,188	GB	55
									652	978		4.40	1426	180TC	STF-300-10-C-A	**GSF1030CA**	1,357	GB	61
117	15:1		119	159								0.46	221	56C	STF-133-15-A-A	**GSF1513AA**	629	GB	21
				159	239	359						0.87	416	56C	STF-175-15-A-A	**GSF1518AA**	689	GB	23
					238	357	475					1.28	605	56C	STF-200-15-A-A	**GSF1520AA**	821	GB	29
						359	478	717				1.84	875	56C	STF-225-15-A-A	**GSF1523AA**	932	GB	34
							478	717				1.84	875	140TC	STF-225-15-B-A	**GSF1523BA**	932	GB	33
							478	717	956			2.50	1188	140TC	STF-258-15-B-A	**GSF1526BA**	1,188	GB	51
								717	956			3.25	1544	140TC	STF-300-15-B-A	**GSF1530BA**	1,357	GB	57
								717	956	1434		3.25	1544	180TC	STF-300-15-C-A	**GSF1530CA**	1,357	GB	61
									956	1434	2391	5.35	2525	180TC	STF-350-15-C-A	**GSF1535CA**	1,862	GB	89
88	20:1	102	154	205								0.36	220	56C	STF-133-20-A-A	**GSF2013AA**	629	GB	20
				205	308							0.68	419	56C	STF-175-20-A-A	**GSF2018AA**	689	GB	23
					308	462	616					1.00	612	56C	STF-200-20-A-A	**GSF2020AA**	821	GB	30
					308	462	616					1.00	612	140TC	STF-200-20-B-A	**GSF2020BA**	821	GB	28
					309	463	617					1.35	8.28	56C	STF-225-20-A-A	**GSF2023AA**	932	GB	34
					309	463	617					1.35	8.28	140TC	STF-225-20-B-A	**GSF2023BA**	932	GB	33
						461	615	923				1.92	1174	56C	STF-258-20-A-A	**GSF2026AA**	1,188	GB	51
							615	923				1.92	1174	140TC	STF-258-20-B-A	**GSF2026BA**	1,188	GB	51
							615	923	1230			2.52	1541	140TC	STF-300-20-B-A	**GSF2030BA**	1,357	GB	57
								923	1230			2.52	1541	180TC	STF-300-20-C-A	**GSF2030CA**	1,357	GB	62
									1230	1845		3.89	2363	180TC	STF-350-20-C-A	**GSF2035CA**	1,862	GB	93

NOTE: Service Class I Torque Ratings (1.0 Service Factor)
Service Class II Torque Ratings (≥ 1.4 Service Factor)
Service Class III Torque Ratings (≥ 2.0 Service Factor)

Vertical motor below gearhead not recommended.
Avoiding those positions where the high speed oil seal is immersed in oil, will provide greater security against high speed input seal wear.
Replacement oil – 1 Qt P/N MJ0006A05SP (Klubersynth UH1-6-460)

ATTENTION: Additional ratios, ratings and mounting configurations are available.
Need a fully assembled gearmotor? Have your reducer and motor coupled by utilizing M34D from the Motor Mod Express section.
Please contact your local ABB representative for assistance.

Universal Series – Right Angle – Quill Type – Solid Shaft continued…

Nominal Output RPM @ 1750 RPM In	Gear Ratio	Continuous Duty Output Torque (In-Lbs) Based on 1750 RPM Motor										Max Input Hp	Max Output Torque Rating In-Lbs	NEMA Motor Mount	Style Number	Catalog Number	List Price	Mult. Sym.	Ap'x Shpg. Wgt.
		0.18	0.25	0.33	0.5	0.75	1	1.5	2	3	5								
70	25:1	123	186									0.29	218	56C	STF-133-25-A-A	**GSF2513AA**	629	GB	21
			186	247	371							0.55	406	56C	STF-175-25-A-A	**GSF2518AA**	689	GB	23
				247	371	557						0.81	601	56C	STF-200-25-A-A	**GSF2520AA**	821	GB	29
					375	563	751					1.09	814	56C	STF-225-25-A-A	**GSF2523AA**	932	GB	33
							744	1114	1489			2.08	1539	140TC	STF-300-25-B-A	**GSF2530BA**	1,357	GB	56
58	30:1	145	218									0.24	214	56C	STF-133-30-A-A	**GSF3013AA**	629	GB	21
			218	289								0.47	406	56C	STF-175-30-A-A	**GSF3018AA**	689	GB	22
				289	435	652						0.77	665	56C	STF-200-30-A-A	**GSF3020AA**	821	GB	30
					435	652						0.98	847	56C	STF-225-30-A-A	**GSF3023AA**	932	GB	33
					435	652	869					1.35	1166	56C	STF-258-30-A-A	**GSF3026AA**	1,188	GB	50
							869	1304				1.74	1501	140TC	STF-300-30-B-A	**GSF3030BA**	1,357	GB	57
							869	1304	1739			2.82	2443	140TC	STF-350-30-B-A	**GSF3035BA**	1,862	GB	90
44	40:1	181										0.19	206	56C	STF-133-40-A-A	**GSF4013AA**	629	GB	21
		180	272	362								0.36	389	56C	STF-175-40-A-A	**GSF4018AA**	689	GB	11
			272	362	543							0.52	568	56C	STF-200-40-A-A	**GSF4020AA**	821	GB	30
				364	547							0.71	772	56C	STF-225-40-A-A	**GSF4023AA**	932	GB	33
					545	817	1090					1.01	1095	56C	STF-258-40-A-A	**GSF4026AA**	1,188	GB	51
					542	815	1087					1.36	1470	56C	STF-300-40-A-A	**GSF4030AA**	1,357	GB	57
					542	815	1087					1.36	1470	140TC	STF-300-40-B-A	**GSF4030BA**	1,357	GB	54
							1087	1630	2173			2.24	2405	140TC	STF-350-40-B-A	**GSF4035BA**	1,862	GB	87
35	50:1	210										0.15	191	56C	STF-133-50-A-A	**GSF5013AA**	629	GB	21
		210	316									0.28	360	56C	STF-175-50-A-A	**GSF5018AA**	689	GB	23
		211	317	423								0.42	536	56C	STF-200-50-A-A	**GSF5020AA**	821	GB	30
			317	422								0.55	693	56C	STF-225-50-A-A	**GSF5023AA**	932	GB	33
				422	634	951						0.79	995	56C	STF-258-50-A-A	**GSF5026AA**	1,188	GB	51
					634	952	1270					1.07	1350	140TC	STF-300-50-B-A	**GSF5030BA**	1,357	GB	57
						952	1270	1904				1.75	2196	140TC	STF-350-50-B-A	**GSF5035BA**	1,862	GB	89
29	60:1	235										0.24	343	56C	STF-175-60-A-A	**GSF6018AA**	689	GB	23
		234	353	470								0.36	505	56C	STF-200-60-A-A	**GSF6020AA**	821	GB	29
			346	461	692							0.51	702	56C	STF-225-60-A-A	**GSF6023AA**	932	GB	33
				470	706							0.69	976	56C	STF-258-60-A-A	**GSF6026AA**	1,188	GB	51
					706	1059						0.84	1179	56C	STF-300-60-A-A	**GSF6030AA**	1,357	GB	56
						1059	1413	2119				1.50	2128	140TC	STF-350-60-B-A	**GSF6035BA**	1,862	GB	89

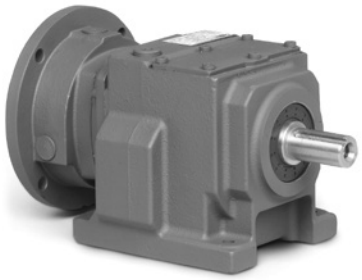
NOTE: Service Class I Torque Ratings (1.0 Service Factor)
Service Class II Torque Ratings (≥ 1.4 Service Factor)
Service Class III Torque Ratings (≥ 2.0 Service Factor)

Optional Shaft Positions, Bases Installation and Motor Mounting available through Mod Express.

Vertical motor below gearhead not recommended.
Avoiding those positions where the high speed oil seal is immersed in oil, will provide greater security against high speed input seal wear.
Replacement oil – 1 Qt P/N MJ0006A05SP (Klubersynth UH1-6-460)

ATTENTION: Additional ratios, ratings and mounting configurations are available.
Need a fully assembled gearmotor? Have your reducer and motor coupled by utilizing M34D from the Motor Mod Express section.
Please contact your local ABB representative for assistance.

Inline Helical



4 Sizes

56C thru 250TC

Applications: Ideal for conveyors, material handling, textile machines, packaging machinery. etc. (slow speed and high torque).

Features: ILH (in-line helical) gearboxes have higher torque ratings in a compact design. Clamp collar 56C – 250TC offers compact C-face solution. Heavy-duty cast iron housings, hardened and ground AGMA class 11 gears for greater impact resistance and longer service life. Pre-fill for horizontal mounting to insure proper oil grade and fill level.

Nominal RPMS	Continuous Duty Output Torque (in-lbs.) Based on 1750 RPM Motors												Max Input Hp	Max Output Torque Rating In-Lbs.	NEMA	Style Number	Catalog Number	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.
	0.33	0.50	0.75	1	1.5	2	3	5	7.5	10	15	20								
180				349	524	698							2.02	705	56C	HB382CN56C-9	**GIF0938A**	998	GB	29
					524	699	1048						4.86	1698	140TC	HB382CN140TC-9	**GIF0938B**	998	GB	31
					524	699	1048						4.86	1698	180TC	HB382CN180TC-9	**GIF0938C**	1,093	GB	32
							1055	1758	2637				8.79	3090	180TC	HB482CN180TC-9	**GIF0948C**	1,578	GB	55
										3504	5256	7007	20.17	7067	210TC	HB682CN210TC-9	**GIF0968D**	2,472	GB	101
124				510	766	1021							2.02	1031	56C	HB382CN56C-14	**GIF1438A**	998	GB	29
					766	1021	1532						3.77	1925	140TC	HB382CN56C-14	**GIF1438B**	998	GB	31
						1057	1586	2644					6.68	3532	180TC	HB482CN180TC-14	**GIF1448C**	1,578	GB	55
								2447	3670	4894			10.36	5070	180TC	HB682CN180TC-14	**GIF1468C**	2,472	GB	93
								2447	3670	4894			14.47	7081	210TC	HB682CN210TC-14	**GIF1468D**	2,472	GB	101
										5268	7902	10536	27.6	14540	250TC	HB882CN250TC-14	**GIF1488E**	3,810	GB	229
102				468	623	935							1.84	1147	56C	HB382CN56C-18	**GIF1838A**	998	GB	29
					936	1248	1872						3.12	1947	140TC	HB382CN140TC-18	**GIF1838B**	998	GB	31
						1264	1896						4.86	3071	140TC	HB482CN140TC-18	**GIF1848B**	1,384	GB	54
						1264	1896	3162					5.91	3738	180TC	HB482CN180TC-18	**GIF1848C**	1,578	GB	85
							1776	2961	4441				9.95	5892	180TC	HB682CN180TC-18	**GIF1868C**	2,472	GB	93
								2963	4444	5926			11.95	7081	210TC	HB682CN210TC-18	**GIF1868D**	2,472	GB	101
										6219	9329	12438	23.91	14870	250TC	HB882CN250TC-18	**GIF1888E**	3,810	GB	229
70			440	660	880								1.41	1241	56C	HB382CN56C-25	**GIF2538A**	998	GB	29
					881	1321	1762						2.21	1947	140TC	HB382CN140TC-25	**GIF2538B**	998	GB	31
					1435	1913	2869						3.92	3749	140TC	HB482CN140TC-25	**GIF2548B**	1,384	GB	54
						1910	2865						4.17	3983	180TC	HB482CN180TC-25	**GIF2548C**	1,578	GB	55
							2759	4598	6897				7.70	7081	180TC	HB682CN180TC-25	**GIF2568C**	2,472	GB	93
									6755	9007	13510		16.51	14870	210TC	HB882CN210TC-25	**GIF2588D**	3,589	GB	178
									6755	9007	13510		16.51	14870	250TC	HB882CN250TC-25	**GIF2588E**	3,810	GB	229
44	465	705	1057										0.95	1339	56C	HB382CN56C-40	**GIF4038A**	998	GB	29
		746	1118	1491									1.12	1670	56C	HB482CN56C-40	**GIF4048A**	1,384	GB	52
				1486	2229	2972							2.68	3983	140TC	HB482CN140TC-40	**GIF4048B**	1,384	GB	54
						2718	4077	6796					5.21	7081	180TC	HB682CN180TC-40	**GIF4068C**	2,472	GB	93
								6710	10065	13421			11.08	14870	210TC	HB882CN210TC-40	**GIF4088D**	3,589	GB	178
33	691	1047	1570										0.93	1947	56C	HB383CN56C-56	**GIF5638A**	1,205	GB	29
			1509	2012	3017								1.98	3983	56C	HB483CN56C-56	**GIF5648A**	1,518	GB	52
					2601	3468	5203						3.04	5272	140TC	HB682CN140TC-50	**GIF5068B**	2,279	GB	92
						3655	5483	9138					5.58	10198	180TC	HB882CN180TC-50	**GIF5088C**	3,589	GB	178

NOTE: Service Class I Torque Ratings (1.0 Service Factor)
Service Class II Torque Ratings (≥ 1.4 Service Factor)
Service Class III Torque Ratings (≥ 2.0 Service Factor)

ATTENTION: Additional ratios, ratings and mounting configurations are available. Please contact your local ABB representative for assistance.

Ratio Multiplier – Inline – Quill Type – Solid Shaft

2 Sizes 56C thru 140TC

Applications: Reducer or Increaser*. Combine with Right Angle units for high ratios. May also be used as a stand alone with optional base kits.

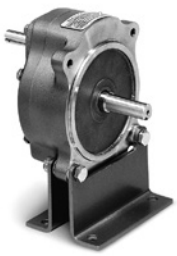
Features: High efficiency. Cast iron construction, universal mounting positions, and optional base mounting. Internal compression chamber eliminates breather vent. Lubricated for life with Klubersynth GH6-150.

* Custom style “SX” can be back driven to increase motor speed. Max output speed, 4500 RPMS.

Size	Output RPM @ 1750 RPM in.	Gear Ratio	Input Style	Output Style	Catalog Number	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Type
1	875	2:1	56C	56C	**GCF2X01AA**	459	GB	17	FX1-2-B5-56C
	583	3:1	56C	56C	**GCF3X01AA**	459	GB	17	FX1-3-B5-56C
	438	4:1	56C	56C	**GCF4X01AA**	459	GB	17	FX1-4-B5-56C
	350	5:1	56C	56C	**GCF5X01AA**	459	GB	19	FX1-5-B5-56C
2	875	2:1	140TC	140TC	**GCF2X02BB**	553	GB	28	FX2-2-B7-140TC
	583	3:1	140TC	140TC	**GCF3X02BB**	553	GB	28	FX2-3-B7-140TC
	438	4:1	140TC	140TC	**GCF4X02BB**	553	GB	29	FX2-4-B7-140TC
	350	5:1	56C	140TC	**GCF5X02AB**	553	GB	29	FX2-5-B5-140TC
	350	5:1	140TC	140TC	**GCF5X02BB**	553	GB	28	FX2-5-B7-140TC

Ratings at 1750 RPM Input

Size	Ratio	Output RPM	Input Hp	Output Hp	Output Torque	Output Shaft OHL
1	2:1	875	2.06	1.96	141	173
	3:1	583	1.70	1.62	175	203
	4:1	438	1.50	1.42	205	224
	5:1	350	1.13	1.08	194	247
2	2:1	875	12.42	12.17	877	445
	3:1	583	8.68	8.42	911	445
	4:1	438	6.34	6.15	885	445
	5:1	350	5.40	5.17	931	360



BRMX01
with Style SX1 Ratio Multiplier

Ratio Multiplier
with F900 Series Reducer

Optional Base Kits

Size	Catalog Number	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.
1	**BRMX01**	67	A8	6
2	**BRMX02**	117	A8	2

ATTENTION: Additional ratios, ratings and mounting configurations are available. Please contact your local ABB representative for assistance.

900 Series – Right Angle – Base Kits

Horizontal Base

J Base

Vertical Base

Washdown Base

Base Description	Size (Position)	Catalog Number	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.
HORIZ.	913 (A,B)	**B13H71**	67	A8	5
VERT. low	913 (D,F)	**B13V81**	117	A8	2
VERT. high	913 (C,E)	**B13V91**	118	A8	3
VERT J	913 (X,Y)	**B13J92**	243	A8	3
HORIZ.	915 (A,B)	**B15H71**	47	A8	3
VERT. low	915(D,F)	**B18V81**	121	A8	3
VERT. high	915 (C,E)	**B18V91**	122	A8	3
VERT. J	915 (X,Y)	**B18J92**	246	A8	6
HORIZ.	918 (A,B)	**B18H71**	81	A8	6
VERT. low	918 (D,F)	**B18V81**	121	A8	3
VERT. high	918 (C,E)	**B18V91**	122	A8	3
VERT. J	918 (X,Y)	**B18J92**	246	A8	6
HORIZ.	921G (A,B)	**B21GH71**	84	A8	5
HORIZ.	921 (A,B)	**B21H71**	87	A8	6
VERT. low	921 (D,F)	**B21V81**	132	A8	4
VERT. high	921 (C,E)	**B21V91**	136	A8	6
VERT. J	921 (X,Y)	**B21J92**	260	A8	7
HORIZ.	924 (A,B)	**B24H71**	105	A8	8
VERT. low	924 (D,F)	**B24V81**	148	A8	4
VERT. high	924 (C,E)	**B24V91**	160	A8	6
VERT. J	924 (X,Y)	**B24J92**	276	A8	9
HORIZ.	926 (A,B)	**B26H71**	117	A8	9
VERT. low	926 (D,F)	**B26V81**	199	A8	6
VERT. high	926 (C,E)	**B26V91**	202	A8	9
VERT. J	926 (X,Y)	**B26J92**	327	A8	10
HORIZ.	930 (A,B)	**B30H71**	133	A8	4
VERT. low	930 (D,F)	**B30V81**	199	A8	8
VERT. high	930 (C,E)	**B30V91**	202	A8	16
HORIZ.	932 (A,B)	**B32H71**	158	A8	13
VERT. low	932 (D,F)	**B32V81**	234	A8	10
VERT. high	932 (C,E)	**B32V91**	240	A8	13
HORIZ.	938 (A,B)	**B38H71**	189	A8	15
VERT. low	938(D,F)	**B38V81**	281	A8	38
VERT. high	938(C,E)	**B38V91**	295	A8	36
		Optional Washdown Base Kits			
HORIZ.	913 (A,B)	**WDB13H71**	87	A8	3
HORIZ.	915 (A,B)	**WDB15H71**	87	A8	4
HORIZ.	918 (A,B)	**WDB18H71**	108	A8	6
HORIZ.	921 (A,B)	**WDB21H71**	114	A8	6
HORIZ.	924 (A,B)	**WDB24H71**	123	A8	8
HORIZ.	926 (A,B)	**WDB26H71**	139	A8	9
HORIZ.	930 (A,B)	**WDB30H71**	154	A8	6
HORIZ.	932 (A,B)	**WDB32H71**	181	A8	13
		Optional Stainless Steel Base Kits			
HORIZ	918 (A,B)	**SSB18H71**	395	A8	8
HORIZ	921 (A,B)	**SSB21H71**	411	A8	10
HORIZ	926 (A,B)	**SSB26H71**	454	A8	13

Universal Series – Right Angle – Base Kits

Kit includes angle bases and hardware. Converts style STF to SVF.

Size	NEMA Flange	Catalog Number	List Price	Mult. Sym.	Ap'x. Shpg. Wgt
133-175	56C/140TC	**B1317V81**	118	A8	2
200-225	56C/140TC	**B2022V81**	123	A8	3
258-300	56C/140TC	**B2530V81**	191	A8	4
258-300	180TC	**B2530V81**	191	A8	4
350	56C/140TC 180TC/210TC	**B3500V81**	221	A8	5

NEMA C-Face Flange Kits (coupling type)

Flange adapts NEMA C face motors to 900 Series type S reducers.
Includes flange, flexible coupling and mounting hardware.

Size	NEMA Flange	Catalog Number	List Price	Mult. Sym.	Ap'x. Shpg. Wgt
913	56C	**SFL913B5**	183	A8	8
915	56C	**SFL918B5**	183	A8	9
	140TC	**SFL918B7**	183	A8	8
918	56C	**SFL918B5**	183	A8	9
	140TC	**SFL921B5**	203	A8	11
921	56C	**SFL921B7**	203	A8	11
	140TC	**SFL924B5**	203	A8	11
924	56C	**SFL924B7**	203	A8	11
	140TC	**SFL926B5**	261	A8	14
926	56C	**SFL926B7**	261	A8	15
	140TC	**SFL926B7**	261	A8	15

Riser Block Kits

Riser Blocks permit the gearbox to be mounted in the most desirable position (high speed input shaft above the oil level). They mount on top of the gearbox to provide clearance between the motor and the mounting surface. Kit includes the Riser Block and attachment bolts.

Size	NEMA Flange	Catalog Number	List Price	Mult. Sym.	Ap'x. Shpg. Wgt
913	56C	**RBK13B5**	69	A8	5
915	56C/140TC	**RBK15B5**	87	A8	5
918	56C/140TC	**RBK18B5**	108	A8	5
921	56C/140TC	**RBK21B5**	139	A8	5
924	56C/140TC	**RBK24B5**	146	A8	5
	180TC	**RBK24B9**	276	A8	10
926	56C/140TC	**RBK26B5**	154	A8	8
	180TC	**RBK26B9**	336	A8	11
930	56C/140TC	**RBK30B5**	174	A8	15
	180TC	**RBK30B9**	373	A8	15
932	56C/140TC	**RBK32B5**	234	A8	8
	180TC	**RBK32B9**	461	A8	15

Torque Arm Kits

Kit includes turnbuckle and both mounting brackets.
Secures hollow shaft reducer to application.

Size	Catalog Number	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.
H50	**TA05HK**	88	A8	2
913	**TA13HK**	170	A8	2
918	**TA18HK**	188	A8	2
921	**TA21HK**	210	A8	6
924	**TA24HK**	211	A8	2
926	**TA26HK**	215	A8	2
930	**TA30HK**	219	A8	2
932	**TA32HK**	224	A8	6
938	**TA38HK**	234	A8	2

Output Flange Kits

Size	Catalog Number	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.
913	**FL13HK**	110	A8	2
915	**FL15HK**	118	A8	6
918	**FL18HK**	123	A8	3
921	**FL21HK**	138	A8	3
924	**FL24HK**	196	A8	4
926	**FL26HK**	211	A8	6
930	**FL30HK**	219	A8	6
932	**FL32HK**	227	A8	12
938	**FL38HK**	235	A8	12

Bushing Kits for Hollow Shaft Reducers

Size	Shaft Diameter	Catalog Number	List Price	Mult. Sym.
918	3/4	**BU100H012**	139	A8
	7/8	**BU100H014**	139	A8
	15/16	**BU100H015**	158	A8
924/926	15/16	**BU107H015**	170	A8
	1	**BU107H100**	170	A8
	1-1/8	**BU107H102**	170	A8
	1-3/16	**BU107H103**	170	A8

Size	Shaft Diameter	Catalog Number	List Price	Mult. Sym.
924/926	1-1/4	**BU107H104**	170	A8
	1-5/16	**BU107H105**	170	A8
930/932	1.00	**BU115H100**	234	A8
	1-7/16	**BU115H107**	234	A8
	1-1/2	**BU115H108**	234	A8
	1-5/8	**BU115H110**	234	A8
	1-11/16	**BU115H111**	234	A8
	1-3/4	**BU115H112**	234	A8

Stainless Steel Bushing

Size	Shaft Diameter	Catalog Number	List Price	Mult. Sym.
918	3/4	**SSBU100H012**	166	A8
918	7/8	**SSBU100H014**	166	A8
918	15/16	**SSBU100H015**	166	A8
921	15/16	**SSBU104H015**	105	A8
921	1	**SSBU104H100**	105	A8
926	15/16	**SSBU107H015**	199	A8
926	1	**SSBU107H100**	199	A8
926	1-1/8	**SSBU107H102**	199	A8
926	1-3/16	**SSBU107H103**	199	A8
926	1-1/4	**SSBU107H104**	199	A8
926	1-5/16	**SSBU107H105**	199	A8

Double Reduction Adapter Kits

900 series double reduction units may be assembled from stock single reduction units using the adapter kits.

Catalog Number	Primary Unit [a]	Secondary Unit [b]	List Price	Mult. Sym.
DR913X913B5	913	913-B5	183	A8
DR913X918B5	913	918-B5	191	A8
DR913X921B5	913	921-B5	202	A8
DR913X924B5	913	924-B5	202	A8
DR913X926B5	913	926-B5	219	A8
DR918X924B7	918	924-B7	219	A8
DR918X926B7	918	930-B7/926-B7	227	A8
DR918X932B7	918	932-B7	227	A8
DR924X938B9	924	938-B9	227	A8

NOTE: Each adapter kit consists of: 1 Adapter; 1 Seal (Installed); 1 Shim Set; 4 Screws; 1 Bearing Cup (Installed); 4 Lock Washers; and 1 Sealant Package.

[a] Any style except shaft mount

[b] F and HF styles only

Bushing Kit

Reduces bore size of Quill type input shafts from 7/8 to 5/8. Sintered metal bushing with integral internal and external keys.

Catalog Number	List Price	Mult. Sym.
133-6FBA	69	A8

C-Face Kits for Field Conversion – NEMA AC Motors

Features: Complete kits with all hardware necessary for converting 56 though 449T frame ridgid base motors to "C-Face" mounting with base. For manufacturer conversion, refer to the Mod Express section in this catalog. Please furnish the motor specification number when ordering. NEMA "BA" dimension will be non-standard after conversion on NEMA 143-5T, 182-4T, 213-5T and 254-6T frame motors.

Catalog Number	Frame Description		Enclosure	Bearing	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.
34-3900T	48C (34)		TEFC	6203	60	A8	1
34-171	56C (34)		TEFC	6203	60	A8	2
34-3903A	143-5TC (34)		ODP	6205	73	A8	2
34-3903A-GLD	143-5TC (34)		ODP	6205	73	A8	2
34-3903T	143-5TC (34)		TEFC	6205	76	A8	2
34-3903T-GLD	143-5TC (34)		TEFC	6205	76	A8	2
35-8762	56C,143-5TC (35)		TEFC	6205	70	A8	3
35-8762GLD	56C,143-5TC (35)		TEFC	6205	70	A8	3
35-8764	56C,143-5TC (35)		ODP	6205	70	A8	3
35-8764GLD	56C,143-5TC (35)		ODP	6205	70	A8	3
35-3304	182-4TC (35)		TEFC	6206	85	A8	4
35-1300	56C,143-5TC (35)		TEFC	6205	120	A8	6
35-1300GLD	56C,143-5TC (35)		TEFC	6205	120	A8	6
35-1325	182-4TC (35)		TEFC	6206	154	A8	11
35-1325GLD	182-4TC (35)		TEFC	6206	154	A8	11
35-1409	182-4TC (35)		ODP	6206	172	A8	11
35-1409GLD	182-4TC (35)		ODP	6206	172	A8	11
36-1037	182-4C (36)		TEFC	6206	137	A8	8
36-1037GLD	182-4C (36)		TEFC	6206	42	A8	7
36-1206A	213-5TC (36)		OPSB	6207	176	A8	13
36-1206A-GLD	213-5TC (36)		OPSB	6207	176	A8	13
36-1206B	213-5TC (36)		ODP	6207	186	A8	14
36-1206B-GLD	213-5TC (36)		ODP	6207	186	A8	14
36-486	182-4C (36)		ODP	6206	194	A8	8
36-486GLD	182-4C (36)		ODP	6206	194	A8	8
36-3301	182-4TC (36)		TEFC	6206	99	A8	5
36-3301GLD	182-4TC (36)		TEFC	6206	99	A8	5
36-3403	182-4TC (36)		ODP	6206	116	A8	5
36-3403GLD	182-4TC (36)		ODP	6206	116	A8	5
36-1749	182-4TC (36)		TEFC	6206	173	A8	12
36-1749GLD	182-4TC (36)		TEFC	6206	173	A8	12
37-1404	213-5C, TC (37)		ODP	6307	231	A8	14
37-1404GLD	213-5C, TC (37)		ODP	6307	231	A8	14
37-1304	213-5C, TC (37)		TEFC	6307	192	A8	12
37-1304GLD	213-5C, TC (37)		TEFC	6307	192	A8	12
37-1402	254-6UC, TC (37)		ODP	6309	274	A8	18
37-1402GLD	254-6UC, TC (37)		ODP	6309	274	A8	18
37-1302	254-6UC, TC (37)		TEFC	6309	292	A8	18
37-1302GLD	254-6UC, TC (37)		TEFC	6309	292	A8	18
09-1309	254-6UC, TC (09)	●	TEFC	6309	394	A8	22
09-1309GLD	254-6UC, TC (09)	●	TEFC	6309	394	A8	22
09-1310	284-6UC, TC (09)	●	TEFC	6311	596	A8	22
09-1310GLD	284-6UC, TC (09)	●	TEFC	6311	596	A8	22

NOTE: Specification number of motor should be verified when ordering.
Kits that have catalog numbers ending in "GLD" are for use on Super-E® gold motors.
● = Suitable only for field conversion of motors manufactured with external rabbets on the stator housings.
✱✱ = Usable on catalog motors that have footnote #56.
✱ = Contact an ABB representative with nameplate specification number to determine correct kit.

Catalog Number	Frame Description		Enclosure	Bearing	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.
39-3400	254-6UC, TC (39)		ODP	6309	256	A8	19
39-1403	284-6UC, TC (39)		ODP	6311	411	A8	21
39-1403GLD	284-6UC, TC (39)		ODP	6311	411	A8	21
10-1304	324-6UC, TC (10)	●	TEFC	6312	439	A8	32
10-1304GLD	324-6UC, TC (10)	●	TEFC	6312	439	A8	32
10-1305	284-6UC, TC (10)	●	TEFC	6311	457	A8	32
10-1305ECP8	284-6TC, IEEE-841 (10)	●	TEFC	6311	894	A8	32
10-1305GLD	284-6UC, TC (10)	●	TEFC	6311	457	A8	32
40-1400	284-6UC, TC (40)		ODP	6311	417	A8	30
40-1400GLD	284-6UC, TC (40)		ODP	6311	417	A8	30
40-1401	324-6 UC, TC (40)	●	ODP	6312	427	A8	40
40-1401GLD	324-6 UC, TC (40)	●	ODP	6312	427	A8	40
12-1105	324-6UC, TC (12)		TEFC	6312	563	A8	48
12-1105ECP8	324-6TC, IEEE-841 (12)		TEFC	6312	1,124	A8	48
12-1105GLD	324-6UC, TC (12)		TEFC	6312	563	A8	48
42-1300	324-6UC, TC (42)	●	ODP	6312	750	A8	36
42-1300GLD	324-6UC, TC (42)	●	ODP	6312	750	A8	36
K36G2	364-5UC, TC		TEFC	6313	730	A8	69
K36G801	364-5TC IEEE-841		TEFC	6313	1,298	A8	75
42-1400	364-5UC, TC (42)	●	ODP	6313	730	A8	30
42-1400GLD	364-5UC, TC (42)	●	ODP	6313	730	A8	30
K40G2	404-5UC, TC E-Line Design	✱✱	TEFC	6316	1,086	A8	113
K40G71	404-5UC, TC G Series Design	✱✱	TEFC	6316 4 & 6 Pole	1,086	A8	120
K40G802	404-5TC G Series design: IEEE-841	✱✱	TEFC	6316 4 & 6 Pole	1,722	A8	120
K40G70	404-5UC, TC G Series Design	✱✱	TEFC	6313 2 pole	1,086	A8	120
K40G801	404-5TC G Series design: IEEE-841	✱✱	TEFC	6313 2 pole	1,722	A8	120
44-1402	404-5UC, TC (44)		ODP	6316	844	A8	40
44-1402GLD	404-5UC, TC (44)		ODP	6316	844	A8	40
44-1403	404-5UC, TSC (44)		ODP	6313	844	A8	40
44-1403GLD	404-5UC, TSC (44)		ODP	6313	844	A8	40
44-1403A	404-5USC, TSC (44)		OPEN	6312	844	A8	40
44-1403A-GLD	404-5USC, TSC (44)		OPEN	6312	844	A8	40
K44G50	444-5UC, TC E-Line design	✱	TEFC	6318, 4 & 6 pole	1,665	A8	249
K44G51	447-9UC,TC E-Line design	✱	TEFC	6318, 4 & 6 pole	1,665	A8	251
K44G70	444-9UC, TC G Series design		TEFC	6313, 2 pole,	1,665	A8	250
K44G801	444-9UC, TC G Series design: IEEE-841		TEFC	6313, 2 pole,	2,448	A8	250
K44G71	444-9UC, TC G Series design		TEFC	6318, 4 & 6 pole	1,665	A8	250
K44G802	444-9UC, TC G Series design: IEEE-841		TEFC	6318, 4 & 6 pole	2,448	A8	250

NOTE: Specification number of motor should be verified when ordering.
Kits that have catalog numbers ending in "GLD" are for use on Super-E® gold motors.
● = Suitable only for field conversion of motors manufactured with external rabbets on the stator housings.
✱✱ = Usable on catalog motors that have footnote #56.
✱ = Contact an ABB representative with nameplate specification number to determine correct kit.

C-Face Kits for Field Conversion NEMA DC SCR Drive Motor

Features: For non-laminated frame DC motors with catalog numbers ending in “P”.

Catalog Number	Frame	Bearing	Enclosure	List Price	Mult. Sym.	Ap'x Shpg. Wgt.
180-5002	180ATC	6206	Drip-Proof	903	P1	18
210-5001	210ATC	6207	Drip Proof or Totally Enclosed	783	P1	12
250-5001	250ATC	6209	Drip Proof of Totally Enclosed	1,668	P1	75
280-5002	280ATC	6210	Drip Proof	2,210	P1	57
320-5002	320ATC	6211	Drip Proof	3,080	P1	87
360-5001	360ATC	6213	Drip Proof or Totally Enclosed	4,725	P1	121
400-5001	400ATC	6214	Drip Proof or Totally Enclosed	5,722	P1	173

Double C-Face Motor Brake Kits

Coil Voltage: 115/208-230

Features: Double C-Face coupler brakes. Mounts on motors with C-Face, provides NEMA C-face mounting on brake. Spring set, electrically released.

Brake Rating	Brake Mounting	Catalog Number	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.
3 ft-lb	56C	**CBK003-1**	670	A8	12
6 ft-lb	56C	**CBK006-1**	986	A8	12
6 ft-lb	145TC	**CBK006-2**	986	A8	12
10 ft-lb	145TC	**CBK010-1**	1,150	A8	12
15 ft-lb	145TC	**CBK015-1**	2,457	A8	12

Conduit Box Kits

Frame Size	Catalog Number	List Price	Mult. Sym.	Ap'x Shpg. Wgt. Lbs.
	Conduit Box Kit – Standard Size			
42	**33CB5000A01SP**	37	P1	1
42	**33CB5001A01SP**	37	P1	1
48	**34CB5001A01SP**	36	P1	1
56 - 143-5T	**35CB5001A01SP**	39	P1	1
182T-4T	**36CB5001A01SP**	42	P1	1
182T-4T	**36CB5001A06SP**	47	P1	2
182T-4T	**36CB5001A07SP**	70	P1	2
213T-5T	**37CB5002A06SP**	47	P1	3
213T-5T	**37CB5002A07SP**	42	P1	4
184T,215T,254-6	**09CB5001A01SP**	82	P1	3
184T,215T,254-6	**09CB5001A15SP**	65	P1	3
254-6T,284-6,324-6	**10CB5001A01SP**	109	P1	6
254-6T,284-6,324-6	**10CB5002A01SP**	132	P1	4
360T - Cast Iron	**K36G8**	274	P1	22
400T - Cast Iron	**K40G8**	300	P1	35
440T - Cast Iron	**K44G8**	332	P1	55
	Conduit Box Kit – Oversize			
360T - Cast Iron	**K36G9**	300	P1	25
400T - Cast Iron	**K40G9**	332	P1	30
440T - Cast Iron	**K44G9**	356	P1	135

Frame Size	Catalog Number	List Price	Mult. Sym.
	Auxiliary Conduit Box Kits		
360	**K36G16**	313	P1
400	**K40G3**	332	P1
440	**K44G5**	709	P1

D-Flange Kits

Complete kit with hardware necessary for converting either Foot Mount or C-Face 143T thru 326T motors to D-Flange mounting. Please note that using these kits to modify the 143T thru 184T foot mounted motors will result in a non-standard NEMA BA dimension. Modified C-Face motors will have standard BA dimensions. Please furnish the motor specification number when ordering.

NEMA Frame	Enclosure	Catalog Number	List Price	Mult. Sym.	Ap'x. Shpg. Weight Lbs.
143-145T (1)	TEFC	**35EP1506A01SP**	215	A8	8
182-184T (2)	TEFC	**36EP1304A62SP**	236	A8	15
286-286 U,T	TEFC	**10EP1502A01SP**	581	A8	39
324-326 U,T	TEFC	**12EP1501A03SP**	1,003	A8	50

NOTES: (1) 143T-145T foot mount motor modified with kit 35EP1506A01SP will have Non-standard NEMA BA dimension of 2.25".
(2) 182T-184T foot mount motor modified with kit 36EP1304A62SP will have Non-standard NEMA BA dimension of 2.75".

Drain Fitting Kit

TEFC Motors 48 – 215T

Applications: Increase General Purpose IP44 enclosures to IP54 protection level by installing drain plugs in motor weep hole drains.

Features: Kit consists of quantity (2) plastic push in drain fittings and instructions for proper installation. Can be installed in steel band and cast iron frame motors.

Catalog Number	List Price	Mult. Sym.	Ap'x. Shpg. Wgt. Lbs.
HA5027A03	5	A8	1

Drip Covers for Field Conversion

Standard ODP Motors to Vertical Mount

Features: Complete kits with all hardware, attaches to endplate with no drilling. Designed to protect open steel band motors from rain, snow and ice when mounted outdoors in a vertical position. Made from heavy steel. Primed and painted inside and out. For manufacturer conversion, refer to the Mod Express Section in this catalog.

Catalog Number	Frame	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.
FCD34	48-56, Type 34	94	A8	1
FCD35	56-145T, Type 35	132	A8	1
FCD36	182T-184T, Type 36	115	A8	2
FCD37	213T-256T, Type 37	139	A8	3
FCD39	254T-256T, Type 39	186	A8	3
FCD40	284-286, Type 40	199	A8	12
FCD42	324-326, Type 42	213	A8	5

Cast Iron Fan Cover for Field Conversion

Standard TEFC Cast Iron Motors

Applications: For cast iron construction.

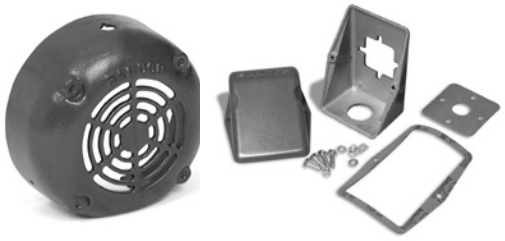
Features: Complete kits consists of cast iron fan covers and all necessary mounting hardware. These kits replace the standard steel fan cover when used. For manufacturer conversion, refer to the Mod Express Section in this catalog.

Catalog Number	Description	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.
FFC05	05/143-5T	186	A8	6
FFC06	06/182-4T	199	A8	10
K18G8**	06/182-4T E Line	199	A8	10
K18G9**	07/213-5T E Line	212	A8	15
FFC09	09/254-6U & T	221	A8	20
K18G10**	09/254-6T E Line	229	A8	20
K18G11**	10/324-6T E Line	237	A8	25
K18G12**	12/364-5T E Line	268	A8	35
FFC18**	404-5T E Line	289	A8	90
FFC19**	444-9T E Line	352	A8	120

NOTE: ** Contact District Office with nameplate specification number to determine correct kit.
Not available on 280 frame due to replacement of bearing, endplate, and mounting configuration.

SHADED RATINGS ARE CAST IRON FRAMES

Cast Iron Fan Cover and Conduit Boxes for Field Conversion



Standard TEFC Cast Iron Motors

Applications: For all Cast Iron construction.

Features: Complete kits consists of cast iron fan covers and cast iron conduit boxes when necessary. The kits also include all necessary mounting hardware. These kits replace the standard steel fan cover and aluminum conduit box when used. For manufacturer conversion, refer to the Mod Express Section in this catalog.

Catalog Number	Description	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.
FFC07WB	07/213-5T	295	A8	19
FFC09WB	09/254-6U & T	405	A8	28
360T	K36G50	1,285	P1	123
360T	K36G18	1,285	P1	123

NOTE: NOT FOR USE ON EXPLOSION PROOF MOTORS.

SHADED RATINGS ARE CAST IRON FRAMES

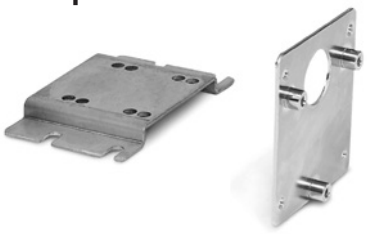
Gear Motor Accessories

Conduit Box Kit

24 Frame stock gearmotors are designed to accommodate this optional conduit/capacitor box.

Motor Types	Kit Description	Catalog Number	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.
2412, 2416, 2420, 2424	Combination Conduit/Capacitor Mounting Box Kit	**BKP2400**	60	A8	1

PSM Mounting Adapters



B92 is formed steel mounting base that bolts to machined surface on bottom of PSM gear box casting. Provides secure foot mounting of gear motor and drop-in interchangeability with other major manufacturers.

B93 is a three point face mounting adapter. Provides interchangeability with other manufacturers.

Catalog Number	Description	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.
B92	Foot Mount	49	A8	1
B93	3 Point Face Mount	62	A8	1
B94	B Box Mounting Base Kit	84	A8	1

"L" Type Mounting Brackets

Applications: Mounting bracket for PSSH and PSL gearmotors. Securely mounts to gear face in 90 degree locations for floor, wall or ceiling mount. Bracket LB74 is not recommended for PSL/PSLH units weighing over 20 lbs. For units weighing more than 20 lbs. use LB75.

Catalog Number	Description	List Price	Mult. Sym.	Color	Ap'x. Shpg. Wgt
LB73	PSSH	49	A8	Black	2
LB74	PSL	69	A8	Black	2
LB75	PSL/PSLH	96	A8	Black	7
LB73GR	PSSH	49	A8	Grey	2
LB74GR	PSL/PSLH	69	A8	Grey	2
LB75GR	PSL	96	A8	Grey	7

H Gearbox Accessories

Optional base and shaft kits are available for H style gearmotors. Adding a base and shaft kit allows them to be used in applications requiring a rightangle shaft extension. The shaft can be used for either right or left hand output applications.

Catalog Number	Description	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.
B19H71	Horiz Base Kit	82	A8	1
SH10HS	Output Shaft Kit	26	A8	2
TA05HK	Torque Arm Kit	88	A8	2

Motors and Gearmotors UL, cUL and CSA Approvals

Product Type	CSA LR2262	UL E46145	CUL E46145
AC	Motor Models and Frames 24, 25, 33	Motor Models and Frames 24, 25, 33	
DC	Motor Models and Frames 73, 74: 90V Ratings Only Motor Models and Frames 25, 33: Not Restricted to 90 Volts	Motor Models and Frames 23, 25, 33, 73, 74, 125, 135	Motor Model and Frames 23, 125, 135

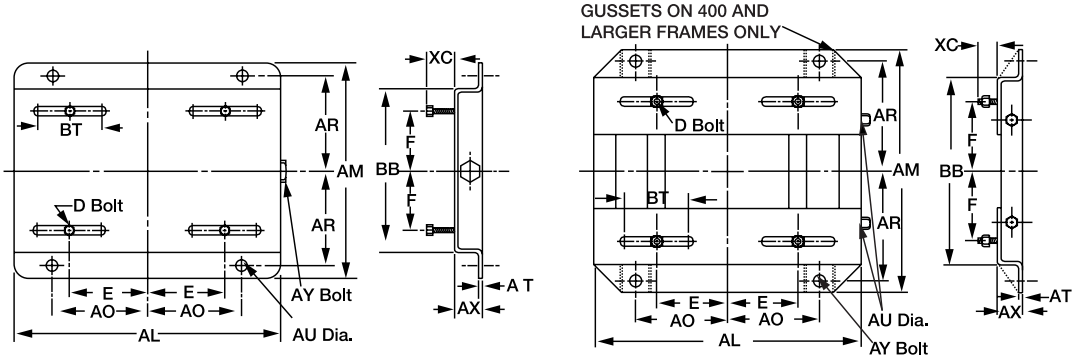
Adjustable Motor Bases

These motor bases simplify mounting and belt tension adjustment at installation and during later maintenance checks. These are heavy duty adjustable motor bases manufactured of steel or plate. All bases are detergent washed, painted with dark gray primer and oven baked for corrosion resistance. The nuts and bolts are zinc plated. NEMA 215T and smaller bases feature one adjusting screw. Bases for NEMA 254T frame and larger motors feature two adjusting screws. Motor mounting bolts are included. Bases listed can be used with motor frame numbers given and succeeded by the letters S, T, U, US and TS, or any other letter combinations provided the motors' base meets NEMA standards.

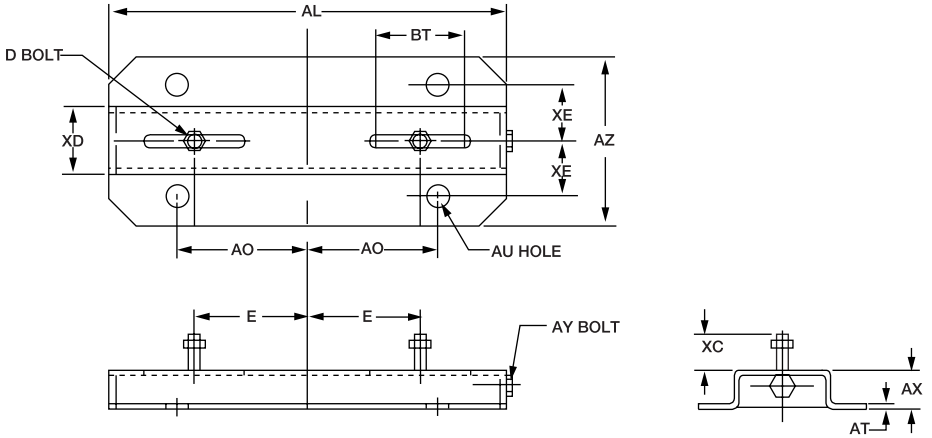
NEMA Frame Motors	Base Catalog Number	List Price	Mult. Sym.	No. of Adjusting Screws	Motor Mounting Bolt Size	Ap'x Shpg. Wgt.
48	**B48T**	107	A8	1	5/16 x 1	3
56	**B56T**	107	A8	1	5/16 x 1	5
143T	**B143T**	137	A8	1	5/16 x 1	6
145T	**B145T**	137	A8	1	5/16 x 1	7
182T	**B182T**	145	A8	1	3/8 x 1 1/2	10
184T	**B184T**	145	A8	1	3/8 x 1 1/2	10
213T	**B213T**	168	A8	1	3/8 x 1 1/2	14
215T	**B215T**	168	A8	1	3/8 x 1 1/2	15
254T	**B254T**	276	A8	2	1/2 x 1 3/4	21
256T	**B256T**	276	A8	2	1/2 x 1 3/4	21
284T	**B284T**	314	A8	2	1/2 x 2	24
286T	**B286T**	314	A8	2	1/2 x 2	24
324T	**B324T**	485	A8	2	5/8 x 2 1/2	34
326T	**B326T**	485	A8	2	5/8 x 2 1/2	37
364T	**B364T**	604	A8	2	5/8 x 2 1/2	48
365T	**B365T**	604	A8	2	5/8 x 2 1/2	50
404T	**B404T**	898	A8	2	3/4 x 3	62
405T	**B405T**	898	A8	2	3/4 x 3	66
444T	**B444T**	1,097	A8	2	3/4 x 3	70
445T	**B445T**	1,097	A8	2	3/4 x 3	71
447T	**B447T**	1,293	A8	2	3/4 x 3 1/2	93
449T	**B449T**	1,293	A8	2	3/4 x 3 1/2	99
G5008-G5012	**B5000RLS** (1)	1,948	A8	2	7/8 x 3 1/2	149

NOTE: Bases not suitable for vertical mounting. See base dimensions on next page.
(1) One adjustable motor rail.

Adjustable Motor Bases Dimension Diagrams



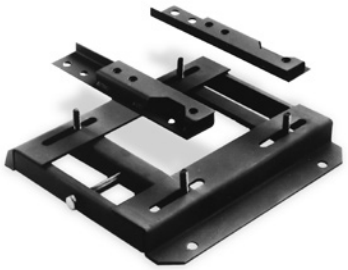
NEMA Frame	Catalog Number	E	F	AL	AM	AO	AR	AT	AU	AX	BB	BT	XC	D Bolt	AY Bolt
48	**B48T**	2.125	1.375	10.00	6.25	3.50	2.75	0.078	0.375	1.125	4.25	3.00	0.875	5/16 x 1	3/8 x 4
56	**B56T**	2.437	1.50	10.625	6.50	3.812	2.875				4.50				
143	**B143T**	2.75	2.00	10.50	7.50	3.75	3.375	0.109	0.375	1.125	5.50	3.00	0.812	5/16 x 1	3/8 x 4
145	**B145T**		2.50		8.50		3.875				6.50				
182	**B182T**	3.75	2.25	12.75	9.50	4.50	4.25	0.140	0.50	1.50	6.50	3.00	1.50	3/8 x 1-3/4	1/2x 5
184	**B184T**		2.75		10.50		4.75				7.50				
213	**B213T**	4.25	2.75	15.00	11.00	5.25	4.75	0.156	0.50	1.75	7.50	3.50	1.50	3/8 x 1-3/4	1/2 x 5
215	**B215T**		3.50		12.50		5.50				9.00				
254	**B254T**	5.00	4.125	17.75	15.125	6.25	6.625	0.187	0.625	2.00	10.75	4.00	1.437	1/2 x 1-3/4	5/8 x 6
256	**B256T**		5.00		16.875		7.50				12.50				
284	**B284T**	5.50	4.75	19.75	16.875	7.00	7.50	0.187	0.625	2.00	12.514	4.50	1.687	1/2 x 2	5/8 x 6
286	**B286T**		5.50		18.375		8.25								
324	**B324T**	5.25	5.256	22.75	19.25	8.00	8.50	0.187	0.75	2.50	14.00	5.25	2.187	5/8 x 2-1/2	3/4 x 9
326	**B326T**	6.00			20.75		9.25				15.50				
364	**B364T**	7.00	5.625	25.50	20.50	9.00	9.125	0.25	0.75	2.50	15.50	6.00	2.062	5/8 x 2-1/2	3/4 x 9
365	**B365T**		6.625		21.50		9.625				16.50				
404	**B404T**	8.00	6.125	28.75	22.375	10.00	9.875	0.25	0.875	3.00	16.50	7.00	2.50	3/4 x 3	3/4 x 11
405	**B405T**		6.387		23.875		10.625				18.00				
444	**B444T**	9.00	7.25	31.25	24.625	11.00	11.00	0.25	0.875	3.00	19.25	7.50	2.50	3/4 x 3	3/4 x 11
445	**B445T**		8.25		26.625		12.00				21.25				
447	**B447T**	9.00	10.00	31.25	30.125	11.00	13.75	0.312	1.125	3.00	24.75	7.50	3.00	3/4 x 3-1/2	3/4 x 14
449	**B449T**		12.50		35.125		16.25				29.75				3/4 x 11



NEMA Frame	Catalog Number	E	AL	AO	AL	AU	AX	AZ	BT	XC	XO	XE	D Bolt	AY Bolt
G5000	**B5000RLS**	10.00	35.00	12.50	0.312	1.00	3.50	12.00	8.00	3.00	6.00	4.50	7/8 x 3-1/2	7/8 x 16

DIMENSIONS ARE FOR REFERENCE ONLY, CONSULT AN ABB REPRESENTATIVE FOR CERTIFIED DIMENSIONS

Conversion Bases

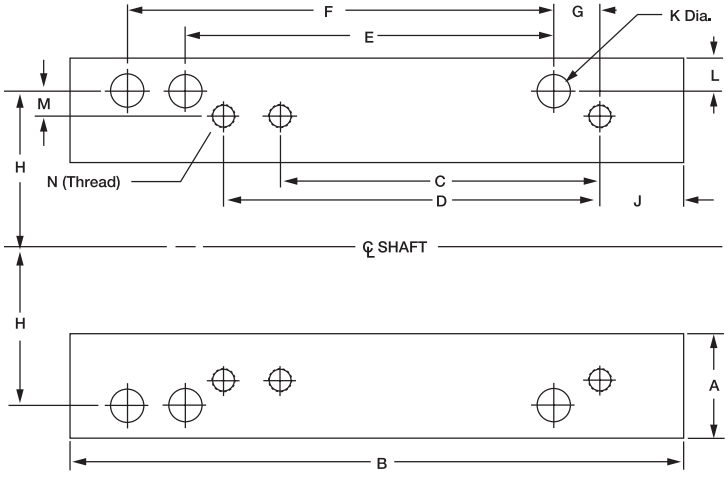


These Conversion Bases are designed to allow NEMA “T” frame motors to be used where corresponding NEMA “U” frame motors have been applied. Consisting of right and left hand pieces that fit to existing mounting studs positioned for “U” frame motors. The “T” frame motor is mounted to the pieces resulting in compensation for the difference in motor height, shaft position and mounting hole between the previous “U” frame motor and the replacement “T” frame motor. Made of the same top quality material as the adjustable motor bases.

Catalog Number	Converts From “U” Frame	Converts To “T” Frame	List Price	Mult. Sym.	Ap’x Shpg. Wgt.	Height Inches	Width Inches	Length Inches	Thread
CB1814T	182/184	143T/145T	115	A8	2	1	2 1/4	7 1/2	5/16-18
CB2118T	213/215	182T/184T	162	A8	2	3/4	1 3/4	9 1/2	3/8-16
CB2521T	254U/256U	213T/215T	186	A8	6	1	2 7/16	12 3/4	3/8-16
CB2825T	284U/286U	254T/256T	251	A8	7	3/4	2 3/4	14 1/4	1/2-13
CB3228T	324U/326U	284T/286T	346	A8	9	1	3 1/4	15 3/4	1/2-13
CB3632T	364U/365U	324T/326T	426	A8	12	1	3 11/16	16 1/2	5/8-11
CB4036T	404U/405U	364T/365T	584	A8	20	1	4 1/4	18 5/8	5/8-11

NOTE: Dimensions are for one piece. Two pieces supplied. Design is for horizontal mounting. Motor shimming may be required for direct drive applications.

Conversion Bases Dimension Diagrams



Catalog Number	Converts From	Converts To	A	B	Height	C	D	E	F	G	H	J	K	L	M	N(Thread)
CB1814T	182-184	143T-145T	2.25	7.50	1.00	4.00	5.00	4.50	5.50	0.50	3.75	1.00	0.437	0.50	1.0	5/16-18
CB2118T	213-215	182T-184T	1.75	8.50	0.75	4.50	5.50	5.50	7.00	1.00	4.25	1.00	0.437	0.437	0.5	3/8-16
CB2521T	254U-256U	213T-215T	2.437	12.75	1.00	5.50	7.00	8.25	10.00	1.125	5.00	1.00	0.562	0.625	0.75	3/8-16
CB2825T	284U-286U	254T-256T	2.75	14.25	0.75	8.25	10.00	9.50	11.00	1.375	5.50	1.25	0.562	0.937	0.5	1/2-13
CB3228T	324U-326U	284T-286T	3.25	15.75	1.00	9.50	11.00	10.50	12.00	1.50	6.25	1.50	0.687	0.937	0.75	1/2-13
CB3632T	364U-365U	324T-326T	3.687	16.50	1.00	10.50	12.00	11.25	12.25	1.75	7.00	1.75	0.687	1.187	0.75	5/8-11
CB4036T	404U-405U	364T-365T	4.25	18.625	1.00	11.25	12.25	12.25	13.75	2.00	8.00	2.00	0.812	1.25	1.0	5/8-11

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Motor Mod Express®

Ordering Information

Note: Motors made for sale in the U.S. must comply with the Energy Independence and Security Act of 2007 (EISA) including those modified from stock. After any modification, the motor must comply with the Energy Independence and Security Act of 2007 (EISA) or the applicable regulations such as Natural Resources Canada if used in that country.

For example, it is not permissible to take a footless VM3615T and add a base to it. Such a base-mounted motor needs to comply with NEMA MG 1, table 12-12 for a premium motor which means a VEM Super-E® motor should have been used instead.

To order, specify the catalog number of the stock product and the MOD number. Use the motor discount for the motor. All modifications should be priced using the modification list price, applying the appropriate multiplier symbol for the motor. **Lead times indicated are subject to availability of stock motors in the Fort Smith, Arkansas and Kings Mountain, North Carolina warehouses.** Customer will absorb all freight costs when motor is shipped to Fort Smith from field warehouses.

NOTE: Some modifications do not apply to explosion-proof motors. Contact Manufacturer for Approval.

MOD Express Cancellation Policy

Should it be necessary to cancel an order for a motor after it is modified, but before it ships – a cancellation charge of double the modification charge will be invoiced to the customer. Any MOD order cancelled before modification is completed is subject to 25% cancellation charge.

Once shipped, modified motors returned at purchaser's expense will be invoiced at double the MOD fee plus 10% restock fee.

NOTE: Mod Express for RPM AC, RPM III DC and V*S Master is available. Contact your local ABB representative for details.

Note

All lead times indicated are subject to availability of stock motors and parts in the Fort Smith, Arkansas and Kings Mountain, North Carolina warehouse. Please check stock availability before quoting lead time.

Some conversions may not be allowed if they result in a change of operating parameters that affect efficiency or change the EISA or NRCan classification of compliant motors.

Modification prices do not include the cost of the motor, speed reducer, etc.

Modification Number	Motor Mod Express® Description and List Price	Working Days Required

Balance

M1A Dynamic Balance of Rotor

TWO DAYS

Re-balance stock motor to special balance NEMA 42 through 5810 frame.

Squirrel Cage Type			
NEMA Frame	Standard Balance	Special Balance	List Price Per Motor
42 - 145	0.15"/s	0.08"/s	256
182 - 215	0.15"/s	0.08"/s	621
254 - 286	0.15"/s	0.08"/s	894
324 - 364	0.15"/s	0.08"/s	1734
404 - 445	0.15"/s	0.10"/s	2100
447 - 449	0.15"/s	0.10"/s	2192
5008 - 5810	0.15"/s	0.10"/s	2231

NOTE: Balance units are for velocity in inches per second.
Special balance is the standard level for IEEE-841 (2009).

Bearings

M2A Sealed

TWO DAYS

This modification provides the option of replacing standard bearings in AC motors with sealed bearings.

NEMA Frame	List Price Per Motor (2 Bearings)
48, 56	181
143 - 145	185
182 - 184	233
213 - 215	233
254 - 256	435
284 - 286	435
324 - 326	562
364 - 365	562

NOTE: Grease fittings will be replaced with slotted head pipe plugs.
Grease fittings will be replaced with slotted head pipe plugs unless otherwise specified.

M2B Ball to Roller 1800 RPM or Below

TWO DAYS

Roller bearings have the capability to handle higher radial loads than ball bearings, but must have high minimum radial loads to operate correctly. Roller bearings must only be used in heavy belted loads, they are not suitable for coupled loads. Because of the heavy overhung loads, most stock motors 440 frames and smaller are not suitable for roller bearing conversion. Only the stock 5000 and 5800 frame TEFC motors with "L" shafts have high strength steel shafts. Conversion may be performed on these in the Kings Mountain Plant (not FSM Mod Express Center).

Also see the main catalog section for stock motors with roller bearings already installed. These stock motors are identified with a "LR" suffix after the catalog number (M442S6LR-2340).

Does Not Apply to Explosion-Proof Motors or designs that must be built as custom motors.

NEMA Frame	List Price Per Motor
5008L - 5810L	1856

NOTE: *449T - Applicable to 449T, 2300 volt and above.

Modification Number	Motor Mod Express® Description and List Price	Working Days Required

Bearings continued...

M2C Add Thermocouple to Bearing Housing

CONTACT YOUR LOCAL ABB REPRESENTATIVE

Iron constantan thermocouples unless specified otherwise. 449T Frame and up, leads for temperature detectors are brought into separate terminal housing condulets located at each bearing housing.

NEMA Frame	List Price Per Bearing
449T	1407
5008 - 5810	1407

NOTE: 5008 frame and up, option is available to terminate detector leads in the stator RTD box. If required please specify. Additionally, we have option to terminate bearing temperature detectors into a separate terminal box. See M4E.

M2D Add Bearing Temperature Detector

CONTACT YOUR LOCAL ABB REPRESENTATIVE

100 OHM Platinum Standard. (10 OHM and 120 OHM available)

NEMA Frame	List Price Per Bearing
449T	1407
5008 - 5810	1407

NOTE: 5008 frame and up, option is available to terminate detector leads in the stator RTD box. If required please specify. Additionally, we have option to terminate bearing temperature detectors into a separate terminal box. See M4E.

M2E Add Sealed Bearings

TWO DAYS

See M2A for Sealed Bearings.

M2F Add Isolated Bearings NEMA 56 Through 5810 (SKF Insocoat or equivalent)

TWO DAYS

Totally Enclosed (TEFC) 5008-5810 motors come standard with insulated opposite drive bearing. If insulating both bearings, the additon of M39A is recommended.

NEMA Frame	List Price (x2 per set)
56 - 145T	539
182T - 184T	560
213T - 215T	762
254T - 256T	1168
284T - 286T	1466
324T - 326T	1634
364T - 365T	1693
404T - 405T	1772
444T - 445T	1852
447T - 449T	3174
5008 - 5810	1243 (1 Bearing)

NOTE: For 449T - 5810 frame motors 2300V and up, requires the addition of M39A.
Contact manufacturer for pricing and availability of insulating bearings on Open (WP-II) O5810 frames.

Modification Number	Motor Mod Express® Description and List Price	Working Days Required

M2G Roller to Ball Bearing 1800 RPM or Below

CONTACT YOUR LOCAL ABB REPRESENTATIVE

This modification is to convert all LR catalog 5000 frame motors and above from roller bearings to standard ball bearing design. Roller bearings have the capability to handle higher radial loads than ball bearings, but must have high minimum radial loads to operate correctly. It is recommended that roller bearings only be used in heavy belted loads and not for coupled loads.

NEMA Frame	List Price Per Bearing
5008-5810	1537

NOTE: *449T frame 2300 volt and above

Brake Motors

M3A Convert Standard to Weatherproof

CONTACT YOUR LOCAL ABB REPRESENTATIVE

Standard base mounted, TEFC brake motors will be converted to W/P brake motors. Includes replacement of standard brake with W/P brake of the same rating and weatherproofing of motor (See M27).

Brake Rating lb-ft	List Price Per Motor	Brake Rating lb-ft	List Price Per Motor
3	648	50	1330
6	659	75	1373
10	668	105	1672
15	751	125	2591
25	758	175	3323
35	791	230	3572

NOTE: TENV, C-Face brake motors can be converted also. **TEFC C-Face brake motors cannot be converted.**

M3B Convert to Vertical Mounting

CONTACT YOUR LOCAL ABB REPRESENTATIVE

Standard brake motors will be modified so that brakes will be operable in a brake-below motor or a brake-above motor vertical mounting position.

Brake Rating lb-ft	List Price Per Motor	Explosion-Proof List Per Motor-Additional
10 - 15	STD	159
25 - 35	368	223
50 - 75	416	251
105	551	332
125 - 175	918	552
230	1161	

NOTE: Specify if brake is to be above or below motor

M3C Add Larger or Smaller Brake (All Types)

CONTACT YOUR LOCAL ABB REPRESENTATIVE

Contact manufacturer for application assistance.
List Price: $308 per brake (plus difference in brake cost).

Modification Number	Motor Mod Express® Description and List Price	Working Days Required

Brake Motors continued...

M3D Change Stearn's Brake

Working Days Required: CONTACT YOUR LOCAL ABB REPRESENTATIVE

Brake coils will be changed to allow operation from different voltage supplies for both 50 and 60 hertz AC or from DC supplies. External brake coil lead connections will be brought from the brake or from the motor conduit box when necessary in the application.
Specify brake lead location, voltage of brake coil, frequency of supply source. (Allow 2 weeks for brake coil delivery.)
List Price: $282 per brake (plus any difference in coil cost).

M3E Add a Double C-Face Coupler Brake

Working Days Required: CONTACT YOUR LOCAL ABB REPRESENTATIVE

Double C-Face coupler brakes. Mounts on motors with C-Face. Provides NEMA C-Face mounting on brake. Spring set, electrically released.

Brake Rating lb-ft	Brake Mounting	List Price Per Motor
3	56C	832
6	56C	1105
6	145TC	1105
10	145TC	1249
15	145TC	2387

NOTE: Rating up to a 105 ft. lb. is available. Contact your ABB Representative for approval and delivery time.

M3F Remove Brake From a Brake Motor

Working Days Required: CONTACT YOUR LOCAL ABB REPRESENTATIVE

Brake is removed for customers who will be supplying a brake at their location.

Brake Rating	List Price Per Motor
All	184

M3G Change Dodge Brake

Working Days Required: CONTACT YOUR LOCAL ABB REPRESENTATIVE

Brake will be changed to specified hertz, voltage, and brake rating. (Allow 2 weeks for brake delivery)

List Price: $282 per brake (plus any difference in brake cost).

Modification Number	Motor Mod Express® Description and List Price	Working Days Required

Conduit Box

M4A Tap or Provide Additional Lead Hole

TWO DAYS

Lead outlet hole in conduit box with dimensions as shown below will be tapped to accept threaded conduit as shown in "Optional threaded hole..." column below. An additional clearance hole or threaded hole may be supplied if specified. Use same list adder for threaded hole.

NEMA Frame	Stock Motor		Optional Threaded Hole For Conduit Size	List Price Per Motor
	Hole Diameter *	For Conduit Size		
48 - 145T	7/8"	1/2"	3/4"	126
182 - 215T	1-1/16"	3/4"	1"	126
254 - 256T	1-3/8"	1"	1-1/4"	206
284 - 326T	2"	1-1/2"	2"	206
364 - 365T	2-1/2"	2"	2-1/2"	276
404 - 405T	3"	2 1/2"	3"	300
444 - 447T	3"	2-1/2"	3"	300

NOTE: * Stock motor lead holes are not threaded except on Dirty Duty and Chemical Process motors.
Extra lead holes do not apply to Explosion Proof motors.
If additional hole is needed, specify hole diameter and exact location.

M4B Rotate Conduit Box Lead Opening

TWO DAYS

Specify lead opening location facing conduit box

List Price Per Motor: $147

M4C Add Oversized Cast Iron Conduit Box

TWO DAYS

NEMA Frame	List Price Per Motor
182-184T	298
213-215T	298
254-256T	298
284-286T	427
324-326T	433
364-365T	459
404-405T	491
447-449T	515

NOTE: Consider use of IEEE 841 motors that have oversized conduit boxes standard.

M4E Add Conduit Box for Accessory Leads

Does not apply to Explosion-Proof Motors.

CONTACT YOUR LOCAL ABB REPRESENTATIVE

NEMA Frame	List Price Per Motor
449T*	407

NOTE: *Applicable to 449T frame 2300 volt and above

Modification Number	Motor Mod Express® Description and List Price	Working Days Required

Conduit Box continued...

M4F — Replace Die Cast Aluminum Conduit Box

TWO DAYS

Install cast iron conduit box with drilled and tapped entrance hole.

NEMA Frame	List Price Per Motor
42 - 56	162
143 - 215T	187
254 - 286T	230
324 - 365T	368

Cord

M5A — Install Line Cord in Conduit Box or Terminal Panel

TWO DAYS

Heavy duty, industrial type SO oil resistant cord with ground will be installed in conduit box or terminal panel. Strain relief included. Plug not included. **Does Not Apply to Explosion-Proof Motors**

Wire Gauge	Amp Rating		Six Feet or Less List Price	Each Additional Foot to Ten Max List Price
	Single Phase	Three Phase		
18	10	7	133	10
16	13	10	133	11
14	18	15	154	14
12	25	20	162	15

NOTE: Specify voltage and rotation facing drive end of motor.

M5B — Install 6 Foot, 3 Conductor, Type SO Cord With Plug

TWO DAYS

With ground plug for 115VAC, single phase only. Not for explosion proof motors.

Hp	List Price Per Motor
1 Hp and smaller	142

NOTE: Advise rotation facing drive end of motor

Modification Number	Motor Mod Express® Description and List Price	Working Days Required

Switch

M6A Install Switch, Cord and Plug
(Single Phase Only)

TWO DAYS

Includes installation of cord with ground prong and two pole single throw switch. **Does Not Apply to Explosion-Proof Motors**

Hp	Rating	List Price per Motor
2 Hp and smaller	16-20A/115V or 230V	299

NOTE: Advise voltage and rotation facing drive end of motor

M6C Change from Mechanical to Electronic Switch
(Single Phase Only)

TWO DAYS

2 Hp and smaller (Includes price of switch). Remove mechanical switch from inside motor and install electronic switch in motor conduit box. Contact your ABB representative for assistance.
Does Not Apply to Explosion-Proof Motors

Hp	List Price per Motor
2 Hp and smaller	313

Drains

M7A Add Condensation Drain Holes

TWO DAYS

A maximum of two additional drilled holes will be made in both endplates of 215T frame and smaller TEFC motors.

A maximum of one additional plastic T-drain fitting will be installed in both endplates of 254T frame and larger TEFC motors.
Does Not Apply to Explosion-Proof Motors

NEMA Frame	List Price Per Motor
215T and Smaller	223
254T - 449T	303

NOTE: Indicate position of drain holes in each endplate.

M7B Install "T" Drain

TWO DAYS

Install one stainless steel "T" drain in each end bracket in existing hole.
Does Not Apply to Explosion-Proof Motors

NEMA Frame	List Price Per Motor
254T - 449T	579
5008 - 5810	407

Modification Number	Motor Mod Express® Description and List Price	Working Days Required

Drains continued...

M7C Close Standard Condensation Drain Holes.

TWO DAYS

Close existing drain holes with plugs.

Does Not Apply to Explosion-Proof Motors

NEMA Frame	List Price Per Motor
215 and Smaller	185
254 - 449	223

M7D Add Breather Drains to Cast Iron Explosion-Proof Motor.

TWO DAYS

Drain Type	List Price Per Motor
UL Listed Explosion Proof Drain - ANSI 316 S.S.	389
UL Listed Explosion Proof Drain - Crouse-Hinds ECD	437

Dripcovers

M8A Install Dripcover on TEFC or ODP

TWO DAYS

NEMA Frame	List Price Per Motor ODP or TEFC
48 - 145	147
182 - 184	158
213 - 215	176
254 - 256	202
284 - 286	244
324 - 326	270
364 - 365	488
404-405 (NEMA Frame)	488
444 - 449 (NEMA Frame)	692

Modification Number	Motor Mod Express® Description and List Price	Working Days Required

Slurry Coat & Encapsulation

M9B Encapsulation

Not available as ModX. Encapsulation is available on Washdown Duty motors as a custom motor option.

Leads

M10A Install Terminal Lugs

TWO DAYS

Ring-type non insulated terminals made of copper alloy and seamless compression type lugs. Prices are standard 3-lead single voltage three-phase motors. Multiply mod list adder for actual number of leads per motor.

NEMA Frame	List Additions for 3 Terminal Lugs
215 and Smaller	180
254-365	223
404-445	265
447-449	265

NOTE: 5008 and up, come standard with lead lugs. Option is for conversion to single or double Burndy style lugs.

M10B Reconnect Motor from Nine Leads to Three, Specify Voltage When Ordering

TWO DAYS

NEMA Frame	List Price Per Motor
42 - 145	162
182 - 184	251
213 - 215	333
254 - 256	375
284 - 286	494
324 - 326	624

NOTE: On explosion proof, leads are connected in conduit box.

M10C Reconnect Motor to High or Low Voltage in Conduit Box

TWO DAYS

Please specify voltage.

NEMA Frame	List Price Per Motor
42 - 145	162
182 - 184	251
213 - 215	333
254 - 256	375
284 - 286	494
324 - 326	624

Modification Number	Motor Mod Express® Description and List Price	Working Days Required

Leads continued…

M10D Longer Leads, Additional Leads added:

TWO DAYS

NEMA Frame	Number of Leads	List Price		
		18 Inches	24 Inches	36 Inches
42-286	3 - 12 Leads	215	218	224
324-449	3 Leads	324	335	346
	6 Leads	358	380	403
	9 Leads	392	425	459
	12 Leads	425	470	515

NOTE: If lead requirements are longer than 8 feet contact your ABB representative.

Does Not Apply to Explosion-Proof Motors

Lubrication

M11A Install Low Temperature Lubricant in Bearings (Single Shield or Open Bearing)

TWO DAYS

Bearing grease may be changed to allow an operating temperature range for bearings of -55° to +200°F. Standard grease is Exxon POLYREX®EM, with bearing operating temperature range of -15° to +250°F. For low temperature operation, please specify either Aeroshell #7 or Mobil Temp SHC-32 Low temperature grease allows an operating temperature range for bearings of -55° to +200°F. New bearings are installed when grease is changed.

NEMA Frame	List Price Per Motor
48	126
56 - 145T	135
182 - 184T	145
213 - 215T	150
254 - 256T	192
284 - 286T	213
324 - 326T	299
364 - 365T	319
404 - 405T	507
444 - 449T*	700

NOTE: Low temperature operation below -25C(-13F)

Does Not Apply to Explosion-Proof Motors

Modification Number	Motor Mod Express® Description and List Price	Working Days Required

Lubrication continued...

M11B Add High Temperature Grease

TWO DAYS

Bearing grease may be changed to allow an operating temperature range above the standard grease, which is Exxon POLYREX®EM, with bearing operating temperature range of -15° to +250°F. Roller bearings are lubricated using Mobil SHC-220 grease. Motors must be studied by Fort Smith application engineering for acceptable temperature rise above 40°C ambient. New bearings are installed when grease is changed.

Does Not Apply to Explosion-Proof Motors

NEMA Frame	List Price Per Motor
48	126
56 - 145T	135
182 - 184T	145
213 - 215T	150
254 - 256T	192
284 - 286T	213
324 - 326T	299
364 - 365T	319
404 - 405T	507
444 - 449T*	700

NOTE: *Contact your ABB Representative for availability on 449T frames 2300 Volt and above

Seals

M12A Install Oil Seals

CONTACT YOUR LOCAL ABB REPRESENTATIVE

Nitrile is the standard oil seal material.

NEMA Frame	List Price Each
48, 56	342
143T - 145T	342
182T - 184T	378
213T - 215T	417
254T - 256T	574
284T - 286T	673
324T - 326T	760
364T - 365T	956
404T - 405T	956
444T - 449T*	1008

NOTE: **Does Not Apply to Explosion-Proof Motors**
***For 449T frames 2300 Volt and above, consult M27B Mod.**

Modification Number	Motor Mod Express® Description and List Price	Working Days Required

Seals continued...

M12B Install Inpro/Seal® Drive End Only

FOUR DAYS

Contact your ABB representative for Other Frame Sizes. Inpro/Seal® VBX is the standard material used.
NOTE: Contact your ABB representative for opposite drive end installation or order IEEE 841 motor from stock.
Does Not Apply to Explosion-Proof Motors

NEMA Frame	List Price Each
143T-215T	1070
254-256T	1340
284-286T	1428
324-326T	1516
364-365T	1739
404-405T	1825
444-449T	2224
5008 - 5810	1049

Mountings

M13A Add Rigid Base

TWO DAYS

Weld stamped steel base to steel band explosion proof motor unless motor meets VEM or VEL. Not available if conversion results in motors that fall under EISA/NRCAN requirements. All other steel band motors cannot be welded due to Autophoretic Coding.

NEMA Frame	List Price Per Motor
42 - 48	168
56	172
143 - 145T	172
182 - 184T	209
213 - 215T	251

NOTE: Not available for cast iron motors.

M13B Install NEMA C-Face Steel Band Motor Construction

TWO DAYS

284T & LARGER SUBJECT TO CASTING AVAILABILITY

Add to rigid base mounted motor. Not for explosion proof motors.

NEMA Frame	List Price Per Motor
42, 48 & 56	221
143 - 145T (1)	221
182 - 184T (1)	242
213 - 215T (1)	293
254 - 256T (2)	557
284 - 286T (2)	756
324 - 326T (2)	988

NOTE: (1) These motors will have a non-NEMA BA dimension when C-Face is added.
(2) Applies to ODP only.

Modification Number	Motor Mod Express® Description and List Price	Working Days Required

Mountings continued...

M13C-1 Install NEMA C-Face - Cast Iron Construction

TWO DAYS

Install Cast Iron Endplate where aluminum die cast parts are supplied as standard.

Does Not Apply to Explosion-Proof Motors, See M13G

NEMA Frame	NEMA C-Face Price
48 & 56	234
143 - 145T (1)	234
182 - 184T (1)	282
213 - 215T (1)	324
254 - 256T	717
284 - 286T	988
324 - 326T	1069
364 - 365T	1153
404 - 405T	1438
444 - 449T	1725

NOTE: (1) These motors will have a non-NEMA BA dimension when C-Face is added.
Specify C-face or Standard horizontal endplate.
Westville open motors cannot be modified to C-Face.
Contact your ABB representative.

M13C-2 Install NEMA C-Face – IEEE 841 Motors

Cast Iron Endplate replaces aluminum die cast parts.

NEMA Frame	NEMA C-Face Price
284 - 365TC	1022
324 - 326TC	1590
364 - 326TC	1611
404 - 405TC	1793
447 - 449TC	1902

M13D Add D-Flange

CONTACT YOUR LOCAL ABB REPRESENTATIVE

Some motors may be converted to D-Flange mounting and meet NEMA BA dimensions.
All other frame sizes needing D-Flange mounting please order as custom motor.

Does not Apply to Explosion Proof Motors

Steel Band

NEMA Frame	List Price Per Motor
320	986

Cast Iron

NEMA Frame	List Price Per Motor
180	321 * †
250	1069 *
280	1192 *
320	1357 *

NOTE: * TEFC motors only
† Must start with motor that already has C-Face on it.

Modification Number	Motor Mod Express® Description and List Price	Working Days Required

Mountings continued...

M13E Remove Rigid Base From Foot Mounted Steel Band Motors

TWO DAYS

NEMA Frame	List Price Per Motor	NEMA Frame	List Price Per Motor
42 - 48	224	213 - 215T	372
56	230	254 - 256T	529
143 - 145T	230	284 - 286T	600
182 - 184T	279	324 - 326T	736

NOTE: Bases cannot be removed from explosion proof motors.

M13F-1 Convert Mounting Configuration for Steel Band Motor

THREE DAYS

Available on all Steel Band AC motors through 449T Frame. For conversion to F2 designs, check available inventory before using Mod.
Consists of repositioning endplate vents, condensation drains, and where applicable, the conduit to positions shown in chart on page 294. Converting a steel band motor requires a new steel band frame.

Does Not Apply to Stainless Steel Band Motors
Does Not Apply to Explosion-Proof Motors

NEMA Frame Enclosure	Specify Mounting configuration using Drawings on Pg. 451		List Price Per Motor
	ODP	TEFC	
UP TO 184T	Yes	Yes	564
213 - 215T	Yes	Yes	564
254 - 326T	Yes	254-6	733
364 - 449T	Yes	Yes	959

M13F-2 Convert Mounting Configuration for Cast Iron Motor

THREE DAYS

Available on all Cast Iron AC motors through 449T Frame. For conversion to F2 designs, check available inventory before using Mod.
Consists of repositioning endplate vents, condensation drains, and where applicable, the conduit to positions shown in chart on page 294.

Does Not Apply to Explosion-Proof Motors

NEMA Frame Enclosure	Specify Mounting configuration using Drawings on Pg. 451		List Price Per Motor
	ODP	TEFC	
UP TO 184T	Yes	Yes	213
213 - 215T	Yes	Yes	213
254 - 326T	Yes	Yes	213
365 - 449T	Yes	Yes	213
5008-5810	No	Yes	2231

Modification Number	Motor Mod Express® Description and List Price	Working Days Required

Mountings continued...

M13G Add C-Face to Explosion Proof Motors

THREE DAYS

Only available on NEMA frames shown below.

NEMA Frame	List Price Per Motor
56	268
143 - 145T	268
284 - 286T	1932
324 - 326T	2643
364 - 365T	2957
404 - 405T	3489

NOTE: Any other frame size must be built as a custom motor.

M13J Add Adjustable Motor Bases

TWO DAYS

Adjustable motor bases bolted to fixed base on stock motor before shipping. NEMA 215T and smaller bases feature one adjusting screw. Bases on NEMA 254T frame and larger feature two adjusting screws.

NEMA Frame	List Price Per Motor
48 - 56	184
143T - 145T	210
182T - 184T	219
213T - 215T	238
254T - 256T	379
284T - 286T	414
324T - 326T	566
364T - 365T	716
404T - 405T	978
444T - 445T	1156
447T - 449T	1331

NOTE: Bases not suitable for vertical mounting.

Modification Number	Motor Mod Express® Description and List Price	Working Days Required

Mountings continued…

M13K Add Two Piece Transition Base

A custom designed adapter base allows stock 5008-5810 frame motors to mount in existing applications, where standard footprint and shaft height are not sufficient. Mounting dimension and shaft height of existing machine is required prior to order. Please note terminal boxes, accessory boxes, and overall length may be different. Please reference drawing of stock motor to ensure proper overall fit in your application.
List price – Consult factory for quote.

M13L Add Steel Fan Cover

Add Steel Fan Cover on TEFC motors.

NEMA Frame	List Price
5008-5012	618
5810	782

NOTE: Some ratings may come with steel fan cover as standard. Please reference notes for stock product.

M13M Add Low Noise Fan and/or Fan Cover

Add low noise steel fan cover to TEFC motors. Please contact your ABB representative for expected sound levels when using low noise fan covers.

NEMA Frame	List Price
5008-5810	Quote

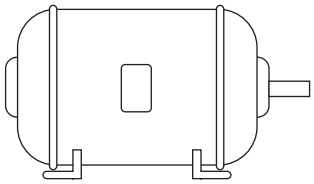
M13N Add Cast Iron Fan Cover

Converting a General Purpose, Super-E Cast Iron motor with a Steel Fan Cover to a Cast Iron Fan Cover.

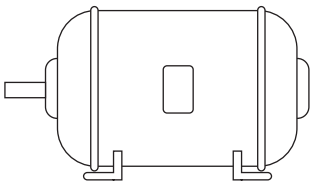
NEMA Frame	List Price
143-145T	271
182-184T	284
213-215T	321
254-256T	349
404-405T	384
447-449T	437

Modification Number	Motor Mod Express® Description and List Price	Working Days Required

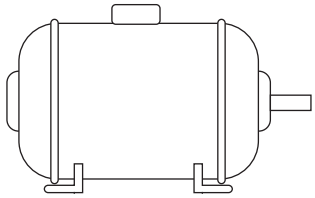
Floor Mountings



Assembly F-1

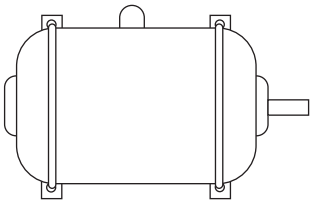


Assembly F-2

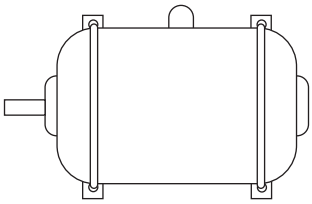


Assembly F-3

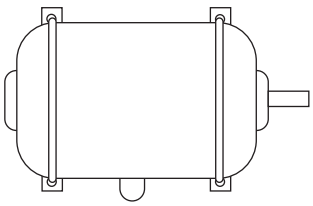
Wall Mountings



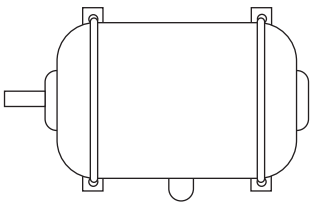
Assembly W-1



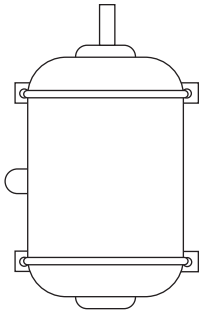
Assembly W-2



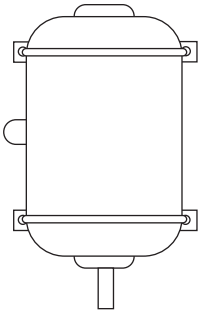
Assembly W-3



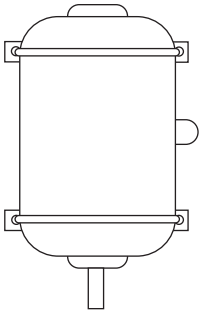
Assembly W-4



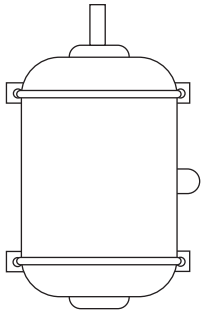
Assembly W-5



Assembly W-6

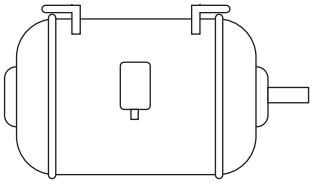


Assembly W-7

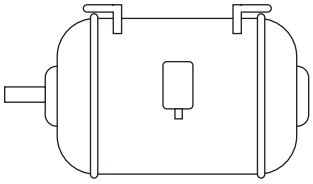


Assembly W-8

Ceiling Mountings



Assembly C-1



Assembly C-2

NOTE: For all NEMA mounting configurations, refer to NEMA MG 1-2009.

Modification Number	Motor Mod Express® Description and List Price	Working Days Required

Export Packaging

M14A Open Crate Packaging

FIVE DAYS

Replace standard motor packaging with Open Crate. For NEMA 360 thru 449 frames the open crate has Euro base as standard. Requests for Euro pallet on NEMA 320 frame and smaller must be made in shipping instructions.

NEMA Frame	Open Crate List Price
56-215	420
254-326	547
364-445	772
447-449	873
5008-50012	1556
5810	1660

M14B Totally Enclosed Crate Packaging

FOUR DAYS

Replace standard motor packaging with Enclosed Crate. For NEMA 360 thru 449 frames the enclosed crate has Euro base as standard. Requests for Euro pallet on NEMA 320 frame and smaller must be made in shipping instructions.

NEMA Frame	Enclosed Crate List Price
56-215	526
254-326	740
364-445	921
447-449	1070
5008-50012	6974
5810	7599

M14C Motor and Nameplate Photograph

Take photo of motor and nameplate for FAA Security Endorsement Documents. Photos will be attached to sales order.
List Price per Motor: $85

Modification Number	Motor Mod Express® Description and List Price	Working Days Required

Nameplate

M15A **Provide Original Nameplate for Remote Mounting** — TWO DAYS

Extra nameplate is packed with motor, not mounted.
All CSA and UL_R markings are removed on duplicate nameplates.
Shipped loose.
List Per Motor: $123 **5000 Frame and Above: $369 List**

M15B **Replace Nameplate** — TWO DAYS

Replace motor nameplate which may include customer part numbers, voltage, hertz, etc.
List Per Motor: $147 **5000 Frame and Above: $400 List**

M15C **Laser Engrave Nameplate into Stainless Steel Motor** — TWO DAYS

Motor nameplate is laser etched on stainless steel band surface up to 210 frame motor
List Per Motor $147

M15E **Mail Nameplates to Customer**

(All CSA and UL_R markings are removed on nameplates ordered as a mail out order)
No Explosion Proof Nameplates (No Exceptions!)
Order minimum charge of $31 net. Add $3.00 net for each additional nameplate.
5000 Frame and Above: $369
NOTE: No charge orders only accepted if with RA or warranty claim.
Nameplates for Explosion-proof motors will not be mailed out, no exceptions.

M15F **Mark Nameplate with CE** — TWO DAYS

The motor has to meet ie^2 efficiency standards and be ATEX / IECEx approved in order to be CE marked. Does not apply to Div. 1 or Div. 2 classified motors.
List Per Motor $147

Blowers

M16A **Add Constant Velocity Blower Unit** — TWO DAYS

For legacy products, contact your ABB representative for details.

M16B **Convert from a 3 Phase to a Single Phase Blower** — TWO DAYS

NEMA Frame	List Price Per Motor
All	228

Modification Number	Motor Mod Express® Description and List Price	Working Days Required

Paint

M17A **Paint Motor to Baldor•Reliance Stock Paint Color** — TWO DAYS

Baldor•Reliance Stock colors are: Metallic Gray, Reliance Blue/Green, Gold Super-E, Black, White, Silver, Lite Tan. Stock colors for 5008 and up are: White, Black, Yellow, Gray and Signal Red. Please specify color on order.

All orders that call for Epoxy Paint require an additional day to allow for complete drying of paint.

NEMA Frame	List Price Per Motor
42 - 215T	147
254 - 449T	579
5008 - 5812	1294

M17B **Paint Motor or Parts to Customer Specified Color** — TWO DAYS

Painted parts include, but are not limited to, fan covers, conduit boxes, drip covers, etc.

Please provide color chip or RAL number on order.

All orders that call for Epoxy Paint require an additional day to allow for complete drying of paint.

List price: Contact your ABB representative for quote.

Lifting Lugs

M18A **Add Lifting Lugs Up to a 326T Frame Size** — TWO DAYS

NEMA Frame	List Price Per Motor
48 - 145T	219
182 - 215T	272
254 - 286T	353
324 - 326T	431

Screens

M19A **Add Rodent Screens to Open Drip-Proof Motors** — TWO DAYS

NEMA Frame	List Price Per Motor
56	293
143-215T	380
254-365T	461
404-449T	535

Modification Number	Motor Mod Express® Description and List Price	Working Days Required

Hardware

M20A Exchange Plated Hardware with Stainless Steel

TWO DAYS

Replaces all mounting hardware for fan cover, conduit box, bearing retainers, thru-bolts, and frame bolts with 304 stainless steel hardware.

NEMA Frame	List Price Per Motor
56-184	337
213-215	373
254-256	431
284-286	488
324-326	561
364-405	647
444-445	792
447-449	876
5008-5810	3247

NOTE: 5008 frame and up, pricing includes grease and relief tubes.

Space Heaters

M21A Add Space Heaters to TEFC or Open Motors

TWO DAYS

Standard space heater voltage is 110VAC. Heaters for 230 or 460 volts are available. Specify circuit voltage.

NEMA Frame	List Price Per Motor
145T and Smaller	319
182 - 215T	402
254 - 365T	598
404 - 449T	680

NOTE: Strip type space heaters are standard. 5000 frame performed at plant of manufacturing. Contact your ABB representative for time.

Does Not Apply to Explosion-Proof Motors

M21B Add Conduit Box for Accessory Leads

See M4E

Not for explosion proof motors.

Textile Service

M22A Lint Proof Fan Cover for Textile Applications

TWO DAYS

Remove standard fan cover and replace with textile fan shroud and cover.

NEMA Frame	List Price Per Motor
48 - 145T	292
182 - 184T	380
213 - 215T	429
254 - 256T	613
284 - 286T	719
324 - 326T	795
364 - 365T	944
404 - 405T	1026
444 - 449T	1108

Modification Number	Motor Mod Express® Description and List Price	Working Days Required

Thermal Protectors

M23A Thermostats

TWO DAYS

One or More Thermostats Laced to Winding

For over temperature protection. These are pilot circuit devices only with leads into conduit box tagged "JJ". Specify normally open or closed contacts. All ECP motors require hermetically sealed thermostats to maintain Division 2 marking.

NEMA Frame	Number of Devices	Standard List Price Per Motor	Hermetically Sealed for Division 2
Single Phase	1	185	N/A
Three Phase 42 - 215T	3 (3)	209	304
Three Phase 254 - 449T	3 (3)	557	653
Direct Current 48 - 215T	1	209	N/A

NOTE: (3) In Series with two leads into conduit box. Normally open are in parallel.

Does Not Apply to Explosion-Proof Motors

M23B Exchange Thermal Overload

TWO DAYS

Exchange from manual thermal overload to automatic thermal overload or exchange from automatic thermal overload to manual thermal overload.

NEMA Frame	List Price Per Motor
	M.T.O to A.T.O. OR A.T.O. to M.T.O.
48 and 56	230
143 and 145T	235
182 - 184T	270
213 - 215T	372

Does Not Apply to Explosion-Proof Motors

M23C Install Resistance Temperature Detectors

CONTACT YOUR LOCAL ABB REPRESENTATIVE

Install on low voltage winding endturns (Six 100 OHM RTD's).

NEMA Frame	List Price Per Motor
449T	4096

NOTE: Installing RTD on winding endturns are not as effective as embedded RTD in winding. For embedded RTD, build as custom motor.

Does Not Apply to Explosion-Proof Motors

Modification Number	Motor Mod Express® Description and List Price	Working Days Required

Winding Thermocouples

(3 per motor, 6 foot standard length)

M24A **Iron Constantan (3 per motor)** — TWO DAYS

Specify location.

NEMA Frame	List Price Per Thermocouple
42 - 215T	202
254 - 449T	417

NOTE: Thermocouples are installed on end turns.

Does Not Apply to Explosion-Proof Motors

Winding Thermistors

Does Not Apply to Explosion-Proof Motors

M25A **Thermistors** — TWO DAYS

Thermistors are normally applied in sets of three (3) per motor, One (1) per phase.

List Price per Motor: $669

Modification Number	Motor Mod Express® Description and List Price	Working Days Required

Tropicalization

M26A Protection of Windings and Mechanical Parts

TWO DAYS

Protection from tropical environments.

NEMA Frame	List Price Per Motor AC
Through 215T	244
254 - 365T	350
404 - 449T	598
5008 - 5810	1532

Weatherproofing

M27A Treatment of Windings and Mechanical Parts

TWO DAYS

Protection from the elements or high moisture areas.

NEMA Frame	List Price Per Motor AC
Through 215T	238
254 - 365T	1112
404 - 449T	1306

NOTE: "Dirty Duty", "CP" and "ECP" motors are weatherproofed as standard.
Does Not Apply to Explosion-Proof Motors

M27B Upgrade to IP55 Protection

TWO DAYS

Includes all necessary mechanical modifications for TEFC motors to meet IP55.
Severe Duty NEMA frames are IP55 protected as standard.

NEMA Frame	List Price
449T* - 5810	776

NOTE: *Available for 449T frame 2300 Volt and above

M27C Corrosion Resistant Treatment of Windings

Epoxy coated rotor O.D. and stator I.D. including winding.

NEMA Frame	List Price Per Motor AC
5008 - 5010	1532

Modification Number	Motor Mod Express® Description and List Price	Working Days Required

Shaft Modifications

FIVE DAYS

Includes modifications to existing shafts only. Not applicable if new shaft is required. Price each modification per table. One or both bearings will be replaced after shaft modification is complete.

NEMA Frame	List Price Per Modification	NEMA Frame	List Price Per Modification
42 - 145T	219	254T - 256T	291
182 - 184T	230	284 - 286T	291
ASM62 (5)	270	324-326T	337
213 - 215T	319	364-365T	359
ASM75 (5)	319	404-405T	401

NOTE: (5) Arbor Saw Motors.

M29A Drill and Tap One Hole in End of Shaft or Mill Flat on Shaft Extension.

THREE DAYS

Provide details on order. Price this modification per table above.

M29B Convert from TEFC to TEAO

THREE DAYS

Cut off shaft extension for external fan. Price this modification per table above.

Does Not Apply to Explosion-Proof Motors

M29C Threading

FIVE DAYS

Specify right hand or left hand thread, also type and length of thread. Price this modification per table above.

M29D Convert “T” Frame to “U” Frame Shaft Dimension or Smaller (TS)

FIVE DAYS

Provide details on order.

NEMA Shaft	Conversion of T Frame to TS or U Frame List Price Per Motor
143 thru 145T	219
182 thru 215T	402
254 thru 286T	916
324 thru 365T	1364
404 thru 449T	2248

Modification Number	Motor Mod Express® Description and List Price	Working Days Required

Shaft Modifications continued...

M29F — Shorten Shafts Without Reducing the Overall Diameter

THREE DAYS

Shortening the shaft may cause the motor to fall out of NEMA standards. If motor falls out of NEMA standards, the nameplate will be designated with a “TZ” to signify short shaft.

NEMA Shaft	List Price Per Motor
48 - 145T	232
182 - 215T	247
254 - 256T	253
324 - 326T	267
364 - 365	281
404 - 405	281
447 - 449	294

M29I — Machine Explosion Proof Motor Shafts from T to U Frame

Contact ABB representative for price and availability.

M29J — Convert “L” Frame to “S” Frame for Coupled Duty

This modification includes taking an 1800 RPM 5008-5810L frame and shortening the shaft to 5008-5810S Frame Dimensions for Coupled Duty.

NEMA Frame	List Price
5008-5810	763

NOTE: When changing to S shaft dimensions, shaft material will be changed to 1045 Class I.

Grounding Screw

M30A — Add Grounding Screw On Endplate

TWO DAYS

Requirement for UL 1081, swimming pool pump motors only (includes slinger.)

List Price: $135

Modification Number	Motor Mod Express® Description and List Price	Working Days Required

Tach and Encoder Mounting Kits

M31A Add Tach Mounting Kits Only

THREE DAYS

Tach mounting kits are available. See DC controls section.
These kits are complete and will allow mounting of a BTG1000 or XPY tach generator (tach generator not included).

Baldor•Reliance Motor Type	List Price Per Motor
3300P	417
3400D/P	515
3500D/P	536
3600D/P	619
180 - 500 Frame DC	1333

NOTE: Price includes tach kit.

M31B Tach Kit with BTG1000 Tach

FOUR DAYS

Order tach kit per M31A and order tach separately.

M31C Tach Kit with XPY Tach

FOUR DAYS

Order tach kit per M31A and order tach separately.

M31D Add Encoder Kit to Inverter Duty Motor

TWO DAYS

Order encoders separately.
Encoders are listed in the Inverter controls section.

NEMA Frame	List Price Per Motor
56 - 215T	191
254T - 404T	397
444T - 449T	619
5008 - 5810	2489

M31E Additional Mounted Encoder Options for IDRPM Motors

TWO DAYS

List price includes encoder and mounting to motor.

Motor Enclosure	Type	Frame Size	Mfg.	Mag or Optical	Conn Type	Input Voltage VDC	List Price
All	H20	FL180 - L400	Dynapar	O	MS-ST	5-15	2044
All except TEFC	RL67	FL180 - L400	Dynapar	M	Latch	5-15	2520
All except TEFC	SL85	F280 - L400	Dynapar	M	Latch	5-15	2653

Modification Number	Motor Mod Express® Description and List Price	Working Days Required

Testing

M32A CSA C390 Method 1 Equivalent to IEEE 112 Method B Performance Testing

SEVEN * DAYS

Three phase stock motors will be tested under lab conditions according to CSA C390 (equivalent to IEEE 112b).
Complete test data will be supplied.
Bearings are replaced after testing.

NEMA Frame	List Price Per Motor
42 - 215	2400
254 - 320	3901
360 - 449	4694
5008 - 5810	5000

NOTE: 449T Frame 2300 Volt and up and 5008-5810

M32B Witnessed CSA C390 Method 1 Equivalent to IEEE 112 Method B Performance Testing

SEVEN * DAYS

Test schedule must be coordinated with manufacturing facility.
Bearings are replaced after testing.

NEMA Frame	List Price Per Motor
42 - 215	7709
254 - 320	8613
360 - 449	8837
5008 - 5810	9000

NOTE: 449T Frame 2300 Volt and up and 5008-5810

Testing

M33A Short Motor Test

SEVEN * DAYS

Three phase or single phase motors will have any or all of the following motor characteristics measured. Test data will be supplied. All data will be taken on cold motor.

- No Load Current
- Full Load Current
- Breakdown Torque
- Locked Rotor (Starting) Current
- Locked Rotor Torque
- Hi-Potential Test

NEMA Frame	List Price Per Motor
42 - 215T	400
254 - 449T	731

NOTE: Not available for 449T Frame 2300 Volt and up.

NOTE: * Lead time is dependent on Test Lab availability. Contact your ABB representative.

Modification Number	Motor Mod Express® Description and List Price	Working Days Required

Testing continued...

M33B Routine Motor Test

SEVEN * DAYS

This is a test reported per IEEE Std. 112 - 2004 Annex B. All data will be taken on a cold motor. Bearings are replaced after testing. Test includes:

- No Load Current
- Locked Rotor Current
- High-Potential
- Winding resistance

NEMA Frame	List Price Per Motor
42 - 215T	270
254 - 449T*	496

NOTE: Standard 449T frame 2300 Volt and up.

M33C Complete Performance Test

SEVEN * DAYS

A Complete test uses a dynamometer to verify nameplate description and electrical design characteristics. The motor is allowed to achieve its full load temperature rise before making performance measurements. Testing conducted per IEEE Std 112-2004 Annex C. Test report includes:

- No Load Current
- Full Load Current
- Locked Rotor Current
- High-Potential
- Winding Resistance
- Full Load Heat Run
- Temperature Rise
- Full Load Slip
- Measure breakdown and starting torques
- Measure efficiency at 100%, 75%, 50% & 25% of full load
- Measure power factor at 100%, 75%, 50% & 25% of full load

NEMA Frame	List Price Per Motor
42 - 215T	2400
254 - 320T	3597
360T - 449T*	8787

NOTE: For 449T frame 2300 Volt and up please see M32A.

M33D Calibration Test

CONTACT * YOUR LOCAL ABB REPRESENTATIVE

This test consists of 0 to 125% rated load test measurement of speed, torque, current, power factor and efficiency at rated voltage. The data is provided as a curve plotted on Baldor•Reliance standard format. Tests may also be performed as a witnessed test.

NEMA Frame	Calibration Test
42 - 215T	2160
254T - 320T	2878
360T - 449T*	7913

NOTE: Not available for 449T frame 2300 Volt and above.

NOTE: * Lead time is dependent on Test Lab availability. Contact your ABB representative.

Modification Number	Motor Mod Express® Description and List Price	Working Days Required

Testing continued...

M33E Sound Measurement Test

SEVEN * DAYS

Two tests are available to measure the sound produced by the motor at idle and operated from a line power supply.

The basic test is an overall sound measurement (one band). The Noise test that verifies sound levels per procedures defined in IEEE-85 under a No Load Condition showing an octave band analysis is also available. Double these prices for witnessed tests.

Note: Sound tests must be performed in Fort Smith, Arkansas or the Motor R&D Lab in Greenville, South Carolina. Allow for extra shipping time and freight charges from plant.

NEMA Frame	List Price Per Motor
42 - 215T	985
254 - 445T	1472
447 - 449T	3595

NOTE: * Lead time is dependent on Test Lab availability. Contact your ABB representative.

Worm Gear Modifications

M34A Install Bases on Worm Gear Speed Reducers.

TWO DAYS

List price include bases.

900 Series			
Size	Horiz. Base List Price	Vertical Low Base List Price	Vertical High Base List Price
913	200	242	244
915	211	244	247
918	211	244	247
921	215	249	252
924	230	268	274
926	244	309	313
932	274	337	344
938	299	379	391

Modification Number	Motor Mod Express® Description and List Price	Working Days Required

Worm Gear Modifications continued...

M34B — Convert from Single to Double End Output Shaft on Worm Gear Speed Reducers.

TWO DAYS

List price includes shaft.

900 Series		Universal Series	
Size	List Price	Size	List Price
913	221	133	217
915	224	175	224
918	224	200	224
921	224	225	235
924	230	258	244
926	244	300	249
932	249	350	270
938	270	400	296

M34C — Convert Output Shaft from Left Hand to Right Hand or vice versa on 900 or Universal Series Reducers

TWO DAYS

List Price: $168 (Price does not include reducer)

M34D — Install Motor on 900 F-Series or Universal STF Series Reducers

TWO DAYS

List Price: $168 (Price does not include motor or reducer)

Terminal Blocks

M35A — Install IEC Terminal Blocks in Conduit Box and Connect Leads

TWO DAYS

IEC Frame, stocked with terminal blocks.
Advise how motors leads are to be connected.

Does Not Apply to Explosion-Proof Motors

NEMA Frame	List Price
34 FRAME - 56-143T	228
35 FRAME - 56-145T	245
182-184	272
213-215	298
254-256	342
284-286	353
324-326	1031
364-365	1031
404-405	1031
444-449	1031

Modification Number	Motor Mod Express® Description and List Price	Working Days Required

Fan Change with Inverter Nameplate Markings

M38A **No longer available as ModEx**

Shaft Grounding

A shaft ground may be specified by many HVAC, pump and conveyor manufacturers to mitigate the effects of Adjustable Speed Drive circulating currents and prolong bearing life. Shaft grounding is available as an option on Baldor•Reliance custom motors or can be installed on a stock motor in Mod Express. On applications where washdown or debris may be present, mounting the ground internally on the motor (as custom) may be required.

NOTE: A shaft ground is a sparking device not suited for explosion-proof Division 1 or 2 applications, even when mounted internally.

Three main types of shaft grounding devices are available:

- **M39A - Shaft Grounding Systems**
- **M39B - Shaft Grounding Rings**
- **M39C - Shaft Grounding Brush**

M39A Shaft Grounding Systems

The SGS™ (Shaft Grounding Systems) design is a robust, enclosed unit designed for harsh environments. Mounts to the opposite drive end of the motor on TEFC, TENV, TEBC & ODP motors.

THREE DAYS

NEMA Frame	List Price
56 - 449T	1231
5008 - 5810	1243

NOTE: 449T - 5810 frame motors 2300 Volt & up require the addition of Mod M2F.

Does Not Apply to Explosion-Proof or Division 2 Motors

Modification Number	Motor Mod Express® Description and List Price	Working Days Required

Shaft Grounding continued...

M39B-1 AEGIS® Bearing Protection Ring

NEMA Frame	Shaft Diameter	List Price
56	0.625	221
140T, 180	0.875	232
180T, 210	1.125	244
210T, 250U	1.375	258
250T, 280U	1.625	322
280T, 320U, 320TS, 360TS	1.875	343 (1)
320T, 360U, 400TS	2.125	379 (1)
360T, 400U, 440TS	2.375	456 (1)
400T, 440U	2.875	643 (1)
440T	3.375	766 (1)

(1) Motors over 100 Hp / 75 kW require an additional modification to add an insulated bearing on the opposite drive end. Reference Mod M2F to add for one insulated bearing on the ODE of the motor.

NOTE: For this modification, the AEGIS Bearing Protection Ring mounts to the drive end of the motor.

M39B-2 Inpro/Seal® Current Diverter Ring™

NEMA Frame	Shaft Diameter	List Price
56	0.625	226
140T, 180	0.875	226
180T, 210	1.125	272
210T, 250U	1.375	320
250T, 280U	1.625	383
280T, 320U, 320TS, 360TS	1.875	458 (1)
320T, 360U, 400TS	2.125	515 (1)
360T, 400U, 440TS	2.375	547 (1)
400T, 440U	2.875	653 (1)
440T	3.375	738 (1)

(1) Motors over 100 Hp / 75 kW require an additional modification to add an insulated bearing on the opposite drive end. Reference Mod M2F to add for one insulated bearing on the ODE of the motor.

NOTE: For this modification, the Inpro/Seal Current Diverter Ring mounts to the drive end of the motor.

M39B-3 Inpro/Seal® Motor Grounding Seal™

The Inpro/Seal Motor Grounding Seal **includes** their labyrinth seal.

NEMA Frame	Shaft Diameter	List Price
56	0.625	1184
140T, 180	0.875	1184
180T, 210	1.125	1213
210T, 250U	1.375	1242
250T, 280U	1.625	1541
280T, 320U, 320TS, 360TS	1.875	1686 (1)
320T, 360U, 400TS	2.125	1767 (1)
360T, 400U, 440TS	2.375	2083 (1)
400T, 440U	2.875	2225 (1)
440T	3.375	2711 (1)

(1) Motors over 100 Hp / 75 kW require an additional modification to add an insulated bearing on the opposite drive end. Reference Mod M2F to add for one insulated bearing on the ODE of the motor.

NOTE: For this modification, the Inpro/Seal Motor Grounding Seal (MGS) will be installed on the drive end of the motor (unless otherwise specified), and replaces any existing seal currently installed on the motor. Use of a MGS on both ends of the motor is not recommended as it may introduce the potential for circulating currents.

Modification Number	Motor Mod Express® Description and List Price	Working Days Required

Shaft Grounding continued...

M39C **Baldor Shaft Grounding Brush Assembly**

Add external shaft grounding brush to motor endplate. Brush contacts motor shaft diameter.

TWO DAYS

NEMA Frame	List Price Per Motor
48, 56	221
140	232
180	244
210	258
250	272
280	291 (1)
320	318 (1)
360	350 (1)
400	386 (1)
440	431 (1)

Does Not Apply to Explosion-Proof Motors

(1) Motors over 100 Hp / 75 kW require an additional modification to add an insulated bearing on the opposite drive end. Reference Mod M2F to add for one insulated bearing on the ODE of the motor.

Check Total Indicated Runout (TIR)

M40A **Check Total Indicated Runout (TIR)**

Check C-face and shaft run out. If applicable check foot flatness.

List Price: $123

Modification Number	Motor Mod Express® Description and List Price	Working Days Required

Vibration Detectors

M41A Provisions for Vibration Detection

This will include a vibration block configured to accept the specified vibration detector. Please specify detection plane and mounting dimensions prior to order.

NEMA Frame	List Price
5008 - 5810	2930

M41B Add Vibration Switch

NEMA Frame	List Price
5008 - 5810	12035

NOTE: Requires M41A.
Leads will be loose for auxiliary box. See M4E.

M41C Add Velocity Transducer

NEMA Frame	List Price
5008 - 5810	8533

NOTE: Requires M41A.
Leads will be loose for auxiliary box. See M4E.

M41D Add Accelometer

NEMA Frame	List Price
5008 - 5810	8264

NOTE: Requires M41A.
Leads will be loose for auxiliary box. See M4E.

Cast Iron Endplate

M42A Install Cast Iron Endplate

NEMA Frame	Cast Iron Endplate Price
48 & 56	151
143 - 145T	159
182 - 184T	168
213 - 215T	185

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
09-1309	264	394	A8	22	
09-1309GLD	264	394	A8	22	
09-1310	264	596	A8	22	
09-1310GLD	264	596	A8	22	
09CB5001A01SP	267	82	P1	3	
09CB5001A15SP	267	65	P1	3	
10-1304	265	439	A8	32	
10-1304GLD	265	439	A8	32	
10-1305	265	457	A8	32	
10-1305ECP8	265	894	A8	32	
10-1305GLD	265	457	A8	32	
10CB5001A01SP	267	109	P1	5.5	
10CB5002A01SP	267	132	P1	4	
10EP1502A01SP	268	581	A8	39	
12-1105	265	563	A8	48	
12-1105ECP8	265	1124	A8	48	
12-1105GLD	265	563	A8	48	
12EP1501A03SP	268	1003	A8	50	
33CB5000A01SP	267	37	P1	1	
33CB5001A01SP	267	37	P1	1	
34-171	264	60	A8	2	
34-3900T	264	60	A8	1	
34-3903A	264	73	A8	2	
34-3903A-GLD	264	73	A8	2	
34-3903T	264	76	A8	2	
34-3903T-GLD	264	76	A8	2	
34CB5001A01SP	267	36	P1	1	
35-1300	264	120	A8	6	
35-1300GLD	264	120	A8	6	
35-1325	264	154	A8	11	
35-1325GLD	264	154	A8	11	
35-1409	264	172	A8	11	
35-1409GLD	264	172	A8	11	
35-3304	264	85	A8	4	
35-8762	264	70	A8	3	
35-8762GLD	264	70	A8	3	
35-8764	264	70	A8	3	
35-8764GLD	264	70	A8	3	
35CB5001A01SP	267	39	P1	1	
35EP1506A01SP	268	215	A8	8	
36-486	264	194	A8	8	
36-486GLD	264	194	A8	8	
36-1037	264	137	A8	7	
36-1037GLD	264	137	A8	7	
36-1206A	264	176	A8	13	
36-1206A-GLD	264	176	A8	13	
36-1206B	264	186	A8	14	
36-1206B-GLD	264	186	A8	14	
36-1749	264	173	A8	12	
36-1749GLD	264	173	A8	12	
36-3301	264	99	A8	5	
36-3301GLD	264	99	A8	5	
36-3403	264	116	A8	5	
36-3403GLD	264	116	A8	5	
36CB5001A01SP	267	42	P1	1	
36CB5001A06SP	267	47	P1	2	
36CB5001A07SP	267	70	P1	2	
36EP1304A62SP	268	236	A8	15	
37-1302	264	292	A8	18	
37-1302GLD	264	292	A8	18	
37-1304	264	192	A8	12	
37-1304GLD	264	192	A8	12	
37-1402	264	274	A8	18	
37-1402GLD	264	274	A8	18	
37-1404	264	231	A8	14	
37-1404GLD	264	231	A8	14	
37CB5002A06SP	267	47	P1	3	
37CB5002A07SP	267	42	P1	4	
39-1403	265	411	A8	21	
39-1403GLD	265	411	A8	21	
39-3400	265	256	A8	19	
40-1400	265	417	A8	30	
40-1400GLD	265	417	A8	30	
40-1401	265	427	A8	40	
40-1401GLD	265	427	A8	40	
42-1300	265	750	A8	36	
42-1300GLD	265	750	A8	36	
42-1400	265	730	A8	30	
42-1400GLD	265	730	A8	30	
44-1402	265	844	A8	40	
44-1402GLD	265	844	A8	40	
44-1403	265	844	A8	40	
44-1403A	265	844	A8	40	
44-1403A-GLD	265	844	A8	40	
44-1403GLD	265	844	A8	40	
133-6FBA	263	69	A8	1	
180-5002	266	903	P1	18	
210-5001	266	830	P1	12	
250-5001	266	1769	P1	75	
280-5002	266	2210	P1	57	
320-5002	266	3080	P1	87	
360-5001	266	4725	P1	121	
360T	269	1285	P1	123	
400-5001	266	5722	P1	173	
42384-26BE	195	319	A8	17	
42384-26BF	195	319	A8	17	
42384-26BH	195	559	A8	29	
42384-26D	195	319	A8	14	
413336-1R	194	1689	A8	7	
413336-2R	194	1906	A8	9	
417077-51	195	1491	A8	44	
417077-57	173, 195	911	A8	2	
417077-58	195	911	A8	4	
417077-59	173, 195	911	A8	4	
417077-65	173, 195	1165	A8	7	
417077-74	195	2123	A8	55	
417077-75	174, 195	2324	A8	85	
417077-102	173, 195	1642	A8	6	
417077-124	173, 195	1893	A8	18	
417077-126	174, 195	4738	A8	225	
417077-127	174, 195	2123	A8	110	
417077-129	174	503	E8	68	
417077-130	174	591	E8	64	
417077-131	174	503	E8	90	
417077-132	174	591	E8	90	
417077-133	172	1442	E8	5	
417077-136	172	1442	E8	4	
417077-141	174	1142	E8	6	
417077-143	174	897	E8	5	
417077-144	174	897	E8	72	

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight(1)	Type Code
417077-145	174	1753	E8	82	
417077-153	172	1598	E8	9	
417077-156	172	2060	E8	9	
417077-165	172	1442	E8	15	
417077-167	172	1598	E8	20	
417077-168	172	2060	E8	10	
417077-170	172	1442	E8	10	
417077-171	172	1442	E8	5	
417077-173	172	1442	E8	10	
417077-176	172	1529	P1	15	
417077-177	172	1442	E8	35	
417077-179	172	1442	E8	35	
417077-182	172	1442	E8	10	
417077-184	174	503	E8	10	
417077-185	174	503	E8	10	
417077-186	174	591	E8	10	
417077-187	174	591	E8	10	
417077-188	172	1442	E8	10	
417077-189	172	1442	E8	10	
417077-191	172	1598	E8	10	
417077-193	172	2060	E8	10	
417077-201	174	165	E8	1	
417077-202	174	165	E8	1	
417077-208TL	172	1442	E8	5	
417077-212TL	172	1442	E8	6	
417077-218TL	172	1442	E8	6	
417077-242TL	172	1442	E8	6	
417708-21	194	1689	A8	7	
417708-22	194	1689	A8	9	
417708-26	194	1689	A8	7	
417708-27	194	1689	A8	9	
417708-30	194	3164	E8	5	
417708-32	194	3164	E8	5	
417708-33	194	3164	E8	5	
417708-34	194	3764	E8	5	
417708-36	194	3764	E8	5	
417708-37	194	3764	E8	5	
417708-40	194	1091	A8	1	
417708-41	194	1091	A8	2	
417708-42	194	1091	A8	1	
417708-85	172	1598	E8	5	
417708-87	172	2060	E8	6	
417708-90	172	1598	E8	13	
417708-91	172	1598	E8	15	
417708-120	172	2060	E8	23	
417708-126	194	5128	E8	4	
417708-130	172	1442	E8	5	
417708-133	194	4036	E8	5	
417708-134	194	4036	E8	5	
417708-135	194	4036	E8	5	
417708-136	194	5128	E8	6	
417708-137	194	5128	E8	6	
417708-138	194	5128	E8	4	
417708-140	172	1442	E8	10	
417708-142	172	1442	E8	15	
417708-151	194	4036	E8	5	
417708-153	194	3164	E8	5	
417708-154	194	3764	E8	5	
417708-155	194	1689	A8	9	
417708-156	194	1689	A8	8	
417708-157	194	1091	A8	1	
417708-201	173	165	E8	1	
417708-202	173	165	E8	2	
417708-203	173	165	E8	1	
417708-244	194	4673	N5	35	
417708-245	194	4673	N5	22	
417708-246	194	4673	N5	22	
417708-247	194	4673	N5	35	
417709-17	194	4245	A8	6	
417709-21	194	4245	A8	19	
417709-58	194	4245	A8	20	
417709-59	194	4245	A8	23	
417709-60	194	4245	A8	23	
417709-61	194	4245	A8	29	
417709-65	194	4245	A8	6	
417709-66	194	4245	A8	9	
417709-67	194	4245	A8	15	
417709-68	194	4245	A8	18	
419914-1A	195	545	A8	50	
419914-1B	195	634	A8	33	
419914-1C	195	1223	A8	37	
419914-1D	195	1606	A8	69	
419914-1E	195	2166	A8	76	
419914-1P	195	545	A8	36	
419914-1R	195	634	A8	59	
419914-1S	195	634	A8	36	
419914-1T	195	1223	A8	26	
419914-1U	195	1223	A8	42	
419914-1W	195	1606	A8	76	
419914-1X	195	2166	A8	81	
419914-9A	173	469	E8	13	
419914-9B	173	469	E8	14	
419914-9C	173	469	E8	15	
419914-9D	173	469	E8	17	
419914-10A	173	469	E8	39	
419914-10B	173	469	E8	27	
419914-10D	173	547	E8	48	
419914-10G	173	547	E8	55	
419914-10J	173	703	E8	37	
419914-10K	173	1006	E8	80	
419914-10L	173	547	E8	52	
419914-10M	173	547	E8	28	
419914-10N	173	703	E8	58	
419914-10P	173	703	E8	56	
419914-10R	173	1006	E8	80	
419914-10S	173	1006	E8	90	
419914-11C	173	1300	E8	105	
419914-11D	173	1300	E8	74	
419914-11E	173	2476	E8	105	
419914-11F	173	2476	E8	132	
419914-11G	173	2476	E8	141	
419914-11H	173	4672	E8	140	
419914-11J	173	4672	E8	150	
419914-11K	173	4672	E8	160	
419914-11L	173	4672	E8	165	
419914-11M	173	1300	E8	110	
419914-11N	173	1300	E8	124	
419914-11P	173	1110	E8	90	
419914-11R	173	1110	E8	130	
419947-29	195	1491	A8	83	

(1) Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
419947-30	195	1491	A8	39	
419947-31	174	1747	E8	100	
419947-32	195	1823	A8	84	
419947-33	174	1944	E8	1	
419947-34	195	2123	A8	90	
419947-40	174	1747	E8	1	
419947-41	174	2123	A8	1	
419947-42	174	2324	A8	1	
EM44252TS-2340	55	33234	LG	2338	
EM44254T-2340	55	36300	LG	2694	
EM44302TS-2340	55	40,255	LG	3149	
EM44304T-2340	55	36979	LG	3676	
EM50352S-2340	55	43766	LG	4780	
EM50354L-2340	55	44000	LG	5325	
EM50402S-2340	55	48213	LG	4780	
EM50404L-2340	55	47745	LG	5325	
EM50406LR-2340	55	54064	LG	5867	
EM50452S-2340	55	56872	LG	4871	
EM50454L-2340	55	51957	LG	5540	
EM50456LR-2340	55	62021	LG	6000	
EM50502S-2340	55	62021	LG	4920	
EM50504L-2340	55	59681	LG	5750	
EM50506LR-2340	55	70915	LG	6069	
EM50602S-2340	55	67872	LG	5071	
EM50604L-2340	55	70213	LG	5809	
EM50704L-2340	55	77234	LG	5867	
EM50804L-2340	55	89872	LG	6100	
EM58606LR-2340	55	78404	LG	9460	
EM58802S-2340	55	89362	LG	8280	
EM58904L-2340	55	94553	LG	10000	
EM581004L-2340	55	108596	LG	10500	
M50256LR-2340	55	41964	LG	3683	
M50306LR-2340	55	43298	LG	3683	
M50356LR-2340	55	49383	LG	5060	
M58702S-2340	55	71851	LG	8045	
AEM2237-4	133	2942	L1	227	0924M
AEM2238-4	133	3558	L1	245	0932M
AEM2275-4	133	3338	L1	211	0736M
AEM2276-4	133	4252	L1	299	0954M
AEM2332-4	133	5218	L1	353	1032M
AEM2333-4	133	4943	L1	312	0942M
AEM2334-4	133	5960	L1	384	1038M
AEM3683-4	133	1269	L1	79	0617M
AEM3684-4	133	1601	L1	90	0628M
AEM3686-4	133	1362	L1	86	0623M
AEM3687-4	133	1771	L1	88	0628M
AEM3689-4	133	1451	L1	95	0628M
AEM3782-4	133	1976	L1	180	0722M
AEM3783-4	133	1675	L1	155	0729M
AEM3784-4	133	2406	L1	155	0727M
AEM3787-4	133	2193	L1	166	0728M
AEM4100-4	133	6992	L1	497	1236M
AEM4102-4	133	8773	L1	513	1240M
AEM4103-4	133	7597	L1	551	1246M
AEM4104-4	133	8583	L1	559	1250M
AEM4111-4	133	9413	L1	878	A36052M
AEM4117-4	133	10918	L1	830	A36052M
AEM4307-4	133	10199	L1	874	A36050M
AEM4308-4	133	13888	L1	1198	A40052M
AEM4311-4	133	12282	L1	915	A36056M
AEM4312-4	133	16572	L1	1160	A40048M
AEM4314-4	133	15008	L1	1294	A40064M
AEM4316-4	133	18755	L1	1751	A44062M
AEM4400-4	133	20718	L1	1892	A44078M
AEM4403-4	133	19390	L1	1574	A44046M
AEM4404-4	133	26259	L1	1681	A44062M
AOM3454	119	337	K	18	3410M
AOM3455	119	529	K	19	3411M
AOM3458	119	376	K	18	3410M
AOM3535	119	557	K	22	3414M
AOM3538	119	442	K	25	3413M
AOM3539	119	600	K	24	3418M
AOM3542	119	476	K	23	3416M
AOM3543	119	617	K	31	3428M
AOM3546T	119	495	L1	33	3428M
AOM3554T	119	515	L1	34	3520M
AOM3556T	119	626	L1	35	3520M
AOM3558T	119	546	L1	38	3523M
AOM3607T	119	716	L1	50	3617M
AOM3611T	119	640	L1	59	3622M
AOM3614T	119	768	L1	56	3627M
AOM3615T	119	740	L1	71	3634M
AOM3617T	119	1212	L1	62	3623M
AOM3702T	119	1839	L1	97	3724M
AOM3704T	119	962	L1	92	3720M
AOM3705T	119	2010	L1	113	3744M
AOM3708T	119	1377	L1	115	3732M
AOM3710T	119	949	L1	106	3728M
AOM3714T	119	1150	L1	126	3740M
AOM25904T	119	3194	L1	208	3936M
AP7401	184	484	DS	12	
AP7402	184	484	DS	12	
AP7421	184	484	DS	10	
AP7422	184	484	DS	12	
AP231001	184	294	DS	4	
AP232001	184	322	DS	5	
AP233001	184	346	DS	5	
AP233021	184	346	DS	5	
ASM6207	128	3117	L1	105	6246M
ASM6210	128	3331	L1	108	6246M
ASM6215	128	3883	L1	117	6260M
ASM7510	128	3883	L1	142	7535M
ASM7515	128	4189	L1	146	7544M
B13H71	261	67	A8	5	
B13J92	261	115	A8	3	
B13V81	261	117	A8	2	
B13V91	261	118	A8	3	
B15H71	261	47	A8	3	
B18H71	261	81	A8	6	
B18J92	261	118	A8	6	
B18V81	261	121	A8	3	
B18V91	261	122	A8	3	
B19H71	231, 244, 270	82	A8	1	
B21GH71	261	84	A8	5	
B21H71	261	87	A8	6	
B21J92	261	132	A8	7	
B21V81	261	132	A8	4	
B21V91	261	136	A8	6	
B24H71	261	105	A8	8	
B24J92	261	148	A8	9	

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
B24V81	261	148	A8	4	
B24V91	261	160	A8	6	
B26H71	261	117	A8	9	
B26J92	261	199	A8	10	
B26V81	261	199	A8	6	
B26V91	261	202	A8	9	
B30H71	261	133	A8	4	
B30V81	261	199	A8	8	
B30V91	261	202	A8	13	
B32H71	261	158	A8	13	
B32V81	261	234	A8	10	
B32V91	261	240	A8	13	
B38H71	261	189	A8	15	
B38V81	261	281	A8	38	
B38V91	261	295	A8	36	
B48T	271, 272	107	A8	3	
B56T	271, 272	107	A8	5	
B92	237, 270	49	A8	1	
B93	237, 270	62	A8	1	
B94	270	84	A8	1	
B143T	271, 272	137	A8	6	
B145T	271, 272	137	A8	7	
B182T	271, 272	145	A8	10	
B184T	271, 272	145	A8	10	
B213T	271, 272	168	A8	14	
B215T	271, 272	168	A8	15	
B254T	271, 272	276	A8	21	
B256T	271, 272	276	A8	21	
B284T	271, 272	314	A8	24	
B286T	271, 272	314	A8	24	
B324T	271, 272	485	A8	34	
B326T	271, 272	485	A8	37	
B364T	271, 272	604	A8	48	
B365T	271, 272	604	A8	50	
B404T	271, 272	898	A8	62	
B405T	271, 272	898	A8	66	
B444T	271, 272	1097	A8	70	
B445T	271, 272	1097	A8	71	
B447T	271, 272	1293	A8	93	
B449T	271, 272	1293	A8	99	
B1317V81	261	118	A8	2	
B2022V81	261	123	A8	3	
B2530V81	261	191	A8	4	
B3500V81	261	221	A8	5	
B5000RLS	271, 272	1948	A8	149	
BC24-LF	202	75	E9	1	
BC138	202, 206	218	E9	1	
BC139	202, 206	218	E9	1	
BC140	202, 206	369	E9	3	
BC140-FBR	202, 206	510	E9	3	
BC141	203, 207	202	E9	1	
BC141-SIH	203	477	E9	3	
BC142	203, 207	202	E9	2	
BC142-5	203	225	E9	3	
BC142-6	203, 207	224	E9	1	
BC142-6SIH	203	499	E9	3	
BC142-SIH	203	499	E9	3	
BC143	202, 205	72	E9	2	
BC144	202	124	E9	1	
BC145	202, 204	211	E9	1	
BC147	202	30	E9	1	
BC148	202	13	E9	1	
BC149	202	15	E9	1	
BC152	202	193	E9	1	
BC153	204	223	E9	1	
BC154	204, 206	467	E9	5	
BC154-P	204	467	E9	3	
BC154-R	204	616	E9	3	
BC154-SI	204	751	E9	3	
BC155	203, 207	660	E9	5	
BC156	204	145	E9	1	
BC157	204	27	E9	1	
BC158	204	60	E9	1	
BC159	204	32	E9	1	
BC160	204, 206	537	E9	3	
BC200	205, 207	704	E9	4	
BC201	205, 207	836	E9	6	
BC203	205, 207	1052	E9	10	
BC204	205, 207	377	E9	3	
BC204-BPSI	205	487	E9	3	
BC212	205	216	E9	1	
BC215	205	100	E9	3	
BC216	205	77	E9	1	
BC218	202, 205	36	E9	1	
BC245	205	213	E9	1	
BC253	205	27	E9	1	
BC254	204, 205	673	E9	5	
BC254-FBR	204, 205	706	E9	3	
BC258	205	60	E9	1	
BC259	205	27	E9	5	
BC354	204	723	E9	5	
BCWD140	204, 206	625	E9	6	
BKP2400	270	60	A8	1	
BL3507	141	1313	K	42	3428LC
BL3510	141	1390	K	52	3524L
BL3516	141	874	K	27	3414L
BL3517	141	921	K	27	3414L
BL3518	141	1000	K	32	3421L
BLWL05-L	183	814	E8	7	
BLWL06-L	183	917	E8	8	
BLWL07-L	183	962	E8	21	
BLWL09-L	183	988	E8	5	
BLWL10-L	183	1068	E8	35	
BLWL12-L	183	1134	E8	46	
BLWL14-L	183	1206	E8	55	
BLWM07-F	183	962	E8	20	
BLWM09-F	183	999	E8	30	
BLWM10-F	183	1068	E8	35	
BLWM12-F	183	1134	E8	46	
BLWM14-F	183	1219	E8	55	
BLWM16-F	183	1704	E8	70	
BLWM18-F	183	2387	E8	87	
BM2334T	141	6885	L1	273	0760M
BM2353T	141	5010	L1	249	0748M
BM2354T	141	5822	L1	273	0760M
BM3108	143	908	K	27	3416M
BM3112	143	1057	K	31	3420M
BM3116	143	1150	K	33	3424M
BM3538	141	964	K	31	3420M
BM3538-S	139	1153	K	42	3511M

(1) Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
BM3539	141	1328	K	35	3418M
BM3542	141	1128	K	31	3420M
BM3542-S	139	1198	K	48	3514M
BM3543	141	1394	K	39	3428M
BM3546	141	1309	K	38	3426M
BM3546-S	139	1242	K	47	3516M
BM3546T	141	1309	L1	39	3426M
BM3546T-S	139	1242	L1	51	3516M
BM3554	141	1469	K	47	3521M
BM3554T	141	1469	L1	47	3521M
BM3554T-S	139	1288	L1	56	3521M
BM3556T	141	1864	L1	46	3520M
BM3558	141	1505	K	49	3523M
BM3558-D	137	1387	K	45	3524M
BM3558T	141	1505	L1	51	3523M
BM3558T-S	139	1321	L1	52	3524M
BM3568	141	839	K	26	3413M
BM3569	141	887	K	27	3416M
BM3603	141	1814	L1	43	3514M
BM3606	141	1940	L1	50	3520M
BM3609	141	2019	L1	53	3523M
BM3611T	141	2040	L1	67	3622M
BM3611T-S	139	1788	L1	78	3542M
BM3614T	141	2494	L1	77	3627M
BM3615T	141	2531	L1	90	3634M
BM3615T-S	139	2218	L1	95	3634M
BM3635T	141	2151	L1	90	3634M
BM3703	141	3050	L1	78	3622M
BM3704T	141	3695	L1	136	3720M
BM3707	141	3730	L1	91	3634M
BM3710T	141	3253	L1	155	3728M
BM3714T	141	4139	L1	154	3740M
BM3730T	141	3087	L1	155	3731M
BM3734T	141	3426	L1	158	3740M
BM4103T	141	7290	L1	402	1040M
BM4104T	141	10224	L1	453	1044M
BNM3538-D	137	926	K	43	3512M
BNM3542-D	137	1259	K	47	3514M
BNM3546-D	137	1307	K	39	3524M
BNM3546T-D	137	1411	L1	58	3524M
BNM3554-D	137	1356	K	66	3526M
BNM3554T-D	137	1465	L1	65	3533M
BR0006	203	11	E9	1	
BR0010SP	203	11	E9	1	
BR0015SP	203	11	E9	1	
BR0025	203	24	E9	1	
BR0035	203	24	E9	1	
BR0050	203	24	E9	1	
BR0100	203	11	E9	1	
BR0101	203	24	E9	1	
BR0180	203	24	E9	1	
BR0250	203	24	E9	1	
BR0251	203	11	E9	1	
BR0350	203	24	E9	1	
BR0510	203	11	E9	1	
BR1000	203	11	E9	1	
BRMX01	260	67	A8	6	
BRMX02	260	117	A8	2	
BTG50XPS	200	1021	N5	5	
BTG60XPS-M	200	1021	N5	2	

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BTG100XPS	200	1021	N5	6	
BTG1000	200	559	DS	7	
BTGWD50XPS	200	1214	N5	2	
BTGWD100XPS	200	1214	N5	2	
BU100H012	263	139	A8	1	
BU100H014	263	139	A8	1	
BU100H015	263	158	A8	1	
BU107H015	263	170	A8	1	
BU107H100	263	170	A8	1	
BU107H102	263	170	A8	1	
BU107H103	263	170	A8	1	
BU107H104	263	170	A8	1	
BU107H105	263	170	A8	1	
BU115H100	263	234	A8	4	
BU115H107	263	234	A8	1	
BU115H108	263	234	A8	1	
BU115H110	263	234	A8	1	
BU115H111	263	234	A8	1	
BU115H112	263	234	A8	1	
C18G2700	105	5991	S1	54	
C18G2701	105	6850	S1	256	
C18G2702	105	6347	S1	250	
C18G2703	105	7935	S1	260	
C18G2704	105	7935	S1	256	
C18G2730	105	5725	S1	225	
C18G2731	105	5725	S1	226	
C21G2701	105	9727	S1	350	
C21G2702	105	10566	S1	369	
CB1814T	273	115	A8	2	
CB2118T	273	162	A8	2	
CB2521T	273	186	A8	6	
CB2825T	273	251	A8	7	
CB3228T	273	346	A8	9	
CB3632T	273	426	A8	12	
CB4036T	273	584	A8	20	
CBK003-1	145, 266	670	A8	12	
CBK006-1	145, 266	986	A8	12	
CBK006-2	145, 266	986	A8	12	
CBK010-1	145, 266	1150	A8	12	
CBK015-1	145, 266	2457	A8	12	
CBL015ZD-2	182	198	E8	1	
CBL030ZD-2	182	230	E8	1	
CBL046ZD-2	182	263	E8	2	
CBL061ZD-2	182	291	E8	2	
CBL091ZD-2	182	355	E8	3	
CBL152ZD-2	182	477	E8	6	
CBL229ZD-2	182	632	E8	8	
CBL305ZD-2	182	787	E8	8	
CBL379ZD-2	182	943	E8	14	
CBL455ZD-2	182	1023	E8	2	
CBL606ZD-2	182	1407	E8	16	
CBL3518-D	136	1215	K	52	3520L
CBL3519-D	136	1350	K	56	3524L
CBL3597-D	136	1283	K	43	3520L
CBLST2TL	183	400	E8	2	
CBLTL2ST	183	400	E8	2	
CBM3546T	142	1373	L1	42	3514M
CBM3554T	142	1539	L1	48	3520M
CBM3558T	142	1582	L1	51	3523M
CBM3611T	142	2136	L1	72	3622M

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
CBM3615T	142	2670	L1	90	3634M
CBM3710T	142	3404	L1	160	3728M
CBM3714T	142	4372	L1	154	3740M
CBM7006	144	3306	K	95	3512M
CBM7010	144	3682	K	93	3514M
CBM7014T	144	4244	L1	95	3520M
CBM7023T	144	5137	L1	137	3628M
CBM7027T	144	7122	L1	215	3726M
CD1803R	190	9906	N2	212	
CD1805R	190	7266	N2	175	
CD2003P-2	197	6453	N2	170	
CD2003R-2	190	11067	N2	204	
CD2005P-2	197	6453	N2	170	
CD2005R-2	190	11067	N2	209	
CD2007P-2	197	7468	N2	222	
CD2007R-2	190	12042	N2	235	
CD2010P-2	197	8834	N2	250	
CD2015P-2	197	10458	N2	408	
CD2015R-BV	192	17153	N2	345	
CD2105R	190	14534	N2	355	
CD3425	189	699	K	24	
CD3434	189	764	K	23	
CD3450	189	868	K	28	
CD3451	189	868	K	28	
CD3475	189	1080	K	26	
CD3476	189	1080	K	33	
CD5318	189	1525	K	51	
CD5319	189	1525	K	51	
CD5333	189	1101	K	31	
CD5350	189	1216	K	37	
CD5375	189	1432	K	46	
CD6202	189	2698	L1	96	
CD6203	189	3064	L1	133	
CD6215	189	2281	L1	81	
CD6218	189	2037	L1	64	
CD6219	189	2037	L1	64	
CD7502	189	4734	L1	108	
CD7503	189	5035	L1	140	
CDD1803R	190	6040	N2	160	
CDMG2310	198	10190	N2	250	
CDMG2320	198	18625	N2	620	
CDMG2325	198	20265	N2	886	
CDMG2333	198	25423	N2	880	
CDP3306	184	695	K	23	
CDP3310	184	695	K	23	
CDP3316	184	733	K	26	
CDP3320	184	733	K	26	
CDP3326	184	820	K	30	
CDP3330	184	820	K	31	
CDP3335	184	733	K	26	
CDP3410-V12	188	747	K	30	
CDP3410-V24	188	708	K	31	
CDP3420-V12	188	820	K	31	
CDP3420-V24	188	782	K	31	
CDP3430-V12	188	850	K	32	
CDP3430-V24	188	810	K	35	
CDP3436	184	996	K	28	
CDP3440	184	996	K	37	
CDP3440-V12	188	1220	K	40	
CDP3440-V24	188	845	K	34	
CDP3443	184	881	K	34	
CDP3445	184	1211	K	43	
CDP3445-V12	188	1765	K	43	
CDP3445-V24	188	1757	K	43	
CDP3450	184	996	K	28	
CDP3455	184	1211	K	43	
CDP3460	184	996	K	37	
CDP3575	184	2231	L1	64	
CDP3580	184	1941	L1	60	
CDP3585	184	2662	L1	72	
CDP3590	184	2231	L1	64	
CDP3603	184	3278	L1	110	
CDP3604	184	3260	L1	112	
CDP3605	184	5564	L1	161	
CDPSWD3406	186	1077	K	28	
CDPSWD3410	186	1077	K	29	
CDPSWD3426	186	1276	K	38	
CDPSWD3430	186	1276	K	38	
CDPSWD3545	186	1886	K	61	
CDPSWD3555	186	1886	K	52	
CDPT3306	185	1984	K	26	
CDPT3310	185	1984	K	26	
CDPT3316	185	2024	K	30	
CDPT3320	185	2024	K	31	
CDPT3326	185	2151	K	35	
CDPT3330	185	2151	K	34	
CDPT3436	185	2275	K	44	
CDPT3440	185	2275	K	43	
CDPT3445	185	2538	K	49	
CDPT3455	185	2538	K	49	
CDPT3575	185	3523	L1	68	
CDPT3585	185	3953	L1	77	
CDPT3603	185	4598	L1	120	
CDPT3605	185	6878	L1	164	
CDPWD3306	186	900	K	22	
CDPWD3310	186	900	K	23	
CDPWD3316	186	950	K	26	
CDPWD3320	186	950	K	26	
CDPWD3326	186	1068	K	30	
CDPWD3330	186	1068	K	31	
CDPWD3436	186	1289	K	37	
CDPWD3440	186	1289	K	38	
CDPWD3445	186	1572	K	43	
CDPWD3455	186	1572	K	43	
CDPWD3575	186	3008	L1	64	
CDPWD3585	186	3590	L1	72	
CDPWD3603	186	4595	L1	113	
CDPWD3605	186	7783	L1	157	
CDPX3406	185	1907	K	37	
CDPX3410	185	1907	K	37	
CDPX3416	185	2396	K	42	
CDPX3420	185	2396	K	43	
CDPX3426	185	2705	K	35	
CDPX3430	185	2705	K	45	
CDPX3436	185	3344	K	51	
CDPX3440	185	3344	K	51	
CDPX3545	185	4454	K	70	
CDPX3555	185	4454	K	70	
CDPX3575	185	4761	L1	80	
CDX1850	189	2768	L1	102	

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
CDX1875	189	3666	L1	102	
CDX2001	189	4560	L1	102	
CDX7100	189	3785	L1	103	
CDX7150	189	5012	L1	120	
CDX7200	189	5629	L1	134	
CEBM3558T-D	137	1723	L1	61	3528M
CEBM3611T-D	137	2184	L1	103	3628M
CEBM3615T-D	137	2532	L1	121	3642M
CEBM3710T-D	137	3570	L1	127	3736M
CEBM3714T-D	137	4364	L1	165	3752M
CEBM7142T	144	6217	L1	240	
CEBM7144T	144	7489	L1	85	
CECP2276T	37	3059	SD	305	0954M
CECP2294T	37	3505	SD	307	0934M
CECP2332T	37	3913	SD	323	0960M
CECP2333T	37	3344	SD	297	0944M
CECP2333T-4	37	3344	SD	296	0944M
CECP2334T	37	3544	SD	339	0952M
CECP2334T-4	37	3544	SD	336	0952M
CECP3581T	37	1099	SD	67	0524M
CECP3582T	37	1211	SD	75	0526M
CECP3584T	37	1121	SD	72	0530M
CECP3587T	37	1166	SD	76	0535M
CECP3660T	37	1436	SD	112	0628M
CECP3661T	37	1505	SD	114	0632M
CECP3663T	37	1744	SD	121	0632M
CECP3664T	37	1422	SD	113	0642M
CECP3665T	37	1529	SD	130	0641M
CECP3667T	37	1407	SD	99	0630M
CECP3764T	37	2072	SD	187	0737M
CECP3768T	37	2098	SD	226	0748M
CECP3769T	37	2345	SD	173	0731M
CECP3770T	37	2000	SD	170	0735M
CECP3771T	37	2482	SD	203	0742M
CECP3774T	37	2354	SD	231	0748M
CECP4100T	37	4856	SD	435	1056M
CECP4102T	37	6384	SD	460	1062M
CECP4103T	37	4684	SD	449	1046M
CECP4103T-4	37	4684	SD	440	1050M
CECP4104T	37	5406	SD	478	1060M
CECP4104T-4	37	5406	SD	475	1060M
CECP4106T	37	3991	SD	333	0944M
CECP4107T	37	4868	SD	372	1048M
CECP4108T	37	5766	SD	454	1042M
CECP4109T	37	7751	SD	571	1240M
CECP4110T	37	6901	SD	628	1260M
CECP4111T	37	6876	SD	626	1260M
CECP4114T	37	8079	SD	639	1256M
CECP4115T	37	7941	SD	656	1272M
CECP4117T	37	8623	SD	640	1264M
CECP4308T	37	10627	SD	908	A36062M
CECP4312T	37	11260	SD	908	A36062M
CECP4400T-4	37	15928	SD	1388	A40064M
CECP4406T-4	37	22059	SD	2138	A44078M
CECP4407T-4	37	26536	SD	2455	A44106M
CECP82276T-4	41	3311	SD	346	0954M
CECP82332T-4	41	4268	SD	362	0960M
CECP82333T-4	41	3465	SD	316	0944M
CECP82333T-5	43	3465	SD	309	0944M
CECP82334T-4	41	3666	SD	356	0960M

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
CECP82334T-5	43	3666	SD	357	0960M
CECP82394T-4	41	3549	SD	306	0934M
CECP83580T-4	40	1087	SD	63	0516M
CECP83581T-4	40	1190	SD	71	0524M
CECP83581T-5	43, 155	1190	SD	71	0524M
CECP83582T-4	40	1273	SD	69	0526M
CECP83583T-4	40	1164	SD	71	0524M
CECP83584T-4	40	1212	SD	75	0530M
CECP83586T-4	40	1277	SD	80	0535M
CECP83587T-4	40	1262	SD	78	0535M
CECP83587T-5	43, 155	1262	SD	80	0535M
CECP83660T-4	41	1552	SD	121	0632M
CECP83661T-4	41	1644	SD	120	0632M
CECP83661T-5	43, 155	1644	SD	122	0632M
CECP83663T-4	41	1886	SD	139	0643M
CECP83664T-4	40	1681	SD	120	0642M
CECP83665T-4	41	1653	SD	131	0641M
CECP83665T-5	43, 155	1653	SD	131	0641M
CECP83667T-4	40	1461	SD	108	0630M
CECP83764T-4	41	2246	SD	209	0736M
CECP83768T-4	41	2298	SD	227	0748M
CECP83769T-4	41	2445	SD	179	0731M
CECP83770T-4	41	2094	SD	178	0737M
CECP83770T-5	43, 155	2094	SD	211	0737M
CECP83771T-4	41	2595	SD	225	0742M
CECP83774T-4	41	2531	SD	231	0748M
CECP83774T-5	43, 155	2531	SD	231	0748M
CECP84100T-4	41	5162	SD	420	1050M
CECP84102T-4	41	6756	SD	460	1050M
CECP84103T-4	41	5145	SD	452	1052M
CECP84103T-5	43, 155	5145	SD	444	1052M
CECP84104T-4	41	5892	SD	485	1060M
CECP84104T-5	43, 155	5892	SD	487	1060M
CECP84106T-4	41	4025	SD	328	0954M
CECP84107T-4	41	5490	SD	433	1048M
CECP84108T-4	41	6395	SD	442	1050M
CECP84109T-4	41	8505	SD	640	1256M
CECP84110T-4	41	7637	SD	638	1260M
CECP84110T-5	43, 155	7637	SD	670	1260M
CECP84111T-4	41	7609	SD	643	1264M
CECP84114T-4	41	8831	SD	670	1266M
CECP84115T-4	41	8790	SD	683	1272M
CECP84115T-5	43, 155	8790	SD	663	1272M
CECP84117T-4	41	9622	SD	640	1266M
CECP84308T-4	41	11670	SD	908	A36062M
CECP84310T-4	41	12655	SD	899	A36056M
CECP84312T-4	41	12362	SD	908	A36062M
CECP84313T-4	41	13898	SD	1007	A36068M
CECP84314T-4	41	11434	SD	906	A36062M
CECP84316T-4	41	13119	SD	992	A36070M
CEFWWDM3546	63	1146	WD	37	3519M
CEFWWDM3546T	63	1170	WD	38	3519M
CEFWWDM3550	63	1230	WD	46	3528M
CEFWWDM3554T	63	1253	WD	43	3526M
CEM2333T	22	3339	LS	269	0944M
CEM2333T-5	151	3339	LS	263	0942M
CEM2334T	22	3409	L1	298	0952M
CEM2334T-5	151	3409	L1	289	0948M
CEM2394T	22	3119	L1	250	0930M
CEM2513T	29	2399	L1	213	3938M

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
CEM2514T	29	2722	L1	194	3928M
CEM2515T	29	2921	L1	231	3944M
CEM2516T	29	3205	L1	219	3938M
CEM2531T	29	3742	L1	336	4050M
CEM2535T	29	4037	L1	355	4052M
CEM2539T	29	5318	L1	460	4250M
CEM2543T	29	5788	L1	494	4256M
CEM2547T	29	7198	L1	632	4278M
CEM2551T	29	8625	L1	457	4462M
CEM2555T	29	9982	L1	945	4484M
CEM3116T	29	667	L1	35	3519M
CEM3154T	29	687	L1	37	3522M
CEM3157T	29	733	L1	41	3525M
CEM3158T	29	764	L1	46	3530M
CEM3211T	29	866	L1	71	3630M
CEM3212T	29	862	L1	64	3623M
CEM3218T	29	909	L1	87	3640M
CEM3219T	29	1381	L1	77	3632M
CEM3311T	29	1367	L1	118	3733M
CEM3312T	29	1595	L1	121	3728M
CEM3313T	29	1622	L1	133	3739M
CEM3314T	29	2199	L1	128	3734M
CEM3538-BG	108	854	K	33	3513M
CEM3542-BG	108	881	K	37	3517M
CEM3545	21	667	K	33	3516M
CEM3546	21	672	K	36	3519M
CEM3546T	21	741	LS	36	3519M
CEM3546T-5	151	741	LS	37	3519M
CEM3546T-BG	108	907	L1	38	3519M
CEM3550	21	706	K	37	3520M
CEM3550T	21	763	L1	40	3520M
CEM3554	21	742	K	45	3526M
CEM3554T	21	769	LS	42	3526M
CEM3554T-5	151	769	LS	42	3526M
CEM3554T-BG	108	935	L1	41	3526M
CEM3555	21	773	K	46	3526M
CEM3555T	21	831	L1	44	3526M
CEM3556T	21	925	L1	43	3526M
CEM3558	21	784	K	46	3530M
CEM3558T	21	796	LS	46	3530M
CEM3558T-5	151	796	LS	47	3528M
CEM3558T-BG	108	962	L1	45	3528M
CEM3559T	22	927	L1	52	3532M
CEM3559T-5	151	927	L1	52	3532M
CEM3581T	21	972	L1	54	0519M
CEM3581T-5	151	972	L1	54	0519M
CEM3583T	21	1073	L1	55	0520M
CEM3583T-5	151	1073	L1	54	0520M
CEM3584T	21	1005	L1	60	0526M
CEM3584T-5	151	1005	L1	63	0526M
CEM3586T	21	1076	L1	60	0526M
CEM3586T-5	151	1076	L1	60	0526M
CEM3587T	21	1052	L1	62	0527M
CEM3587T-5	151	1052	L1	61	0527M
CEM3607T	21	1072	L1	77	3632M
CEM3610T	22	954	L1	50	3532M
CEM3610T-5	151	954	L1	58	3532M
CEM3611T	22	912	LS	75	3631M
CEM3611T-5	151	912	LS	75	3631M
CEM3611T-BG	108	1109	L1	70	3631M
CEM3613T	22	1051	L1	78	3630M
CEM3613T-5	151	1051	L1	78	3630M
CEM3614T	21	1106	L1	97	3644M
CEM3615T	22	991	LS	93	3642M
CEM3615T-5	151	991	LS	93	3642M
CEM3615T-BG	108	1188	L1	93	3642M
CEM3616T	22	1361	L1	101	3646M
CEM3660T	22	1196	L1	90	0619M
CEM3660T-5	151	1196	L1	89	0619M
CEM3661T	22	1226	L1	104	0632M
CEM3661T-5	151	1226	L1	102	0632M
CEM3663T	22	1450	L1	91	0624M
CEM3663T-5	151	1450	L1	95	0624M
CEM3664T	21	1335	L1	115	0642M
CEM3665T	22	1252	L1	114	0641M
CEM3665T-5	151	1252	L1	113	0641M
CEM3704T	22	1484	L1	141	3739M
CEM3708T	22	1648	L1	161	3748M
CEM3709T	22	1604	L1	120	3728M
CEM3710T	22	1460	LS	134	3736M
CEM3710T-5	151	1460	LS	129	3736M
CEM3711T	22	1620	L1	121	3729M
CEM3711T-5	151	1620	L1	123	3729M
CEM3713T	22	2229	L1	182	3752M
CEM3713T-5	151	2229	L1	169	3752M
CEM3714T	22	1629	LS	165	3752M
CEM3714T-5	151	1629	LS	165	3752M
CEM3764T	22	1736	L1	173	0735M
CEM3768T	22	1983	L1	190	0746M
CEM3769T	22	1759	L1	155	0726M
CEM3769T-5	151	1759	L1	179	0724M
CEM3770T	22	1703	L1	170	0735M
CEM3770T-5	151	1703	L1	170	0735M
CEM3771T	22	2028	L1	182	0729M
CEM3771T-5	151	2028	L1	182	0729M
CEM3774T	22	1886	L1	195	0748M
CEM3774T-5	151	1886	L1	231	0748M
CEM4103T	22	4508	L1	527	1046M
CEM4103T-5	151	4508	L1	401	1052M
CEM4104T	22	5194	L1	422	1056M
CEM4104T-5	151	5160	L1	449	1060M
CEM4106T	22	3365	L1	265	0936M
CEM4107T	22	4441	L1	346	0950M
CEM4108T	22	4955	L1	389	1042M
CEM4109T	22	6763	L1	600	1240M
CEM4110T	22	6619	L1	578	1254M
CEM4114T	22	7314	L1	591	1252M
CEM4115T	22	7148	L1	630	1272M
CEM4310T	22	9998	L1	830	A36048M
CEM4313T	22	11472	L1	905	A36052M
CEM4314T	22	9966	L1	915	A36062M
CEM4316T	22	11485	L1	907	A36068M
CEM4400T	22	15168	L1	1360	A40064M
CEM7013T-I	82	1376	SD	41	3516M
CEM7013T-I-5	82, 161	1376	SD	41	3516M
CEM7014T	77	1342	L1	45	3519M
CEM7014T-I	82	1375	SD	51	3519M
CEM7014T-I-5	82, 161	1375	SD	48	3524M
CEM7018T	77	1328	L1	45	3520M
CEM7018T-I	82	1386	SD	47	3520M

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
CEM7020T-I	82	2264	SD	102	3632M
CEM7026T-I	83	1928	SD	80	3622M
CEM7026T-I-5	83, 161	1928	SD	80	3622M
CEM7032T-I	82	1514	SD	49	3526M
CEM7034T	77	1453	L1	52	3526M
CEM7034T-I	82	1563	SD	61	3526M
CEM7036T-I	83	2529	SD	175	3739M
CEM7037T	78	1539	L1	56	3530M
CEM7037T-I	82	1657	SD	66	3530M
CEM7037T-I-5	82, 161	1657	SD	76	3535M
CEM7040T-I	83	3209	SD	180	3748M
CEM7041T-I	82	2323	SD	105	3644M
CEM7042T	78	1866	L1	97	3631M
CEM7042T-I	83	1866	SD	117	3631M
CEM7042T-I-5	83, 161	1866	SD	108	3631M
CEM7044T	78	2256	L1	119	3642M
CEM7044T-I	83	2256	SD	136	3643M
CEM7044T-I-5	83, 161	2256	SD	115	3643M
CEM7045T	78	2887	L1	166	3728M
CEM7045T-I	83	2748	SD	149	3728M
CEM7045T-I-5	83, 162	2748	SD	149	3728M
CEM7047T	78	2646	L1	161	3736M
CEM7047T-I	83	2646	SD	161	3736M
CEM7047T-I-5	83, 162	2646	SD	161	3736M
CEM7048T-I	83	4749	SD	393	0950M
CEM7053T	78	3419	L1	357	0930M
CEM7053T-I	83	4554	SD	349	0934M
CEM7053T-I-5	83, 162	4554	SD	370	0934M
CEM7054T	78	5324	L1	376	0942M
CEM7054T-I	83	5324	SD	385	0942M
CEM7054T-I-5	83, 162	5324	L1	370	0942M
CEM7056T	78	6310	L1	376	0952M
CEM7056T-I	83	6310	SD	409	0952M
CEM7056T-I-5	83, 162	6310	SD	393	0952M
CEM7057T-I	83	8317	L1	552	1042M
CEM7058T	78	7727	L1	647	1050M
CEM7058T-I	83	7727	SD	563	1050M
CEM7058T-I-5	83, 162	7727	SD	600	1050M
CEM7059T	78	5458	L1	369	0936M
CEM7059T-I	83	5458	SD	413	0950M
CEM7059T-I-5	83, 162	5458	SD	409	0950M
CEM7060T	78	8967	L1	552	1056M
CEM7060T-I	83	8967	SD	572	1056M
CEM7060T-I-5	83, 162	8927	SD	550	1056M
CEM7062T	78	11961	L1	699	1254M
CEM7062T-I	83	11961	SD	721	1254M
CEM7062T-I-5	83, 162	11961	SD	720	1254M
CEM7063T	78	7197	L1	512	1038M
CEM7063T-I	83	7199	SD	445	1038M
CEM7063T-I-5	83, 162	7199	SD	570	1048M
CEM7064T	78	13601	L1	746	1272M
CEM7064T-I	83	13601	SD	771	1276M
CEM7064T-I-5	83, 162	13601	SD	841	1276M
CEM7065T-I	83	5436	SD	412	0956M
CEM7066T-I	83	15388	SD	910	A36062M
CEM7067T-I	83	10966	SD	750	1252M
CEM7067T-I-5	83, 162	10966	SD	761	1252M
CEM7068T-I	83	15909	SD	977	A36068M
CEM7071T	78	1325	L1	53	3526M
CEM7071T-I	82	1506	SD	55	3526M
CEM7071T-I-5	82, 161	1506	SD	55	3526M
CEM7072T	78	2167	L1	101	3630M
CEM7072T-I	83	2318	SD	91	3634M
CEM7072T-I-5	83, 161	2318	SD	91	3634M
CEM7073T	78	2544	L1	124	3646M
CEM7075T	78	1643	L1	61	3532M
CEM7079T-I	83	8493	SD	475	1056M
CEM7080T-I	83	11722	SD	766	1264M
CEM7081T-I	83	13368	SD	766	1264M
CEM7081T-I-5	83, 162	13368	SD	766	1264M
CEM7082T-I	83	10850	SD	741	1260M
CEM7083T-I	83	8157	SD	495	1046M
CEM7083T-I-5	83, 162	8157	SD	495	1046M
CEM7084T-I	83	13472	SD	886	A36064M
CEM7090T-I	83	19650	SD	1375	A40072M
CEM7170T	78	3219	L1	249	0748M
CEM7170T-I	83	3219	SD	252	0750M
CEM7170T-I-5	83, 162	3219	SD	252	0750M
CEM7174T	78	3151	L1	235	0729M
CEM7174T-I	83	3172	SD	212	0729M
CEM7174T-I-5	83, 162	3172	SD	212	0729M
CENCP83580T-4	40	1039	SD	61	0520M
CENCP83581T-4	40	1130	SD	64	0524M
CESSWDM3546T	67	1426	WD	52	3524M
CESSWDM3546T-5	67, 157	1426	WD	51	3524M
CESSWDM3550	67	1419	WD	56	3532M
CESSWDM3550T	67	1431	WD	60	3532M
CESSWDM3554T	67	1453	WD	55	3528M
CESSWDM3554T-5	67, 157	1453	WD	56	3528M
CESSWDM3555T	67	1734	WD	64	3535M
CESSWDM3558T	67	1746	WD	64	3536M
CESSWDM3558T-5	67, 157	1746	WD	64	3536M
CESSWDM3559T	67	2089	WD	74	3546M
CESSWDM3559T-5	67, 157	2089	WD	73	3546M
CESSWDM3610T	67	2231	WD	90	3624M
CESSWDM3611T	67	2041	WD	94	3635M
CESSWDM3611T-5	67, 157	2041	WD	92	3631M
CESSWDM3613T	67	2374	WD	106	3636M
CESSWDM3613T-5	67, 157	2374	WD	106	3636M
CESSWDM3615T	67	2297	WD	112	3646M
CESSWDM3615T-5	67, 157	2297	WD	112	3646M
CESSWDM3709T	67	2786	WD	166	3735M
CESSWDM3710T	67	2873	WD	137	3739M
CESSWDM3711T	67	3109	WD	184	3744M
CESSWDM3714T	67	3169	WD	190	3756M
CESSWDM23933T	67	6245	WD	293	3956M
CESSWDM23934T	67	7242	WD	299	3960M
CESSWDM23994T	67	6345	WD	293	3952M
CESSWDM41906T	67	7283	WD	312	3960M
CESWDM3546	66	1150	WD	40	3524M
CESWDM3554T	66	1205	WD	50	3533M
CESWDM3555T	66	1427	WD	52	3532M
CESWDM3558T	66	1479	WD	56	3536M
CESWDM3559T	66	1756	WD	62	3540M
CESWDM3611T	66	1809	WD	79	3632M
CESWDM3613T	66	2227	WD	88	3636M
CESWDM3615T	66	2105	WD	92	3642M
CESWDM3709T	66	2811	WD	134	3735M
CESWDM3710T	66	2590	WD	135	3739M
CESWDM3711T	66	3116	WD	154	3744M

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight(1)	Type Code
CESWDM3714T	66	2947	WD	165	3752M
CEUHM3546T	135	681	L1	39	3519M
CEUHM3554T	135	719	L1	45	3526M
CEUHM3558T	135	792	L1	50	3528M
CEUHM3611T	135	926	L1	73	3631M
CEUHM3615T	135	1017	L1	94	3642M
CEWAM3558T	49	1343	SD	52	3528M
CEWAM3559T	49	1450	SD	59	3532M
CEWAM3611T	49	1577	SD	90	3631M
CEWAM3613T	49	1602	SD	97	3634M
CEWAM3615T	49	1785	SD	108	3642M
CEWAM3704T	49	2075	SD	154	3739M
CEWAM3708T	49	2599	SD	181	3750M
CEWAM3709T	49	2387	SD	138	3728M
CEWAM3710T	49	2358	SD	150	3736M
CEWAM3711T	49	2408	SD	138	3729M
CEWAM3714T	49	2601	SD	185	3752M
CEWDBM3538	64, 144	2025	WD	42	3516M
CEWDBM3542	64, 144	2188	WD	42	3517M
CEWDBM3546	64, 144	2246	WD	50	3524M
CEWDBM3546T	64, 144	2269	WD	51	3524M
CEWDBM3554T	64, 144	2444	WD	61	3533M
CEWDBM3558T	64, 144	2487	WD	60	3528M
CEWDBM3611T	64, 144	3009	WD	93	3631M
CEWDBM3615T	64, 144	3635	WD	110	3642M
CEWDM3545	59	1039	WD	33	3516M
CEWDM3546	59	1044	WD	41	3524M
CEWDM3546-5	61, 156	1044	WD	39	3524M
CEWDM3546T	59	1065	WD	37	3524M
CEWDM3546T-5	61, 156	1065	WD	38	3524M
CEWDM3550	59	1068	WD	46	3528M
CEWDM3554T	59	1115	WD	48	3533M
CEWDM3554T-5	61, 156	1115	WD	46	3533M
CEWDM3555	59	1155	WD	35	3526M
CEWDM3555T	59	1178	WD	45	3526M
CEWDM3556	59	1172	WD	43	3526M
CEWDM3558T	59	1229	WD	46	3528M
CEWDM3558T-5	61, 156	1229	WD	46	3528M
CEWDM3559T	59	1451	WD	60	3532M
CEWDM3559T-5	61, 156	1451	WD	52	3532M
CEWDM3610T	59	1368	WD	57	3532M
CEWDM3611T	59	1614	WD	78	3631M
CEWDM3611T-5	61, 156	1614	WD	77	3631M
CEWDM3613T	59	1920	WD	80	3630M
CEWDM3613T-5	61, 156	1920	WD	70	3630M
CEWDM3614T	59	1441	WD	93	3644M
CEWDM3615T	59	1829	WD	96	3642M
CEWDM3615T-5	61, 156	1829	WD	94	3642M
CEWDM3616T	59	2282	WD	101	3646M
CEWDM3704T	59	1899	WD	136	3739M
CEWDM3708T	59	2249	WD	161	3748M
CEWDM3709T	59	2705	WD	143	3728M
CEWDM3710T	59	2314	WD	132	3736M
CEWDM3710T-5	61, 156	2314	WD	195	3736M
CEWDM3711T	59	2977	WD	122	3729M
CEWDM3713T	59	3741	WD	174	3752M
CEWDM3714T	59	2630	WD	165	3752M
CEWDM3714T-5	61, 156	2630	WD	165	3752M
CEWDM22976T	59	3861	WD	280	3954M
CEWDM23932T	59	4389	WD	289	3956M
CEWDM23933T	59	5172	WD	256	3942M
CEWDM23933T-5	61, 156	5172	WD	258	3942M
CEWDM23934T	59	5998	WD	283	3952M
CEWDM23934T-5	61, 156	5998	WD	289	3952M
CEWDM23994T	59	5255	WD	188	3752M
CEWDM41906T	59	6031	WD	274	3940M
CEWDNM3558T	59	1200	WD	54	3538M
CEWWDM3545	63	1112	WD	34	3516M
CEWWDM3555	63	1236	WD	41	3526M
CEWWDM3555T	63	1261	WD	41	3526M
CEWWDM3558T	63	1316	WD	48	3528M
CEWWDM3559T	63	1553	WD	61	3532M
CEWWDM3610T	63	1464	WD	75	3628M
CEWWDM3611T	63	1727	WD	81	3631M
CEWWDM3613T	63	2055	WD	83	3630M
CEWWDM3615T	63	1958	WD	97	3642M
CEWWDM3616T	63	2442	WD	104	3646M
CEWWDM3709T	63	2895	WD	121	3728M
CEWWDM3710T	63	2476	WD	127	3736M
CEWWDM3711T	63	3186	WD	118	3729M
CEWWDM3713T	63	4003	WD	169	3752M
CEWWDM3714T	63	2815	WD	165	3752M
CEWWDM23933T	63	5535	WD	255	3942M
CEWWDM23934T	63	6418	WD	286	3952M
CEWWDM23994T	63	5623	WD	240	3936M
CEWWDM41906T	63	6454	WD	260	3940M
CFM3036A	120	566	K	25	3418M
CFM3046A	120	614	K	33	3428M
CFM3136A	120	586	K	28	3516M
CFM3146A	120	633	K	33	3520M
CFM3156A	120	722	K	38	3522M
CFM3166A	120	785	K	48	3535M
CHC144A	123	347	K	21	3411C
CHC164A	123	403	K	19	3411C
CHC244A	123	387	K	22	3414C
CHC264A	123	467	K	23	3416C
CHC345A	123	438	K	27	3420C
CHC365A	123	504	K	34	3428C
CHC445A	123	499	K	35	3428C
CHC545A	123	534	K	39	1924C
CHC565A	123	722	K	51	1935C
CHM164A	123	408	K	20	3411M
CHM264A	123	435	K	19	3414M
CHM344A	123	416	K	23	3416M
CHM345A	123	419	K	24	3416M
CHM364A	123	473	K	25	3418M
CHM365A	123	477	K	28	3418M
CHM465A	123	545	K	34	3428M
CHM545A	123	526	K	35	3428M
CHM565A	123	620	K	40	1924M
CJL1205A	91	308	K	23	3416L
CJL1301A	91	462	K	23	3414L
CJL1303A	91	320	K	30	3420L
CJL1304A	91	522	K	25	3418L
CJL1306A	91	408	K	30	3424L
CJL1307A	91	599	K	35	3520L
CJL1309A	91	418	K	32	3428L
CJL1313A	91	580	K	37	3432LC
CJL1317A	91	776	K	45	3528L
CJL3501A	90	423	K	23	3414L

(1) Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
CJL3504A	90	498	K	28	3421L
CJL3507A	90	607	K	35	3428LC
CJL3509A	90	614	K	41	3524L
CJL3513A	90	675	K	47	3528L
CJL3515A	90	793	K	53	3535L
CJM3104	93	383	K	22	3413M
CJM3107	93	351	K	22	3413M
CJM3108	93	428	K	24	3416M
CJM3111	93	401	K	28	3416M
CJM3112	93	459	K	27	3420M
CJM3115	93	448	K	29	3420M
CJM3120	93	546	K	31	3424M
CJM3155	93	649	K	34	3430M
CJM3158	93	768	K	41	3524M
CJM3538	92	475	K	23	3416M
CJM3542	92	503	K	25	3420M
CJWDM3463	64, 94	639	WD	33	3513M
CJWDM3545	64, 94	774	WD	35	3516M
CJWDM3550	64, 94	807	WD	38	3520M
CJWDM3555	64, 94	910	WD	43	3524M
CJWDM3559	64, 94	1114	WD	48	3528M
CL1301	16	369	K	23	3414L
CL1303	16	327	K	22	3413L
CL1304	16	420	K	25	3418L
CL1307	16	481	K	33	3428L
CL1310	16	553	K	34	3520L
CL1408TM	16, 127	1012	L1	80	3634LC
CL1410TM	16, 127	1220	L1	88	3640LC
CL3403	12	363	K	22	3411L
CL3405	12	362	K	21	3413L
CL3501	12	379	K	23	3414L
CL3503	12	380	K	23	3413L
CL3504	12	443	K	28	3421L
CL3506	12	423	K	29	3424L
CL3507	12	529	K	34	3428LC
CL3509	12	489	K	36	3520L
CL3510	12	597	K	40	3524L
CL3513	12	633	K	46	3528L
CL3514	12	708	K	51	3532LC
CL3515	12	816	K	50	3535L
CL3515T	12	823	L1	53	3535L
CL3516TM	12, 127	1052	L1	53	3535LC
CL3608TM	12, 127	1482	L1	92	3640LC
CL3612TM	12, 127	1434	L1	102	3646LC
CL3619TM	12, 127	1368	L1	81	3634LC
CL3711T	12	2409	L1	167	3744LC
CL3712T	12	2438	L1	171	3748LC
CL5001A	77	827	K	30	3414L
CL5001A-50	166	911	K	35	3421L
CL5001-I	85	911	K	47	3513L
CL5003A	77	726	K	35	3416L
CL5004A	77	828	K	36	3424L
CL5004A-50	166	912	K	45	3428L
CL5004-I	85	912	K	53	3520L
CL5007A	77	924	K	49	3524L
CL5007A-50	166	1061	K	52	3528L
CL5007-I	85	974	K	60	3528L
CL5009A	77	824	K	50	3524L
CL5013	77	2095	L1	83	3628L
CL5018	77	3355	L1	154	3735L
CL5020	77	4271	L1	170	3744LC
CL5023-50	166	1122	K	56	3532L
CL5023A	77	1049	K	49	3524L
CL5023-I	85	1049	K	66	3532L
CL5027T	77	2162	L1	99	3634L
CL5027T-50	166	2485	L1	121	3646L
CL5028T	77	2187	L1	100	3634L
CL5030T	77	1291	L1	53	3528L
CL5031T	77	1476	L1	60	3535L
CM3104	29	326	K	21	3413M
CM3107	29	340	K	20	3410M
CM3108	29	369	K	23	3416M
CM3112	29	416	K	27	3420M
CM3155	29	603	K	33	3428M
CM3534	21	377	LS	21	3413M
CM3534-5	151	377	LS	21	3413M
CM3537	21	392	K	20	3410M
CM3538	21	417	LS	23	3416M
CM3538-5	151	417	LS	23	3416M
CM3538-8	146	473	K	23	3416M
CM3539	21	612	K	23	3418M
CM3541	21	428	K	22	3413M
CM3542	21	443	LS	26	3420M
CM3542-5	151	443	LS	26	3420M
CM3543	21	624	K	23	3428M
CM3545	21	498	K	24	3416M
CM3546	21	476	K	31	3426M
CM3546-5	151	476	K	29	3424M
CM3546-8	146	478	K	29	3424M
CM3550	21	541	K	30	3424M
CM3554	21	518	K	35	3520M
CM3554-5	151	518	K	35	3520M
CM3555	21	605	K	33	3428M
CM3555/35	21	679	K	43	3526M
CM3556	21	634	K	35	3520M
CM3557	21	723	K	46	3529M
CM3558	21	555	K	40	3523M
CM3558-5	151	555	K	41	3523M
CM3559	22	699	K	45	3528M
CM7005A	77	867	K	27	3410M
CM7006-57	166	994	K	36	3420M
CM7006A	77	938	K	30	3416M
CM7006-I	82	938	SD	52	3512M
CM7009A	77	895	K	29	3413M
CM7010-57	166	1017	K	42	3428M
CM7010A	77	956	K	34	3420M
CM7010-I	82	956	SD	50	3514M
CM7013	77	936	K	31	3416M
CM7013-57	166	1028	K	34	3420M
CM7014	77	1020	K	40	3514M
CM7014-57	166	1087	K	45	3432M
CM7014-I	82	1020	SD	52	3516M
CM7018T-57	166	1169	L1	45	3520M
CM7034	77	1087	K	45	3520M
CM7034T-57	166	1198	L1	36	3521M
CM7037	78	1177	K	49	3523M
CM7037T-57	166	1293	L1	48	3534M
CM7071T-57	166	1209	L1	50	3524M
CM8001	48	637	SD	29	3416M
CM8002	48	795	SD	33	3420M

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
CM8003	48	865	SD	38	3426M
CM8004	48	947	SD	42	3520M
CM8537	48	611	SD	26	3410M
CM8539	48	829	SD	30	3418M
CM8543	48	977	SD	38	3428M
CM8556	48	1043	SD	43	3520M
CNL20082	134	256	DS	12	2514C
CNL20134	134	279	DS	13	2520C
CNL20172	134	288	DS	13	2524C
CNM3454/35	21	524	K	31	3513M
CNM3457	21	385	K	21	3410M
CNM3531	21	666	K	31	3516M
CNM3538/35	21	536	K	28	3512M
CNM3539	21	654	K	40	3524M
CNM3542	21	481	K	31	3514M
CNM3546	21	549	K	40	3524M
CNM20132	134	311	DS	8	2510M
CNM20134	134	337	DS	10	2516M
CNM20252	134	346	DS	12	2520M
CP50356LR-4	35	85043	LM	5060	
CP50358LR-4	35	86801	LM	5867	
CP50402S-4	35	80892	LM	4850	
CP50406LR-4	35	91978	LM	5867	
CP50408LR-4	35	92256	LM	5867	
CP50456LR-4	35	96916	LM	6000	
CP50458LR-4	35	114806	LM	6000	
CP50504L-4	35	80768	LM	5550	
CP50506LR-4	35	101595	LM	6069	
CP50508LR-4	35	120606	LM	6069	
CP50602S-4	35	89698	LM	4850	
CP50604L-4	35	84911	LM	5809	
CP50606LR-4	35	121254	LM	6069	
CP50704S-4	35	88771	LM	5867	
CP50804S-4	35	94325	LM	6100	
CP58702S-4	35	120277	LM	10000	
CP58802S-4	35	128522	LM	10000	
CP400608LR-4	35	135379	LM	10000	
CP400706LR-4	35	140075	LM	10000	
CP400708LR-4	35	186010	LM	10000	
CP400806LR-4	35	183854	LM	10000	
CP500808LR-4	35	218488	LM	18500	
CR4408TR-4	46	26090	SD	2542	A44106M
CR44256TR-4	46	36933	SD	2839	A44128M
CR44304TR-4	46	35303	SD	2645	A44120M
CR44354TR-4	46	41906	SD	2880	A44144M
CR49306TR-4	46	48040	SD	3683	A44208M
CSPM3545	134	2997	K	34	
CSPM3546T	134	3299	L1	37	3520M
CSPM3555T	134	3495	L1	60	
CSPM3558T	134	3735	L1	55	3530M
CSPM3611T	134	4457	L1	70	3544M
CSSEWDFM3546T	69	1560	WD	60	3525M
CSSEWDFM3554T	69	1574	WD	62	3533M
CSSEWDFM3558T	69	1897	WD	73	3538M
CSSEWDFM3611T	69	2283	WD	111	3635M
CSSEWDFM3615T	69	2493	WD	122	3646M
CSSEWDM3537	69	1412	WD	46	3516M
CSSEWDM3537-5	71, 157	1412	WD	35	3516M
CSSEWDM3538	69	1433	WD	50	3516M
CSSEWDM3538-5	71, 157	1433	WD	35	3516M

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
CSSEWDM3539	69	1721	WD	37	3522M
CSSEWDM3541	69	1459	WD	53	3520M
CSSEWDM3542	69	1481	WD	58	3521M
CSSEWDM3542-5	71, 157	1481	WD	40	3521M
CSSEWDM3543	69	1769	WD	63	3530M
CSSEWDM3545	69	1532	WD	59	3524M
CSSEWDM3546	69	1547	WD	59	3525M
CSSEWDM3546-5	71, 157	1547	WD	43	3525M
CSSEWDM3546T	69	1560	WD	59	3525M
CSSEWDM3546T-5	71, 157	1560	WD	43	3525M
CSSEWDM3550	69	1552	WD	62	3532M
CSSEWDM3550T	69	1565	WD	63	3532M
CSSEWDM3554	69	1559	WD	66	3533M
CSSEWDM3554-5	71, 157	1559	WD	64	3533M
CSSEWDM3554T	69	1574	WD	68	3533M
CSSEWDM3554T-5	71, 157	1574	WD	50	3533M
CSSEWDM3555	69	1857	WD	68	3535M
CSSEWDM3555T	69	1870	WD	71	3535M
CSSEWDM3556	69	1829	WD	73	3537M
CSSEWDM3558	69	1884	WD	72	3538M
CSSEWDM3558-5	71, 157	1884	WD	72	3538M
CSSEWDM3558T	69	1897	WD	73	3538M
CSSEWDM3558T-5	71, 157	1897	WD	72	3538M
CSSEWDM3559T	69	2267	WD	81	3546M
CSSEWDM3559T-5	71, 157	2267	WD	81	3546M
CSSEWDM3611T	69	2283	WD	112	3635M
CSSEWDM3611T-5	71, 157	2283	WD	112	3635M
CSSEWDM3613T	69	2474	WD	108	3634M
CSSEWDM3613T-5	71, 157	2474	WD	110	3634M
CSSEWDM3614T	69	2251	WD	91	3646M
CSSEWDM3615T	69	2493	WD	124	3646M
CSSEWDM3615T-5	71, 157	2493	WD	125	3646M
CSSEWDM3709T	69	3104	WD	178	3735M
CSSEWDM3710T	69	3168	WD	189	3739M
CSSEWDM3711T	69	3520	WD	202	3744M
CSSEWDM3713T	69	5279	WD	187	3756M
CSSEWDM3714T	69	3730	WD	187	3756M
CSSWDM3457	67	1054	WD	33	3513M
CSSWDM3534	67	1109	WD	33	3512M
CSSWDM3537	67	1245	WD	36	3513M
CSSWDM3538	67	1336	WD	37	3513M
CSSWDM3538-5	67, 157	1336	WD	37	3513M
CSSWDM3541	67	1287	WD	43	3518M
CSSWDM3542	67	1383	WD	42	3519M
CSSWDM3542-5	67, 157	1383	WD	41	3519M
CSSWDM3545	67	1411	WD	40	3516M
CSSWDM3546	67	1420	WD	47	3524M
CSSWDM3546-5	67, 157	1420	WD	46	3524M
CSSWDM3554	67	1452	WD	49	3521M
CSSWDM3554-5	67, 157	1452	WD	48	3521M
CSSWDM3558	67	1765	WD	54	3528M
CSSWDM3558-5	67, 157	1765	WD	62	3536M
CSWDM3537	66	731	WD	29	3513M
CSWDM3538	66	715	WD	27	3512M
CSWDM3539	66	1000	WD	38	3522M
CSWDM3541	66	767	WD	36	3518M
CSWDM3542	66	825	WD	30	3514M
CSWDM3543	66	1207	WD	47	3530M
CSWDM3545	66	907	WD	27	3516M
CSWDM3546	66	854	WD	34	3518M

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
CSWDM3546T	66	854	WD	35	3518M
CSWDM3550	66	947	WD	51	3535M
CSWDM3554	66	894	WD	42	3526M
CSWDM3554T	66	894	WD	42	3526M
CSWDM3556	66	1166	WD	45	3520M
CSWDM3557	66	1234	WD	47	3529M
CSWDM3558	66	1101	WD	44	3528M
CTM1760T	118	3455	L1	210	
CTM1761T	118	4381	L1	290	0940M
CTM1762T	118	5293	L1	358	0944M
CTM1763T	118	6158	L1	442	
CTM1764T	118	7069	L1	455	
CTM1765T	118	9280	L1	619	1262M
CTM1766T	118	10949	L1	657	1272M
CTM1767T	118	15857	L1	836	A36052M
CTM2276T	117	2025	L1	179	0756M
CTM2332T	117	2254	L1	275	0946M
CTM2333T	117	2472	L1	236	0756M
CTM2334T	117	2756	L1	245	0760M
CTM3665T	117	1095	L1	100	0633M
CTM3768T	117	1660	L1	206	0736M
CTM3770T	117	1458	L1	164	0729M
CTM3774T	117	1861	L1	170	0733M
CTM4103T	117	3341	L1	343	0956M
CTM4104T	117	4010	L1	363	0964M
CTM4110T	117	5334	L1	529	1248M
CUHL3518	135	490	K	37	3520L
CUHL3519	135	597	K	44	3524L
CUHM3538	135	420	K	27	3511M
CUHM3542	135	444	K	31	3513M
CUHM3546	135	476	K	36	3516M
CUHM3554	135	518	K	39	3521M
CUHM3558	135	555	K	43	3524M
CWAM3538	49	715	SD	34	3512M
CWAM3542	49	825	SD	37	3514M
CWAM3545	49	851	SD	39	3513M
CWAM3546	49	854	SD	41	3518M
CWAM3546T	49	854	SD	42	3518M
CWAM3550	49	953	SD	42	3516M
CWAM3554T	49	894	SD	48	3526M
CWAM3555	49	1048	SD	38	3524M
CWAM3556	49	1101	SD	45	3520M
CWAM3557	49	1248	SD	56	3529M
CWAM3558	49	1101	SD	49	3524M
CWDL3504	57	620	WD	35	3520L
CWDL3507	57	721	WD	36	3520L
CWDL3509	57	676	WD	37	3520L
CWDL3510	57	829	WD	41	3524L
CWDL3513	57	835	WD	41	3524L
CWDL3514	57	993	WD	50	3532LC
CWDM3457	59	514	WD	20	3410M
CWDM3534	59	541	WD	33	3512M
CWDM3537	59	604	WD	29	3513M
CWDM3538	59	654	WD	28	3512M
CWDM3538-5	61, 156	654	WD	26	3512M
CWDM3539	59	826	WD	37	3522M
CWDM3541	59	633	WD	35	3518M
CWDM3542	59	709	WD	29	3514M
CWDM3542-5	61, 156	709	WD	35	3514M
CWDM3543	59	997	WD	46	3530M
CWDM3545	59	749	WD	33	3516M
CWDM3546	59	760	WD	34	3518M
CWDM3546-5	61, 156	760	WD	35	3518M
CWDM3546T	59	782	WD	36	3518M
CWDM3550	59	782	WD	50	3535M
CWDM3554	59	800	WD	36	3520M
CWDM3554-5	61, 156	800	WD	40	3521M
CWDM3554T	59	823	WD	43	3526M
CWDM3554T-5	61, 156	823	WD	42	3526M
CWDM3555	59	885	WD	39	3432M
CWDM3556	59	963	WD	36	3520M
CWDM3557	59	1020	WD	46	3529M
CWDM3558	59	883	WD	40	3523M
CWDM3558-5	61, 156	883	WD	39	3524M
CWDM3561TP-9	62	1493	WD	66	3544M
D1151	188	1358	K	23	
D1152	188	1452	K	27	
D1153	188	1705	K	31	
D1154	188	2005	K	60	
D1802R	190	6040	N2	86	
D1803R	190	6040	N2	165	
D1815R	190	6040	N2	169	
D2003R	193	6431	N2	161	
D2005P	196	6242	N2	180	
D2005R	193	10358	N2	194	
D2007P	196	7258	N2	218	
D2007R	193	10358	N2	210	
D2010P	196	8238	N2	245	
D2010R	193	11335	N2	233	
D2010R-2	190	16661	N2	360	
D2015P	196	9861	N2	250	
D2015R	193	15311	N2	315	
D2015R-BV	192	16556	N2	345	
D2020P	196	11273	N2	250	
D2020R	193	18661	N2	403	
D2020R-BV	192	16556	N2	345	
D2025P	196	15236	N2	575	
D2025R	193	18661	N2	415	
D2025R-BV	192	18317	N2	370	
D2030P	196	15236	N2	595	
D2030R	193	26466	N2	515	
D2030R-BV	192	19905	N2	400	
D2040P-BV	197	23764	N2	855	
D2040R-BV	192	26587	N2	480	
D2050P-BV	197	23764	N2	873	
D2060P-BV	197	30715	N2	980	
D2075P-BV	197	30715	N2	975	
D2301	188	1358	K	30	
D2302	188	1455	K	27	
D2303	188	1705	K	32	
D2304	188	2005	K	60	
D2305	188	3521	L1	82	
D2505P	198	9004	N2	220	
D2505R	191	13081	N2	251	
D2507P	198	10480	N2	300	
D2507R	191	17059	N2	359	
D2510P	198	13020	N2	250	
D2510R	191	18820	N2	379	
D2515P	198	17374	N2	630	
D2515R	191	28213	N2	560	

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
D2520P	198	22882	N2	850	
D2520R	191	30464	N2	640	
D2525P	198	22882	N2	872	
D2525R	191	43228	N2	805	
D5003R	193	9967	N2	197	
D5005P	196	6242	N2	162	
D5005R	193	9967	N2	194	
D5007P	196	8009	N2	235	
D5007R	193	9967	N2	197	
D5010P	196	8238	N2	255	
D5010R	193	11335	N2	227	
D5010RS-BV	192	19133	N2	345	
D5015P	196	9861	N2	250	
D5015R	193	15311	N2	320	
D5015R-BV	192	16556	N2	375	
D5015RS-BV	192	19133	N2	345	
D5020P	196	11273	N2	430	
D5020R	193	17074	N2	372	
D5020R-BV	192	16556	N2	390	
D5020RS-BV	192	20894	N2	370	
D5025P	196	15236	N2	490	
D5025R	193	18661	N2	394	
D5025R-BV	192	18317	N2	410	
D5025RS-BV	192	22483	N2	472	
D5030P	196	15236	N2	590	
D5030R	193	26466	N2	520	
D5030R-BV	192	19905	N2	445	
D5030RS-BV	192	30609	N2	535	
D5040P	196	20393	N2	784	
D5040P-BV	197	23764	N2	830	
D5040R	193	28717	N2	605	
D5040R-BV	192	23683	N2	501	
D5040RS-BV	192	31738	N2	605	
D5050P	196	20393	N2	835	
D5050P-BV	197	23764	N2	885	
D5050R	193	41092	N2	766	
D5050RS-BV	192	32860	N2	660	
D5060P-BV	197	30715	N2	880	
D5060R	193	45931	N2	860	
D5060R-BV	192	29962	N2	610	
D5060RS-BV	192	45623	N2	860	
D5075P	196	27343	N2	905	
D5075P-BV	197	30715	N2	960	
D5075R-BV	192	34634	N2	767	
D5075RS-BV	192	50462	N2	890	
D5130R-BV	192	26587	N2	480	
D5140R-BV	192	29962	N2	640	
D5150R-BV	192	34634	N2	695	
D5160R-BV	192	39995	N2	885	
D5175R-BV	192	56918	N2	1125	
D5505P	198	9004	N2	214	
D5505R	191	15311	N2	340	
D5507P	198	10480	N2	310	
D5507R	191	17059	N2	360	
D5510P	198	13020	N2	250	
D5510R	191	18820	N2	405	
D5515P	198	17374	N2	630	
D5515R	191	28213	N2	547	
D5520P	198	22882	N2	875	
D5520R	191	30464	N2	640	
D5525P	198	22882	N2	875	
D5525R	191	43228	N2	815	
D5530R	191	48066	N2	895	
D5540R	191	65449	N2	1120	
D5550R	191	69186	N2	1270	
D50100P	196	36878	N2	1100	
D50100P-BV	197	40250	N2	1145	
D50100R-BV	192	39995	N2	890	
D50100RS-BV	192	67915	N2	1210	
D50125P	196	42414	N2	1445	
D50125P-BV	197	40250	N2	1170	
D50125R-BV	192	49873	N2	997	
D50125RS-BV	192	71773	N2	1290	
D50125UR-BV	192	51108	N2	945	
D50150P	196	52882	N2	1785	
D50150P-BV	197	46126	N2	1515	
D50150RE	192	56918	N2	6103	
D50150RS-BV	192	88976	N2	1630	
D50150URE-BV	192	58152	N2	1197	
D50200P	196	65981	N2	2095	
D50200P-BV	197	57457	N2	1830	
D50200RR-BV	192	73535	N2	1475	
D50250P	196	79067	N2	2540	
D50250P-BV	197	70339	N2	2175	
D50250RR-BV	192	89964	N2	1891	
D50250RS-BV	192	124469	N2	2310	
D50300P-BV	197	83425	N2	2640	
D50300R-BV	192	113818	N2	2190	
D50300RS-BV	192	150442	N2	2815	
D50400P-BV	197	117765	N2	3285	
D50400R-BV	192	145465	N2	3040	
D50400RS-BV	192	168174	N2	3040	
D50500P-BV	197	154655	N2	4170	
D51100R-BV	192	56918	N2	1239	
D51125RR-BV	192	73535	N2	1475	
D51150RR-BV	192	89964	N2	1850	
D51200R-BV	192	106410	N2	1850	
D51250R-BV	192	145465	N2	2735	
D51300R-BV	192	163196	N2	3015	
D51400R-BV	192	201741	N2	3830	
D51500R-BV	192	206180	N2	4560	
DMG2305	198	7521	N2	220	
DMG2307	198	8652	N2	245	
DMG2310	198	9589	N2	250	
DMG2315	198	16097	N2	250	
DMG2320	198	17622	N2	595	
DMG2333	198	24435	N2	840	
DMG2340	198	26785	N2	910	
DR913X913B5	263	183	A8	9	
DR913X918B5	263	191	A8	3	
DR913X921B5	263	202	A8	1	
DR913X924B5	263	202	A8	1	
DR913X926B5	263	219	A8	1	
DR918X924B7	263	219	A8	1	
DR918X926B7	263	227	A8	1	
DR918X932B7	263	227	A8	1	
DR924X938B9	263	227	A8	1	
EBM2333T	140	6611	L1	337	0944M
EBM2334T	140	8016	L1	398	0952M
EBM2513T	143	5375	L1	252	3938M

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
EBM3116T	143	1343	L1	49	3524M
EBM3154T	143	1488	L1	48	3522M
EBM3157T	143	1698	L1	51	3525M
EBM3211T	143	2083	L1	83	3630M
EBM3218T	143	2574	L1	104	3640M
EBM3248T	143	2212	L1	104	3640M
EBM3311T	143	3235	L1	149	3733M
EBM3313T	143	4064	L1	159	3739M
EBM3546	140	1529	K	44	3519M
EBM3546T	140	1560	L1	46	3519M
EBM3554T	140	1756	L1	52	3526M
EBM3558T	140	1795	L1	57	3528M
EBM3558T-D	137	1631	L1	61	3528M
EBM3611T	140	2325	L1	89	3631M
EBM3611T-D	137	2112	L1	104	3628M
EBM3615T	140	2819	L1	106	3642M
EBM3615T-D	137	2554	L1	117	3642M
EBM3710T	140	3780	L1	158	3736M
EBM3710T-D	137	3434	L1	170	3736M
EBM3714T	140	4673	L1	165	3752M
EBM3714T-D	137	4227	L1	165	3752M
EBM4103T	140	9022	L1	516	1046M
EBM4104T	140	12220	L1	667	1052M
ECP2276T	33	2858	SD	335	0954M
ECP2276T-4	33	2858	SD	337	0954M
ECP2276T-5	36	2858	SD	333	0954M
ECP2280T-4	33	4385	SD	327	0952M
ECP2294T	33	2922	SD	300	0934M
ECP2332T	33	3713	SD	348	0960M
ECP2332T-4	33	3713	SD	347	0960M
ECP2332T-5	36	3713	SD	347	0960M
ECP2333T	33	2745	SD	314	0944M
ECP2333T-4	33	2745	SD	294	0944M
ECP2333T-5	36	2745	SD	297	0942M
ECP2334T	33	2944	SD	334	0952M
ECP2334T-4	33	2944	SD	333	0952M
ECP2334T-5	36	2944	SD	325	0952M
ECP2394T-4	33	2922	SD	297	0934M
ECP2394T-5	36	2922	SD	239	0934M
ECP2395T-4	33	7807	SD	479	1060M
ECP2401T-4	33	5014	SD	347	0960M
ECP2402T-4	33	5849	SD	468	1060M
ECP3580T	32	950	SD	59	0516M
ECP3580T-4	32	950	SD	59	0516M
ECP3580T-5	36	950	SD	61	0516M
ECP3581T	32	1044	SD	64	0524M
ECP3581T-4	32	1044	SD	61	0524M
ECP3581T-5	36	1044	SD	65	0524M
ECP3582T	32	1153	SD	68	0526M
ECP3582T-4	32	1153	SD	69	0526M
ECP3583T	32	1080	SD	67	0524M
ECP3583T-4	32	1080	SD	67	0524M
ECP3584T	32	1063	SD	69	0530M
ECP3584T-4	32	1063	SD	72	0530M
ECP3584T-5	36	1063	SD	71	0530M
ECP3586T	32	1130	SD	74	0532M
ECP3586T-4	32	1130	SD	74	0532M
ECP3587T	32	1110	SD	75	0535M
ECP3587T-4	32	1110	SD	73	0535M
ECP3587T-5	36	1110	SD	75	0535M

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
ECP3660T	33	1336	SD	104	0628M
ECP3660T-4	33	1336	SD	106	0628M
ECP3660T-5	36	1336	SD	107	0628M
ECP3661T	33	1404	SD	110	0632M
ECP3661T-4	33	1404	SD	112	0632M
ECP3661T-5	36	1404	SD	113	0632M
ECP3663T	33	1644	SD	114	0632M
ECP3663T-4	33	1644	SD	111	0634M
ECP3663T-5	36	1644	SD	111	0634M
ECP3664T	32	1366	SD	122	0642M
ECP3664T-4	32	1366	SD	120	0642M
ECP3665T	33	1429	SD	118	0641M
ECP3665T-4	33	1429	SD	119	0641M
ECP3665T-5	36	1429	SD	118	0641M
ECP3667T	32	1349	SD	108	0630M
ECP3667T-4	32	1349	SD	108	0630M
ECP3668T-4	32	2015	SD	110	0634M
ECP3687T-4	32	1619	SD	103	0628M
ECP3764T	33	1971	SD	185	0737M
ECP3764T-4	33	1971	SD	209	0736M
ECP3764T-5	36	1971	SD	211	0737M
ECP3768T	33	1998	SD	212	0748M
ECP3768T-4	33	1998	SD	227	0748M
ECP3768T-5	36	1998	SD	196	0748M
ECP3769T	33	2145	SD	169	0731M
ECP3769T-4	33	2145	SD	173	0731M
ECP3769T-5	36	2145	SD	169	0731M
ECP3770T	33	1799	SD	170	0735M
ECP3770T-4	33	1799	SD	170	0735M
ECP3770T-5	36	1799	SD	170	0735M
ECP3771T	33	2284	SD	203	0742M
ECP3771T-4	33	2284	SD	215	0742M
ECP3771T-5	36	2284	SD	182	0742M
ECP3772T-4	32	2541	SD	179	0732M
ECP3774T	33	2154	SD	231	0748M
ECP3774T-4	33	2154	SD	211	0748M
ECP3774T-5	36	2154	SD	231	0748M
ECP3775T-4	33	2755	SD	203	0744M
ECP4100T	33	4257	SD	449	1056M
ECP4100T-4	33	4257	SD	448	1056M
ECP4100T-5	36	4257	SD	446	1056M
ECP4102T	33	5784	SD	480	1062M
ECP4102T-4	33	5784	SD	467	1062M
ECP4102T-5	36	5784	SD	478	1062M
ECP4103T	33	3852	SD	431	1046M
ECP4103T-4	33	3852	SD	437	1052M
ECP4103T-5	36	3852	SD	424	1052M
ECP4104T	33	4574	SD	475	1060M
ECP4104T-4	33	4574	SD	470	1060M
ECP4104T-5	36	4574	SD	467	1060M
ECP4106T	33	3408	SD	324	0944M
ECP4106T-4	33	3408	SD	328	0944M
ECP4106T-5	36	3408	SD	310	0942M
ECP4107T	33	4096	SD	354	1048M
ECP4107T-4	33	4096	SD	357	1048M
ECP4108T	33	4993	SD	430	1042M
ECP4108T-4	33	4993	SD	424	1050M
ECP4109T	34	6859	SD	552	1240M
ECP4109T-4	34	6859	SD	566	1244M
ECP4110T	34	5984	SD	618	1260M

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
ECP4110T-4	34	5984	SD	626	1260M
ECP4110T-5	36	5984	SD	623	1260M
ECP4111T	33	6044	SD	604	1260M
ECP4111T-4	33	6044	SD	608	1260M
ECP4111T-5	36	6044	SD	612	1260M
ECP4112T-4	33	8900	SD	600	1256M
ECP4113T-4	33	11752	SD	813	A36050M
ECP4114T	34	7188	SD	619	1256M
ECP4114T-4	34	7188	SD	610	1256M
ECP4115T	34	7024	SD	641	1272M
ECP4115T-4	34	7024	SD	668	1272M
ECP4115T-5	36	7024	SD	652	1272M
ECP4117T	33	7791	SD	621	1264M
ECP4117T-4	33	7791	SD	633	1264M
ECP4124T-4	33	11114	SD	598	1256M
ECP4308T	34	9710	SD	918	A36062M
ECP4308T-4	34	9710	SD	889	A36062M
ECP4310T	34	10431	SD	929	A36056M
ECP4310T-4	34	10431	SD	882	A36056M
ECP4312T	34	10343	SD	928	A36062M
ECP4312T-4	34	10343	SD	920	A36062M
ECP4313T	34	11661	SD	1004	A36068M
ECP4313T-4	34	11661	SD	990	A36068M
ECP4314T	34	9414	SD	933	A36062M
ECP4314T-4	34	9414	SD	941	A36062M
ECP4314T-5	36	9414	SD	936	A36062M
ECP4315T-4	34	13513	SD	813	A36062M
ECP4316T	34	11000	SD	958	A36070M
ECP4316T-4	34	11000	SD	962	A36068M
ECP4316T-5	36	11000	SD	966	A36070M
ECP4316TR-4	34	11625	SD	965	A36070M
ECP4400T-4	34	14439	SD	1296	A40064M
ECP4400T-5	36	14439	SD	1305	A40064M
ECP4400TR-4	34	15153	SD	1326	A40064M
ECP4400TS-4	34	14439	SD	1304	A40064M
ECP4402T	34	14657	SD	1283	A40060M
ECP4402T-4	34	14657	SD	1272	A40060M
ECP4403T	34	14128	SD	1281	A40064M
ECP4403T-4	34	14128	SD	1331	A40064M
ECP4403TR-4	34	14842	SD	1375	A40072M
ECP4404T	34	17194	SD	1275	A40064M
ECP4404T-4	34	17194	SD	1334	A4072M
ECP4404TR-4	34	17908	SD	1334	A4072M
ECP4406T-4	34	19997	SD	2190	A4488M
ECP4406T-5	36	19997	SD	2175	A4488M
ECP4406TR-4	34	21225	SD	1826	A4488M
ECP4407T-4	35	24056	SD	2545	A44120M
ECP4407T-4E	35	24056	SD	2347	A44106M
ECP4407T-5	36	24056	SD	2570	A44120M
ECP4407TR-4	35	25282	SD	2621	A44120M
ECP4407TS-4	35	24056	SD	2573	A44120M
ECP4408T-4	35	30527	SD	2981	A44140M
ECP4408TR-4	35	31753	SD	2995	A44140M
ECP4409T-4	34	18912	SD	1871	A44064M
ECP4409TR-4	34	20140	SD	1625	A44064M
ECP4410T-4	34	17070	SD	1950	A44076M
ECP4410T-4E	34	17070	SD	1757	A44062M
ECP4410T-5	36	17070	SD	2054	A44076M
ECP4410T-5E	36	17070	SD	1764	A44062M
ECP4410TR-4	34	18298	SD	1669	A44076M

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
ECP4411T-4	34	21365	SD	2146	A44090M
ECP4411TR-4	34	22593	SD	1874	A44090M
ECP4412T	34	17223	SD	1957	A4468M
ECP4412T-4	34	17223	SD	1901	A4468M
ECP4413T-4	34	20191	SD	2017	A4478M
ECP4416T-4	35	23908	SD	2436	A44104M
ECP4417T-4	34	16652	SD	1216	A40060M
ECP4418T-4	34	19529	SD	1216	A40060M
ECP4419T-4	34	24111	SD	1815	A44072M
ECP4420T-4	34	28143	SD	1905	A44060M
ECP4421T-4	34	30823	SD	2330	A44104M
ECP4422T-4	34	35415	SD	2491	A44120M
ECP4423T-4	35	44951	SD	2825	A44144M
ECP4906T-4	34	19997	SD	1826	A4488M
ECP4906T-5	36	19997	SD	1826	#N/A
ECP4907T-5	36	24056	SD	2676	A44120M
ECP4907TS-4	35	24056	SD	2591	A44120M
ECP4910T-5	36	17070	SD	2054	#N/A
ECP44156T-4	34	24088	SD	2546	A44120M
ECP44156TR-4	34	25315	SD	2585	A44120M
ECP44206T-4	35	31553	SD	3104	A44160M
ECP44206TR-4	35	32779	SD	3091	A44160M
ECP44252T-4	35	36560	SD	2633	A44112M
ECP44256T-4	35	44018	SD	3090	A44160M
ECP44256TR-4	35	45244	SD	3093	A44160M
ECP44304T-4	35	42075	SD	3061	A44152M
ECP44304TR-4	35	43302	SD	3048	A44152M
ECP44352T-4	35	64135	SD	2965	A44144M
ECP44402T-4	35	75034	SD	3091	A44160M
ECP49258T-4	35	54429	SD	3225	A44176M
ECP49306T-4	35	44454	SD	3125	A44208M
ECP49308T-4	35	65528	SD	3315	A44208M
ECP49352T-4	35	64135	SD	2998	A44144M
ECP49354T-4	35	50488	SD	3543	A44176M
ECP49404T-4	35	63060	SD	3682	A44208M
ECP50452S-4	35	83253	LM	4871	
CP50454L-4	35	76700	LM	5550	
ECP50502S-4	35	90151	LM	4720	A50184M
ECP62333TR-4	44	3372	SD	324	0944M
ECP62334TR-4	44	3617	SD	761	0960M
ECP63665T-4	44	1570	SD	128	0641M
ECP63770TR-4	44	2248	SD	195	0737M
ECP63774TR-4	44	2611	SD	231	0748M
ECP64103TR-4	44	4676	SD	461	1050M
ECP64104TR-4	44	5426	SD	487	1060M
ECP64110TR-4	44	7198	SD	636	1260M
ECP64115TR-4	44	8354	SD	687	1272M
ECP64314TR-4	44	10960	SD	936	A36062M
ECP64316TR-4	44	12644	SD	976	A36070M
ECP82276T-4	39	3195	SD	343	0954M
ECP82276T-5	42	3195	SD	348	0954M
ECP82332T-4	39	4079	SD	359	0960M
ECP82332T-5	42	4079	SD	358	0960M
ECP82333T-4	39	3015	SD	317	0944M
ECP82333T-5	42	3015	SD	318	0944M
ECP82334T-4	39	3260	SD	350	0960M
ECP82334T-5	42	3260	SD	361	0960M
ECP82394T-4	39	3264	SD	308	0934M
ECP82394T-5	42	3264	SD	305	0934M
ECP83580T-4	39	1043	SD	60	0516M

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
ECP83580T-5	42	1043	SD	63	0516M
ECP83581T-4	39	1145	SD	69	0524M
ECP83581T-5	42	1145	SD	67	0524M
ECP83582T-4	39	1228	SD	69	0526M
ECP83582T-5	42	1228	SD	69	0526M
ECP83583T-4	39	1120	SD	69	0524M
ECP83583T-5	42	1120	SD	71	0524M
ECP83584T-4	39	1165	SD	73	0530M
ECP83584T-5	42	1165	SD	73	0530M
ECP83586T-4	39	1229	SD	78	0535M
ECP83586T-5	42	1229	SD	79	0535M
ECP83587T-4	39	1217	SD	78	0535M
ECP83587T-5	42	1217	SD	77	0535M
ECP83660T-4	39	1465	SD	116	0632M
ECP83660T-5	42	1465	SD	116	0632M
ECP83661T-4	39	1541	SD	116	0632M
ECP83661T-5	42	1541	SD	118	0632M
ECP83663T-4	39	1805	SD	132	0643M
ECP83663T-5	42	1805	SD	130	0643M
ECP83664T-4	39	1537	SD	130	0642M
ECP83664T-5	42	1537	SD	128	0642M
ECP83665T-4	39	1570	SD	127	0641M
ECP83665T-5	42	1570	SD	127	0641M
ECP83667T-4	39	1414	SD	114	0630M
ECP83667T-5	42	1414	SD	112	0630M
ECP83764T-4	39	2143	SD	165	0736M
ECP83764T-5	42	2143	SD	211	0736M
ECP83768T-4	39	2215	SD	193	0748M
ECP83768T-5	42	2215	SD	226	0748M
ECP83769T-4	39	2356	SD	179	0731M
ECP83769T-5	42	2356	SD	179	0731M
ECP83770T-4	39	1978	SD	199	0737M
ECP83770T-5	42	1978	SD	199	0737M
ECP83771T-4	39	2508	SD	225	0742M
ECP83771T-5	42	2508	SD	225	0742M
ECP83774T-4	39	2342	SD	231	0748M
ECP83774T-5	42	2342	SD	231	0748M
ECP84100T-4	39	4712	SD	447	1050M
ECP84100T-5	42	4712	SD	445	1050M
ECP84102T-4	39	6350	SD	442	1050M
ECP84102T-5	42	6350	SD	443	1050M
ECP84103T-4	39	4228	SD	441	1052M
ECP84103T-5	42	4228	SD	443	1052M
ECP84104T-4	39	4979	SD	545	1060M
ECP84104T-5	42	4979	SD	480	1060M
ECP84106T-4	39	3742	SD	328	0954M
ECP84106T-5	42	3742	SD	324	0942M
ECP84107T-4	39	4575	SD	430	1048M
ECP84107T-5	42	4575	SD	429	1048M
ECP84108T-4	39	5480	SD	442	1050M
ECP84108T-5	42	5480	SD	422	1050M
ECP84109T-4	39	7498	SD	626	1256M
ECP84109T-5	42	7498	SD	624	1256M
ECP84110T-4	39	6629	SD	629	1260M
ECP84110T-5	42	6629	SD	635	1260M
ECP84111T-4	39	6692	SD	638	1264M
ECP84111T-5	42	6692	SD	623	1264M
ECP84114T-4	40	7821	SD	623	1266M
ECP84114T-5	42	7821	SD	662	1266M
ECP84115T-4	40	7783	SD	679	1272M
ECP84115T-5	42	7783	SD	653	1272M
ECP84117T-4	39	8709	SD	637	1266M
ECP84117T-5	42	8709	SD	635	1264M
ECP84308T-4	39	10662	SD	927	A36062M
ECP84308T-5	42	10662	SD	922	A36062M
ECP84310T-4	40	11558	SD	905	A36056M
ECP84310T-5	43	11558	SD	932	A36056M
ECP84312T-4	40	11355	SD	928	A36062M
ECP84312T-5	42	11355	SD	924	A36062M
ECP84313T-4	40	12802	SD	1045	A36068M
ECP84313T-5	43	12802	SD	998	A36068M
ECP84314T-4	40	10335	SD	913	A36062M
ECP84314T-5	43	10335	SD	937	A36062M
ECP84316T-4	40	12019	SD	971	A36070M
ECP84316T-5	43	12019	SD	985	A36070M
ECP84400T-4	40	16043	SD	1299	A40064M
ECP84400T-5	43	16043	SD	1304	A40064M
ECP84402T-4	40	15341	SD	1277	A40060M
ECP84402T-5	43	15341	SD	1287	A40060M
ECP84403T-4	40	14718	SD	1271	A40064M
ECP84403T-5	43	14718	SD	1275	A40064M
ECP84404T-4	40	17827	SD	1327	A4072M
ECP84404T-5	43	17827	SD	1283	A4072M
ECP84406T-4	40	21521	SD	2184	A4488M
ECP84406T-5	43	21521	SD	1886	A44078M
ECP84406T-5E	43	21521	SD	1879	A44078M
ECP84407T-4	40	25892	SD	2582	A44120M
ECP84407T-5	43	25892	SD	2606	A44120M
ECP84407TR-4	40	27119	SD	2608	A44120M
ECP84407TR-5	43	27119	SD	2618	A44120M
ECP84408T-4	40	33052	SD	2959	A44140M
ECP84408T-5	43	33052	SD	2932	A44140M
ECP84408TR-4	40	34246	SD	2995	A44140M
ECP84408TR-5	43	34246	SD	2732	A44140M
ECP84409T-4	40	19609	SD	1940	A44064M
ECP84409T-5	43	19609	SD	1885	A44062M
ECP84410T-4	40	18198	SD	2020	A44076M
ECP84410T-4E	40	18198	SD	1746	A44062M
ECP84410T-5	43	18198	SD	1915	A44062M
ECP84410T-5E	43	18198	SD	1802	A44062M
ECP84411T-4	40	22257	SD	2083	A44090M
ECP84411T-5	43	22257	SD	2000	A44076M
ECP84412T-4	40	17941	SD	1968	A4468M
ECP84412T-4E	40	17941	SD	1679	A44056M
ECP84412T-5	43	17941	SD	1799	A44056M
ECP84412T-5E	43	17941	SD	1740	A44056M
ECP84413T-4	40	20617	SD	2053	A4478M
ECP84413T-4E	40	20617	SD	1910	A44078M
ECP84413T-5	43	20617	SD	2062	A44078M
ECP84416T-4	40	27256	SD	2433	A44104M
ECP84416T-5	43	27256	SD	2182	A44078M
ECP84906T-4	40	21521	SD	2175	A4488M
ECP84907T-5	43	25892	SD	2676	A44120M
ECP84907TR-5	43	27119	SD	2676	A44120M
ECP84908T-4	40	33052	SD	2971	A44140M
ECP84908T-5	43	33052	SD	2941	A44140M
ECP84908TR-4	40	34246	SD	2995	A44140M
ECP84908TR-5	43	34246	SD	2677	A44140M
ECP84909T-4	40	19609	SD	1933	A44064M
ECP84910T-4	40	18198	SD	1779	A44076M

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
ECP84912T-4	40	17941	SD	1968	A44068M
ECP84913T-4	40	20617	SD	2049	A4478M
ECP844156T-4	40	24739	SD	2536	A44120M
ECP844156TR-4	40	25964	SD	2615	A44120M
ECP844156TR-5	43	25964	SD	2595	A44120M
ECP844206T-4	40	32865	SD	3109	A44160M
ECP844206TR-4	40	34092	SD	3108	A44160M
ECP844206TR-5	43	34092	SD	3100	A44160M
ECP844252T-4	40	43915	SD	2790	A44128M
ECP844252T-5	43	43915	SD	2784	A44128M
ECP844256T-4	40	46128	SD	3102	A44160M
ECP849156T-4	40	24739	SD	2598	A4412M
ECP849156TR-4	40	25964	SD	2615	A4412M
ECP849156TR-5	43	25964	SD	2000	A4412M
ECP849206T-4	40	32865	SD	3085	A44160M
ECP849206TR-4	40	34092	SD	3085	A4416M
ECP849252T-4	40	43915	SD	2798	A44128M
ECP849252T-5	43	43915	SD	2798	A44128M
ECP44302T-4	35	53433	SD	2789	A44128M
ECR4400TR-4	46	12216	SD	1403	A40076M
ECR4404TR-4	46	16137	SD	1272	A40064M
ECR4406TR-4	46	18205	SD	2184	A44096M
ECR4407TR-4	46	21907	SD	2831	A44128M
ECR4409TR-4	46	16669	SD	2141	A44084M
ECR4410TR-4	46	15544	SD	2075	A44078M
ECR4411TR-4	46	18831	SD	2371	A44096M
ECR4907TR-4	46	21907	SD	2694	A44128M
ECR4909TR-4	46	16669	SD	2141	A44084M
ECR4910TR-4	46	15544	SD	1964	A44078M
ECR4911TR-4	46	18831	SD	2271	A44096M
ECR44156TR-4	46	21231	SD	3125	A44160M
ECR44206TR-4	46	27805	SD	3162	A44160M
ECTM2276T	117	2802	L1	290	0950M
ECTM2332T	117	3201	L1	297	0954M
ECTM2333T	117	2944	L1	278	0944M
ECTM2334T	117	3284	L1	293	0952M
ECTM3665T	117	1239	L1	108	0641M
ECTM3768T	117	1968	L1	227	0748M
ECTM3770T	117	1653	L1	170	0735M
ECTM3774T	117	2218	L1	231	0748M
ECTM4100T	117	4268	L1	345	1042M
ECTM4103T	117	4042	L1	378	1046M
ECTM4104T	117	4797	L1	410	1056M
ECTM4110T	117	6273	L1	553	1254M
ECTM4115T	117	7500	L1	598	1272M
ECTM4314T	117	9863	L1	835	A36062M
EFM2333T	31	2306	L1	256	0944M
EFM2334T	31	2794	L1	276	0952M
EFM2394T	31	2520	L1	256	93M
EFM2513T	31	2069	L1	214	3938M
EFM2513T-8	148	2120	L1	209	3938M
EFM2515T	31	2597	L1	226	3944M
EFM2515T-8	148	2661	L1	226	3944M
EFM2531T	31	3166	L1	313	4050M
EFM2535T	31	3462	L1	339	4052M
EFM2539T	31	4516	L1	392	4064M
EFM2543T	31	4983	L1	547	4256M
EFM2547T	31	6274	L1	622	4278M
EFM3116T	31	621	L1	35	3519M
EFM3154T	31	649	L1	38	3522M
EFM3157T	31	696	L1	40	3525M
EFM3157T-8	148	714	L1	43	3525M
EFM3211T	31	750	L1	68	3630M
EFM3211T-8	148	769	L1	70	3630M
EFM3212T	31	794	L1	61	3623M
EFM3218T	31	822	L1	84	3640M
EFM3218T-8	148	842	L1	82	3640M
EFM3219T	31	1259	L1	77	3632M
EFM3311T	31	1207	L1	114	3733M
EFM3311T-8	148	1237	L1	111	3733M
EFM3312T	31	1440	L1	107	3728M
EFM3313T	31	1461	L1	125	3739M
EFM3313T-8	148	1496	L1	127	3739M
EFM3314T	31	2045	L1	123	3734M
EFM3546T	31	706	L1	35	3519M
EFM3554T	31	734	L1	41	
EFM3558T	31	758	L1	41	3528M
EFM3610T	31	882	L1	73	
EFM3611T	31	841	L1	73	3631M
EFM3613T	31	978	L1	75	3630M
EFM3615T	31	920	L1	91	3642M
EFM3709T	31	1465	L1	128	
EFM3710T	31	1331	L1	128	3736M
EFM3711T	31	1485	L1	119	3729M
EFM3714T	31	1495	L1	165	3752M
EFM4100T	31	3880	L1	391	1046M
EFM4102T	31	5166	L1	420	1054M
EFM4103T	31	3652	L1	452	1046M
EFM4104T	31	4337	L1	397	1056M
EFM4110T	31	5673	L1	572	
EFM4114T	31	6429	L1	578	1252M
EFM4115T	31	6199	L1	640	
EFM4308T	31	8414	L1	908	A36062M
EFM4312T	31	10167	L1	902	A36062M
EFM4314T	31	8917	L1	800	
EFM4316T	31	10429	L1	840	A3668M
EFM4400T	31	12952	L1	1160	A464M
EFM4403T	31	12341	L1	1164	A40064M
EFM4404T	31	14371	L1	1217	A4072M
EFM4409T-4	31	17345	L1	1625	A44064M
EHFM2515T	114	2612	LS	227	3944M
EHFM2523T	114	2087	LS	212	3938M
EHFM2523T-8	115	2082	LS	211	3938M
EHFM2531T	114	3177	LS	301	4050M
EHFM2535T	114	3473	LS	328	4052M
EHFM2539T	114	4519	LS	429	4064M
EHFM2543T	114	5544	LS	466	4256M
EHFM3157T	114	726	LS	49	3525M
EHFM3211T	114	779	LS	68	3630M
EHFM3218T	114	846	LS	82	3640M
EHFM3311T	114	1230	LS	115	3733M
EHFM3313T	114	1480	LS	127	3739M
EHM2276T	116	2583	L1	294	0950M
EHM2332T	116	2943	L1	290	0954M
EHM2333T	116	2332	LS	250	0944M
EHM2333T-5	116	2332	LS	255	0942M
EHM2334T	116	2821	LS	288	0952M
EHM2334T-5	116	2821	LS	286	0952M
EHM2506T	114	1773	L1	248	3950M
EHM2511T	114	2297	L1	260	3954M

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
EHM2515T	114	2612	LS	225	3944M
EHM2515T-8	115	2612	LS	226	3944M
EHM2523T	114	2087	LS	212	3938M
EHM2523T-8	115	2087	LS	210	3938M
EHM2524T	114	3085	L1	300	4038M
EHM2528T	114	3747	L1	321	4044M
EHM2531T	114	3177	LS	306	4050M
EHM2531T-8	115	3177	LS	369	4050M
EHM2532T	114	4519	L1	383	4072M
EHM2535T	114	3473	LS	339	4052M
EHM2535T-8	115	3473	LS	331	4052M
EHM2536T	114	4712	L1	482	4084M
EHM2539T	114	4519	LS	433	4064M
EHM2539T-8	115	4519	LS	434	4250M
EHM2543T	114	5544	LS	469	4256M
EHM2543T-8	115	5544	LS	459	4256M
EHM2547T	114	6268	LS	582	4272M
EHM2551T	114	7687	LS	752	4462M
EHM2555T	114	8762	LS	911	4476M
EHM3116T	114	651	LS	35	3519M
EHM3116T-8	115	651	LS	34	3519M
EHM3154T	114	676	LS	37	3522M
EHM3154T-8	115	676	LS	38	3522M
EHM3157T	114	726	LS	41	3525M
EHM3157T-8	115	726	LS	41	3525M
EHM3211T	114	779	LS	72	3630M
EHM3211T-8	115	779	LS	71	3630M
EHM3218T	114	846	LS	85	3640M
EHM3218T-8	115	846	LS	85	3640M
EHM3218TA	122	1076	L1	84	3640M
EHM3305T	114	1141	L1	114	3733M
EHM3309T	114	1485	L1	141	3744M
EHM3311T	114	1230	LS	115	3733M
EHM3311T-8	115	1230	LS	115	3733M
EHM3313T	114	1480	LS	127	3739M
EHM3313T-8	115	1480	LS	129	3739M
EHM3546T	116	734	LS	37	3519M
EHM3546T-5	116	734	LS	37	3519M
EHM3554T	116	737	LS	44	3526M
EHM3554T-5	116	737	LS	44	3526M
EHM3558T	116	789	LS	46	3528M
EHM3558T-5	116	789	LS	47	3528M
EHM3611T	116	869	LS	73	3631M
EHM3611T-5	116	869	LS	74	3631M
EHM3615T	116	949	LS	93	3642M
EHM3615T-5	116	949	LS	92	3642M
EHM3708T	116	1558	L1	154	3748M
EHM3710T	116	1353	LS	128	3736M
EHM3710T-5	116	1353	LS	127	3736M
EHM3714T	116	1526	LS	165	3752M
EHM3714T-5	116	1526	LS	165	3752M
EHM4100T	116	3914	L1	391	1046M
EHM4102T	116	5201	L1	437	1054M
EHM4103T	116	3680	LS	430	1056M
EHM4103T-5	116	3680	LS	397	1052M
EHM4104T	116	4360	LS	423	1060M
EHM4104T-5	116	4360	LS	395	1056M
EHM4110T	116	5691	LS	612	1264M
EHM4110T-5	116	5691	LS	575	1254M
EHM4111T	116	5879	L1	465	1072M
EHM4115T	116	6198	LS	622	1272M
EHM4115T-5	116	6198	LS	622	1266M
EJMM2333T	98	3064	L1	265	0944M
EJMM2333T-G	96	3357	L1	265	0944M
EJMM2334T	98	3457	L1	304	0952M
EJMM2334T-G	96	3750	L1	308	0952M
EJMM2394T	98	3091	L1	257	0930M
EJMM2394T-G	96	3384	L1	260	0930M
EJMM2513T	100	2511	L1	214	3938M
EJMM2513T-G	96	2804	L1	213	3938M
EJMM2514T	100	2793	L1	195	3928M
EJMM2515T	100	3008	L1	248	3944M
EJMM2516T	100	3310	L1	219	3938M
EJMM2531T	100	3578	L1	317	4050M
EJMM2534T	100	4207	L1	305	3948M
EJMM2535T	100	4286	L1	359	4052M
EJMM2538T	101	5065	L1	328	3956M
EJMM2539T	101	5210	L1	417	4064M
EJMM2542T	101	5710	L1	421	4248M
EJMM2543T	101	6025	L1	491	4256M
EJMM3116T	99	707	L1	38	3519M
EJMM3116T-G	96	873	L1	37	3519M
EJMM3154T	99	765	L1	38	3522M
EJMM3154T-G	96	931	L1	41	3522M
EJMM3155T	99	846	L1	44	3524M
EJMM3157T	99	837	L1	44	3525M
EJMM3157T-G	96	1003	L1	44	3525M
EJMM3158T	99	950	L1	49	3530M
EJMM3158T-G	96	1116	L1	51	3530M
EJMM3211T	99	926	L1	72	3630M
EJMM3211T-G	96	1134	L1	74	3630M
EJMM3212T	100	1132	L1	64	3623M
EJMM3212T-G	96	1340	L1	64	3623M
EJMM3218T	100	1047	L1	87	3640M
EJMM3218T-G	96	1255	L1	88	3640M
EJMM3219T	100	1338	L1	78	3632M
EJMM3219T-G	96	1546	L1	78	3632M
EJMM3311T	100	1570	L1	120	3733M
EJMM3311T-G	96	1831	L1	120	3733M
EJMM3312T	100	1723	L1	120	3728M
EJMM3312T-G	96	1984	L1	121	3728M
EJMM3313T	100	1698	L1	136	3739M
EJMM3313T-G	96	1959	L1	132	3739M
EJMM3314T	100	2218	L1	131	3734M
EJMM3314T-G	96	2479	L1	134	3734M
EJMM3546T	97	827	L1	40	3519M
EJMM3550T	97	822	L1	41	3520M
EJMM3554T	97	881	L1	44	3526M
EJMM3555T	97	882	L1	47	3526M
EJMM3558T	97	900	L1	50	3528M
EJMM3559T	97	947	L1	54	3532M
EJMM3610T	97	949	L1	56	3532M
EJMM3610T-G	96	1157	L1	60	3532M
EJMM3611T	97	1044	L1	76	3631M
EJMM3611T-G	96	1252	L1	76	3631M
EJMM3613T	97	1125	L1	79	3630M
EJMM3613T-G	96	1333	L1	81	3630M
EJMM3615T	97	1047	L1	93	3642M
EJMM3615T-G	96	1255	L1	93	3642M
EJMM3616T	97	1392	L1	101	3646M

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
EJMM3709T	97	1474	L1	125	3728M
EJMM3709T-G	96	1735	L1	124	3728M
EJMM3710T	97	1593	L1	134	3736M
EJMM3710T-G	96	1854	L1	134	3736M
EJMM3711T	97	1692	L1	130	3729M
EJMM3711T-G	96	1953	L1	124	3729M
EJMM3714T	97	1872	L1	165	3752M
EJMM3714T-G	96	2133	L1	165	3752M
EJMM4103T	98	4097	L1	387	1046M
EJMM4104T	98	4854	L1	422	1056M
EJMM4106T	98	3404	L1	281	0936M
EJMM4106T-G	96	3697	L1	274	0936M
EJMM4107T	98	3955	L1	353	0946M
EJMM4108T	98	5439	L1	406	1042M
EJMM4109T	98	6159	L1	487	1058M
EJMM4110T	98	6310	L1	586	1254M
EJMM4114T	98	7453	L1	595	1252M
EJMM4115T	98	7585	L1	624	1272M
EJPM2333T	98	3064	L1	265	0944M
EJPM2334T	98	3457	L1	300	0952M
EJPM2394T	98	3091	L1	260	0930M
EJPM2513T	100	2511	L1	219	3938M
EJPM2514T	100	2793	L1	220	3928M
EJPM2515T	100	3008	L1	236	3944M
EJPM2516T	100	3310	L1	230	3938M
EJPM2531T	100	3578	L1	335	4050M
EJPM2534T	100	4207	L1	310	3948M
EJPM2535T	100	4286	L1	372	4052M
EJPM2538T	101	5065	L1	329	3956M
EJPM2539T	101	5210	L1	458	4250M
EJPM2542T	101	5710	L1	424	4248M
EJPM2543T	101	6025	L1	500	4256M
EJPM3312T	100	1723	L1	122	3728M
EJPM3313T	100	1698	L1	138	3739M
EJPM3314T	100	2218	L1	134	3734M
EJPM3714T	97	1872	L1	165	3752M
EJPM4103T	98	4097	L1	412	1046M
EJPM4104T	98	4854	L1	452	1056M
EJPM4106T	98	3404	L1	264	0932M
EJPM4107T	98	3955	L1	349	0946M
EJPM4108T	98	5439	L1	405	1038M
EJPM4109T	98	6159	L1	498	1058M
EJPM4110T	98	6310	L1	602	1254M
EJPM4114T	98	7453	L1	604	1252M
EJPM4115T	98	7585	L1	646	1272M
EJPM7142T-I	85	2112	L1	127	0632M
EJPM7144T-I	85	2472	L1	152	0641M
EJPM71147T-I	85	2804	L1	225	0735M
EJPM71170T-I	85	3473	L1	252	0750M
EL1203	14	365	K	23	3414LC
EL1205	14	333	K	27	3420LC
EL1301	14	431	K	26	3418LC
EL1303	14	367	K	23	3413LC
EL1304	14	494	K	30	3424LC
EL1306	14	447	K	29	3424LC
EL1307	14	608	K	38	3524LC
EL1309	14	470	K	32	3428LC
EL1310	14	663	K	43	3528LC
EL1313	15	658	K	37	3432LC
EL1317	15	875	K	47	3528LC
EL1319	15	868	K	50	3535LC
EL1319T	15	839	L1	50	3535LC
EL1405T	15	1014	L1	65	3623LC
EL1406T	15	1068	L1	70	3628LC
EL1408T	15	1062	L1	81	3634LC
EL1409T	15	1268	L1	79	3634LC
EL1410T	15	1213	L1	97	3646LC
EL3403	10	420	K	24	3414LC
EL3405	10	402	K	27	3420LC
EL3501	10	464	K	27	3418LC
EL3503	10	455	K	23	3413LC
EL3504	10	547	K	30	3424LC
EL3506	10	512	K	29	3424LC
EL3507	10	666	K	44	3528LC
EL3509	11	591	K	38	3520LC
EL3510	11	765	K	45	3532LC
EL3514	11	871	K	58	3540LC
EL3514T	11	871	L1	58	3540LC
EL3515T	11	1022	L1	56	3535LC
EL3605T	11	1191	L1	66	3623LC
EL3606T	11	1112	L1	79	3634LC
EL3608T	11	1533	L1	91	3640LC
EL3609T	11	1390	L1	89	3640LC
EL3612T	11	1658	L1	97	3646LC
EM2276T	19	2549	L1	278	0950M
EM2276T-BG	107	2812	L1	310	0950M
EM2276T-G	110	2842	L1	281	0950M
EM2332T	19	2909	L1	290	0954M
EM2332T-BG	107	3172	L1	310	0954M
EM2332T-G	110	3202	L1	291	0954M
EM2333T	19	2306	LS	270	0944M
EM2333T-5	150	2306	LS	258	0942M
EM2333T-5G	111	2599	L1	250	0942M
EM2333T-8	146	2375	L1	255	0936M
EM2333T-8G	111	2599	L1	254	0936M
EM2333T-BG	107	2569	L1	274	0944M
EM2333T-G	110	2599	L1	270	0944M
EM2334T	19	2796	LS	289	0952M
EM2334T-5	150	2796	LS	290	0952M
EM2334T-5G	111	3089	L1	293	0952M
EM2334T-8	146	2881	L1	292	0952M
EM2334T-12	19	2865	L1	291	0952M
EM2334T-BG	107	3059	L1	290	0952M
EM2334T-G	110	3089	L1	295	0952M
EM2394T	19	2520	L1	241	0930M
EM2394T-5	150	2520	L1	245	0930M
EM2394T-8	146	2582	L1	240	0930M
EM2394T-BG	107	2783	L1	253	0930M
EM2394T-G	110	2813	L1	239	0930M
EM2506T	27	1739	L1	239	3950M
EM2506T-BG	109	2002	L1	248	3950M
EM2506T-G	112	2032	L1	243	3950M
EM2511T	27	2263	L1	255	3954M
EM2511T-BG	109	2526	L1	255	3954M
EM2511T-G	112	2556	L1	255	3954M
EM2513T	27	2367	LS	211	3938M
EM2513T-5	158	2367	LS	273	3938M
EM2513T-5G	113	2660	L1	210	3938M
EM2513T-8	147	2120	L1	209	3938M
EM2513T-8G	113	2660	L1	234	3938M

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
EM2513T-BG	109	2630	L1	234	3938M
EM2513T-CI	27	2253	L1	238	0936M
EM2513T-G	112	2660	L1	210	3938M
EM2514T	27	2402	L1	191	3928M
EM2514T-8	147	2464	L1	190	3928M
EM2514T-G	112	2695	L1	195	3928M
EM2515T	27	2597	L1	225	3944M
EM2515T-5	158	2597	L1	227	3944M
EM2515T-5G	113	2890	L1	250	3944M
EM2515T-8	147	2661	L1	227	3944M
EM2515T-8G	113	2890	L1	250	3944M
EM2515T-12	27	2647	L1	225	3944M
EM2515T-BG	109	2860	L1	228	3944M
EM2515T-CI	27	2831	L1	281	0946M
EM2515T-G	112	2890	L1	227	3944M
EM2516T	27	2884	L1	222	3938M
EM2516T-8	147	2957	L1	220	3938M
EM2516T-G	112	3177	L1	212	3938M
EM2524T	27	3051	L1	278	4038M
EM2524T-BG	109	3350	L1	300	4038M
EM2524T-G	112	3428	L1	280	4038M
EM2528T	27	3713	L1	302	4044M
EM2528T-BG	109	4012	L1	321	4044M
EM2528T-G	112	4090	L1	299	4044M
EM2531T	27	3166	L1	327	4050M
EM2531T-5	158	3166	L1	312	4050M
EM2531T-5G	113	3543	L1	328	4050M
EM2531T-8	147	3244	L1	311	4050M
EM2531T-8G	113	3543	L1	330	4050M
EM2531T-12	27	3227	L1	307	4050M
EM2531T-BG	109	3465	L1	387	4050M
EM2531T-CI	27	3451	L1	382	1046M
EM2531T-G	112	3543	L1	314	4050M
EM2532T	27	4485	L1	411	4072M
EM2532T-G	112	4941	L1	384	4072M
EM2534T	27	3404	L1	308	4040M
EM2534T-G	112	3781	L1	311	4040M
EM2535T	27	3462	L1	336	4052M
EM2535T-5	158	3462	L1	333	4052M
EM2535T-5G	113	3839	L1	340	4052M
EM2535T-8	147	3548	L1	278	4052M
EM2535T-8G	113	3839	L1	340	4052M
EM2535T-12	27	3532	L1	339	4052M
EM2535T-BG	109	3761	L1	341	4052M
EM2535T-CI	27	3773	L1	240	1050M
EM2535T-G	112	3839	L1	337	4052M
EM2536T	27	4678	L1	463	4084M
EM2536T-G	112	5134	L1	457	4084M
EM2538T	27	4385	L1	329	4046M
EM2538T-8	147	4495	L1	362	4046M
EM2538T-CI	27	4780	L1	402	1046M
EM2538T-G	112	4762	L1	328	4046M
EM2539T	27	4516	L1	392	4064M
EM2539T-5	158	4516	L1	397	4064M
EM2539T-5G	113	4972	L1	400	4064M
EM2539T-8	147	4629	L1	434	4064M
EM2539T-8G	113	4972	L1	390	4064M
EM2539T-12	27	4606	L1	397	4064M
EM2539T-BG	109	4882	L1	324	4064M
EM2539T-CI	27	4923	L1	538	1250M
EM2539T-G	112	4972	L1	389	4064M
EM2540T	27	6327	L1	598	4278M
EM2540T-CI	27	6664	L1	801	A36062M
EM2540T-G	112	7170	L1	606	4278M
EM2542T	27	4776	L1	394	4058M
EM2542T-CI	27	5416	L1	548	1250M
EM2542T-G	112	5232	L1	392	4058M
EM2543T	27	4983	L1	467	4256M
EM2543T-5	158	4983	L1	465	4256M
EM2543T-8	147	5107	L1	467	4256M
EM2543T-12	27	5089	L1	468	4256M
EM2543T-BG	109	5349	L1	497	4256M
EM2543T-CI	27	5433	L1	570	1256M
EM2543T-G	112	5439	L1	473	4256M
EM2543TS-12	27	5089	L1	469	4256M
EM2544T	27	7641	L1	762	4466M
EM2544T-CI	27	8068	L1	722	A36052M
EM2546T	27	6043	L1	458	4250M
EM2547T	27	6274	L1	615	4278M
EM2547T-5	158	6274	L1	620	4278M
EM2547T-8	147	6431	L1	623	4278M
EM2547T-12	27	6406	L1	620	4278M
EM2547T-CI	27	6838	L1	745	A36050M
EM2547T-G	112	7117	L1	616	4278M
EM2547TS-12	27	6406	L1	613	4278M
EM2548T	27	9413	L1	888	4480M
EM2548T-4CI	27	10242	L1	1009	A40052M
EM2549T	28	7926	L1	502	4254M
EM2550T	28	8473	L1	562	4266M
EM2551T	28	7701	L1	744	4462M
EM2551T-5	158	7701	L1	740	4462M
EM2551T-8	147	7892	L1	783	A36056M
EM2551T-12	28	7861	L1	758	4462M
EM2551T-CI	28	8392	L1	762	A36056M
EM2551T-G	112	8543	L1	750	4462M
EM2551TS-12	28	7861	L1	749	4462M
EM2552T-4	28	11403	L1	1067	A40064M
EM2554T-4	28	10633	L1	894	4476M
EM2554T-4CI	28	12687	L1	997	A40048M
EM2555T	28	8959	L1	930	4484M
EM2555T-4	28	8959	L1	896	4476M
EM2555T-4G	112	10158	L1	898	4476M
EM2555T-5	158	8959	L1	943	4484M
EM2555T-8	147	9183	L1	906	4476M
EM2555T-12	28	9139	L1	946	4484M
EM2555T-CI	28	9765	L1	1038	A40052M
EM2555TS-12	28	9139	L1	941	4484M
EM2556T-4	28	13117	L1	980	4464M
EM2557T-4	28	13555	L1	1513	A44062M
EM2558T-4	28	12208	L1	1528	A44062M
EM2558T-5	158	12208	L1	1535	A44062M
EM2558TS-4	28	12208	L1	1519	A44062M
EM2559T-4	28	10991	L1	955	4488M
EM2559T-4CI	28	11978	L1	1118	A40064M
EM2559T-5	158	10991	L1	960	4488M
EM2559TS-4	28	10991	L1	1238	4488M
EM2560T-4	28	15963	L1	1572	A44072M
EM2562T-4	28	14864	L1	1364	A44056M
EM2563T-4	28	15256	L1	1625	A44072M
EM2564T-4	28	20984	L1	1827	A44090M

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
EM2583T-4	28	12551	L1	1455	A44056M
EM3115	26	548	K	28	3513M
EM3115-G	112	703	K	28	3513M
EM3116T	26	711	LS	34	3519M
EM3116T-5	158	711	LS	34	3519M
EM3116T-5G	113	877	L1	38	3519M
EM3116T-8	147	637	L1	34	3519M
EM3116T-8G	113	877	L1	38	3519M
EM3116T-BG	109	877	L1	38	3519M
EM3116T-G	112	877	L1	34	3519M
EM3120T	26	612	L1	33	3518M
EM3120T-G	112	778	L1	34	3518M
EM3154T	26	743	LS	37	3522M
EM3154T-5	158	743	LS	37	3522M
EM3154T-5G	113	909	L1	37	3522M
EM3154T-8	147	665	L1	37	3522M
EM3154T-8G	113	909	L1	37	3522M
EM3154T-BG	109	909	L1	37	3522M
EM3154T-G	112	909	L1	38	3522M
EM3155T	26	718	L1	41	3524M
EM3155T-BG	109	884	L1	43	3524M
EM3155T-G	112	884	L1	41	3524M
EM3156T	26	727	L1	36	3524M
EM3156T-G	112	893	L1	40	3524M
EM3157T	26	796	LS	40	3525M
EM3157T-5	158	796	LS	39	3525M
EM3157T-5G	113	962	L1	43	3525M
EM3157T-8	147	714	L1	40	3525M
EM3157T-8G	113	962	L1	43	3525M
EM3157TA	26	825	L1	44	3528M
EM3157T-BG	109	962	L1	43	3525M
EM3157T-G	112	962	L1	41	3525M
EM3158T	27	727	L1	46	3530M
EM3158T-BG	109	893	L1	51	3530M
EM3158T-G	112	893	L1	46	3530M
EM3207T	26	851	L1	66	3628M
EM3207T-G	112	1048	L1	67	3628M
EM3211T	27	858	LS	69	3630M
EM3211T-5	158	858	LS	69	3630M
EM3211T-5G	113	1055	L1	74	3630M
EM3211T-8	147	769	L1	71	3630M
EM3211T-8G	113	1055	L1	74	3630M
EM3211TA	27	967	L1	65	3631M
EM3211T-BG	109	1055	L1	74	3630M
EM3211T-G	112	1055	L1	72	3630M
EM3212T	27	794	L1	61	3623M
EM3212T-BG	109	991	L1	63	3623M
EM3212T-G	112	991	L1	63	3623M
EM3215T	26	870	L1	79	3636M
EM3215T-G	112	1067	L1	79	3636M
EM3218T	27	940	LS	84	3640M
EM3218T-5	158	940	LS	82	3640M
EM3218T-5G	113	1137	L1	92	3640M
EM3218T-8	147	842	L1	84	3640M
EM3218T-8G	113	1137	L1	92	3640M
EM3218TA	27	1023	L1	84	3640M
EM3218T-BG	109	1137	L1	92	3640M
EM3218T-G	112	1137	L1	84	3640M
EM3219T	27	1259	L1	74	3632M
EM3219T-BG	109	1456	L1	77	3632M
EM3219T-G	112	1456	L1	75	3632M
EM3305T	27	1107	L1	119	3733M
EM3305T-BG	109	1328	L1	110	3733M
EM3305T-G	112	1328	L1	110	3733M
EM3309T	27	1451	L1	139	3744M
EM3309T-BG	109	1672	L1	141	3744M
EM3309T-G	112	1672	L1	141	3744M
EM3311T	27	1381	LS	115	3733M
EM3311T-5	158	1381	LS	114	3733M
EM3311T-5G	113	1602	L1	114	3733M
EM3311T-8	147	1237	L1	114	3733M
EM3311T-8G	113	1602	L1	120	3733M
EM3311T-BG	109	1602	L1	120	3733M
EM3311T-G	112	1602	L1	115	3733M
EM3312T	27	1440	L1	121	3728M
EM3312T-BG	109	1661	L1	121	3728M
EM3312T-G	112	1661	L1	113	3728M
EM3313T	27	1672	LS	128	3739M
EM3313T-5	158	1672	LS	123	3739M
EM3313T-5G	113	1893	L1	132	3739M
EM3313T-8	147	1496	L1	129	3739M
EM3313T-8G	113	1893	L1	132	3739M
EM3313T-BG	109	1893	L1	132	3739M
EM3313T-G	112	1893	L1	127	3739M
EM3314T	27	2045	L1	124	3734M
EM3314T-BG	109	2266	L1	131	3734M
EM3314T-G	112	2266	L1	126	3734M
EM3538	17	660	LS	29	3513M
EM3545	18	641	K	37	3516M
EM3545-G	110	796	K	32	3516M
EM3546	18	738	LS	35	3519M
EM3546T	18	706	LS	35	3519M
EM3546T-5	149	706	LS	34	3519M
EM3546T-5G	111	872	L1	35	3519M
EM3546T-8	146	727	L1	35	3519M
EM3546T-BG	107	872	L1	38	3519M
EM3546T-G	110	872	L1	36	3519M
EM3550	18	679	K	35	3520M
EM3550T	18	726	L1	36	3520M
EM3550T-5	149	726	L1	36	3520M
EM3550T-G	110	892	L1	36	3520M
EM3554	18	820	LS	40	3526M
EM3554T	18	734	LS	41	3526M
EM3554T-5	149	734	LS	42	3526M
EM3554T-5G	111	900	L1	42	3526M
EM3554T-8	146	756	L1	43	3526M
EM3554T-BG	107	900	L1	41	3526M
EM3554T-G	110	900	L1	42	3526M
EM3555	18	747	K	42	3526M
EM3555T	18	795	L1	43	3526M
EM3555T-5	149	795	L1	43	3526M
EM3555T-BG	107	961	L1	41	3526M
EM3555T-G	110	961	L1	46	3526M
EM3556	18	841	K	42	3526M
EM3556T	18	846	L1	42	3526M
EM3556T-5	149	846	L1	40	3526M
EM3556T-G	110	1012	L1	43	3526M
EM3558	18	867	LS	46	3528M
EM3558T	18	761	LS	45	3528M
EM3558T-5	149	761	LS	46	3528M

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
EM3558T-5G	111	927	L1	46	3528M
EM3558T-8	146	783	L1	46	3528M
EM3558T-BG	107	927	L1	45	3528M
EM3558T-G	110	927	L1	42	3528M
EM3559T	18	871	L1	49	3532M
EM3559T-5	149	892	L1	60	3532M
EM3559T-BG	107	1037	L1	50	3532M
EM3559T-G	110	1037	L1	53	3532M
EM3581T	18	913	L1	51	0519M
EM3582T	18	1023	L1	56	0524M
EM3583T	18	966	L1	52	0520M
EM3584T	18	947	L1	57	0526M
EM3586T	18	1014	L1	59	0526M
EM3587T	18	993	L1	58	0527M
EM3607T	18	989	L1	73	3632M
EM3607T-5	149	989	L1	73	3632M
EM3607T-G	110	1186	L1	76	3632M
EM3610T	18	882	L1	50	3532M
EM3610T-G	110	1079	L1	57	3532M
EM3611T	18	840	LS	73	3631M
EM3611T-5	149	840	LS	73	3631M
EM3611T-5G	111	1037	L1	76	3631M
EM3611T-8	146	862	L1	72	3631M
EM3611T-BG	107	1037	L1	70	3631M
EM3611T-G	110	1037	L1	74	3631M
EM3613T	18	978	L1	75	3630M
EM3613T-5	149	978	L1	75	3630M
EM3613T-BG	107	1175	L1	74	3630M
EM3613T-G	110	1175	L1	76	3630M
EM3614T	18	1037	L1	93	3644M
EM3614T-5	149	1037	L1	90	3644M
EM3614T-G	110	1234	L1	94	3644M
EM3615T	18	919	LS	93	3642M
EM3615T-5	149	919	LS	89	3642M
EM3615T-5G	111	1116	L1	84	3642M
EM3615T-BG	107	1116	L1	93	3642M
EM3615T-G	110	1116	L1	89	3642M
EM3616T	19	1290	L1	98	3646M
EM3616T-5	149	1290	L1	98	3646M
EM3660T	18	1096	L1	84	0619M
EM3660T-8	146	1123	L1	82	0619M
EM3661T	18	1127	L1	97	0632M
EM3661T-5	149	1127	L1	97	0632M
EM3661T-8	146	1155	L1	96	0632M
EM3663T	18	1349	L1	88	0624M
EM3663T-8	146	1382	L1	88	0624M
EM3664T	18	1237	L1	109	0642M
EM3665T	18	1153	L1	107	0641M
EM3665T-5	149	1153	L1	108	0641M
EM3665T-8	146	1156	L1	108	0641M
EM3665T-8G	111	1350	L1	119	0641M
EM3667T	18	1217	L1	93	0630M
EM3704T	18	1349	L1	134	3739M
EM3704T-5	149	1349	L1	129	3739M
EM3704T-BG	107	1570	L1	132	3739M
EM3704T-G	110	1570	L1	135	3739M
EM3708T	18	1524	L1	154	3748M
EM3708T-5	149	1524	L1	154	3748M
EM3708T-BG	107	1745	L1	154	3748M
EM3708T-G	110	1745	L1	154	3748M
EM3709T	19	1465	L1	116	3728M
EM3709T-5	149	1465	L1	115	3728M
EM3709T-BG	107	1686	L1	121	3728M
EM3709T-G	110	1686	L1	133	3728M
EM3710T	19	1326	LS	128	3736M
EM3710T-5	149	1326	LS	123	3736M
EM3710T-5G	111	1547	L1	126	3736M
EM3710T-BG	107	1547	L1	127	3736M
EM3710T-G	110	1547	L1	129	3736M
EM3711T	19	1485	L1	120	3729M
EM3711T-5	149	1485	L1	119	3729M
EM3711T-BG	107	1706	L1	118	3729M
EM3711T-G	110	1706	L1	118	3729M
EM3713T	19	2095	L1	169	3752M
EM3713T-5	150	2095	L1	169	3752M
EM3714T	19	1497	LS	162	3752M
EM3714T-5	149	1497	LS	165	3752M
EM3714T-5G	111	1718	L1	165	3752M
EM3714T-BG	107	1718	L1	165	3752M
EM3714T-G	110	1718	L1	156	3752M
EM3764T	18	1541	L1	173	0735M
EM3768T	18	1788	L1	195	0746M
EM3769T	19	1561	L1	165	0726M
EM3769T-8	146	1599	L1	155	0724M
EM3770T	19	1504	L1	170	0735M
EM3770T-5	149	1504	L1	170	0735M
EM3770T-8	146	1541	L1	170	0735M
EM3770T-8G	111	1725	L1	170	0735M
EM3771T	19	1830	L1	182	0729M
EM3771T-8	146	1875	L1	182	0729M
EM3774T	19	1687	L1	191	0748M
EM3774T-5	149	1687	L1	185	0748M
EM3774T-8	146	1730	L1	189	0748M
EM3774T-8G	111	1908	L1	231	0748M
EM4100T	19	3880	L1	391	1046M
EM4100T-BG	107	4179	L1	372	1046M
EM4100T-G	110	4257	L1	369	1046M
EM4102T	19	5166	L1	399	1054M
EM4102T-BG	107	5465	L1	406	1054M
EM4102T-G	110	5543	L1	393	1054M
EM4103T	19	3657	LS	436	1046M
EM4103T-5	150	3657	LS	380	1052M
EM4103T-5G	111	4034	L1	364	1052M
EM4103T-8	146	3767	L1	382	1046M
EM4103T-12	19	3742	L1	600	1046M
EM4103T-BG	107	3956	L1	420	1046M
EM4103T-G	110	4034	L1	380	1046M
EM4104T	19	4338	LS	408	1056M
EM4104T-5	150	4338	LS	408	1056M
EM4104T-5G	111	4715	L1	423	1056M
EM4104T-8	146	4470	L1	413	1056M
EM4104T-12	19	4356	L1	425	1056M
EM4104T-BG	107	4637	L1	437	1056M
EM4104T-G	110	4715	L1	410	1056M
EM4106T	19	2766	L1	259	0936M
EM4106T-5	150	2766	L1	252	0932M
EM4106T-8	146	2834	L1	242	0932M
EM4106T-G	110	3059	L1	261	0936M
EM4107T	19	3609	L1	327	0946M
EM4107T-5	150	3609	L1	335	0950M

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
EM4107T-8	146	3697	L1	305	0938M
EM4107T-G	110	3986	L1	323	0946M
EM4108T	19	4288	L1	347	0950M
EM4108T-5	150	4288	L1	331	0948M
EM4108T-8	146	4395	L1	324	0948M
EM4108T-G	110	4665	L1	336	0950M
EM4109T	19	5877	L1	350	1240M
EM4109T-5	150	5877	L1	522	1240M
EM4109T-G	110	6333	L1	532	1240M
EM4110T	19	5673	LS	425	1254M
EM4110T-5	150	5673	LS	575	1254M
EM4110T-5G	111	6129	L1	576	1254M
EM4110T-8	146	5845	L1	576	1254M
EM4110T-12	19	5808	L1	601	1260M
EM4110T-BG	107	6039	L1	578	1254M
EM4110T-G	110	6129	L1	596	1254M
EM4111T	19	5845	L1	445	1072M
EM4111T-BG	107	6211	L1	475	1072M
EM4111T-G	110	6301	L1	507	1072M
EM4114T	19	6429	L1	578	1252M
EM4114T-5	150	6429	L1	574	1252M
EM4114T-G	110	6885	L1	584	1252M
EM4115T	19	6199	LS	640	1272M
EM4115T-5	150	6199	LS	623	1272M
EM4115T-5G	111	6655	L1	644	1272M
EM4115T-8	146	6387	L1	621	1266M
EM4115T-12	19	6338	L1	652	1272M
EM4115T-BG	107	6565	L1	641	1272M
EM4115T-G	110	6655	L1	648	1272M
EM4115TS	19	6281	L1	639	1272M
EM4117T	19	6753	L1	604	1264M
EM4117T-G	110	7209	L1	604	1264M
EM4118T	19	3226	L1	305	0950M
EM4308T	19	8414	L1	899	A36062M
EM4308T-G	110	9257	L1	883	A36062M
EM4310T	19	9032	L1	810	A36056M
EM4310T-G	111	9875	L1	900	A36056M
EM4312T	19	10167	L1	902	A36062M
EM4312T-G	110	11010	L1	910	A36062M
EM4313T	19	10507	L1	980	A36068M
EM4313T-G	111	11350	L1	966	A36068M
EM4314T	19	8919	LS	912	A3662M
EM4314T-5	150	8919	LS	919	A36062M
EM4314T-12	19	9136	L1	850	A36062M
EM4314T-G	111	9763	L1	907	A36062M
EM4314TS	19	8938	L1	907	A36062M
EM4316T	19	10429	LS	955	A36068M
EM4316T-5	150	10429	LS	958	A36070M
EM4316T-12	19	10695	L1	955	A36070M
EM4316T-G	111	11273	L1	956	A36070M
EM4316TS	19	10451	L1	946	A36070M
EM4400T	20	12952	LS	1203	A40064M
EM4400T-5	150	12952	LS	1208	A40064M
EM4400T-12	20	12954	L1	1211	A40064M
EM4400T-G	111	14152	L1	1214	A40064M
EM4400TS	20	12978	L1	1206	A40064M
EM4402T-4	20	13434	L1	1187	A40060M
EM4403T	19	12341	L1	1187	A40064M
EM4404T	19	14371	L1	1229	A4072M
EM4406T-4	20	18443	LS	1826	A4488M
EM4406T-5	150	18443	LS	2151	A4488M
EM4406T-5E	150	18443	LS	1770	A44078M
EM4406TR-4	20	19708	L1	1826	A4488M
EM4406TS-4	20	18481	L1	2071	A4488M
EM4407T-4	20	23119	L1	2497	A44120M
EM4407T-4E	20	23119	L1	2308	A44106M
EM4407TR-4	20	23184	L1	2531	A44120M
EM4407TS-4	20	23119	L1	2487	A44120M
EM4409T-4	20	17345	L1	1828	A44064M
EM4410T-4	20	16033	LS	1969	A44076M
EM4410T-5	150	16033	LS	2041	A44076M
EM4410T-5E	150	16033	LS	1626	A44062M
EM4410TR-4	20	17261	L1	1988	A44076M
EM4410TS-4	20	16066	L1	2001	A44076M
EM4411T-4	20	20405	L1	2073	A44090M
EM4412T-4	20	16605	L1	1901	A4468M
EM4413T-4	20	19538	L1	1995	A4478M
EM4416T-4	20	23416	L1	2355	A44104M
EM4906T-4	20	18443	LS	2169	A4488M
EM4906T-5	150	18443	L1	1826	A4488M
EM4907T-4	20	23119	L1	2517	A44120M
EM4910T-5	150	16033	L1	2041	A4476M
EM4910TS-4	20	16066	L1	2080	A4476M
EM4911T-4	20	20405	L1	1874	A44090M
EM4912T-4	20	16605	L1	1539	A4468M
EM4916T-4	20	23372	L1	2000	A44104M
EM7013T-I	81	1298	SD	2330	3516M
EM7013T-I-5	81, 161	1298	SD	3017	3516M
EM7014T	75	1266	SD	44	3519M
EM7014T-5	79, 160	1266	SD	45	3519M
EM7014T-I	81	1277	SD	55	3519M
EM7014T-I-5	81, 161	1277	SD	51	3519M
EM7018T	75	1158	SD	45	3520M
EM7018T-5	79, 160	1158	SD	45	3520M
EM7018T-I	81	1288	SD	54	3520M
EM7020T	75	1949	SD	85	3632M
EM7020T-I	81	1949	SD	108	3632M
EM7026T	75	1484	L1	73	3622M
EM7026T-I	81	1613	SD	91	3622M
EM7026T-I-5	81, 161	1613	SD	91	3628M
EM7032T	75	1416	L1	52	3526M
EM7032T-I	81	1416	SD	62	3526M
EM7034T	75	1311	L1	51	3526M
EM7034T-5	79, 160	1311	LS	51	3526M
EM7034T-I	81	1323	SD	61	3526M
EM7036T	75	2188	L1	170	3739M
EM7036T-I	81	2188	SD	185	3739M
EM7037T	75	1431	L1	56	3528M
EM7037T-5	79, 160	1431	LS	54	3528M
EM7037T-I	81	1442	SD	65	3530M
EM7037T-I-5	81, 161	1442	SD	59	3528M
EM7040T	75	2868	L1	170	3748M
EM7040T-I	81	2868	SD	170	3748M
EM7041T	75	2008	L1	102	3644M
EM7041T-I	81	2008	SD	119	3644M
EM7042T	75	1520	L1	84	3631M
EM7042T-5	79, 160	1520	L1	84	3631M
EM7042T-I	81	1521	SD	107	3631M
EM7042T-I-5	81, 161	1521	SD	106	3631M
EM7044T	75	1883	L1	105	3642M

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
EM7044T-5	79, 160	1883	L1	105	3642M
EM7044T-I	81	1886	SD	122	3643M
EM7044T-I-5	81, 161	1886	SD	126	3643M
EM7045T	75	2407	L1	166	3728M
EM7045T-I	81	2407	SD	166	3728M
EM7045T-I-5	81, 161	2407	SD	149	3728M
EM7047T	75	2500	L1	161	3736M
EM7047T-5	79, 160	2500	L1	161	3736M
EM7047T-I	81	2325	SD	161	3736M
EM7047T-I-5	81, 161	2325	SD	161	3736M
EM7048T	75	3396	L1	382	0950M
EM7048T-I	81	3396	SD	389	0950M
EM7053T	75	3201	L1	229	0930M
EM7053T-I	81	3201	SD	352	0934M
EM7053T-I-5	81, 161	3201	SD	349	0934M
EM7054T	75	3751	L1	377	0942M
EM7054T-5	79, 160	4291	LS	364	0942M
EM7054T-C	75	3843	L1	378	0942M
EM7054T-I	81	3766	SD	375	0942M
EM7054T-I-5	81, 161	3766	SD	374	0942M
EM7056T	76	4860	L1	396	0952M
EM7056T-5	79, 160	4860	LS	396	0952M
EM7056T-C	76	4962	L1	399	0952M
EM7056T-I	82	4714	SD	399	0952M
EM7056T-I-5	82, 161	4714	SD	397	0952M
EM7057T	75	6581	L1	569	1042M
EM7057T-I	81	6581	SD	529	1042M
EM7058T	76	5896	L1	537	1050M
EM7058T-5	79, 160	5896	LS	534	1050M
EM7058T-C	76	6011	L1	595	1050M
EM7058T-I	82	5918	SD	538	1050M
EM7058T-I-5	82, 161	5918	SD	494	1050M
EM7059T	76	4105	L1	361	0936M
EM7059T-I	82	4105	SD	409	0950M
EM7059T-I-5	82, 161	4105	SD	400	0950M
EM7060T	76	7188	L1	689	1056M
EM7060T-5	79, 160	7188	L1	553	1056M
EM7060T-C	76	7307	L1	563	1052M
EM7060T-I	82	7216	SD	579	1056M
EM7060T-I-5	82, 161	7216	SD	573	1056M
EM7062T	76	9633	L1	724	1254M
EM7062T-5	79, 160	9633	LS	729	1254M
EM7062T-C	76	9763	L1	748	1254M
EM7062T-I	82	9670	SD	756	1254M
EM7062T-I-5	82, 161	9670	SD	745	1254M
EM7063T	76	5463	L1	507	1038M
EM7063T-I	82	5463	SD	552	1038M
EM7063T-I-5	82, 161	5463	SD	445	1048M
EM7064T	76	11182	L1	789	1272M
EM7064T-C	76	11336	L1	795	1272M
EM7064T-I	82	11249	SD	846	1276M
EM7064T-I-5	82, 161	11249	SD	841	1276M
EM7065T	75	4083	L1	403	0956M
EM7065T-I	81	4083	SD	400	0956M
EM7066T	76	12508	L1	1016	A36062M
EM7066T-C	76	12672	L1	1026	A36062M
EM7066T-I	82	12719	SD	1030	A36062M
EM7066T-I-5	82, 161	12719	SD	1015	A36062M
EM7067T	76	8565	L1	663	1240M
EM7067T-I	82	8565	SD	684	1252M
EM7067T-I-5	82, 161	8565	SD	745	1252M
EM7068T	76	15134	L1	1063	A36068M
EM7068T-I	82	13240	SD	1055	A36068M
EM7068T-I-5	82, 161	13240	SD	1064	A36068M
EM7070T	75	2793	L1	189	3752M
EM7071T	75	1186	L1	52	3526M
EM7071T-5	79, 160	1186	L1	52	3526M
EM7071T-I	81	1408	SD	62	3526M
EM7071T-I-5	81, 161	1408	SD	50	3526M
EM7072T	75	1745	L1	93	3630M
EM7072T-5	79, 160	1745	L1	94	3630M
EM7072T-I	81	2003	SD	114	3634M
EM7072T-I-5	81, 161	2003	SD	91	3634M
EM7073T	75	2289	L1	108	3646M
EM7074T	75	2713	L1	175	3729M
EM7075T	75	1404	L1	59	3532M
EM7079T	76	6757	L1	539	1054M
EM7079T-I	82	6757	SD	558	1056M
EM7080T	76	9321	L1	763	1264M
EM7080T-I	82	9321	SD	782	1264M
EM7081T	76	10967	L1	450	1252M
EM7081T-I	82	10967	SD	740	1264M
EM7081T-I-5	82, 161	10967	SD	766	1264M
EM7082T	76	8449	L1	737	1260M
EM7082T-I	82	8449	SD	762	1260M
EM7083T	76	6421	L1	528	1042M
EM7083T-I	82	6421	SD	565	1046M
EM7083T-I-5	82, 161	6421	SD	604	1046M
EM7084T	76	10803	L1	1029	A36064M
EM7084T-I	82	10803	SD	1026	A36064M
EM7085T	76	12193	L1	1037	A36064M
EM7085T-I	82	12193	SD	1003	A36064M
EM7086T	76	14548	L1	1417	A40072M
EM7086T-I	82	14246	SD	1418	A40072M
EM7087T	76	16276	L1	1428	A40072M
EM7087T-I	82	16276	SD	1411	A40072M
EM7088T-I	82	19008	SD	1866	
EM7089T-I-4	82	21243	SD	2411	
EM7090T	76	17576	L1	1449	A40072M
EM7090T-I	82	16981	SD	1437	A40072M
EM7090T-I-5	82, 161	16981	SD	1446	A40072M
EM7114T	75	1439	L1	78	0519M
EM7114T-C	75	1444	L1	78	0519M
EM7120T	75	2167	L1	136	0630M
EM7126T	75	1995	L1	123	0619M
EM7134T	75	1461	L1	84	0526M
EM7134T-C	75	1478	L1	62	0526M
EM7137T	75	1499	L1	86	0527M
EM7137T-C	75	1519	L1	92	0527M
EM7142T	75	1597	L1	138	0632M
EM7142T-C	75	1643	L1	138	0632M
EM7144T	75	1896	L1	152	0641M
EM7144T-C	75	1981	L1	146	0641M
EM7145T	75	2698	L1	154	0726M
EM7147T	75	2404	L1	225	0735M
EM7147T-C	75	2477	L1	225	0735M
EM7170T	75	3308	LS	249	0748M
EM7170T-5	79, 160	3525	L1	249	0748M
EM7170T-C	75	3442	L1	249	0748M
EM7170T-I	81	3138	SD	252	0750M

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
EM7170T-I-5	81, 161	3138	SD	252	0750M
EM7172T	75	2339	L1	131	0624M
EM7174T	75	2831	L1	235	0729M
EM7174T-I	81	2831	SD	235	0729M
EM7174T-I-5	81, 161	2831	SD	212	0729M
EM7310T-I	82	11779	SD	984	A36048M
EM7313T-I	82	13254	SD	993	A36052M
EM7536T-I	80	2264	SD	225	0735M
EM7540T-I	80	2969	SD	234	A21040M
EM7542T-I	80	1576	SD	141	0632M
EM7544T-I	80	1952	SD	160	A18034M
EM7547T-I	80	2407	SD	225	0735M
EM7548T-I	80	3515	SD	397	0954M
EM7554T-I	80	3897	SD	375	0942M
EM7556T-I	80	4879	SD	403	A25056M
EM7558T-I	80	6124	SD	526	1046M
EM7559T-I	80	4249	SD	394	A25050M
EM7560T-I	80	7480	SD	499	A28054M
EM7562T-I	80	10008	SD	737	1256M
EM7564T-I	80	11644	SD	818	A32068M
EM7565T-I	80	4226	SD	395	A25054M
EM7566T-I	80	13164	SD	1023	A36062M
EM7568T-I	80	13703	SD	1072	A36068M
EM7572T-I	80	2072	SD	156	A18026M
EM7574T-I	80	2930	SD	215	A21036M
EM7585T-I	80	12619	SD	1038	A36064M
EM7587T-I	80	16847	SD	1368	A40064M
EM7590T-I	80	17575	SD	1448	A40072M
EM7596T-I	80	23711	SD	2038	A44078M
EM7599T-I	80	20869	SD	1854	A44062M
EM7600T-I	80	21217	SD	1881	A44062M
EM7670T-I	80	3250	SD	241	A21044M
EM8003T	48	1150	SD	58	0519M
EM8004T	48	1186	SD	64	0526M
EM8005T	48	1209	SD	65	0527M
EM8006T	48	1440	SD	108	0632M
EM8007T	48	1579	SD	119	0641M
EM8008T	48	1840	SD	170	0735M
EM8009T	48	2373	SD	231	0748M
EM8010T	48	3237	SD	264	0944M
EM25254T-4	28	17108	L1	2036	A44100M
EM25694T-4	28	26089	L1	2226	A44112M
EM30003	25	310	K	18	3413M
EM30006	25	314	K	19	3413M
EM30009	25	332	K	18	3416M
EM30010	25	417	K	22	3424M
EM31101	25	500	K	19	3416M
EM31104	25	318	K	20	3416M
EM31105	25	524	K	21	3421M
EM31107	25	332	K	19	3416M
EM31108	25	361	K	22	3424M
EM31109	25	576	K	22	3428M
EM31111	25	390	K	20	3416M
EM31112	25	404	K	26	3516M
EM31115	25	581	K	28	3420M
EM31116	25	455	K	28	3520M
EM31120	25	505	K	29	3518M
EM31153	25	621	K	31	3524M
EM31154	25	526	K	34	3526M
EM31155	25	588	K	31	3524M
EM31156	25	660	K	36	3526M
EM31157	25	548	K	38	3528M
EM31158	25	606	K	41	3532M
EM31159	25	750	K	41	3540M
EM44156T-4	20	23372	L1	2571	A44120M
EM44206T-4	20	28836	L1	3017	A44160M
EM49156T-4	20	23372	L1	2000	A4412M
EM49206T-4	20	28836	L1	3017	A4416M
EM74124T-4	76	20539	L1	1900	A44062M
EM74124T-I-4	82	19841	SD	1900	
EM74154T-4	76	22954	L1	2455	A44106M
EM74154T-I-4	82	22174	SD	2455	
EM74204T-4	76	32808	L1	2993	A44144M
EM74204T-I-4	82	31693	SD	2993	
ENC00NV-A2	182	1442	E8	1	
ENC00NV	200	1932	E8	2	
ENC00NV-B1	182	1442	E8	2	
ENC00NV-D1	182	1622	E8	4	
ENC00NV-D2	182	1622	E8	4	
ENC01BC-B1	182	1442	E8	3	
ENC01BC-D1	182	1622	E8	4	
ENC01BC-D2	182	1622	E8	4	
ENC01NV-A2	182	1442	E8	1	
ENC01NV-B2	182	1442	E8	2	
ENC01NV-D1	182	1622	E8	4	
ENC01NV-D2	182	1622	E8	4	
ENC02BC-A2	182	1442	E8	1	
ENC02BC-B2	182	1631	E8	2	
ENC02BC-D1	182	1622	E8	4	
ENC02BC-D2	182	1622	E8	4	
ENCP3580T-4	32	959	SD	55	0520M
ENCP3581T-4	32	1004	SD	56	0524M
ENCP83580T-4	39	994	SD	56	0520M
ENCP83581T-4	39	1087	SD	60	0524M
ERHM3162TA	122	1138	L1	60	3540M
ERM3158TA	122	797	L1	48	3530M
EWDM3546T	58	927	WD	39	3524M
EWDM3554T	58	1019	WD	49	3533M
EWDM3558T	58	1196	WD	46	3528M
EWDM3611T	58	1493	WD	73	3631M
EWDM3615T	58	1699	WD	90	3642M
EWDM3710T	58	2127	WD	129	3736M
EWDM3714T	58	2317	WD	165	3752M
EWDM23933T	58	4997	WD	226	3942M
EWDM23934T	58	5823	WD	255	3952M
FBRK115230	139	131	A8	1	
FBRK230460	139	144	A8	1	
FCD34	268	94	A8	1	
FCD35	268	132	A8	1	
FCD36	268	115	A8	2	
FCD37	268	139	A8	3	
FCD39	268	186	A8	3	
FCD40	268	199	A8	3	
FCD42	268	213	A8	5	
FFC05	269	186	A8	6	
FFC06	269	199	A8	10	
FFC07WB	269	295	A8	19	
FFC09	269	221	A8	20	
FFC09WB	269	405	A8	28	
FFC18**	269	289	A8	90	

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
FFC19**	269	352	A8	120	
FL13HK	263	110	A8	2	
FL15HK	263	118	A8	6	
FL18HK	263	123	A8	3	
FL21HK	263	138	A8	3	
FL24HK	263	196	A8	4	
FL26HK	263	211	A8	6	
FL30HK	263	219	A8	6	
FL32HK	263	227	A8	12	
FL38HK	263	235	A8	12	
FLT3210-250	199	791	A8	2	
FLT4280	199	791	A8	9	
FLT6320-400	199	791	A8	14	
FLT8500	199	965	A8	9	
FM2513T-8	148	1602	L1	155	3748M
FM2515T-8	148	2062	L1	197	3762M
FM3112-8	148	389	K	25	3420M
FM3311T-8	148	866	L1	96	3643M
FM3313T-8	148	1060	L1	129	3733M
FVB3180	199	1491	A8	18	
FVB3210	199	1491	A8	25	
FVB3250	199	1491	A8	19	
FVB4280	199	1823	A8	44	
FVB6320	199	2123	A8	46	
FVB6400	199	2323	A8	59	
FVB8500	199	2750	A8	93	
FVB95010	199	4738	A8	171	
GC3320	221	701	DS	15	2524C
GC3321	221	701	DS	15	2524C
GC3322	221	701	DS	15	2524C
GC3324	221	701	DS	15	2524C
GC3325	227	701	DS	26	3324S
GC3330	227	701	DS	26	3324S
GC24003	212	406	DS	7	2412C
GC24208	214	540	DS	10	2412C
GC24302	217	503	DS	10	2418C
GC24304	217	503	DS	10	2416C
GC24305	217	503	DS	10	2416C
GC24306	217	503	DS	10	2418C
GC24307	221	537	DS	11	2416C
GC24308	221	537	DS	11	2416C
GC24309	221	537	DS	11	2416C
GC24310	217	503	DS	10	2418C
GC24311	221	537	DS	11	2416C
GC24312	215	690	DS	12	2416C
GC24313	217	503	DS	13	2424C
GC24314	215	690	DS	14	2424C
GC24316	225	540	DS	13	2424C
GC24318	225	540	DS	13	2424C
GC24320	225	540	DS	13	2424C
GC24322	225	540	DS	13	2424C
GC25004	221	635	DS	16	2520C
GC25005	227	643	DS	16	2524S
GC25006	221	635	DS	16	2520C
GC25007	221	635	DS	16	2520C
GC25008	221	635	DS	16	2520C
GC25009	221	635	DS	17	2524S
GC25010	227	643	DS	16	2524S
GC25011	221	635	DS	15	2524S
GC25012	221	635	DS	15	2524S

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
GC25014	221	635	DS	15	2524S
GC25020	227	643	DS	16	2524S
GC25060	219	881	DS	20	2520C
GC25080	219	881	DS	15	2520C
GC25120	219	881	DS	20	2520C
GC25190	219	881	DS	21	2520C
GC25280	219	881	DS	20	2520C
GC256015	227	643	DS	16	
GCF2X01AA	260	459	GB	17	
GCF2X02BB	260	553	GB	28	
GCF3X01AA	260	459	GB	17	
GCF3X02BB	260	553	GB	28	
GCF4X01AA	260	459	GB	17	
GCF4X02BB	260	553	GB	29	
GCF5X01AA	260	459	GB	19	
GCF5X02AB	260	553	GB	29	
GCF5X02BB	260	553	GB	28	
GCP3305	238	881	DS	24	3316C
GCP3310	238	849	DS	24	3316C
GCP3315	238	849	DS	24	3316C
GCP24002	238	896	DS	15	2416C
GCP24004	238	896	DS	15	2416C
GCP24005	232	542	DS	10	2416C
GCP24007	232	542	DS	10	2416C
GCP24010	232	542	DS	10	2416C
GCP24013	232	542	DS	10	2416C
GCP24017	232	542	DS	10	2416C
GCP24020	238	896	DS	15	2424C
GCP24022	238	896	DS	15	2424C
GCP24026	232	542	DS	10	2416C
GCP24037	232	561	DS	10	2416C
GCP24050	232	561	DS	10	2416C
GCP24072	232	561	DS	10	2416C
GCP24100	232	561	DS	10	2416C
GCP24114	232	567	DS	10	2412C
GCP24122	232	567	DS	10	2416C
GCP24124	232	561	DS	10	2416C
GCP24134	232	561	DS	10	2424C
GCP24136	232	540	DS	10	2424C
GCP24138	232	540	DS	10	2424C
GCP24140	232	540	DS	10	2424C
GCP24142	232	540	DS	10	2424C
GCP24186	232	567	DS	10	2412C
GCP24232	235	647	DS	14	2424C
GCP24234	235	617	DS	14	2424C
GCP24362	232	567	DS	10	2412C
GCP24369	232	595	DS	10	2408C
GCP24702	232	595	DS	10	2408C
GCP25002	238	870	DS	18	2524S
GCP25004	238	870	DS	18	2524S
GCP25006	238	840	DS	18	2524S
GCP25008	238	840	DS	17	2524S
GCP25010	238	840	DS	18	2524S
GCP25052	235	617	DS	14	2524S
GCP25054	235	617	DS	14	2524S
GCP25056	235	587	DS	14	2524S
GCP25058	235	587	DS	14	2524S
GCP25060	235	587	DS	14	2524S
GCP25062	235	587	DS	14	2524S
GCP25082	238	881	DS	20	2524C

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
GCP25102	238	881	DS	20	2524C
GCP25216	238	896	DS	13	2520C
GCP25658	238	881	DS	20	2524C
GF10G21AG	245	691	GB	30	
GF20G21AG	246	691	GB	35	
GF20G21BG	247	691	GB	30	
GF25G21AG	247	691	GB	40	
GF30G21AG	247	691	GB	30	
GF0513AG	245	504	GB	20	
GF0513AJ	245	504	GB	20	
GF0515AG	245	539	GB	25	
GF0515AH	245	571	GB	25	
GF0515BG	245	539	GB	25	
GF0518AG	245	552	GB	30	
GF0518BG	245	552	GB	30	
GF0521BG	245	691	GB	35	
GF0521BJ	245	691	GB	35	
GF0524CG	245	815	GB	49	
GF0526CG	245	945	GB	59	
GF0530CG	245	1285	GB	68	
GF0538DH	245	1798	GB	123	
GF1013AG	245	504	GB	20	
GF1013AJ	245	504	GB	20	
GF1015AH	245	571	GB	25	
GF1015BG	245	539	GB	20	
GF1018AG	245	552	GB	30	
GF1018AH	245	585	GB	29	
GF1018AJ	245	552	GB	30	
GF1018BG	245	552	GB	30	
GF1021AG	245	691	GB	35	
GF1021AH	246	728	GB	35	
GF1021BG	246	691	GB	35	
GF1024BG	246	815	GB	40	
GF1026BG	246	945	GB	52	
GF1026CG	246	945	GB	60	
GF1030CG	246	1285	GB	72	
GF1032CG	246	1393	GB	97	
GF1038DG	246	1701	GB	126	
GF1513AG	246	504	GB	20	
GF1513AH	246	533	GB	20	
GF1513AJ	246	504	GB	20	
GF1515AG	246	539	GB	25	
GF1515AH	246	571	GB	25	
GF1518AG	246	552	GB	30	
GF1518AH	246	585	GB	30	
GF1518AJ	246	552	GB	30	
GF1521AG	246	691	GB	35	
GF1521AH	246	728	GB	35	
GF1521AJ	246	691	GB	35	
GF1521BG	246	691	GB	35	
GF1524AG	246	815	GB	40	
GF1524AJ	246	815	GB	40	
GF1524BG	246	815	GB	40	
GF1526BG	246	945	GB	55	
GF1530CG	246	1285	GB	68	
GF1532BG	246	1393	GB	87	
GF1532CG	246	1393	GB	97	
GF1538CG	246	1701	GB	119	
GF2013AG	246	504	GB	20	
GF2013AH	246	533	GB	20	
GF2015AG	246	539	GB	25	
GF2015AH	246	571	GB	25	
GF2018AG	246	552	GB	30	
GF2018AH	246	585	GB	30	
GF2018AJ	246	552	GB	30	
GF2021AG	246	691	GB	35	
GF2021AH	247	728	GB	35	
GF2021AJ	246	691	GB	35	
GF2021BG	247	691	GB	35	
GF2024AG	247	815	GB	40	
GF2024BG	247	815	GB	40	
GF2026AG	247	945	GB	55	
GF2026BG	247	945	GB	52	
GF2030BG	247	1285	GB	68	
GF2030CG	247	1285	GB	68	
GF2030CJ	247	1285	GB	72	
GF2032BG	247	1393	GB	87	
GF2032CG	247	1393	GB	97	
GF2038CG	247	1701	GB	120	
GF2513AG	247	504	GB	20	
GF2515AG	247	539	GB	25	
GF2518AG	247	552	GB	28	
GF2518AJ	247	552	GB	30	
GF2521AG	247	691	GB	35	
GF2521AJ	247	691	GB	35	
GF2524AG	247	815	GB	40	
GF2524BG	247	815	GB	40	
GF2526BG	247	945	GB	52	
GF2530AG	247	1285	GB	68	
GF2530BG	247	1285	GB	68	
GF2532BG	247	1393	GB	91	
GF2538CH	247	1798	GB	126	
GF3013AG	247	504	GB	20	
GF3013AH	247	533	GB	20	
GF3015AG	247	539	GB	25	
GF3015AH	247	571	GB	25	
GF3018AH	247	585	GB	30	
GF3018AJ	247	552	GB	30	
GF3021AG	247	691	GB	35	
GF3021AH	247	728	GB	35	
GF3021AJ	247	691	GB	35	
GF3024AG	247	815	GB	40	
GF3024AJ	247	815	GB	40	
GF3024BG	247	815	GB	40	
GF3026AG	247	945	GB	52	
GF3026BG	247	945	GB	55	
GF3030AG	247	1285	GB	68	
GF3030AJ	247	1285	GB	68	
GF3030BG	247	1285	GB	65	
GF3032BG	247	1393	GB	91	
GF3038CG	247	1701	GB	126	
GF4013AG	248	504	GB	20	
GF4013AH	248	533	GB	20	
GF4015AG	248	539	GB	25	
GF4015AJ	248	539	GB	25	
GF4018AG	248	552	GB	30	
GF4018AJ	248	552	GB	30	
GF4021AG	248	691	GB	35	
GF4021AJ	248	691	GB	35	
GF4024AG	248	815	GB	40	

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
GF4024AH	248	861	GB	40	
GF4024AJ	248	815	GB	40	
GF4026AG	248	945	GB	55	
GF4026AJ	248	945	GB	52	
GF4026BG	248	945	GB	55	
GF4030AG	248	1285	GB	68	
GF4030BG	248	1285	GB	68	
GF4032BG	248	1393	GB	88	
GF4038CG	248	1701	GB	126	
GF4038CH	248	1798	GB	126	
GF5013AG	248	504	GB	20	
GF5013AH	248	533	GB	20	
GF5015AG	248	539	GB	25	
GF5018AG	248	552	GB	30	
GF5018AJ	248	552	GB	30	
GF5021AG	248	691	GB	35	
GF5021AH	248	728	GB	35	
GF5021AJ	248	691	GB	35	
GF5024AG	248	815	GB	40	
GF5026AG	248	945	GB	55	
GF5026BG	248	945	GB	52	
GF5030AG	248	1285	GB	65	
GF5030BG	248	1285	GB	68	
GF5032AG	248	1393	GB	87	
GF5032BG	248	1393	GB	87	
GF5038BG	248	1701	GB	117	
GF5038BH	248	1798	GB	126	
GF6015AG	248	539	GB	25	
GF6015AH	248	571	GB	25	
GF6018AG	248	552	GB	30	
GF6018AH	248	585	GB	30	
GF6018AJ	248	552	GB	30	
GF6021AG	249	691	GB	35	
GF6021AH	249	728	GB	35	
GF6021AJ	249	691	GB	35	
GF6024AG	249	815	GB	40	
GF6024AJ	249	815	GB	40	
GF6026AG	249	945	GB	55	
GF6026AH	249	996	GB	55	
GF6026AJ	249	945	GB	55	
GF6030AG	249	1285	GB	65	
GF6030BG	249	1285	GB	68	
GF6032AG	249	1393	GB	90	
GF6032BG	249	1393	GB	91	
GF6038BG	249	1701	GB	117	
GF6038BH	249	1798	GB	126	
GHF0513AH	250	664	GB	20	
GHF0518AH	250	710	GB	30	
GHF1018AH	250	710	GB	30	
GHF1021AH	250	842	GB	35	
GHF1030CH	250	1527	GB	75	
GHF1513AH	250	664	GB	20	
GHF1518AH	250	710	GB	30	
GHF1521AH	250	842	GB	35	
GHF1524AH	250	1013	GB	45	
GHF1530BH	250	1527	GB	75	
GHF2013AH	250	664	GB	20	
GHF2018AH	250	710	GB	30	
GHF2021AH	250	842	GB	35	
GHF2024AH	250	1013	GB	42	

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
GHF2026AH	250	1195	GB	56	
GHF2030BH	250	1527	GB	72	
GHF2518AH	250	710	GB	30	
GHF2521AH	250	842	GB	32	
GHF2526BH	250	1195	GB	56	
GHF2530BH	250	1527	GB	88	
GHF3013AH	250	664	GB	20	
GHF3018AH	250	710	GB	30	
GHF3021AH	250	842	GB	35	
GHF3024AH	250	1013	GB	45	
GHF3026AH	250	1195	GB	56	
GHF3030BH	250	1527	GB	75	
GHF3032BH	250	1655	GB	95	
GHF4018AH	250	710	GB	30	
GHF4021AH	250	842	GB	35	
GHF4024AH	250	1013	GB	42	
GHF4026AH	250	1195	GB	56	
GHF4026BH	250	1195	GB	56	
GHF4032BH	250	1655	GB	95	
GHF5013AH	250	664	GB	20	
GHF5018AH	250	710	GB	30	
GHF5021AH	250	842	GB	35	
GHF5024AH	250	1013	GB	45	
GHF5030AH	250	1527	GB	75	
GHF5032AH	250	1655	GB	95	
GHF6018AH	250	710	GB	30	
GHF6021AH	250	842	GB	35	
GHF6024AH	250	1013	GB	42	
GHF6026AH	250	1195	GB	56	
GHF6030AH	250	1527	GB	71	
GHF6032AH	250	1655	GB	95	
GHH0556	244	641	GB	11	
GHH1056	244	641	GB	11	
GHH1556	244	641	GB	11	
GHH2056	244	641	GB	11	
GHH2556	244	641	GB	36	
GHH3056	244	641	DS	36	
GHH4056	244	641	GB	36	
GHH5056	244	641	GB	36	
GHH6056	244	641	DS	36	
GHL31010	231	1379	DS	55	
GHL31020	231	1379	DS	55	
GHL31030	231	1379	DS	55	
GHL35010	231	1123	DS	45	
GHL35020	231	1123	DS	45	
GHL35030	231	1123	DS	45	
GHL35060	231	1123	DS	45	
GHL37510	231	1208	DS	50	
GHL37520	231	1208	DS	50	
GHL37530	231	1208	DS	50	
GHM31010	231	1144	DS	45	
GHM31020	231	1144	DS	48	
GHM31030	231	1144	DS	42	
GHM35010	231	1083	DS	40	
GHM35020	231	1083	DS	40	
GHM35030	231	1083	DS	40	
GHM35040	231	1083	DS	38	
GHM35050	231	1083	DS	40	
GHM35060	231	1083	DS	40	
GHM37510	231	1114	DS	42	

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
GHM37520	231	1114	DS	42	
GHM37530	231	1114	DS	42	
GHP13530	224	834	DS	12	
GHP13531	224	834	DS	15	
GHP13532	224	834	DS	15	
GHP13533	224	834	DS	15	
GHP13536	224	834	DS	15	
GIF0938A	259	998	GB	33	
GIF0938B	259	998	GB	37	
GIF0938C	259	1093	GB	32	
GIF0948C	259	1578	GB	77	
GIF0968D	259	2472	GB	101	
GIF1438A	259	998	GB	29	
GIF1438B	259	998	GB	31	
GIF1448C	259	1578	GB	55	
GIF1468C	259	2472	GB	93	
GIF1468D	259	2472	GB	101	
GIF1488E	259	3810	GB	229	
GIF1838A	259	998	GB	29	
GIF1838B	259	998	GB	31	
GIF1848B	259	1384	GB	54	
GIF1848C	259	1578	GB	85	
GIF1868C	259	2472	GB	122	
GIF1868D	259	2472	GB	101	
GIF1888E	259	3810	GB	229	
GIF2538A	259	998	GB	33	
GIF2538B	259	998	GB	36	
GIF2548B	259	1384	GB	54	
GIF2548C	259	1578	GB	55	
GIF2568C	259	2472	GB	93	
GIF2588D	259	3589	GB	253	
GIF2588E	259	3810	GB	229	
GIF4038A	259	998	GB	33	
GIF4048A	259	1384	GB	52	
GIF4048B	259	1384	GB	54	
GIF4068C	259	2472	GB	93	
GIF4088D	259	3589	GB	178	
GIF5068B	259	2279	GB	103	
GIF5088C	259	3589	GB	178	
GIF5638A	259	1205	GB	29	
GIF5648A	259	1518	GB	52	
GL3326	221	730	DS	21	2528L
GL3327	221	701	DS	21	2528L
GL3328	221	701	DS	21	2528L
GL3329	221	701	DS	21	2528L
GLF0515AG	254	561	GB	30	
GLF0821AG	254	710	GB	38	
GLF0821AJ	254	710	GB	38	
GLF0821BG	254	710	GB	38	
GLF0826BG	254	974	GB	60	
GLF0826CG	254	974	GB	66	
GLF1018AG	254	575	GB	32	
GLF1021BG	254	710	GB	38	
GLF1021BJ	254	710	GB	38	
GLF1024BG	254	834	GB	45	
GLF1026BG	254	974	GB	60	
GLF1026CG	254	974	GB	60	
GLF1032CG	254	1419	GB	104	
GLF1513AG	254	516	GB	20	
GLF1521AG	254	710	GB	38	

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
GLF1521AJ	254	710	GB	38	
GLF1526BG	254	974	GB	60	
GLF1526BJ	254	974	GB	60	
GLF1532CG	254	1419	GB	100	
GLF1532CJ	254	1419	GB	105	
GLF1538CG	254	1733	GB	130	
GLF2013AG	254	516	GB	20	
GLF2018AG	254	575	GB	32	
GLF2021AG	254	710	GB	38	
GLF2021AJ	255	710	GB	38	
GLF2026BG	255	974	GB	60	
GLF2026BJ	255	974	GB	60	
GLF2032CG	255	1419	GB	100	
GLF2515AG	255	561	GB	30	
GLF2518AG	255	575	GB	32	
GLF2521AG	255	710	GB	38	
GLF2521AJ	255	710	GB	38	
GLF2526AG	255	974	GB	60	
GLF2526BG	255	974	GB	60	
GLF2526BJ	255	974	GB	60	
GLF2532BG	255	1419	GB	100	
GLF2532CG	255	1419	GB	100	
GLF2532CJ	255	1419	GB	100	
GLF3013AG	255	516	GB	20	
GLF3015AG	255	561	GB	30	
GLF3018AG	255	575	GB	32	
GLF3018AJ	255	575	GB	32	
GLF3021AG	255	710	GB	38	
GLF3024AG	255	834	GB	45	
GLF3026BG	255	974	GB	60	
GLF3026BJ	255	974	GB	60	
GLF3032CG	255	1419	GB	100	
GLF3038CG	255	1733	GB	130	
GLF4018AG	255	575	GB	32	
GLF4024AG	255	834	GB	45	
GLF4026AG	255	974	GB	60	
GLF4032BG	255	1419	GB	100	
GLF4038CG	255	1733	GB	130	
GLF5021AG	255	710	GB	38	
GLF5026AG	255	974	GB	60	
GLF6015AG	255	561	GB	30	
GLF6018AG	255	575	GB	32	
GLF6021AG	255	710	GB	38	
GLF6026AG	255	974	GB	60	
GLF6032AG	255	1419	GB	100	
GLF6032BG	255	1419	GB	100	
GLP3310	238	990	DS	25	3320L
GLP3328	238	990	DS	28	3324L
GLP3330	238	990	DS	25	3324L
GLP3332	238	931	DS	25	3324L
GLP3336	238	931	DS	27	3324L
GLP3338	238	931	DS	25	3324L
GLP3342	238	1044	DS	32	3328LC
GLP3344	238	985	DS	31	3328LC
GLP3346	238	985	DS	31	3328LC
GLP3348	238	985	DS	31	3328LC
GLP25005	238	819	DS	24	2528LC
GLP25011	238	819	DS	21	2528LC
GLP25015	238	819	DS	21	2528LC
GLP25019	238	819	DS	24	2528LC

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
GLP25029	238	870	DS	24	2528LC
GLP25036	238	870	DS	21	2528LC
GM2501	227	867	DS	18	2524M
GM2503	227	867	DS	18	2524M
GM2506	227	867	DS	18	2524M
GM2507	227	867	DS	18	2524M
GM3301	227	873	DS	26	3320M
GM3303	227	873	DS	27	3320M
GM3306	227	873	DS	26	3320M
GM3307	227	873	DS	26	3320M
GM3329	217	703	DS	11	2512M
GM3331	225	738	DS	13	2512M
GM3334	227	852	DS	15	2520M
GM3337	227	852	DS	16	2520M
GM3338	227	852	DS	16	2520M
GM3340	221	848	DS	16	2524M
GM3345	221	848	DS	16	2524M
GM3347	221	848	DS	16	2524M
GM3349	221	848	DS	16	2524M
GM25016	215	730	DS	15	2516M
GM25021	215	730	DS	15	2516M
GM25022	217	558	DS	13	2516M
GM25024	217	558	DS	13	2516M
GM25026	217	542	DS	12	2516M
GM25060	219	959	DS	20	2516M
GM25080	219	959	DS	20	2516M
GM25120	219	959	DS	17	2516M
GM25190	219	959	DS	20	2516M
GM25280	219	959	DS	20	2516M
GMP3330	238	1035	DS	27	3320M
GMP3332	238	977	DS	27	3320M
GMP3336	238	977	DS	25	3320M
GMP3338	238	977	DS	24	3320M
GMP3340	238	1035	DS	27	3320M
GMP3342	238	1035	DS	27	3320M
GMP3344	238	977	DS	25	3320M
GMP3348	238	977	DS	25	3320M
GP2501	228	944	DS	21	
GP2503	228	944	DS	21	
GP2506	228	944	DS	21	
GP2507	228	944	DS	21	
GP3301	228	1096	DS	30	
GP3303	228	1096	DS	30	
GP3306	228	1096	DS	30	
GP3307	228	1096	DS	30	
GP7304	215	889	DS	13	
GP7400	228	770	DS	14	
GP7401	228	770	DS	14	
GP7402	228	770	DS	14	
GP7403	228	770	DS	14	
GP7404	228	770	DS	13	
GP7405	228	770	DS	14	
GP7406	228	770	DS	14	
GP7407	228	770	DS	14	
GP7408	228	770	DS	14	
GP7409	215	848	DS	15	
GP7413	228	770	DS	14	
GP7420	228	770	DS	14	
GP7421	228	770	DS	14	
GP7422	228	770	DS	14	
GP7423	228	770	DS	14	
GP7424	228	770	DS	14	
GP7425	228	770	DS	14	
GP7426	228	770	DS	14	
GP7427	228	770	DS	14	
GP7428	228	770	DS	14	
GP7429	215	875	DS	15	
GP7433	228	770	DS	14	
GP12511	222	690	DS	10	
GP12512	222	690	DS	10	
GP12514	222	690	DS	10	
GP12516	222	690	DS	10	
GP13530	222	725	DS	13	
GP13531	222	725	DS	13	
GP13532	222	725	DS	13	
GP13533	222	725	DS	13	
GP13536	222	725	DS	13	
GP24060	219	965	DS	16	
GP24120	219	965	DS	16	
GP24190	219	965	DS	15	
GP24280	219	965	DS	16	
GP231001	212	439	DS	5	
GP231002	212	439	DS	5	
GP231003	212	407	DS	5	
GP231004	225	542	DS	8	
GP231005	213	427	DS	5	
GP231006	213	427	DS	8	
GP231007	213	684	DS	5	
GP232001	212	439	DS	5	
GP232002	217	542	DS	7	
GP232003	225	542	DS	8	
GP232004	214	606	DS	7	
GP232005	214	606	DS	7	
GP232006	214	606	DS	7	
GP232007	214	632	DS	7	
GP233001	217	561	DS	7	
GP233002	217	561	DS	7	
GP233003	217	561	DS	8	
GP233004	225	561	DS	8	
GP233005	225	561	DS	8	
GP233006	225	561	DS	8	
GP233007	217	561	DS	7	
GP233020	214	632	DS	7	
GP233021	217	561	DS	7	
GP233022	217	561	DS	7	
GP233023	217	561	DS	7	
GP233024	225	561	DS	8	
GP233025	225	561	DS	8	
GP233026	225	561	DS	8	
GP233027	214	660	DS	7	
GP233028	214	632	DS	7	
GP233029	214	632	DS	7	
GPB231008	213	722	DS	10	
GPF13514	230	799	DS	15	
GPF13515	230	799	DS	15	
GPF13516	230	799	DS	15	
GPF13517	230	799	DS	15	
GPF13530	230	799	DS	15	
GPF13532	230	799	DS	15	
GPP2530	242	1146	DS	24	

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
GPP2534	242	1091	DS	24	
GPP2538	242	1091	DS	24	
GPP3340	242	1288	DS	31	
GPP3344	242	1232	DS	31	3327P
GPP3348	242	1232	DS	31	
GPP3370	242	1288	DS	31	
GPP3374	242	1232	DS	31	
GPP3378	242	1232	DS	31	
GPP3380	242	1288	DS	31	
GPP3384	242	1232	DS	31	
GPP3388	242	1232	DS	31	
GPP7450	242	772	DS	13	
GPP7451	242	772	DS	13	
GPP7452	242	772	DS	13	
GPP7453	242	772	DS	13	2424P
GPP7454	242	840	DS	14	
GPP7455	242	840	DS	14	
GPP7456	242	840	DS	14	
GPP7457	242	875	DS	15	
GPP7458	242	875	DS	15	
GPP7459	242	875	DS	13	
GPP7460	242	840	DS	14	
GPP7461	242	875	DS	15	
GPP7462	242	875	DS	13	
GPP7470	242	772	DS	13	
GPP7471	242	772	DS	13	
GPP7472	242	772	DS	13	
GPP7473	242	772	DS	13	2424P
GPP7474	242	840	DS	14	
GPP7475	242	840	DS	14	
GPP7476	242	840	DS	14	
GPP7477	242	875	DS	15	
GPP7478	242	875	DS	17	
GPP7479	242	875	DS	14	
GPP12501	234	537	DS	8	2412P
GPP12502	234	537	DS	8	2412P
GPP12503	234	537	DS	8	2412P
GPP12504	234	542	DS	8	2412P
GPP12505	234	542	DS	8	2412P
GPP12521	234	537	DS	9	2416P
GPP12525	234	552	DS	11	
GPP12540	237	663	DS	10	
GPP12541	237	663	DS	10	
GPP12542	237	663	DS	10	
GPP12543	237	663	DS	12	
GPP12544	237	694	DS	12	
GPP12545	237	694	DS	12	
GPP12547	237	694	DS	12	
GPP12555	237	663	DS	12	2416P
GPP12556	237	694	DS	12	2416P
GPP12559	237	663	DS	12	2416P
GPP12560	237	663	DS	11	
GPP12561	237	663	DS	11	
GPP12564	237	670	DS	11	
GPP12567	237	670	DS	11	
GPP24005	237	726	DS	12	
GPP24011	237	726	DS	12	
GPP24019	237	726	DS	12	
GPP230005	234	537	DS	7	
GPP230007	234	537	DS	7	

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
GPP230010	234	537	DS	7	
GPP230013	234	537	DS	7	
GPP230019	234	537	DS	7	
GPP230025	234	537	DS	7	2318P
GPP230037	234	542	DS	7	2318P
GPP230053	237	675	DS	7	2318P
GPP230072	234	542	DS	7	2318P
GPP230139	234	552	DS	7	2308P
GPP230186	234	552	DS	12	2308P
GPP231108	234	542	DS	6	
GPP231109	234	542	DS	6	2308P
GPP231110	234	537	DS	6	2308P
GPP231329	237	693	DS	7	2318P
GPP232110	234	552	DS	7	2314P
GPP233111	234	542	DS	8	2318P
GPP233112	234	542	DS	8	2318P
GPP233120	234	561	DS	8	
GPP233121	234	552	DS	8	2318P
GPP233140	237	693	DS	10	
GPP233141	237	693	DS	8	
GS1018G	256	482	GB	25	
GS1021G	256	568	GB	28	
GS1026G	256	798	GB	50	
GS1515G	256	476	GB	21	
GS1518G	256	482	GB	25	
GS1521G	256	568	GB	28	
GS2018G	256	482	GB	25	
GS2021G	256	568	GB	28	
GS2024G	256	708	GB	38	
GS2026G	256	798	GB	50	
GS2515G	256	476	GB	21	
GS3013G	256	461	GB	18	
GS3018G	256	482	GB	25	
GS3021G	256	568	GB	28	
GS3026G	256	798	GB	50	
GS4015G	256	476	GB	21	
GS4018G	256	482	GB	25	
GS4021G	256	568	GB	28	
GS4026G	256	798	GB	50	
GS5018G	256	482	GB	25	
GS5021G	256	568	GB	28	
GS5026G	256	798	GB	50	
GS6013G	256	461	GB	15	
GS6015G	256	476	GB	21	
GS6018G	256	482	GB	25	
GS6021G	256	568	GB	31	
GS6024G	256	708	GB	38	
GS6026G	256	798	GB	50	
GSF1013AA	257	629	GB	21	
GSF1018AA	257	689	GB	22	
GSF1018BA	257	689	GB	23	
GSF1020AA	257	821	GB	30	
GSF1020BA	257	821	GB	29	
GSF1023BA	257	932	GB	32	
GSF1026BA	257	1188	GB	49	
GSF1026CA	257	1188	GB	55	
GSF1030CA	257	1357	GB	61	
GSF1513AA	257	629	GB	21	
GSF1518AA	257	689	GB	23	
GSF1520AA	257	821	GB	31	

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
GSF1523AA	257	932	GB	34	
GSF1523BA	257	932	GB	33	
GSF1526BA	257	1188	GB	51	
GSF1530BA	257	1357	GB	57	
GSF1530CA	257	1357	GB	61	
GSF1535CA	257	1862	GB	89	
GSF2013AA	257	629	GB	20	
GSF2018AA	257	689	GB	23	
GSF2020AA	257	821	GB	30	
GSF2020BA	257	821	GB	28	
GSF2023AA	257	932	GB	34	
GSF2023BA	257	932	GB	33	
GSF2026AA	257	1188	GB	51	
GSF2026BA	257	1188	GB	51	
GSF2030BA	257	1357	GB	57	
GSF2030CA	257	1357	GB	62	
GSF2035CA	257	1862	GB	93	
GSF2513AA	258	629	GB	21	
GSF2518AA	258	689	GB	23	
GSF2520AA	258	821	GB	29	
GSF2523AA	258	932	GB	33	
GSF2530BA	258	1357	GB	56	
GSF3013AA	258	629	GB	21	
GSF3018AA	258	689	GB	22	
GSF3020AA	258	821	GB	30	
GSF3023AA	258	932	GB	33	
GSF3026AA	258	1188	GB	50	
GSF3030BA	258	1357	GB	57	
GSF3035BA	258	1862	GB	90	
GSF4013AA	258	629	GB	21	
GSF4018AA	258	1516	GB	11	
GSF4020AA	258	821	GB	30	
GSF4023AA	258	932	GB	33	
GSF4026AA	258	1188	GB	51	
GSF4030AA	258	1357	GB	57	
GSF4030BA	258	1357	GB	54	
GSF4035BA	258	1862	GB	87	
GSF5013AA	258	629	GB	21	
GSF5018AA	258	689	GB	23	
GSF5020AA	258	821	GB	30	
GSF5023AA	258	932	GB	33	
GSF5026AA	258	1188	GB	51	
GSF5030BA	258	1357	GB	57	
GSF5035BA	258	1862	GB	89	
GSF6018AA	258	689	GB	23	
GSF6020AA	258	821	GB	31	
GSF6023AA	258	932	GB	33	
GSF6026AA	258	1188	GB	51	
GSF6030AA	258	1357	GB	56	
GSF6035BA	258	1862	GB	89	
HA5027A03	268	5	A8	1	
HPM3615T	105	842	L1	82	3634M
HPM3710T	105	1082	L1	127	3731M
HPM3714T	105	1277	L1	136	3740M
IDBRPM18154C	169	4522	E2	190	
IDBRPM18204C	169	4983	E2	286	
IDBRPM21254C	169	5800	E2	215	
IDBRPM21304C	169	5800	E2	215	
IDBRPM21404	169	6409	E2	215	
IDBRPM25504	169	7147	E2	215	
IDBRPM25604	169	10549	E2	215	
IDBRPM25754	169	12599	E2	215	
IDBRPM281004R1	169	14259	E2	860	
IDBRPM281254	169	15089	E2	940	
IDBRPM321254	169	21135	E2	1170	
IDBRPM321504	169	28276	E2	1340	
IDBRPM362004	169	31281	E2	1746	
IDBRPM362004R1	169	29277	E2	1950	
IDBRPM362504R1	170	31279	E2	2000	
IDBRPM402004	169	33751	E2	1996	
IDBRPM402504	170	39164	E2	2244	
IDBRPM403004	170	48044	E2	2540	
IDBRPM403004R1	170	39163	E2	2620	
IDBRPM444004	170	64562	E2	3300	
IDBRPM445004	170	67899	E2	3620	
IDBRPM446004	170	75188	E2	4610	
IDCSWDM3538	72	1551	WD	31	3515M
IDCSWDM3542	72	1756	WD	32	3519M
IDCSWDM3546	72	1823	WD	40	3524M
IDCSWDM3546T	72	1823	WD	42	3524M
IDCSWDM3554	72	1950	WD	51	3533M
IDCSWDM3554T	72	1950	WD	49	3533M
IDCSWDM3558	72	2083	WD	44	3528M
IDCSWDM3558T	72	2083	WD	48	3528M
IDCSWDM3611T	72	2284	WD	85	3635M
IDCSWDM3615T	72	2658	WD	99	3646M
IDCSWDM3710T	72	4024	WD	136	3739M
IDCSWDM3714T	72	4601	WD	187	3756M
IDDRPM18254C	169	5244	E2	215	
IDDRPM18304C	169	5456	E2	215	
IDDRPM21404	169	6356	E2	370	
IDDRPM21504	169	8556	E2	376	
IDDRPM21604	169	8556	E2	320	
IDDRPM25506	169	10275	E2	570	
IDDRPM25606	169	12458	E2	624	
IDDRPM25754	169	10275	E2	624	
IDDRPM25756	169	16509	E2	608	
IDDRPM251004	169	12458	E2	633	
IDDRPM251254	169	16509	E2	714	
IDDRPM281006	169	18432	E2	785	
IDDRPM281256	169	24030	E2	810	
IDDRPM281504	169	18432	E2	892	
IDDRPM282004	169	24030	E2	995	
IDDRPM321506	169	28276	E2	1145	
IDDRPM322006	169	32927	E2	1325	
IDDRPM322504	170	28276	E2	1186	
IDDRPM323004	170	32927	E2	1360	
IDDRPM362504	170	41696	E2	1750	
IDDRPM362504R1	170	35848	E2	2000	
IDDRPM363006R1	170	41695	E2	2000	
IDDRPM363504	170	41696	E2	1812	
IDDRPM363504R1	170	35848	E2	1680	
IDDRPM364004	170	41696	E2	1742	
IDDRPM364004R1	170	41696	E2	2000	
IDDRPM403006	170	55045	E2	2289	
IDDRPM404006	170	67104	E2	2485	
IDDRPM404006R1	170	55042	E2	2530	
IDDRPM405004	170	55045	E2	2000	
IDDRPM405004R1	170	48367	E2	2260	
IDDRPM406004	170	67104	E2	2100	

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
IDDRPM406004R1	170	55042	E2	2530	
IDDRPM407004R1	170	70456	E2	3080	
IDDRPM445006	170	104952	E2	3890	
IDDRPM445006R1	170	104952	E2	3505	
IDDRPM447004	170	83747	E2	3000	
IDDRPM4410004	170	104952	E2	3890	
IDDRPM4410004R1	170	104952	E2	3505	
IDFRPM18104C	169	4376	E2	195	
IDFRPM21154C	169	5450	E2	215	
IDFRPM21204C	169	5450	E2	215	
IDFRPM21254C	169	5886	E2	215	
IDFRPM25304C	169	6195	E2	215	
IDFRPM25404	169	6739	E2	660	
IDFRPM28504	169	11510	E2	776	
IDFRPM28604	169	11510	E2	865	
IDFRPM28754	169	13751	E2	940	
IDGHM2500	224	998	E2	19	2528M
IDGHM2501	224	998	E2	19	2528M
IDGHM2503	224	998	E2	19	2528M
IDGHM2504	224	998	E2	19	2528M
IDGHM2506	224	998	E2	19	2528M
IDGHM2508	224	998	E2	19	2528M
IDGHM2509	224	998	E2	19	2528M
IDGM2301	180, 214	660	E2	10	2416M
IDGM2302	180, 214	660	E2	10	2416M
IDGM2401	180, 212	505	E2	7	2416M
IDGM2402	180, 212	505	E2	7	2416M
IDGM2403	180, 212	505	E2	7	2416M
IDGM2404	180, 217	612	E2	13	2520M
IDGM2405	180, 217	612	E2	13	2512M
IDGM2406	180, 217	612	E2	13	2512M
IDGM2500	180, 222	766	E2	17	2528M
IDGM2501	180, 222	766	E2	17	2528M
IDGM2503	180, 222	766	E2	17	2528M
IDGM2506	180, 222	766	E2	18	2528M
IDGM2508	180, 222	766	E2	17	2528M
IDGM2509	180, 222	766	E2	17	2528M
IDGM2511	180, 215	840	E2	15	2512M
IDGM2512	180, 215	840	E2	15	2512M
IDGM2513	180, 219	1036	E2	20	2516M
IDGM2514	180, 219	1036	E2	20	2516M
IDGM2515	180, 219	1036	E2	20	2516M
IDGM3300	180, 227	961	E2	30	3332M
IDGM3301	180, 227	961	E2	30	3332M
IDGM3302	180, 227	942	E2	28	3324M
IDGM3303	180, 227	942	E2	28	3324M
IDGMP2500	181, 239	1012	E2	18	2528M
IDGMP2501	181, 239	1012	E2	18	2528M
IDGMP2503	181, 239	1012	E2	20	2528M
IDGMP2505	181, 239	1037	E2	20	2528M
IDGMP24005	181, 232	561	E2	10	
IDGMP24010	181, 232	561	E2	10	
IDGMP24020	181, 232	561	E2	10	
IDGMP24030	181, 232	595	E2	10	
IDGMP24060	181, 232	595	E2	11	
IDGMP24090	181, 232	613	E2	11	
IDGMP24180	181, 232	613	E2	11	
IDGMP25006	181, 235	667	E2	14	2524M
IDGMP25008	181, 239	1025	E2	14	2524M
IDGMP25011	181, 235	667	E2	14	2524M

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
IDGMP25013	181, 239	1025	E2	17	2524M
IDGMP25021	181, 235	698	E2	14	2524M
IDGMP25023	181, 239	1025	E2	17	2524M
IDGMP25031	181, 235	698	E2	14	2524M
IDGMP25033	181, 239	1044	E2	18	2524M
IDGMP25061	181, 235	698	E2	14	2424M
IDGMP25062	181, 239	1037	E2	16	
IDGMP25063	181, 239	1044	E2	18	2516M
IDGMP25091	181, 235	729	E2	14	2416M
IDGMP25092	181, 239	1059	E2	20	2516M
IDGMP25181	181, 235	729	E2	14	2412M
IDGMP25182	181, 239	1059	E2	20	2512M
IDGMP33005	239	1012	E2	25	
IDGMP33010	181, 239	1012	E2	25	
IDGMP33015	181, 239	1012	E2	25	
IDGMP33020	181, 239	1012	E2	25	
IDGMP33030	181, 239	1037	E2	28	
IDGMP33040	181, 239	1037	E2	28	
IDM2276T	178	5423	E2	332	0954M
IDM2332T	178	6626	E2	352	0960M
IDM2333T	178	3726	E2	318	0944M
IDM2333T-5	178	3726	E2	299	0942M
IDM2334T	178	3980	E2	333	0952M
IDM2334T-5	178	3980	E2	329	0948M
IDM3581T	178	1737	E2	65	0524M
IDM3581T-5	178	1737	E2	60	0519M
IDM3582T	178	2040	E2	68	0528M
IDM3584T	178	1837	E2	70	0530M
IDM3584T-5	178	1837	E2	70	0530M
IDM3587T	178	1964	E2	72	0533M
IDM3587T-5	178	1964	E2	73	0535M
IDM3661T	178	2509	E2	111	0632M
IDM3661T-5	178	2509	E2	112	0632M
IDM3664T	178	2356	E2	124	0642M
IDM3665T	178	2654	E2	124	0640M
IDM3665T-5	178	2654	E2	121	0640M
IDM3667T	178	2294	E2	107	0630M
IDM3764T	178	3082	E2	187	0737M
IDM3768T	178	3772	E2	226	0748M
IDM3770T	178	3200	E2	170	0735M
IDM3770T-5	178	3200	E2	170	0735M
IDM3774T	178	3428	E2	231	0748M
IDM3774T-5	178	3428	E2	231	0748M
IDM4100T	178	7855	E2	450	1056M
IDM4102T	178	8844	E2	451	1062M
IDM4103T	178	4908	E2	417	1046M
IDM4104T	178	5629	E2	464	1056M
IDM4110T	178	7612	E2	605	1256M
IDM4111T	178	10079	E2	557	1260M
IDM4115T	178	8543	E2	622	1262M
IDM4117T	178	11217	E2	628	1264M
IDNM2237T	178	3071	E2	242	0932M
IDNM2238T	178	3213	E2	285	0948M
IDNM2333T	178	3310	E2	286	0948M
IDNM2334T	178	4573	E2	406	1056M
IDNM3534	178	495	E2	29	3513M
IDNM3538	178	579	E2	29	3512M
IDNM3542	178	645	E2	30	3514M
IDNM3581T	178	1315	E2	58	0524M
IDNM3584T	178	1451	E2	57	0524M

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
IDNM3587T	178	1516	E2	67	0535M
IDNM3661T	178	1986	E2	107	0632M
IDNM3665T	178	2215	E2	116	0640M
IDNM3669T	178	1759	E2	94	0628M
IDNM3767T	178	2469	E2	170	0735M
IDNM3770T	178	2563	E2	196	0750M
IDNRPM18054C	169	3666	E2	160	
IDNRPM18074C	169	4215	E2	210	
IDNRPM21104C	169	4990	E2	285	
IDVSM2333T	175	3787	E2	291	0942M
IDVSM2334T	175	4106	E2	321	0952M
IDVSM3661T	175	1674	E2	105	0632M
IDVSM3665T	175	1941	E2	120	0641M
IDVSM3770T	175	2497	E2	180	0735M
IDVSM3774T	175	3255	E2	231	0748M
IDVSM4103T	175	5214	E2	446	1056M
IDVSM4104T	175	5696	E2	457	1060M
IDVSM4110T	175	6571	E2	619	1264M
IDVSM4115T	175	8031	E2	670	1278M
IDVSM4314T	175	9948	E2	869	A36062M
IDVSM4316T	175	12459	E2	901	A36068M
IDVSM4400T-4	175	16102	E2	1218	A40064M
IDVSM4406T-4	175	23853	E2	1789	A44078M
IDVSM4407T-4	175	28263	E2	2189	A44106M
IDVSM4408T-4	175	39946	E2	2511	A44128M
IDVSM4410T-4	175	19987	E2	1637	A44062M
IDVSM44304T-4	175	39946	E2	2816	A44160M
IDVSNM2237T	175	2567	E2	212	0750M
IDVSNM2238T	175	3521	E2	306	0948M
IDVSNM2333T	175	4235	E2	284	0948M
IDVSNM3534	175	495	E2	32	3513M
IDVSNM3538	175	579	E2	35	3516M
IDVSNM3542	175	645	E2	36	3517M
IDVSNM3546	175	1048	E2	43	3525M
IDVSNM3581T	175	1315	E2	56	0524M
IDVSNM3581T-5	175	1256	E2	58	0524M
IDVSNM3582T	175	1715	E2	61	0528M
IDVSNM3584T	175	1451	E2	63	0532M
IDVSNM3584T-5	175	1451	E2	64	0532M
IDVSNM3587T	175	1516	E2	63	0535M
IDVSNM3587T-5	175	1448	E2	62	0535M
IDVSNM3661T	175	1722	E2	111	0635M
IDVSNM3665T	175	1995	E2	124	0643M
IDVSWDM3538	72	1538	WD	32	3516M
IDVSWDM3542	72	1748	WD	35	3519M
IDVSWDM3546	72	1814	WD	40	3524M
IDVSWDM3546T	72	1814	WD	40	3524M
IDVSWDM3554	72	1940	WD	50	3533M
IDVSWDM3554T	72	1940	WD	50	3533M
IDVSWDM3558	72	2066	WD	45	3528M
IDVSWDM3558T	72	2066	WD	46	3528M
IDVSWDM3611T	72	2172	WD	80	3635M
IDVSWDM3615T	72	2532	WD	97	3646M
IDWNM3546T	73	1551	WD	41	3524M
IDWNM3554T	73	1708	WD	52	3533M
IDWNM3609T	73	1882	WD	69	3628M
IDWNM3611T	73	2050	WD	90	3640M
IDWNM3707T	73	2320	WD	122	3732M
IDWNM22937T	73	3593	WD	240	3940M
IDWNM22938T	73	4208	WD	287	3956M

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
IDXCM7542T-C	89	1892	L1	175	
IDXCM7544T-C	89	2217	L1	225	
IDXCM7547T-C	89	2809	L1	250	
IDXCM7554T-C	89	4359	L1	350	
IDXCM7556T-C	89	5557	L1	400	
IDXCM7558T-C	89	7558	L1	450	
IDXCM7560T-C	89	8918	L1	500	
IDXCM7562T-C	89	11963	L1	825	
IDXCM7564T-C	89	13615	L1	900	
IDXCM7566T-C	89	15841	L1	910	A36062M
IDXCM7568T-C	89	16300	L1	965	A36070M
IDXCM7570T-C	89	3760	L1	300	
IDXM7002	88	1190	L1	43	3513M
IDXM7006	88	1223	L1	39	3513M
IDXM7010	88	1250	L1	43	3517M
IDXM7014T	88	1392	L1	52	3519M
IDXM7034T	88	1442	L1	60	3526M
IDXM7037T	88	1577	L1	63	3535M
IDXM7054T	87	4026	L1	383	0942M
IDXM7056T	87	5224	L1	408	0952M
IDXM7058T	87	6190	L1	536	1050M
IDXM7060T	87	7550	L1	561	1056M
IDXM7062T	87	10113	L1	748	1254M
IDXM7064T	87	11765	L1	527	1272M
IDXM7066T	87	13433	L1	1024	A36062M
IDXM7068T	87	14892	L1	1391	A40064M
IDXM7142T	87	1715	L1	145	0632M
IDXM7144T	87	2040	L1	161	0640M
IDXM7147T	87	2565	L1	227	0735M
IDXM7170T	87	3516	L1	231	0748M
IDXM7542T	87	1799	L1	146	0632M
IDXM7542T-C	89	1577	L1	175	0632M
IDXM7544T	87	2621	L1	212	0728M
IDXM7544T-C	89	1902	L1	225	0728M
IDXM7547T	87	3685	L1	226	0735M
IDXM7547T-C	89	2468	L1	250	0735M
IDXM7554T	87	5348	L1	392	0948M
IDXM7554T-C	89	3846	L1	350	0948M
IDXM7556T	87	6485	L1	526	1046M
IDXM7556T-C	89	5044	L1	400	1460M
IDXM7558T	87	7808	L1	708	1250M
IDXM7558T-C	89	6700	L1	450	1250M
IDXM7560T	87	9088	L1	738	1248M
IDXM7560T-C	89	8060	L1	500	1248M
IDXM7562T	87	10165	L1	1013	A36062M
IDXM7562T-C	89	10723	L1	825	A3662M
IDXM7564T	87	12680	L1	1034	A36062M
IDXM7564T-C	89	12375	L1	900	A3662M
IDXM7566T	87	15021	L1	1262	A40064M
IDXM7566T-C	89	14266	L1	965	A36062M
IDXM7568T-C	89	14725	L1	1326	A36070M
IDXM7570T	87	4124	L1	392	0932M
IDXM7570T-C	89	3419	L1	300	0932M
JL1205A	91	270	K	25	3416L
JL1301A	91	311	K	23	3414L
JL1303A	91	304	K	26	3420L
JL1304A	91	366	K	25	3418L
JL1306A	91	400	K	33	3424L
JL1307A	91	462	K	33	3428L
JL1309A	91	414	K	32	3428L

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
JL1313A	91	578	K	36	3432LC
JL1317A	91	713	K	45	3528L
JL1323A	91	732	K	52	3535LC
JL3405A	90	313	K	19	3416L
JL3501A	90	391	K	22	3414L
JL3503A	90	359	K	26	3420L
JL3504A	90	454	K	27	3421L
JL3506A	90	427	K	29	3424L
JL3507A	90	539	K	33	3428LC
JL3509A	90	522	K	42	3524L
JL3510A	90	619	K	40	3528L
JL3513A	90	619	K	45	3528L
JL3514A	90	679	K	51	3532LC
JL3515A	90	727	K	54	3535L
JL3516A	90	773	K	52	3535LC
JL5003A	86	691	K	37	3513L
JL5006A	86	773	K	37	3516L
JL5009A	86	828	K	49	3524L
JL5030	86	1065	K	52	3528L
JL5031	86	1157	K	60	3535L
JM3006	93	320	K	19	3410M
JM3107	93	338	K	21	3413M
JM3108	93	404	K	23	3416M
JM3111	93	401	K	23	3416M
JM3112	93	446	K	27	3420M
JM3115	93	446	K	32	3420M
JM3116	93	489	K	30	3424M
JM3120	93	532	K	30	3424M
JM3154	93	582	K	34	3432M
JM3155	93	632	K	35	3430M
JM3158	93	750	K	42	3524M
JM3457	92	351	K	19	3410M
JM3458	92	380	K	21	3413M
JM3460	92	380	K	21	3413M
JM3461	92	448	K	23	3416M
JM3463	92	416	K	23	3416M
JM3542	92	484	K	26	3420M
JM3545	92	496	K	26	3420M
JM3546	92	514	K	31	3426M
JM3550	92	514	K	29	3424M
JM3554	92	565	K	35	3520M
JM3555	92	651	K	41	3524M
JM3558	92	630	K	40	3523M
JM3559	92	707	K	44	3528M
JM7013	86	918	K	30	3416M
JM7018	86	936	K	41	3516M
JM7071	86	980	K	48	3524M
JML1406T	95	987	L1	69	3628L
JML1408T	95	1132	L1	80	3634LC
JML1409T	95	1394	L1	81	3634LC
JML1508T	95	1606	L1	115	3727L
JML1509T	95	2000	L1	116	3729L
JML1510T	95	2115	L1	142	3744LC
JML1511T	95	2459	L1	141	3740L
JML1512T	95	2618	L1	150	3744LC
JML3606T	95	1035	L1	79	3634L
JML3608T	95	1379	L1	93	3640LC
JMM2333T	98	2842	L1	236	0756M
JMM2333T-5	159	2842	L1	236	0756M
JMM2334T	98	3009	L1	245	0760M
JMM2394T	98	2915	L1	225	0748M
JMM2394T-5	159	2915	L1	225	0748M
JMM2506T	100	1610	L1	160	3756M
JMM2511T	100	1995	L1	242	3948M
JMM2513T	100	2049	L1	155	3748M
JMM2514T	100	2461	L1	195	3930M
JMM2515T	100	2484	L1	197	3760M
JMM2516T	100	3049	L1	221	3934M
JMM2524T	100	2602	L1	323	3958M
JMM2531T	100	3078	L1	281	3942M
JMM2534T	100	3127	L1	267	3936M
JMM2535T	100	3529	L1	299	3952M
JMM2538T	101	4593	L1	307	3946M
JMM2539T	101	4575	L1	375	4052M
JMM2542T	101	4997	L1	368	4044M
JMM2543T	101	5205	L1	406	4060M
JMM2546T	101	6220	L1	401	4054M
JMM3116T	99	607	L1	35	3516M
JMM3120T	99	632	L1	40	3520M
JMM3154T	99	599	L1	38	3519M
JMM3155T	99	700	L1	42	3522M
JMM3157T	99	685	L1	42	3523M
JMM3158T	99	742	L1	48	3528M
JMM3158T-5	159	742	L1	47	3526M
JMM3211T	99	735	L1	63	3536M
JMM3211T-5	159	735	L1	67	3536M
JMM3212T	100	834	L1	62	3535M
JMM3212T-5	159	834	L1	61	3535M
JMM3218T	100	795	L1	73	3630M
JMM3218T-5	159	795	L1	73	3630M
JMM3219T	100	1020	L1	71	3627M
JMM3219T-5	159	1020	L1	73	3627M
JMM3309T	100	1276	L1	124	3734M
JMM3311T	100	1155	L1	106	3644M
JMM3311T-5	159	1155	L1	95	3644M
JMM3312T	100	1387	L1	116	3726M
JMM3312T-5	159	1387	L1	116	3728M
JMM3313T	100	1372	L1	121	3733M
JMM3313T-5	159	1372	L1	119	3733M
JMM3314T	100	1864	L1	126	3731M
JMM3314T-5	159	1864	L1	124	3731M
JMM3546T	97	657	L1	39	3516M
JMM3546T-5	159	657	L1	38	3516M
JMM3550T	97	690	L1	42	3520M
JMM3550T-5	159	690	L1	39	3520M
JMM3554T	97	690	L1	43	3521M
JMM3554T-5	159	690	L1	41	3521M
JMM3555T	97	769	L1	47	3526M
JMM3555T-5	159	769	L1	49	3526M
JMM3558T	97	721	L1	46	3524M
JMM3558T-5	159	721	L1	51	3524M
JMM3559T	97	862	L1	53	3532M
JMM3559T-5	159	862	L1	55	3535M
JMM3610T	97	894	L1	56	3532M
JMM3610T-5	159	894	L1	68	3623M
JMM3611T	97	862	L1	66	3542M
JMM3611T-5	159	862	L1	66	3542M
JMM3613T	97	1104	L1	74	3626M
JMM3613T-5	159	1104	L1	78	3630M
JMM3615T	97	964	L1	85	3635M

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
JMM3615T-5	159	964	L1	81	3634M
JMM3616T	97	1249	L1	91	3640M
JMM3616T-5	159	1249	L1	91	3640M
JMM3709T	97	1407	L1	98	3640M
JMM3710T	97	1233	L1	125	3731M
JMM3710T-5	159	1233	L1	122	3731M
JMM3711T	97	1682	L1	124	3729M
JMM3711T-5	159	1682	L1	123	3729M
JMM3713T	98	2216	L1	160	3748M
JMM3713T-5	159	2216	L1	170	3748M
JMM3714T	97	1556	L1	137	3740M
JMM3714T-5	159	1556	L1	137	3740M
JMM4103T	98	3516	L1	366	0954M
JMM4104T	98	4333	L1	382	0964M
JMM4106T	98	3208	L1	255	0754M
JMM4107T	98	3603	L1	342	0942M
JMM4108T	98	4716	L1	370	0954M
JMM4109T	98	5661	L1	460	1050M
JMM4110T	98	5456	L1	486	1064M
JMM4114T	98	6174	L1	507	1064M
JMM4115T	98	6396	L1	591	1254M
JMM7026T	86	1466	L1	89	3620M
JMM7045T	86	2610	L1	165	3723M
JMM7072T	86	1981	L1	110	3634M
JMM7073T	86	2227	L1	118	3640M
JMM7074T	86	2956	L1	165	3731M
JMM7075T	86	1466	L1	69	3532M
JMSSEWDM3546T	65, 102	1805	WD	62	3525M
JMSSEWDM3550T	65, 102	1809	WD	68	3532M
JMSSEWDM3554T	65, 102	1820	WD	69	3533M
JMSSEWDM3555T	65, 102	2138	WD	72	3535M
JMSSEWDM3558T	65, 102	2168	WD	74	3538M
JMSSEWDM3559T	65, 102	2568	WD	83	3546M
JMSSEWDM3611T	65, 102	2696	WD	108	3635M
JMSSEWDM3613T	65, 102	2904	WD	104	3634M
JMSSEWDM3615T	65, 102	2924	WD	121	3646M
JMSSEWDM3709T	65, 102	3423	WD	184	3735M
JMSSEWDM3710T	65, 102	3487	WD	135	3739M
JMSSEWDM3711T	65, 102	3838	WD	154	3744M
JMSSEWDM3714T	65, 102	4049	WD	187	3756M
JMWDM3546T	65, 102	954	WD	39	3518M
JMWDM3550T	65, 102	998	WD	42	3520M
JMWDM3554T	65, 102	998	WD	46	3526M
JMWDM3555T	65, 102	1110	WD	47	3526M
JMWDM3558T	65, 102	1044	WD	45	3524M
JMWDM3559T	65, 102	1249	WD	53	3532M
JMWDM3611T	65, 102	1249	WD	67	3542M
JMWDM3613T	65, 102	1601	WD	79	3626M
JMWDM3615T	65, 102	1398	WD	89	3635M
JMWDM3616T	65, 102	1814	WD	96	3640M
JMWDM3710T	65, 102	1787	WD	125	3731M
JMWDM3711T	65, 102	2438	WD	134	3732M
JMWDM3713T	65, 102	2904	WD	160	3750M
JMWDM3714T	65, 102	2257	WD	136	3740M
JPL1406T	95	987	L1	76	3628L
JPL1408T	95	1132	L1	87	3634LC
JPL1409T	95	1394	L1	88	3634LC
JPL1508T	95	1606	L1	117	3727L
JPL1509T	95	2000	L1	121	3729L
JPL1510T	95	2115	L1	143	3744LC

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
JPL1511T	95	2459	L1	148	3740L
JPL1512T	95	2618	L1	142	3744LC
JPM2333T	98	2842	L1	236	0756M
JPM2334T	98	3009	L1	245	0760M
JPM2394T	98	2915	L1	225	0748M
JPM2513T	100	2049	L1	175	3748M
JPM2514T	100	2461	L1	206	3930M
JPM2515T	100	2484	L1	197	3760M
JPM2516T	100	3049	L1	219	3934M
JPM2531T	100	3078	L1	282	3942M
JPM2534T	100	3127	L1	270	3936M
JPM2535T	100	3529	L1	255	3952M
JPM2538T	101	4593	L1	308	3946M
JPM2539T	101	4575	L1	378	4052M
JPM2542T	101	4997	L1	376	4044M
JPM2543T	101	5205	L1	415	4060M
JPM2547T	101	5912	L1	507	4252M
JPM2551T	101	7764	L1	586	4266M
JPM3116T	99	607	L1	37	3516M
JPM3154T	99	599	L1	39	3519M
JPM3157T	99	685	L1	43	3523M
JPM3158T	99	742	L1	41	3528M
JPM3211T	99	735	L1	61	3536M
JPM3212T	100	834	L1	65	3535M
JPM3218T	100	795	L1	74	3630M
JPM3219T	100	1020	L1	73	3627M
JPM3311T	100	1155	L1	124	3731M
JPM3312T	100	1387	L1	120	3726M
JPM3313T	100	1372	L1	127	3733M
JPM3314T	100	1864	L1	131	3731M
JPM3554T	97	690	L1	44	3521M
JPM3555T	97	769	L1	48	3526M
JPM3558T	97	721	L1	42	3524M
JPM3559T	97	862	L1	54	3532M
JPM3610T	97	894	L1	58	3532M
JPM3611T	97	862	L1	67	3542M
JPM3613T	97	1104	L1	77	3626M
JPM3615T	97	964	L1	88	3635M
JPM3616T	97	1249	L1	93	3640M
JPM3709T	97	1407	L1	120	3723M
JPM3710T	97	1262	L1	127	3731M
JPM3711T	97	1682	L1	128	3729M
JPM3713T	98	2216	L1	160	3748M
JPM3714T	97	1556	L1	146	3740M
JPM4103T	98	3516	L1	356	0954M
JPM4104T	98	4333	L1	386	0964M
JPM4106T	98	3208	L1	255	0754M
JPM4107T	98	3603	L1	333	0942M
JPM4108T	98	4716	L1	359	0950M
JPM4109T	98	5661	L1	468	1050M
JPM4110T	98	5456	L1	496	1064M
JPM4114T	98	6174	L1	517	1064M
JPM4115T	98	6396	L1	595	1254M
JSL325A	94	376	K	24	3416L
JSL425A	94	399	K	26	3420L
JSL525A	94	426	K	30	3424L
JSL625A	94	580	K	42	1924L
JSL725A	94	582	K	47	1928L
JSM3107	94	338	K	21	3413M
JSM3111	94	400	K	24	3416M

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
JSM3115	94	443	K	27	3420M
JSM3120	94	528	K	31	3424M
JSM3155	94	625	K	35	3430M
JWDM3463	64, 94	634	WD	33	3513M
JWDM3545	64, 94	769	WD	35	3516M
JWDM3550	64, 94	802	WD	38	3520M
JWDM3555	64, 94	905	WD	43	3524M
JWDM3559	64, 94	1109	WD	48	3528M
K00G83	177	1442	A8	8	
K18G8**	269	229	A8	20	
K18G9**	269	237	A8	25	
K18G10**	269	268	A8	35	
K18G11**	269	199	A8	10	
K18G12**	269	212	A8	15	
K36G2	265	730	A8	69	
K36G8	267	274	P1	1	
K36G9	267	300	P1	1	
K36G16	267	313	P1	1	
K36G801	265	1298	A8	65	
K40G2	265	1086	A8	172	
K40G3	267	332	P1	1	
K40G8	267	300	P1	1	
K40G9	267	332	P1	1	
K40G70	265	1086	A8	120	
K40G71	265	1665	A8	116	
K40G801	265	2448	A8	117	
K40G802	265	2448	A8	135	
K44G5	267	752	P1	125	
K44G8	267	332	P1	1	
K44G9	267	356	P1	1	
K44G50	265	1665	A8	250	
K44G51	265	1665	A8	251	
K44G70	265	1665	P1	21	
K44G71	265	1765	P1	196	
K44G801	265	2448	A8	140	
K44G802	265	1874	A8	155	
K99G70	177	1442	E8	9	
K99G71	177	1442	E8	9	
K99G72	177	1442	E8	35	
K99G73	177	1442	E8	4	
K99G74	177	1442	E8	1	
K99G75	177	1442	E8	9	
K99G76	177	1442	E8	5	
K99G77	177	1442	E8	5	
K99G78	177	1622	E8	3	
K99G79	177	1622	E8	6	
K99G80	177	1442	E8	5	
K99G81	177	1442	E8	5	
K99G82	177	1412	A8	6	
KBL3406	142	939	K	27	3414L
KBL3409	142	1031	K	32	3421L
KBM3454	142	833	K	26	3413M
KBM3458	142	885	K	23	3416M
KENM3454	23	513	K	26	3513M
KENM3534	23	566	K	33	3513M
KENM3535	23	832	K	35	3520M
KL1200	16	299	K	19	3408L
KL1203	16	304	K	21	3411L
KL1205	16	290	K	21	3413L
KL1205A	16	296	K	21	3413L

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
KL3400	12	353	K	19	3408L
KL3401	12	494	K	24	3418L
KL3403	12	363	K	20	3411L
KL3405	12	335	K	24	3413L
KM3003	30	311	K	19	3410M
KM3006	30	318	K	20	3410M
KM3454	23	329	K	19	3410M
KM3454-57	165	361	K	20	3410M
KM3457	23	336	K	20	3410M
KNM3454	23	348	K	18	3410M
KNM3457/35	23	541	K	29	3513M
KNM3534	23	385	K	23	3416M
L1177T	11	5867	L1	323	0956LC
L1200	14	279	K	18	3408L
L1201	14	427	K	23	3418L
L1203	14	284	K	21	3414L
L1203M	14	326	K	20	3411L
L1204	14	456	K	25	3421L
L1205	14	268	K	20	3413L
L1205-50	163	309	K	22	3416L
L1206	14	326	K	21	3414L
L1206-50	163	376	K	24	3418L
L1206M	14	367	K	22	3414L
L1207	14	487	K	29	3424L
L1208	14	296	K	21	3416L
L1208-50	163	340	K	25	3420L
L1209	14	410	K	26	3421L
L1209-50	163	472	K	28	3424L
L1209M	14	455	K	24	3418L
L1300	14	475	K	25	3421L
L1301	14	329	K	21	3414L
L1301M	14	386	K	12	3414L
L1302	14	487	K	28	3424L
L1303	14	296	K	21	3413L
L1304	14	365	K	26	3421L
L1304-50	163	428	K	29	3424L
L1304A	14	434	K	24	3418L
L1304M	14	455	K	24	3418L
L1305	14	732	K	34	3524L
L1306	14	362	K	26	3420L
L1306-50	163	414	K	28	3424L
L1306A	14	380	K	31	3424L
L1307	14	450	K	35	3428L
L1307-50	163	529	K	38	3524L
L1307A	14	528	K	32	3428L
L1307M	14	541	K	32	3428L
L1308	14	824	K	43	3528LC
L1309	14	379	K	31	3428L
L1309-50	163	436	K	34	3432L
L1309A	14	404	K	31	3428L
L1310	14	492	K	34	3520L
L1310M	14	629	K	36	3520L
L1313	15	532	K	40	3428LC
L1313-50	163	612	K	43	3528L
L1313A	15	556	K	40	3524L
L1313T	15	532	L1	36	3520L
L1317	15	707	K	44	3528L
L1317-50	163	815	K	47	3532L
L1317A	15	727	K	43	3528L
L1318	14	538	K	43	3528L

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
L1318-50	163	645	K	41	3528L
L1318M	14	586	K	43	3528L
L1318T	14	561	L1	43	3528L
L1318TM	14	586	L1	42	3528L
L1319	15	634	K	42	3528L
L1319-50	163	744	K	41	3528L
L1319M	15	707	K	43	3528L
L1319T	15	599	L1	42	3528L
L1320T	15	758	L1	46	3528LC
L1321T	15	719	L1	49	3535L
L1321TM	15	780	L1	48	3535L
L1322T	15	733	L1	49	3532LC
L1322TM	15	798	L1	45	3532LC
L1401	132	799	L1	46	3617L
L1401M	132	867	L1	49	3617L
L1403	132	892	L1	56	3623L
L1405	132	936	L1	65	3628L
L1405T	15	752	L1	66	3628L
L1405T-50	163	865	L1	66	3628L
L1406T	15	862	L1	65	3628L
L1407	132	1401	L1	64	3628L
L1408T	15	814	L1	76	3634LC
L1408T-50	163	934	L1	91	3646LC
L1408TM	15, 127	958	L1	74	3634LC
L1409T	15	1026	L1	79	3634L
L1410T	15	962	LS	81	3640LC
L1410TM	15, 127	1165	L1	85	3640LC
L1413	129	1268	L1	52	3617L
L1414	129	1483	L1	59	3623L
L1430T	15	883	L1	78	3634LC
L1430TM	15	1165	L1	82	3634LC
L1503	132	2188	L1	108	3729L
L1505	132	1781	L1	106	3729L
L1508T	15	1271	L1	108	3727L
L1508T-50	163	1462	L1	112	3730LC
L1509T	15	1585	L1	94	3640LC
L1510T	15	1379	L1	134	3744LC
L1511T	15	1999	L1	131	3740L
L1512T	15	2013	L1	132	3737LC
L3351	10	296	K	15	3310L
L3352	10	303	K	15	3310L
L3353	10	308	K	16	3313L
L3354	10	318	K	16	3313L
L3355	10	336	K	18	3316L
L3356	10	340	K	18	3316L
L3400	10	335	K	18	3408L
L3401	10	472	K	23	3418L
L3403	10	344	K	20	3411L
L3403M	10	394	K	11	3411L
L3404	10	503	K	25	3421L
L3405	10	313	K	21	3413L
L3406	10	365	K	22	3414L
L3406M	10	414	K	22	3414L
L3407	10	553	K	27	3424L
L3408	10	354	K	22	3413L
L3409	10	405	K	26	3421L
L3409-50	163	476	K	31	3428L
L3409M	10	487	K	26	3421L
L3500	10	528	K	30	3516L
L3501	10	353	K	22	3414L

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
L3501-50	163	418	K	25	3418L
L3501M	10	414	K	22	3414L
L3502	10	553	K	28	3424L
L3503	10	354	K	23	3413L
L3503-50	163	409	K	27	3420L
L3504	10	414	K	27	3421L
L3504-50	163	476	K	32	3428L
L3504A	10	495	K	27	3421L
L3504M	10	487	K	27	3421L
L3505	10	784	K	43	3528L
L3506	10	399	K	28	3424L
L3506-50	163	456	K	35	3520L
L3507	10	477	K	33	3428LC
L3507-50	163	565	K	38	3524L
L3507A	10	598	K	35	3428LC
L3507M	10	572	K	33	3428LC
L3508	10	907	K	44	3528LC
L3508T	10	893	L1	46	3528LC
L3509	11	462	K	37	3520L
L3509-50	163	531	K	40	3524L
L3509M	11	522	K	40	3524L
L3510	11	541	K	41	3524L
L3510-50	163	650	K	47	3532L
L3510A	11	672	K	40	3524L
L3510M	11	649	K	38	3524L
L3510T	11	552	L1	39	3524L
L3510TM	11	649	L1	40	3524L
L3513	11	619	K	41	3524L
L3513-50	163	699	K	48	3532L
L3513M	11	708	K	46	3528L
L3513T	11	607	L1	43	3524L
L3514	11	625	K	49	3532LC
L3514-50	163	734	K	46	3535LC
L3514A	11	797	K	48	3532LC
L3514M	11	733	K	51	3532LC
L3514T	11	634	L1	44	3526LC
L3514T-50	163	734	L1	51	3535LC
L3514TM	11	733	L1	49	3532LC
L3515	11	790	K	52	3535L
L3515-50	163	909	K	53	3535LC
L3515M	11	827	K	52	3535L
L3515T	11	797	L1	52	3535L
L3516T	11	1013	L1	51	3535LC
L3516TM	11, 127	1043	K	46	3528LC
L3565M	129	827	K	38	3524L
L3566M	129	899	K	41	3524L
L3567M	129	1089	K	49	3532LC
L3576M	129	696	K	36	3520L
L3601	132	996	L1	55	3620L
L3603	132	1085	L1	66	3628L
L3605	132	1214	L1	67	3628L
L3605M	132	1301	L1	66	3628L
L3605T	11	905	L1	68	3628L
L3605T-50	163	1039	L1	76	3634LC
L3605TM	11	1104	L1	73	3634L
L3606T	11	934	L1	74	3634L
L3607	132	1590	L1	74	3634L
L3608T	11	1285	L1	88	3640LC
L3608TM	11, 127	1326	L1	89	3640LC
L3609T	11	1065	L1	80	3634LC

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
L3609T-50	163	1223	L1	95	3646LC
L3609TM	11, 127	1152	L1	79	3634LC
L3612TM	11, 127	1339	L1	100	3646LC
L3613T	11	1657	L1	77	3634LC
L3703	132	2626	L1	113	3735LC
L3705	132	2070	L1	117	3735LC
L3706	132	3153	L1	110	3727LC
L3708	132	2117	L1	100	3726LC
L3708T	11	1271	L1	116	3726LC
L3708T-50	163	1462	L1	119	3732LC
L3708TM	11	1493	L1	135	3744LC
L3709T	11	1655	L1	123	3735LC
L3710T	11	1679	L1	134	3734LC
L3711T	11	2029	L1	148	3744LC
L3712T	11	2060	L1	158	3748LC
L3912T	11	5269	L1	303	3956LC
L4003A	74	553	K	26	3411L
L4005A	74	490	K	32	3413L
L4006A	74	713	K	29	3414L
L4009A	74	784	K	35	3424L
L5000A	74	528	K	29	3414L
L5000A-C	74	657	K	35	3414L
L5001A	74	679	K	29	3414L
L5002A	74	961	K	41	3520L
L5003A	74	644	K	29	3416L
L5004A	74	748	K	35	3424L
L5004A-C	74	877	K	40	3424L
L5005A	74	1107	K	50	3528L
L5006A	74	726	K	40	3516L
L5007A	74	879	K	47	3524L
L5007A-C	74	1008	K	53	3524L
L5009A	74	784	K	48	3524L
L5013	74	2036	L1	77	3628L
L5018	74	3257	L1	152	3735L
L5020	74	4143	L1	166	3744LC
L5022	74	1280	K	57	3540L
L5023A	74	1001	K	48	3524L
L5023T	74	980	L1	46	3528L
L5026	74	2193	L1	83	3634L
L5027T	74	2063	L1	84	3634L
L5028T	74	2144	L1	84	3634L
L5030T	74	1136	L1	54	3528L
L5031T	74	1404	L1	57	3535L
LB73	239, 242, 270	49	A8	2	
LB73GR	239, 242, 270	49	A8	2	
LB74	239, 242, 270	69	A8	2	
LB74GR	239, 242, 270	69	A8	2	
LB75	239, 242, 270	96	A8	7	
LB75GR	239, 242, 270	96	A8	3	
M1004T	126	760	L1	33	3520M
M1005T	126	790	L1	38	3524M
M1006T	126	912	L1	41	3528M
M1007T	126	980	L1	56	3623M
M1008T	126	1180	L1	71	3634M
M1009T	126	1685	L1	113	3735M
M1010T	126	1910	L1	133	3744M
M1019	126	816	K	36	3524M
M1020T	126	879	L1	41	3528M
M1021T	126	1065	L1	55	3623M
M1022T	126	1215	L1	64	3628M

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
M1023T	126	1415	L1	72	3634M
M1024T	126	2178	L1	113	3735M
M1204T	126	760	L1	33	3520M
M1205T	126	790	L1	37	3524M
M1206T	126	912	L1	41	3528M
M1207T	126	980	L1	56	3623M
M1208T	126	1180	L1	72	3634M
M1209T	126	1685	L1	112	3735M
M1210T	126	1910	L1	132	3744M
M1211T	126	2683	L1	206	3936M
M1212T	126	3288	L1	204	3936M
M1213T	126	3859	L1	300	4046M
M1218	126	777	K	33	3520M
M1219	126	816	K	36	3524M
M1220T	126	879	L1	41	3528M
M1221T	126	1065	L1	55	3623M
M1222T	126	1215	L1	65	3628M
M1223T	126	1415	L1	72	3634M
M1224T	126	2178	L1	113	3735M
M1225T	126	2896	L1	148	3740M
M1226T	126	3271	L1	172	3750M
M1227T	126	3969	L1	288	4040M
M1228T	126	5323	L1	309	4046M
M1504T	124	1132	L1	39	3524M
M1505T	124	1196	L1	47	3535M
M1506T	124	1452	L1	64	3628M
M1507T	124	1644	L1	84	3640M
M1508T	124	2148	L1	134	3744M
M1509T	124	2797	L1	185	3754M
M1519	124	882	K	37	3524M
M1520T	124	921	L1	42	3528M
M1521T	124	1138	L1	58	3623M
M1522T	124	1305	L1	66	3628M
M1523T	124	1527	L1	73	3634M
M1524T	124	2392	L1	126	3740M
M1554T	124	798	L1	33	3520M
M1555T	124	829	L1	41	3528M
M1556T	124	963	L1	41	3528M
M1557T	124	1036	L1	65	3628M
M1558T	124	1318	L1	83	3640M
M1704T	124	1132	L1	45	3530M
M1705T	124	1196	L1	47	3535M
M1706T	124	1452	L1	65	3628M
M1707T	124	1644	L1	84	3640M
M1708T	124	2148	L1	132	3744M
M1709T	124	2797	L1	181	3754M
M1710T	124	4308	L1	263	0940M
M1711T	124	4988	L1	267	0944M
M1712T	124	6338	L1	378	1046M
M1713T	124	7694	L1	397	1048M
M1718	125	822	K	29	3515M
M1719	125	909	K	33	3517M
M1720T	125	921	L1	35	3521M
M1721T	125	1138	L1	50	3528M
M1722T	125	1305	L1	58	3536M
M1723T	125	1527	L1	73	3634M
M1724T	125	2392	L1	128	3740M
M1725T	125	3092	L1	230	0928M
M1726T	125	3559	L1	225	0750M
M1727T	125	4223	L1	355	1036M

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
M1728T	125	5726	L1	390	1046M
M1729T	125	6032	L1	512	1240M
M1754T	124	798	L1	33	3518M
M1755T	124	829	L1	38	3523M
M1756T	124	963	L1	45	3531M
M1757T	124	1036	L1	63	3628M
M1758T	124	1318	L1	84	3640M
M1759T	124	1857	L1	136	3744M
M1760T	124	2187	L1	158	3756M
M1761T	124	3023	L1	247	0934M
M1762T	124	3574	L1	344	1034M
M1763T	124	4147	L1	384	1040M
M2237	130	2236	L1	232	0928M
M2238	130	2803	L1	245	0932M
M2275	130	2626	L1	211	0736M
M2276	130	3157	L1	229	0756M
M2280T	18	3159	L1	229	0762M
M2332	130	4033	L1	310	0946M
M2333	130	3859	L1	292	0938M
M2333T-8	146	1953	L1	236	0756M
M2333T-9	45	2110	SD	260	0940M
M2333T-58	164	2193	L1	245	0760M
M2334	130	4618	L1	296	0938M
M2334T-8	146	2357	L1	262	0938M
M2334T-9	45	2546	SD	268	0942M
M2334T-58	164	2646	L1	305	0954M
M2393	130	2509	L1	171	0727M
M2394	130	2602	L1	225	0748M
M2395T	19	5624	L1	400	1050M
M2401T	19	3483	L1	270	0946M
M2402T	19	4044	L1	365	1038M
M2504T	27	2503	L1	220	3944M
M2505	131	2088	L1	129	3731M
M2508T	27	3133	L1	232	3946M
M2510	131	2521	L1	177	3728M
M2513T-8	147	1602	L1	155	3748M
M2513T-58	164	1797	L1	187	3756M
M2514T-8	147	2045	L1	194	3928M
M2515T-8	147	2062	L1	197	3762M
M2515T-58	164	2314	L1	235	3944M
M2516T-8	147	2474	L1	189	3932M
M2523	131	3297	L1	223	3934M
M2527	131	3783	L1	240	3940M
M2531T-8	147	2499	L1	250	3942M
M2534T-8	147	2619	L1	275	3938M
M2535T-8	147	2922	L1	282	3952M
M2538T-8	147	3685	L1	259	3946M
M2539T-8	147	3725	L1	351	4052M
M2542T-8	147	3819	L1	336	4044M
M2543T-8	147	4372	L1	383	4060M
M2565T-4	28	15162	L1	1389	A44056M
M2566T-4	28	15095	L1	1633	A4472M
M2568T-4	28	23699	L1	1456	A44064M
M2571T-4	28	27121	L1	1565	A44068M
M2572T-4	28	26796	L1	2332	A44128M
M3003	26	292	K	18	3410M
M3004	26	472	K	19	3411M
M3006	26	296	K	19	3410M
M3007	26	313	K	11	3413M
M3008	26	462	K	11	3414M
M3009	26	313	K	18	3410M
M3010	26	393	K	22	3416M
M3011	26	511	K	23	3418M
M3012	26	376	K	20	3413M
M3013	26	437	K	25	3420M
M3101	26	472	K	19	3411M
M3104	26	300	LS	20	3413M
M3104-5	158	300	LS	20	3413M
M3105	26	494	K	21	3414M
M3107	26	313	K	19	3410M
M3108	26	341	LS	22	3416M
M3108-5	158	341	LS	22	3416M
M3108-57	164	393	K	26	3420M
M3108A	26	464	K	22	3416M
M3109	26	543	K	22	3418M
M3111	26	368	K	20	3413M
M3112	26	381	LS	26	3420M
M3112-5	158	381	LS	25	3420M
M3112-57	164	437	K	26	3420M
M3112A	26	507	K	26	3420M
M3115	26	426	K	23	3416M
M3116	26	429	LS	28	3424M
M3116-5	158	429	LS	28	3424M
M3116-57	164	494	K	20	3517M
M3116A	26	564	K	28	3424M
M3116T-8	147	444	L1	32	3516M
M3116T-57	164	497	L1	20	3517M
M3120	26	476	K	29	3424M
M3153	26	586	K	31	3428M
M3153T	26	586	L1	33	3428M
M3154	26	496	LS	34	3432M
M3154A	26	563	K	34	3520M
M3154T-8	147	522	L1	34	3519M
M3154T-57	164	528	L1	25	3521M
M3155	26	555	K	31	3428M
M3156	26	623	K	36	3520M
M3157	26	517	LS	38	3521M
M3157T-8	147	530	L1	38	3523M
M3157T-57	164	543	L1	32	3530M
M3158	27	572	K	41	3524M
M3158T-8	147	615	L1	45	3528M
M3159	26	708	K	41	3528M
M3160	26	825	K	38	3522M
M3203	131	713	L1	36	3516M
M3206	131	742	L1	40	3519M
M3208	131	911	L1	42	3522M
M3209	131	799	L1	44	3523M
M3210	131	968	L1	57	3528M
M3211	131	801	L1	55	3536M
M3211T-8	147	552	L1	57	3536M
M3211T-57	164	621	L1	58	3630M
M3212T-8	147	637	L1	56	3535M
M3216T	26	1036	L1	60	3623M
M3218T-8	147	612	L1	71	3630M
M3218T-57	164	687	L1	92	3646M
M3219T-8	147	873	L1	69	3627M
M3220T	26	1259	L1	68	3631M
M3233	129	1098	L1	51	3614M
M3234	129	1164	L1	51	3617M
M3303T	26	1554	L1	112	3732M

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
M3304	131	976	L1	68	3624M
M3306T	27	1791	L1	137	3744M
M3308	131	1023	L1	77	3630M
M3310	131	1376	L1	75	3627M
M3311T-8	147	866	L1	96	3643M
M3311T-58	164	972	L1	105	3735M
M3312T-8	147	1095	L1	107	3726M
M3313T-8	147	1060	L1	116	3733M
M3313T-58	164	1189	L1	117	3740M
M3314T-8	147	1599	L1	117	3731M
M3324	129	1567	L1	79	3717M
M3325	129	1614	L1	80	3717M
M3326	129	1968	L1	95	3720M
M3353	17	376	K	16	3313M
M3355	17	426	K	17	3316M
M3452	17	439	K	17	3408M
M3454	17	311	K	19	3410M
M3455	17	489	K	18	3411M
M3457	17	316	K	20	3410M
M3458	17	379	K	11	3413M
M3460	17	366	K	19	3410M
M3461	17	444	K	22	3416M
M3463	17	403	K	21	3413M
M3464	17	480	K	30	3420M
M3531	17	484	K	23	3411M
M3532	17	705	K	28	3514M
M3534	17	340	LS	21	3413M
M3534-5	149	340	LS	20	3413M
M3535	17	544	K	22	3414M
M3536	17	768	K	29	3515M
M3537	17	366	K	19	3410M
M3537-5	149	366	K	19	3410M
M3538	17	389	LS	23	3416M
M3538-5	149	389	LS	22	3416M
M3538/35	17	501	K	25	3511M
M3538-57	164	446	K	26	3420M
M3539	17	586	K	24	3418M
M3539-5	149	586	K	23	3418M
M3539-TP	120	625	K	29	3516M
M3541	17	403	K	21	3413M
M3541-5	149	403	K	21	3413M
M3541-57	164	446	K	25	3420M
M3542	17	416	LS	25	3420M
M3542-5	149	416	LS	26	3420M
M3542-57	164	477	K	32	3428M
M3543	17	598	K	32	3428M
M3543-5	149	598	K	33	3428M
M3543T	17	598	L1	33	3428M
M3543T-5	149	598	L1	34	3428M
M3545	18	472	K	23	3416M
M3545-5	149	472	K	23	3416M
M3545-57	164	543	K	27	3420M
M3546	18	433	LS	30	3426M
M3546-5	149	433	LS	29	3514M
M3546/35	18	523	K	24	3516M
M3546T-8	146	493	L1	33	3516M
M3546T-57	164	555	L1	33	3517M
M3550	18	515	K	29	3424M
M3550T-57	164	630	L1	37	3520M
M3554	18	489	LS	35	3520M
M3554T-8	146	503	L1	39	3521M
M3554T-57	164	565	L1	25	3521M
M3555	18	579	K	35	3428M
M3555-5	149	579	K	40	3524M
M3555T-57	164	692	L1	44	3526M
M3556	18	608	K	37	3520M
M3556-5	149	608	K	37	3520M
M3557	18	698	K	46	3529M
M3558	18	528	LS	40	3523M
M3558-5	149	528	LS	40	3523M
M3558T-8	146	528	L1	41	3524M
M3558T-9	45	597	SD	41	3524M
M3558T-57	164	596	L1	46	3530M
M3559	18	673	K	45	3528M
M3559-5	149	673	K	50	3535M
M3560	17	862	K	38	3522M
M3564	129	671	K	30	3511M
M3565	129	705	K	31	3513M
M3566	129	740	K	32	3514M
M3567	129	776	K	38	3520M
M3600	130	1082	L1	41	3522M
M3601	130	857	L1	36	3515M
M3602	130	1082	L1	51	3531M
M3603	130	777	L1	38	3516M
M3604	130	991	L1	44	3522M
M3605	130	882	L1	42	3520M
M3606	130	792	L1	43	3521M
M3607	130	1059	L1	66	3628M
M3608	130	1015	L1	41	3526M
M3609	130	835	L1	45	3524M
M3610	130	836	L1	54	3532M
M3610T-57	164	882	L1	66	3542M
M3611	130	870	L1	63	3542M
M3611T-8	146	624	L1	64	3542M
M3611T-9	45	700	SD	66	3629M
M3611T-57	164	700	L1	71	3630M
M3613T-57	164	1014	L1	76	3632M
M3615T-8	146	718	L1	76	3634M
M3615T-9	45	808	SD	83	3638M
M3615T-57	164	808	L1	96	3646M
M3617T	18	1211	L1	62	3623M
M3618T	18	1434	L1	88	3640M
M3701	130	1671	L1	88	3720M
M3702	130	1865	L1	100	3724M
M3702T	18	1816	L1	102	3724M
M3703	130	1023	L1	70	3628M
M3704	130	1259	L1	109	3728M
M3705T	18	1985	L1	139	3743M
M3706	130	1424	L1	75	3626M
M3707	130	1290	L1	83	3634M
M3709	130	1436	L1	90	3640M
M3709T-58	164	1493	L1	113	3727M
M3710T-8	146	917	L1	116	3731M
M3710T-9	45	1027	SD	120	3734M
M3710T-58	164	1027	L1	130	3738M
M3711T-58	164	1563	L1	160	3748M
M3712	130	1197	L1	80	3633M
M3714T-8	146	1113	L1	131	3740M
M3714T-9	45	1195	SD	136	3741M
M3714T-58	164	1249	L1	158	3750M

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
M4103	130	5738	L1	408	1040M
M4103T-8	146	2915	L1	333	0956M
M4103T-9	45	3158	SD	415	1056M
M4103T-58	164	3725	L1	397	1048M
M4104	130	6806	L1	423	1044M
M4104T-8	146	3443	L1	357	0964M
M4104T-9	45	3730	SD	423	1058M
M4104T-58	164	4403	L1	417	1056M
M4106	130	3759	L1	309	0940M
M4107	130	5860	L1	401	1034M
M4110T-8	146	4568	L1	480	1064M
M4110T-9	45	4948	SD	632	1268M
M4110T-58	164	5759	L1	554	1250M
M4112T	19	6395	L1	537	1250M
M4115T-8	146	4729	L1	530	1080M
M4115T-9	45	5122	SD	633	1268M
M4115T-58	164	6252	L1	614	1264M
M4116T	19	7899	L1	530	1256M
M4314T-9	45	9016	SD	876	A36050M
M4314T-58	164	8129	L1	904	A36062M
M4316T-9	45	9729	SD	911	A36056M
M4338T	19	8784	L1	736	1450M
M4348T	19	10895	L1	787	A36050M
M4408T-4	20	26362	L1	2477	A44112M
M4408T-4E	20	26362	L1	2240	A44100M
M4408TR-4	20	26362	L1	2510	A44112M
M4408TS-4	20	26362	L1	2449	A44112M
M4458T	19	13379	L1	1095	A40052M
M4468T	19	15451	L1	1106	A40052M
M4908T-4	20	26362	L1	2545	A44112M
M4908TR-4	20	26362	L1	2545	A44112M
M4908TS-4	20	26362	L1	4000	A44112M
M6002A	74	575	K	25	3410M
M6007A	74	719	K	30	3416M
M7002A	74	691	K	27	3413M
M7003A	74	992	K	34	3513M
M7005A	74	792	K	27	3410M
M7006-5	79, 160	719	K	34	3512M
M7006A	74	719	K	29	3416M
M7007A	74	1047	K	39	3516M
M7009A	74	825	K	29	3413M
M7010-5	79, 160	828	K	37	3513M
M7010A	74	828	K	33	3420M
M7013	75	869	K	29	3416M
M7013-5	79, 160	869	K	30	3416M
M7014	75	907	K	39	3514M
M7014-5	79, 160	907	K	40	3514M
M7015	75	1307	L1	48	3516M
M7019	75	1656	L1	52	3521M
M7023	75	1696	L1	55	3524M
M7026	75	1450	L1	68	3620M
M7027	75	1937	L1	169	3723M
M7030	75	2508	L1	193	3726M
M7031A	74	1112	K	43	3524M
M7031TA	74	1112	L1	47	3524M
M7032	75	1112	K	44	3520M
M7034	75	987	K	44	3520M
M7037	75	1104	K	48	3523M
M8001	48	586	SD	27	3416M
M8002	48	744	SD	30	3420M
M8003	48	814	SD	35	3426M
M25352T-4	28	27121	L1	2269	A44128M
M25402T-4	28	31819	L1	2155	A44112M
M25404T-4	28	29082	L1	2413	A44140M
M25452T-4	28	35038	L1	2132	A44112M
M25454T-4	28	32890	L1	2479	A44144M
M25694T-4	28	23052	L1	1990	A44096M
M44252T-4	20	31880	L1	2569	A44112M
M44256T-4	20	36660	L1	2717	A44128M
M44302T-4	20	48699	L1	2743	A44128M
M44304T-4	20	39242	L1	2863	A44140M
M44304TS-4	20	39242	L1	2838	A44140M
M44306T-4	20	46794	L1	2826	A44140M
M44352T-4	20	56256	L1	2922	A44144M
M44354T-4	20	43600	L1	2995	A44152M
M44354TS-4	20	43600	L1	3130	A44152M
M44402T-4	20	68390	L1	2994	A44160M
M44404T-4	20	57021	L1	3041	A44160M
M49302T-4	20	48699	L1	2798	A44128M
M49354T-4	20	43600	L1	3026	A44152M
M49354TS-4	20	43600	L1	3130	A44152M
M74254T-4	76	35752	L1	2518	A44106M
MOV505L	211	118	E7	1	
MOV620EL	211	111	E7	1	
MST-030-CA	209	1509	E7	1	
MST-037-CA	209, 210	1543	E7	1	
MST-044-CA	209, 210	1577	E7	1	
MST-050-CA	209, 210	1963	E7	1	
MST-050-GD	209	5973	E7	72	
MST-072-CA	209, 210	1992	E7	1	
MST-072-GD	209, 210	6190	E7	73	
MST-085-CA	209, 210	2701	E7	27	
MST-085-GD	209, 210	6807	E7	107	
MST-105-CA	209, 210	2735	E7	27	
MST-105-GD	209, 210	7477	E7	109	
MST-142-CA	209, 210	3830	E7	33	
MST-142-GD	209, 210	8187	E7	118	
MST-175-CA	209, 210	3881	E7	44	
MST-175-GD	209, 210	10092	E7	209	
MST-175-GS	210	10329	E7	223	
MST-210-CA	209, 210	4392	E7	49	
MST-210-GD	209, 210	10669	E7	227	
MST-210-GS	210	12327	E7	228	
MST-250-CA	209, 210	4936	E7	49	
MST-250-GD	209, 210	11586	E7	229	
MST-250-GS	210	11740	E7	237	
MST-300-CA	209, 210	5095	E7	53	
MST-300-GD	209, 210	12327	E7	239	
MST-300-GS	210	13058	E7	235	
MST-370-CA	209, 210	6423	E7	84	
MST-370-GD	209, 210	15427	E7	343	
MST-370-GS	210	16992	E7	373	
MST-470-CA	209, 210	7944	E7	93	
MST-470-GD	209, 210	17507	E7	352	
MST-470-GS	210	19875	E7	399	
MST-570-CA	209, 210	9703	E7	97	
MST-570-GS	210	27568	E7	649	
MST-720-CA	209, 210	10928	E7	119	
MST-720-GS	210	30822	E7	681	
MST-840-CA	209, 210	12369	E7	124	

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
MST-840-GS	210	38587	E7	687	
MST-1050-CA	209, 210	20427	E7	137	
MSTEK	211	461	E7	2	
NM3454	17	326	K	20	3413M
NM3454/35	17	524	K	28	3513M
NM3455	17	450	K	19	3411M
NM3534	17	365	K	23	3416M
NM3538	17	423	K	25	3420M
NM3538/35	17	511	K	27	3512M
NM3539	17	644	K	40	3524M
NM3542	17	455	K	29	3514M
NM3546	18	497	K	39	3524M
NM3546T	18	523	L1	34	3518M
NM3554T	18	546	L1	42	3526M
OF2276T	47	3127	SD	257	0932M
OF2332T	47	3482	SD	288	0942M
OF3303T	47	1414	SD	92	3722M
OF3305T	47	1876	SD	136	3731M
OF3307T	47	2339	SD	211	3930M
OF3310T	47	2834	SD	231	3938M
OF3315T	47	3975	SD	299	4032M
OF3320T	47	4762	SD	329	4040M
OF3325T	47	6119	SD	458	4244M
OF3330T	47	7444	SD	443	4248M
OF3340T	47	9483	SD	572	4268M
OF3350T	47	11088	SD	908	A40038M
OF3360T	47	12458	SD	1024	A40054M
OF3375T	47	14703	SD	1119	A40068M
OF3407T	47	2565	SD	231	0932M
OF3410T	47	2997	SD	273	0942M
OF3415T	47	4200	SD	340	1034M
OF3420T	47	4982	SD	383	1044M
OF3425T	47	6510	SD	487	1244M
OF3430T	47	7873	SD	524	1248M
OF3440T	47	10052	SD	714	A36046M
OF3764T	47	2314	SD	164	0722M
OF3768T	47	2565	SD	196	0750M
OF4100T	47	5553	SD	418	1048M
OF4102T	47	6709	SD	469	1060M
OF4111T	47	8096	SD	575	1250M
OF4117T	47	9817	SD	619	1262M
OF4308T	47	10877	SD	938	A36064M
OF4312T	47	14089	SD	1275	A40062M
OF4403T	47	17426	SD	1348	A40072M
OF4404T	47	18899	SD	2131	A4488M
OF4409T	47	24566	SD	2074	A44116M
OF4411T	47	31535	SD	2881	A44134M
OF4904T	47	18899	SD	2616	A44116M
OF4909T	47	24566	SD	2616	A44116M
OF4911T	47	31535	SD	2910	A44134M
OF33100T	47	15621	SD	1620	A44072M
OF33125T	47	19802	SD	2370	A44134M
OF44156T	47	37249	SD	3169	A44160M
OF49156T	47	37249	SD	3176	A4416M
P18G2701	106	5611	S1	240	
P18G2702	106	5611	S1	235	
P18G2703	106	7021	S1	243	
P18G2704	106	7021	S1	245	
P18G2707	106	5469	S1	235	
P18G2709	106	7412	S1	248	
P18G2739	106	5611	S1	235	
P18G2784	106	5102	S1	169	
P18G2787	106	5226	S1	175	
P18G2791	106	5324	S1	183	
P18G2792	106	5324	S1	182	
P18G2794	106	5382	S1	200	
P21G2701	106	7567	S1	356	
P21G2702	106	7567	S1	356	
P21G2703	106	9694	S1	376	
P21G2704	106	9694	S1	374	
P21G2705	106	8190	S1	350	
P21G2707	106	10014	S1	391	
P21G2737	106	10684	S1	378	
P21G2747	106	9155	S1	350	
P21G2750	106	5361	S1	335	
P21G2752	106	8104	S1	368	
P21G2754	106	5361	S1	340	
P21G2755	106	6434	S1	351	
P21G2756	106	6434	S1	367	
P21G2757	106	8104	S1	377	
P21G2758	106	11257	S1	407	
P21G2769	106	10014	S1	391	
P21G2770	106	8190	S1	350	
P25G2702	106	13650	S1	495	
P25G2704	106	14744	S1	445	
P25G2706	106	19961	S1	510	
P25G2707	106	13228	S1	469	
P25G2710	106	14587	S1	474	
P25G2712	106	18927	S1	496	
P25G2747	106	13650	S1	517	
P32G2700	106	22712	S1	1150	
P32G2701	106	23360	S1	882	
P32G2702	106	25332	S1	872	
P32G2703	106	38734	S1	956	
P32G2706	106	29877	S1	950	
P32G2724	106	23360	S1	880	
P36G2700	106	39606	S1	1374	
P36G2701	106	41185	S1	1340	
P36G2702	106	50906	S1	1500	
PCL1313M	127	598	K	38	3520LC
PCL1317M	127	767	K	42	3524LC
PCL1319M	127	767	K	44	3528LC
PCL1322M	127	795	K	48	3532LC
PCL1326M	127	841	K	50	3532LC
PCL1327M	127	861	K	57	3535LC
PCL3513M	127	679	K	38	3520LC
PCL3514M	127	885	K	54	3535LC
PCL3515M	127	805	K	43	3524LC
PCL3519M	127	882	K	52	3532LC
PFTG50XP	200	1453	N5	6	
PFTG100XP	200	1453	N5	6	
PFTG4250XC	200	2920	N5	32	
PFTG4650XC	200	5021	N5	44	
PFTG42100X	200	2857	N5	33	
PFTG46100X	200	5021	N5	43	
PL1313M	127	552	K	37	3520LC
PL1317M	127	719	K	41	3524LC
PL1319M	127	732	K	43	3528LC
PL1322M	127	767	K	46	3532LC
PL1326M	127	794	K	49	3532LC

[1] Shipping weight is approximate.

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PL1327M	127	818	K	56	3535LC
PL3513M	127	634	K	38	3520LC
PL3514M	127	842	K	51	3535LC
PL3515M	127	767	K	42	3524LC
PL3519M	127	841	K	50	3532LC
PSC3413A	122	400	K	19	3411C
PSC3416A	122	444	K	21	3414C
PSC3524A	122	487	K	24	3418C
PTG50NC	200	2085	N5	8	
PTG50NC	200	2085	N5	8	
PTG50XP	200	1453	N5	6	
PTG50XPS	200	1509	N5	8	
PTG60XP-M	200	1453	N5	5	
PTG60XP-M	200	1453	N5	5	
PTG60XPS-M	200	1509	N5	11	
PTG100XP	200	1453	N5	6	
PTG100XPS	200	1509	N5	10	
PTG1024LD	200	1895	N5	1	
PTG4590AC	200	1396	N5	8	
PTGWD50XPS	200	1607	N5	10	
PTGWD100XPS	200	1607	N5	10	
RBK13B5	262	69	A8	5	
RBK15B5	262	87	A8	5	
RBK18B5	262	108	A8	5	
RBK21B5	262	139	A8	5	
RBK24B5	262	146	A8	5	
RBK24B9	262	276	A8	10	
RBK26B5	262	154	A8	8	
RBK26B9	262	336	A8	11	
RBK30B5	262	174	A8	15	
RBK30B9	262	373	A8	15	
RBK32B5	262	234	A8	8	
RBK32B9	262	461	A8	15	
RL1203A	121	271	K	20	3411L
RL1206A	121	292	K	24	3414L
RL1209A	121	333	K	27	3418L
RL1301A277	121	446	K	23	3414L
RL1304A	121	434	K	26	3418L
RL1304A277	121	464	K	26	3418L
RL1306A	121	399	K	26	3420L
RL1307A	121	532	K	34	3428L
RL1307A277	121	639	K	34	3428L
RL1309A	121	459	K	36	3520L
RL1310A	121	578	K	34	1920L
RL1310A277	121	657	K	42	3528L
RL1313A	121	591	K	36	3524L
RL1319A	121	699	K	42	3528L
RL1319A277	121	715	K	49	3535L
RL1323A	121	395	K	24	3416L
RL1324A	121	428	K	31	3424L
RM3003	121	318	K	19	3410M
RM3007	121	321	K	21	3413M
RM3007A	122	321	K	21	3413M
RM3009	121	321	K	19	3410M
RM3010	121	404	K	22	3416M
RM3104	121	366	K	22	3413M
RM3108	121	416	K	23	3416M
RM3108A	122	487	K	25	3413M
RM3111	121	422	K	22	3413M
RM3112	121	462	K	27	3420M

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
RM3112A	122	524	K	32	3420M
RM3115	121	446	K	23	3416M
RM3116	121	489	K	32	3426M
RM3116A	122	546	K	32	3424M
RM3120	121	543	K	31	3424M
RM3154	121	563	K	35	3432M
RM3154A	122	580	K	34	1920M
RM3155	121	630	K	33	3428M
RM3157	121	608	K	37	3521M
RM3157A	122	665	K	40	3524M
SFL913B5	262	183	A8	8	
SFL918B5	262	183	A8	9	
SFL918B7	262	183	A8	8	
SFL921B5	262	203	A8	11	
SFL921B7	262	203	A8	11	
SFL924B5	262	203	A8	11	
SFL924B7	262	203	A8	11	
SFL926B5	262	261	A8	14	
SFL926B7	262	261	A8	15	
SH10HS	231, 244, 270	26	A8	2	
SSB18H71	261	395	A8	5	
SSB21H71	261	411	A8	9.5	
SSB26H71	261	454	A8	13	
SSBU100H012	263	166	A8	1	
SSBU100H014	263	166	A8	1	
SSBU100H015	263	166	A8	1	
SSBU104H015	263	105	A8	1	
SSBU104H100	263	105	A8	1	
SSBU107H015	263	199	A8	33	
SSBU107H100	263	199	A8	1	
SSBU107H102	263	199	A8	1	
SSBU107H103	263	199	A8	1	
SSBU107H104	263	199	A8	1	
SSBU107H105	263	199	A8	1	
SSGF0518AG	251	1710	GB	30	
SSGF0518BG	251	1710	GB	30	
SSGF0521BG	251	2001	GB	35	
SSGF0526BG	251	2813	GB	65	
SSGF1018AG	251	1710	GB	30	
SSGF1018BG	251	1710	GB	30	
SSGF1021BG	251	2001	GB	35	
SSGF1026BG	251	2813	GB	56	
SSGF1518AG	251	1710	GB	30	
SSGF1521AG	251	2001	GB	35	
SSGF1526BG	251	2813	GB	65	
SSGF2018AG	251	1710	GB	30	
SSGF2021AG	251	2001	GB	35	
SSGF2026BG	251	2813	GB	65	
SSGF2518AG	251	1710	GB	30	
SSGF2521AG	251	2001	GB	35	
SSGF2526BG	251	2813	GB	56	
SSGF3018AG	251	1710	GB	30	
SSGF3021AG	251	2001	GB	35	
SSGF3026BG	251	2813	GB	56	
SSGF4018AG	251	1710	GB	30	
SSGF4021AG	251	2001	GB	35	
SSGF4026BG	251	2813	GB	56	
SSGF5018AG	251	1710	GB	30	
SSGF5021AG	251	2001	GB	35	
SSGF5026AG	251	2813	GB	60	

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
SSGF6018AG	251	1710	GB	30	
SSGF6021AG	251	2001	GB	35	
SSGF6026AG	251	2813	GB	56	
SSGHF0518AH	252	1805	GB	30	
SSGHF1018AH	252	1805	GB	30	
SSGHF1021AH	252	2091	GB	38	
SSGHF1032CH	252	4633	GB	92	
SSGHF1518AH	252	1805	GB	30	
SSGHF1521AH	252	2091	GB	38	
SSGHF1532CH	252	4633	GB	92	
SSGHF2018AH	252	1805	GB	30	
SSGHF2021AH	252	2091	GB	38	
SSGHF2026AH	252	3009	GB	60	
SSGHF2032CH	252	4633	GB	92	
SSGHF3018AH	252	1805	GB	30	
SSGHF3021AH	252	2091	GB	38	
SSGHF3026AH	252	3009	GB	60	
SSGHF3032BH	252	4633	GB	92	
SSGHF4018AH	252	1805	GB	30	
SSGHF4021AH	252	2091	GB	38	
SSGHF4026AH	252	3009	GB	60	
SSGHF4026BH	252	3009	GB	60	
SSGHF4032BH	252	4633	GB	92	
SSGHF5018AH	252	1805	GB	30	
SSGHF5021AH	252	2091	GB	38	
SSGHF5026AH	252	3009	GB	57	
SSGHF5032BH	252	4633	GB	92	
SSGHF6018AH	252	1805	GB	30	
SSGHF6021AH	252	2091	GB	38	
SSGHF6026AH	252	3009	GB	60	
SSGHF6032BH	252	4633	GB	65	
TA05HK	231, 244, 262, 270	88	GB	2	
TA13HK	262	170	A8	2	
TA18HK	262	188	A8	2	
TA21HK	262	210	A8	6	
TA24HK	262	211	A8	2	
TA26HK	262	215	A8	2	
TA30HK	262	219	A8	2	
TA32HK	262	224	A8	6	
TA38HK	262	234	A8	2	
TK3300	201	444	A8	1	
TK3400	201	358	A8	4	
TK3500	201	377	A8	9	
TK3600	201	1096	A8	5	
TK3600PM	201	1096	A8	3	
TK7500	201	516	A8	17	
TK9100	201	557	A8	23	
TKP400AC	199	65	A8	1	
TKP400ENC	199	867	A8	16	
TKP400NC	199	65	A8	1	
TKP400XP	199	1142	A8	2	
TKP500AC	199	65	A8	1.2	
TKP500ENC	199	867	A8	17	
TKP500NC	199	65	A8	1.2	
TKP500XC	199	1689	A8	7	
TKP500XP	199	1142	A8	3	
TKP1836ENC	199	867	A8	17	
TKP1836XP	199	1142	A8	1	
TKP2136AC	199	65	A8	2	
TKP2136NC	199	65	A8	3	
TKP2136XC	199	1689	A8	16	
TKP2136XPT	199	1142	A8	13	
VAOM3527	118	798	K	57	3546M
VAOM3560	118	673	K	50	3528M
VBL3507	142	1338	K	40	3428LC
VBL3510	142	1418	K	49	3522LC
VBL3510T	142	1418	L1	49	3522LC
VBL3518-D	136	1209	K	43	3520L
VBL3519-D	136	1343	K	60	3524L
VBL3597-D	136	1277	K	50	3520L
VBM3108	143	929	K	28	3416M
VBM3112	143	1086	K	31	3420M
VBM3116	143	1175	K	33	3424M
VBM3116T	143	1269	L1	41	3516M
VBM3154	143	1366	K	44	3519M
VBM3154T	143	1475	L1	41	3519M
VBM3157T	143	1662	L1	48	3523M
VBM3211T	143	2105	L1	81	3624M
VBM3218T	143	2612	L1	84	3630M
VBM3248T	143	2197	L1	83	3630M
VBM3538	142	986	K	30	3420M
VBM3538-5D	137	1205	K	48	3512M
VBM3538-5S	139	1144	K	42	3511M
VBM3538-D	137	1205	K	46	3511M
VBM3538-S	139	1144	K	41	3511M
VBM3542	142	1155	K	35	3428M
VBM3542-5	142	1155	K	40	3516M
VBM3542-D	137	1251	K	52	3514M
VBM3542-S	139	1190	K	47	3514M
VBM3546	142	1330	K	38	3426M
VBM3546-5S	139	1245	K	35	3516M
VBM3546-D	137	1308	K	55	3516M
VBM3546-S	139	1245	K	47	3516M
VBM3546T	142	1330	L1	38	3426M
VBM3546T-5	142	1330	L1	40	3514M
VBM3546T-5D	137	1412	L1	40	3516M
VBM3546T-D	137	1412	L1	49	3516M
VBM3546T-S	139	1245	L1	49	3516M
VBM3554	142	1493	K	48	3521M
VBM3554-D	137	1357	K	58	3521M
VBM3554-S	139	1290	K	55	3521M
VBM3554T	142	1493	L1	49	3521M
VBM3554T-5D	137	1466	L1	54	3521M
VBM3554T-5S	139	1290	L1	55	3521M
VBM3554T-D	137	1466	L1	54	3521M
VBM3554T-S	139	1290	L1	52	3521M
VBM3558	142	1530	K	50	3523M
VBM3558-D	138	1387	K	63	3524M
VBM3558-S	139	1321	K	57	3524M
VBM3558T	142	1530	L1	50	3523M
VBM3558T-5D	138	1499	L1	57	3524M
VBM3558T-5S	139	1321	L1	58	3524M
VBM3558T-D	138	1499	L1	56	3524M
VBM3558T-S	139	1321	L1	57	3524M
VBM3611T	142	2139	L1	67	3622M
VBM3611T-5D	138	2076	L1	79	3542M
VBM3611T-D	138	2076	L1	80	3542M
VBM3611T-S	139	1825	L1	79	3542M
VBM3615T	142	2643	L1	89	3634M
VBM3615T-5D	138	2567	L1	81	3634M

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
VBM3615T-D	138	2567	L1	105	3634M
VBM3615T-S	139	2257	L1	96	3634M
VBM3710T	142	3386	L1	128	3728M
VBM3710T-D	138	3348	L1	162	3731M
VBM3714T	142	4296	L1	154	3740M
VBM3714T-D	138	4230	L1	157	3740M
VBNM3538-D	137	1233	K	44	3512M
VBNM3542-D	137	1280	K	48	3514M
VBNM3546-D	137	1338	K	55	3524M
VBNM3546T-D	137	1442	L1	57	3524M
VBNM3554-D	137	1385	K	64	3533M
VBNM3554T-D	137	1494	L1	65	3533M
VEBM3542-D	137	1373	K	50	3517M
VEBM3546	140	1586	K	45	3519M
VEBM3546-D	137	1429	K	54	3519M
VEBM3546T	140	1597	L1	45	3519M
VEBM3546T-5D	137	1534	L1	52	3519M
VEBM3546T-D	137	1534	L1	51	3519M
VEBM3554	140	1783	K	53	3526M
VEBM3554-D	137	1488	K	58	3526M
VEBM3554T	140	1795	L1	52	3526M
VEBM3554T-5D	137	1597	L1	55	3526M
VEBM3554T-D	137	1597	L1	58	3526M
VEBM3558	140	1832	K	56	3528M
VEBM3558T	140	1832	L1	57	3528M
VEBM3558T-5D	138	1631	L1	62	3528M
VEBM3558T-D	138	1631	L1	62	3528M
VEBM3611T	140	2400	L1	82	3631M
VEBM3611T-5D	138	2153	L1	101	3628M
VEBM3611T-D	138	2153	L1	101	3631M
VEBM3615T	140	2890	L1	99	3642M
VEBM3615T-5D	138	2596	L1	117	3640M
VEBM3615T-D	138	2596	L1	117	3642M
VEBM3710T	140	3946	L1	172	3736M
VEBM3710T-D	138	3534	L1	127	3736M
VEBM3714T	140	4838	L1	165	3752M
VEBNM3538	140	1392	K	37	3516M
VEBNM3542	140	1565	K	53	3517M
VECP2276T	38	3392	SD	338	0954M
VECP2332T	38	4246	SD	356	0960M
VECP2333T	38	3279	SD	314	0944M
VECP2333T-4	38	3279	SD	303	0944M
VECP2334T	38	3476	SD	338	0952M
VECP2334T-4	38	3476	SD	338	0952M
VECP3580-4	38	1001	SD	60	0516M
VECP3581	38	1094	SD	66	0524M
VECP3581-4	38	1094	SD	67	0524M
VECP3581T	38	1094	SD	67	0524M
VECP3581T-4	38	1094	SD	66	0524M
VECP3582T	38	1205	SD	69	0526M
VECP3583T-4	38	1129	SD	67	0524M
VECP3584T	38	1112	SD	71	0530M
VECP3584T-4	38	1112	SD	70	0530M
VECP3586T-4	38	1182	SD	74	0532M
VECP3587T	38	1158	SD	75	0535M
VECP3587T-4	38	1158	SD	75	0535M
VECP3660T-4	38	1419	SD	103	0628M
VECP3661T	38	1487	SD	109	0632M
VECP3661T-4	38	1487	SD	108	0632M
VECP3663T-4	38	1727	SD	111	0634M

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
VECP3664T	38	1451	SD	121	0642M
VECP3665T	38	1513	SD	119	0641M
VECP3665T-4	38	1513	SD	119	0641M
VECP3667T	38	1431	SD	107	0630M
VECP3764T	38	2140	SD	165	0737M
VECP3768T	38	2165	SD	225	0748M
VECP3769T-4	38	2313	SD	173	0731M
VECP3770T	38	1966	SD	170	0735M
VECP3770T-4	38	1966	SD	170	0735M
VECP3771T-4	38	2450	SD	203	0742M
VECP3774T	38	2322	SD	231	0748M
VECP3774T-4	38	2322	SD	231	0748M
VECP4100T	38	5006	SD	503	1056M
VECP4102T	38	6534	SD	528	1062M
VECP4103T	38	4602	SD	483	1046M
VECP4111T	38	6877	SD	636	1260M
VECP82333T-4	41	3318	SD	311	0944M
VECP82334T-4	41	3517	SD	355	0960M
VECP82394T-4	41	3403	SD	293	0934M
VECP83583T-4	41	1153	SD	75	0524M
VECP83584T-4	41	1199	SD	76	0530M
VECP83586T-4	41	1264	SD	83	0535M
VECP83587T-4	41	1250	SD	79	0535M
VECP83660T-4	41	1536	SD	121	0632M
VECP83661T-4	41	1628	SD	117	0632M
VECP83663T-4	41	1871	SD	132	0643M
VECP83665T-4	41	1637	SD	128	0641M
VECP83769T-4	41	2414	SD	179	0731M
VECP83770T-4	41	2062	SD	211	0737M
VECP83771T-4	41	2563	SD	225	0742M
VECP83774T-4	41	2499	SD	231	0748M
VECP84106T-4	41	3879	SD	319	0954M
VEFWDM3546T	60	1070	WD	36	3519M
VEFWDM3554T	60	1148	WD	43	3526M
VEJMM3116T	101	707	L1	37	3519M
VEJMM3154T	101	758	L1	43	3522M
VEJMM3157T	101	829	L1	46	3525M
VEJMM3211T	101	910	L1	74	3630M
VEJMM3218T	101	1030	L1	84	3640M
VEJMM3311T	101	1554	L1	125	3733M
VEJMM3313T	101	1682	L1	165	3752M
VEJMM3546T	99	691	L1	38	3519M
VEJMM3554T	99	729	L1	45	3526M
VEJMM3558T	99	873	L1	44	3528M
VEJMM3611T	99	996	L1	74	3631M
VEJMM3615T	99	1149	L1	90	3642M
VEJMM3710T	99	1682	L1	136	3736M
VEJMM3714T	99	1948	L1	165	3752M
VEM2333T-5	152	3134	L1	266	0942M
VEM2334T-5	152	3699	L1	296	0952M
VEM3538	23	695	LS	31	3513M
VEM3542	23	738	LS	35	3517M
VEM3545	23	663	K	32	3516M
VEM3546	23	760	LS	36	3519M
VEM3546-5	152	760	LS	35	3519M
VEM3546T	23	775	LS	36	3519M
VEM3546T-5	152	775	LS	36	3519M
VEM3550	23	699	K	35	3520M
VEM3550T-5	152	757	L1	35	3520M
VEM3554	23	845	LS	42	3526M

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
VEM3554T	23	809	LS	41	3526M
VEM3554T-5	152	809	LS	41	3526M
VEM3555	24	767	K	43	3526M
VEM3556	23	861	K	43	3526M
VEM3558	24	891	LS	46	3528M
VEM3558T	24	832	LS	47	3528M
VEM3558T-5	152	832	LS	46	3528M
VEM3581	23	968	K	52	0519M
VEM3581T	23	968	L1	54	0519M
VEM3581T-5	152	968	L1	53	0519M
VEM3584T	23	970	L1	60	0526M
VEM3584T-5	152	970	L1	58	0526M
VEM3587T	24	1045	L1	59	0527M
VEM3587T-5	152	1045	L1	60	0527M
VEM3610T	24	938	L1	50	3532M
VEM3610T-5	152	938	L1	53	3532M
VEM3611T	24	958	LS	73	3631M
VEM3611T-5	152	1030	L1	71	3631M
VEM3613T	24	1035	L1	75	3630M
VEM3613T-5	152	1035	L1	74	3630M
VEM3615T	24	1051	LS	88	3642M
VEM3615T-5	152	1123	L1	88	3642M
VEM3661T	24	1209	L1	98	0632M
VEM3661T-5	152	1209	L1	98	0632M
VEM3665T	24	1237	L1	109	0641M
VEM3665T-5	152	1237	L1	110	0641M
VEM3709T-5	152	1580	L1	101	3646M
VEM3710T	24	1438	L1	129	3736M
VEM3710T-5	152	1438	L1	123	3736M
VEM3711T-5	152	1596	L1	118	3729M
VEM3713T-5	152	2211	L1	169	3752M
VEM3714T	24	1607	L1	165	3752M
VEM3714T-5	152	1607	L1	165	3752M
VEM3770T	24	1680	L1	170	0735M
VEM3770T-5	152	1680	L1	170	0735M
VEM3774T	24	1864	L1	197	0748M
VEM3774T-5	152	1864	L1	231	0748M
VEM7014T-5	79, 160	1324	L1	44	3519M
VEM7034T-5	79, 160	1443	L1	50	3526M
VEM7037T-5	79, 160	1529	L1	54	3528M
VEM7042T-5	79, 160	1727	L1	95	3631M
VEM7044T-5	79, 160	2040	L1	110	3642M
VEM7054T-I	84	4609	SD	374	0942M
VEM7056T-I	84	5467	SD	393	0952M
VEM7058T-I	84	6688	SD	560	1050M
VEM7060T-I	84	7767	SD	518	1056M
VEM7062T-I	84	10349	SD	720	1254M
VEM7064T-I	84	11776	SD	839	1276M
VEM8003T-5	48	1198	SD	59	0519M
VEM8004T-5	48	1243	SD	65	0526M
VEM8005T-5	48	1291	SD	60	0527M
VENCP83580T-4	41	985	SD	59	0520M
VENCP83581T-4	41	1063	SD	63	0524M
VENM3538	23	641	K	32	3516M
VENM3542	23	700	L1	33	3517M
VENM3546T	23	706	L1	40	3524M
VENM3581T	23	1011	L1	56	0524M
VESWDM3546	66	1095	WD	39	3524M
VESWDM3554	66	1192	WD	47	3533M
VESWDM3554T	66	1192	WD	49	3533M
VESWDM3558T	66	1361	WD	55	3536M
VEUHM3538	135	607	K	33	3513M
VEUHM3542	135	645	K	35	3517M
VEUHM3546	135	664	K	38	3519M
VEUHM3546-5	135	664	K	38	3519M
VEUHM3546T	135	676	L1	38	3519M
VEUHM3546T-5	135	676	L1	38	3519M
VEUHM3554T	135	706	L1	43	3526M
VEUHM3554T-5	135	706	L1	44	3526M
VEUHM3558T	135	784	L1	48	3528M
VEUHM3558T-5	135	784	L1	48	3528M
VEUHM3611T	135	891	L1	73	3631M
VEUHM3611T-5	135	891	L1	70	3631M
VEUHM3615T	135	980	L1	88	3642M
VEUHM3710T	135	1445	L1	129	3736M
VEWDM3538	60	868	WD	20	3516M
VEWDM3542	60	955	WD	32	3517M
VEWDM3546	60	1034	WD	40	3524M
VEWDM3546T	60	1042	WD	40	3524M
VEWDM3554	60	1110	WD	48	3533M
VEWDM3554T	60	1119	WD	48	3533M
VEWDM3558	60	1181	WD	46	3528M
VEWDM3558T	60	1204	WD	47	3528M
VEWDM3611T	60	1513	WD	73	3631M
VEWDM3615T	60	1715	WD	89	3642M
VEWDM3710T	60	2294	WD	121	3736M
VEWDM3714T	60	2465	WD	165	3752M
VFWDM3538	60	678	WD	29	3512M
VFWDM3542	60	733	WD	31	3514M
VHECP2333T	103	4562	SD	316	0944M
VHECP2334T	103	5181	SD	337	0952M
VHECP2394T	103	4401	SD	296	0934M
VHECP3660T	103	2394	SD	120	0623M
VHECP3661T	103	2144	SD	129	0632M
VHECP3663T	103	3092	SD	99	0632M
VHECP3665T	103	2855	SD	141	0641M
VHECP3769T	103	3661	SD	173	0733M
VHECP3770T	103	3543	SD	170	0735M
VHECP3771T	103	3818	SD	203	0742M
VHECP3774T	103	3975	SD	231	0748M
VHECP4103T	103	5780	SD	518	1046M
VHECP4104T	103	6486	SD	563	1060M
VHECP4106T	103	4786	SD	325	0944M
VHECP4107T	103	5089	SD	337	0950M
VHECP4108T	103	5604	SD	361	0954M
VHECP4109T	103	7844	SD	600	1240M
VHECP4110T	103	7335	SD	650	1260M
VHECP4114T	103	9612	SD	668	1256M
VHECP4115T	103	10362	SD	764	1272M
VHECP4310T	103	12280	SD	959	A36056M
VHECP4313T	103	15342	SD	1042	A36068M
VHECP4314T	103	12819	SD	969	A36062M
VHECP4316T	103	15611	SD	1008	A36070M
VHM2513T	104	3632	L1	337	0938M
VHM2514T	104	3812	L1	310	0928M
VHM2515T	104	4125	L1	334	0936M
VHM2516T	104	4055	L1	333	0934M
VHM2531T	104	4602	L1	442	1040M
VHM2534T	104	4461	L1	450	0950M
VHM2535T	104	5168	L1	462	1046M

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
VHM2538T	104	6437	L1	486	1050M
VHM2539T	104	6020	L1	660	1248M
VHM2542T	104	7888	L1	680	1248M
VHM2543T	104	8504	L1	682	1254M
VHM2546T	104	10078	L1	705	1256M
VHM3210T	104	2083	L1	132	0617M
VHM3211T	104	1861	L1	96	0623M
VHM3212T	104	2686	L1	99	0628M
VHM3218T	104	2480	L1	105	0633M
VHM3219T	104	3181	L1	158	0640M
VHM3311T	104	3078	L1	169	0725M
VHM3312T	104	3320	L1	169	0725M
VHM3313T	104	3454	L1	165	0733M
VHM3314T	104	3505	L1	179	0740M
VJMM2333T	99	2867	L1	236	0756M
VJMM2333T-5	159	2867	L1	236	0756M
VJMM2334T	99	2964	L1	267	0938M
VJMM2334T-5	159	2964	L1	276	0944M
VJMM3116T	101	599	L1	37	3516M
VJMM3154T	101	608	L1	41	3521M
VJMM3157T	101	680	L1	42	3523M
VJMM3158T	101	755	L1	50	3528M
VJMM3211T	101	742	L1	62	3536M
VJMM3212T	101	874	L1	60	3535M
VJMM3218T	101	793	L1	73	3630M
VJMM3219T	101	1029	L1	74	3627M
VJMM3311T	101	1158	L1	122	3731M
VJMM3312T	101	1291	L1	110	3726M
VJMM3313T	101	1356	L1	119	3733M
VJMM3314T	101	1741	L1	120	3731M
VJMM3546T	99	670	L1	35	3516M
VJMM3546T-5	159	670	L1	38	3516M
VJMM3554T	99	701	L1	40	3521M
VJMM3554T-5	159	701	L1	40	3521M
VJMM3558T	99	733	L1	43	3524M
VJMM3558T-5	159	733	L1	44	3524M
VJMM3611T	99	876	L1	61	3542M
VJMM3611T-5	159	876	L1	72	3542M
VJMM3615T	99	981	L1	78	3634M
VJMM3615T-5	159	981	L1	90	3638M
VJMM3710T	99	1274	L1	115	3731M
VJMM3710T-5	159	1274	L1	115	3731M
VJMM3714T	99	1573	L1	132	3740M
VJMM3714T-5	159	1573	L1	136	3740M
VL1205A	91	293	K	23	3416L
VL1301	16	350	K	23	3414L
VL1301A	91	352	K	22	3414L
VL1303	16	318	K	23	3413L
VL1303A	91	337	K	26	3420L
VL1304	16	385	K	25	3418L
VL1304A	91	420	K	25	3418L
VL1305	16	752	K	39	3524L
VL1306	16	380	K	27	3420L
VL1306A	91	401	K	30	3424L
VL1307	16	470	K	33	3428L
VL1307A	91	548	K	34	3520L
VL1308	16	843	K	44	3528LC
VL1309	16	400	K	32	3428L
VL1309A	91	423	K	32	3428L
VL1310	16	512	K	35	3520L

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
VL1313	16	553	K	33	3428LC
VL1313A	91	578	K	35	3432LC
VL1317	16	727	K	43	3528L
VL1317A	91	748	K	44	3528L
VL1318	16	556	K	42	3528L
VL1318A	91	581	K	41	3528L
VL1319	16	654	K	43	3528L
VL1321T	16	740	L1	48	3535L
VL1322T	16	754	L1	49	3532LC
VL1323A	91	773	K	51	3535LC
VL1406T	16	916	L1	61	3532LC
VL1408T	16	927	L1	78	3634LC
VL3501	12	372	K	22	3414L
VL3501-50	165	459	K	17	3418L
VL3503	12	376	K	23	3413L
VL3503-50	165	416	K	25	3420L
VL3504	12	435	K	27	3421L
VL3504-50	165	532	K	31	3428L
VL3505	12	805	K	43	3528L
VL3506	12	418	K	29	3424L
VL3506-50	165	480	K	35	3520L
VL3506A	12	462	K	28	3424L
VL3507	12	498	K	33	3428LC
VL3507-50	165	630	K	39	3524L
VL3508	12	926	K	44	3528LC
VL3509	12	481	K	36	#N/A
VL3509-50	165	564	K	40	3524L
VL3509A	12	526	K	41	3524L
VL3510	12	571	K	40	3524L
VL3510-50	165	721	K	47	3532L
VL3510T	12	571	L1	44	3524L
VL3513	12	626	K	40	3524L
VL3513-50	165	726	K	48	3532L
VL3513T	12	665	L1	41	3524L
VL3514	12	647	K	48	3532LC
VL3514-50	165	815	K	51	3535LC
VL3514T	12	654	L1	50	3532LC
VL3515	12	801	K	50	3535L
VL3515-50	165	921	K	52	3535LC
VL3515T	12	816	L1	51	3535L
VL3605	132	1309	L1	64	3628L
VL3605T	12	1157	L1	66	3628L
VL3606T	12	1291	L1	73	3634L
VL3609T	12	1366	L1	79	3634LC
VL4005A	77	557	K	34	3416L
VL5000A	77	732	K	29	3414L
VL5001A	77	748	K	34	3414L
VL5002A	77	1002	K	42	3520L
VL5003A	77	721	K	28	3416L
VL5004A	77	826	K	37	3424L
VL5005A	77	1149	K	51	3528L
VL5006A	77	771	K	40	3516L
VL5007A	77	920	K	48	3524L
VL5009A	77	826	K	48	3524L
VL5023A	77	1045	K	52	3524L
VL5024A	77	1379	K	76	3546L
VL5027	77	2194	L1	90	3634L
VL5030	77	1189	K	51	3528L
VLCP2333T	103	4364	SD	236	0756M
VLCP2334T	103	4953	SD	307	0938M

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
VLCP2394T	103	4208	SD	225	0748M
VLCP3660T	103	2292	SD	83	0617M
VLCP3661T	103	2050	SD	124	0628M
VLCP3663T	103	2958	SD	122	0624M
VLCP3665T	103	2730	SD	131	0633M
VLCP3769T	103	3504	SD	168	0723M
VLCP3770T	103	3388	SD	164	0729M
VLCP3771T	103	3654	SD	171	0727M
VLCP3774T	103	3802	SD	169	0733M
VLCP4103T	103	5527	SD	384	0954M
VLCP4104T	103	6203	SD	523	1044M
VLCP4106T	103	4596	SD	338	0940M
VLCP4107T	103	4868	SD	372	0942M
VLCP4108T	103	5358	SD	383	0950M
VLCP4109T	103	7500	SD	615	1240M
VLCP4110T	103	7015	SD	638	1248M
VM2332T	24	2685	L1	283	0946M
VM2333T	24	2515	LS	236	0756M
VM2333T-5	152	2515	LS	271	0938M
VM2334T	24	2944	LS	240	0760M
VM2334T-5	152	2944	LS	271	0938M
VM2394T	24	2779	L1	225	0748M
VM2513T	30	1944	L1	155	3748M
VM2514T	30	2402	L1	147	3739M
VM2515T	30	2422	L1	197	3766M
VM2516T	30	2838	LS	200	3934M
VM2531T	30	3087	L1	267	3942M
VM2534T	30	3213	L1	252	3938M
VM3104	30	320	LS	21	3413M
VM3107	30	335	K	19	3410M
VM3108	30	363	LS	23	3416M
VM3109	30	564	K	25	3418M
VM3111	30	390	K	22	3413M
VM3112	30	401	LS	26	3420M
VM3115	30	446	K	24	3416M
VM3116	30	450	LS	29	3424M
VM3116T	30	488	LS	33	3516M
VM3120	30	496	K	30	3424M
VM3120T	30	572	L1	34	3518M
VM3153	30	606	K	32	3428M
VM3153T	30	606	L1	32	3428M
VM3154	30	517	LS	35	3432M
VM3154T	30	569	LS	36	3519M
VM3155	30	577	K	33	3428M
VM3155T	30	631	L1	32	3522M
VM3156T	30	680	L1	40	3521M
VM3157	30	535	LS	38	3521M
VM3157T	30	586	LS	40	3523M
VM3158	30	592	K	42	3524M
VM3158T	30	671	L1	46	3528M
VM3159T	30	741	L1	59	3539M
VM3161T	30	687	L1	56	3536M
VM3211	131	839	L1	55	3536M
VM3211T	30	644	L1	64	3536M
VM3212T	30	726	L1	74	3538M
VM3215T	30	772	L1	70	3628M
VM3218	131	667	L1	74	3630M
VM3218T	30	705	L1	71	3630M
VM3219T	30	891	L1	70	3627M
VM3305T	30	981	L1	99	3723M
VM3309T	30	1289	L1	121	3734M
VM3311T	30	1040	L1	115	3731M
VM3312T	30	1276	L1	109	3726M
VM3313T	30	1246	L1	119	3733M
VM3314T	30	1807	L1	119	3731M
VM3531	23	503	K	20	3411M
VM3534	23	356	LS	21	3413M
VM3534-5	152	356	LS	21	3413M
VM3534-57	165	408	K	21	3413M
VM3535	23	565	K	22	3414M
VM3537	23	386	K	20	3410M
VM3537-5	152	386	K	19	3410M
VM3537-57	165	443	K	22	3413M
VM3538	23	408	LS	23	3416M
VM3538-5	152	408	LS	22	3416M
VM3538-57	165	477	K	25	3420M
VM3539	23	606	K	24	3418M
VM3541	23	422	K	21	3413M
VM3541-5	152	422	K	21	3413M
VM3541-57	165	462	K	26	3420M
VM3542	23	434	LS	26	3420M
VM3542-5	152	434	LS	26	3420M
VM3542-57	165	512	K	32	3428M
VM3543	23	620	K	32	3428M
VM3543T	23	620	L1	33	3428M
VM3545	23	494	K	23	3416M
VM3545-5	152	494	K	23	3416M
VM3545-57	165	548	K	26	3420M
VM3546	23	453	LS	31	3426M
VM3546-5	152	453	LS	31	3514M
VM3546-57	165	543	K	35	3517M
VM3546T	23	551	LS	34	3516M
VM3546T-5	152	551	LS	33	3516M
VM3546T-57	165	543	L1	34	3517M
VM3550	23	537	K	30	3424M
VM3550-5	152	537	K	29	3424M
VM3550T	23	623	L1	37	3520M
VM3550T-5	152	623	L1	37	3520M
VM3550T-57	165	596	L1	36	3520M
VM3554	23	509	LS	36	3520M
VM3554-5	152	509	LS	36	3520M
VM3554T	23	561	LS	38	3521M
VM3554T-5	152	561	LS	39	3521M
VM3554T-57	165	564	L1	38	3521M
VM3555	24	598	K	33	3428M
VM3555-5	152	598	K	33	3428M
VM3555-57	165	592	K	44	3526M
VM3555T	24	710	L1	43	3526M
VM3555T-57	165	651	L1	43	3526M
VM3556	23	632	K	36	3520M
VM3556T	23	742	L1	41	3522M
VM3557	23	722	K	48	3529M
VM3557T	23	775	L1	63	3546M
VM3558	24	546	LS	41	3523M
VM3558-5	152	546	LS	40	3523M
VM3558T	24	589	LS	41	3524M
VM3558T-5	152	589	LS	38	3524M
VM3558T-57	165	598	L1	46	3530M
VM3559	24	693	K	46	3528M
VM3559-5	152	693	K	45	3528M

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
VM3559T	24	810	L1	48	3532M
VM3561	24	726	K	51	3535M
VM3561T	24	784	L1	60	3542M
VM3603	130	937	L1	34	3516M
VM3606	130	996	L1	39	3521M
VM3607	130	1118	L1	64	3628M
VM3609	130	1035	L1	41	3524M
VM3610	130	1006	L1	50	3532M
VM3610T	24	887	L1	53	3532M
VM3610T-5	152	887	L1	56	3535M
VM3611	130	1069	L1	60	3542M
VM3611T	24	711	LS	63	3542M
VM3611T-5	152	711	LS	63	3542M
VM3613	130	960	L1	68	3626M
VM3613T	24	1010	L1	70	3626M
VM3613T-5	152	1010	L1	73	3630M
VM3614	130	1169	L1	73	3633M
VM3614T	24	938	L1	75	3633M
VM3615	130	1221	L1	73	3634M
VM3615T	24	814	LS	77	3634M
VM3615T-5	152	814	LS	75	3634M
VM3616T	24	1215	L1	88	3640M
VM3661T	24	1146	L1	96	0629M
VM3661T-9	45	1077	SD	97	0629M
VM3663T	24	1389	L1	90	0624M
VM3664T	24	1213	L1	100	0633M
VM3665T	24	1163	L1	100	0633M
VM3703	130	1136	L1	63	3542M
VM3704	130	1372	L1	106	3728M
VM3704T	24	1230	L1	109	3728M
VM3707	130	1402	L1	78	3634M
VM3708T	24	1455	L1	129	3737M
VM3709T	24	1527	L1	93	3640M
VM3709T-5	152	1527	L1	91	3640M
VM3710T	24	1086	LS	114	3731M
VM3710T-5	152	1086	LS	114	3731M
VM3711T	24	1588	L1	114	3729M
VM3711T-5	152	1588	L1	115	3729M
VM3713T	24	1983	L1	160	3748M
VM3713T-5	152	1983	L1	170	3748M
VM3714T	24	1293	LS	131	3740M
VM3714T-5	152	1293	LS	127	3740M
VM3770T	24	1609	L1	164	0729M
VM3774T	24	1717	L1	169	0733M
VM4103T	24	3693	LS	322	0954M
VM4104T	24	3765	LS	418	1044M
VM4106T	24	3009	L1	255	0754M
VM4107T	24	3862	L1	300	0942M
VM4108T	24	4139	L1	313	0950M
VM7001A	78	871	K	25	3410M
VM7002A	78	890	K	27	3413M
VM7005A	78	861	K	26	3410M
VM7006-5	79, 160	936	K	37	3512M
VM7006A	78	936	K	29	3416M
VM7006-I	84	858	SD	51	3512M
VM7007A	78	1089	K	39	3516M
VM7009A	78	890	K	28	3413M
VM7010-5	79, 160	953	K	38	3513M
VM7010A	78	953	K	33	3420M
VM7010-I	84	953	SD	48	3514M

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
VM7013	78	927	K	30	3416M
VM7014	78	1001	K	40	3428M
VM7014-5	79, 160	1001	K	39	3514M
VM7014-I	84	1001	SD	51	3516M
VM7014T	78	1080	L1	39	3516M
VM7014T-5	79, 160	1080	L1	41	3516M
VM7014T-I	84	1080	SD	51	3516M
VM7018T	78	1138	L1	45	3520M
VM7026T	78	1489	L1	80	3620M
VM7031A	78	1144	K	47	3524M
VM7032	78	1205	K	44	3520M
VM7034	78	1078	K	44	3520M
VM7034-I	84	1078	SD	55	3521M
VM7034T	78	1164	L1	46	3521M
VM7034T-5	79, 160	1164	L1	47	3521M
VM7034T-I	84	1164	SD	58	3521M
VM7035T	78	1331	L1	72	3546M
VM7037	78	1165	K	49	3523M
VM7037T	78	1259	L1	50	3524M
VM7037T-5	79, 160	1259	L1	49	3524M
VM7037T-I	84	1259	SD	60	3526M
VM7042T	78	1614	L1	91	3628M
VM7042T-5	79, 160	1614	L1	90	3628M
VM7042T-I	84	1614	SD	106	3628M
VM7044T	78	1966	L1	103	3634M
VM7044T-5	79, 160	1966	L1	113	3638M
VM7044T-I	84	1966	SD	120	3638M
VM7045T	78	2475	L1	165	3723M
VM7047T	78	2275	L1	157	3731M
VM7047T-5	79, 160	2275	L1	157	3731M
VM7047T-I	84	2275	SD	165	3735M
VM7071T	78	1273	L1	52	3526M
VM7072T	78	1883	L1	108	3634M
VM7073T	78	2126	L1	110	3640M
VM7075T	78	1412	L1	58	3532M
VM7170T	78	2760	L1	173	0733M
VM7170T-I	84	2760	SD	230	0737M
VM8001	48	612	SD	28	3416M
VM8001-5	48	612	SD	27	3416M
VM8002	48	771	SD	31	3420M
VM8002-5	48	771	SD	27	3420M
VM8003	48	829	SD	37	3426M
VM8003T	48	937	SD	58	0516M
VM8003T-5	48	937	SD	56	0516M
VM8004	48	884	SD	42	3520M
VM8004T	48	919	SD	62	0521M
VM8004T-5	48	919	SD	62	0521M
VM8005	48	898	SD	62	0522M
VM8005T	48	969	SD	64	0523M
VM8005T-5	48	969	SD	69	0523M
VM8006T	49	1319	SD	97	0628M
VM8007T	49	1475	SD	113	0633M
VM8008T	49	1902	SD	164	0729M
VM8012	48	760	SD	28	3416M
VM8016	48	954	SD	63	0524M
VM8016T	48	1030	SD	67	0526M
VM8024T	49	2138	SD	169	0733M
VM8537	48	599	SD	25	3410M
VM8541	48	757	SD	27	3413M
VM8550	48	900	SD	44	3520M

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
VM8559T	49	1125	SD	74	0535M
VNM3537	23	543	K	32	3516M
VNM3538	23	444	K	22	3416M
VNM3541	23	580	K	36	3520M
VNM3542	23	450	K	31	3428M
VNM3546	23	531	K	40	3524M
VP3311D	187	695	K	22	
VP3316D	187	733	K	26	
VP3326D	187	820	K	30	
VP3411-14	187	781	K	29	
VP3416-14	187	832	K	31	
VP3426-14	187	881	K	36	
VP3428-14	187	850	K	31	
VP3428D	187	850	K	32	
VP3436-14	187	996	K	38	
VP3436D	187	996	K	40	
VP3439-14	187	881	K	35	
VP3439D	187	881	K	37	
VP3455-14	187	1211	K	43	
VP3455D	187	1211	K	46	
VP3458-14	187	996	K	39	
VP3458D	187	996	K	40	
VP3468-14	187	1110	L1	43	
VP3468D	187	1110	L1	46	
VP3575-14	187	2244	L1	84	
VP3575D	187	2244	L1	67	
VP3585-14	187	2677	L1	78	
VP3585D	187	2677	L1	75	
VP3588-14	187	2244	L1	70	
VP3588D	187	2244	L1	67	
VP3603D	187	3294	L1	122	
VP3605D	187	5592	L1	161	
VP7424-14	187	485	DS	10	
VP7424D	187	485	DS	10	
VPCP4114T	104	9191	SD	646	1248M
VPCP4115T	104	9907	SD	660	1254M
VPCP4310T	104	10568	SD	940	A36036M
VPCP4313T	104	13203	SD	982	A36044M
VPCP4314T	104	11035	SD	933	A36042M
VPCP4316T	104	13434	SD	1010	A36056M
VRBM3161T	136	2579	L1	82	7543M
VRBM3538	136	1399	K	35	3420M
VRBM3542	136	1638	K	47	3428M
VRBM3546	136	1888	K	47	3436M
VRBM3546T	136	2019	L1	46	3436M
VRBM3554T	136	2054	L1	63	7530M
VRBM3558T	136	2110	L1	69	7536M
VRBM3561T	136	2173	L1	76	7543M
VSSEFWDM3538	70	1395	WD	49	3516M
VSSEFWDM3542	70	1443	WD	54	3521M
VSSEFWDM3546	70	1509	WD	59	3525M
VSSEFWDM3546T	70	1522	WD	58	3525M
VSSEWDM3537	70	1344	WD	49	3516M
VSSEWDM3538	70	1367	WD	49	3516M
VSSEWDM3541	70	1393	WD	54	3520M
VSSEWDM3542	70	1415	WD	53	3521M
VSSEWDM3543	70	1703	WD	61	3530M
VSSEWDM3545	70	1465	WD	43	3524M
VSSEWDM3546	70	1480	WD	58	3525M
VSSEWDM3546T	70	1494	WD	56	3525M

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
VSSEWDM3550	70	1485	WD	66	3532M
VSSEWDM3550T	70	1499	WD	64	3532M
VSSEWDM3554	70	1493	WD	66	3533M
VSSEWDM3554T	70	1507	WD	65	3533M
VSSEWDM3555T	70	1805	WD	70	3535M
VSSEWDM3556	70	1763	WD	72	3537M
VSSEWDM3558	70	1818	WD	71	3538M
VSSEWDM3558T	70	1831	WD	70	3538M
VSSFWDM3538	68	1383	WD	40	3513M
VSSFWDM3542	68	1428	WD	44	3519M
VSSFWDM3546	68	1466	WD	50	3524M
VSSWDM3457	68	1023	WD	33	3513M
VSSWDM3534	68	1078	WD	33	3512M
VSSWDM3537	68	1215	WD	37	3513M
VSSWDM3538	68	1308	WD	40	3516M
VSSWDM3541	68	1262	WD	41	3518M
VSSWDM3542	68	1356	WD	42	3519M
VSSWDM3545	68	1383	WD	41	3516M
VSSWDM3546	68	1393	WD	46	3524M
VSSWDM3550	68	1401	WD	49	3528M
VSSWDM3554T	68	1537	WD	46	3521M
VSSWDM3555T	68	1856	WD	57	3532M
VSSWDM3558T	68	1876	WD	52	3528M
VSSWDM3559T	68	2238	WD	60	3535M
VSSWDM3561T	68	1991	WD	63	3546M
VSSWDM3611T	68	2128	WD	87	3628M
VSSWDM3613T	68	2433	WD	94	3634M
VSSWDM3615T	68	2451	WD	107	3640M
VSWDM3538	66	707	WD	28	3512M
VSWDM3542	66	818	WD	31	3514M
VSWDM3546	66	849	WD	34	3518M
VSWDM3546T	66	849	WD	34	3518M
VSWDM3554	66	890	WD	41	3526M
VSWDM3554T	66	890	WD	42	3526M
VSWDM3558T	66	1093	WD	42	3524M
VUHL3518	135	464	K	35	3520L
VUHL3519	135	571	K	40	3524L
VUHM3538	135	414	K	30	3511M
VUHM3538-5	135	414	K	33	3513M
VUHM3542	135	439	K	35	3513M
VUHM3542-5	135	439	K	34	3516M
VUHM3546	135	470	K	35	3516M
VUHM3546-5	135	470	K	36	3516M
VUHM3546T	135	507	L1	36	3516M
VUHM3546T-5	135	507	L1	39	3516M
VUHM3554	135	512	K	40	3521M
VUHM3554T	135	553	L1	39	3521M
VUHM3554T-5	135	553	L1	39	3521M
VUHM3558	135	551	K	43	3524M
VUHM3558T	135	595	L1	43	3524M
VUHM3558T-5	135	595	L1	42	3524M
VUHM3611T	135	719	L1	64	3542M
VUHM3615T	135	822	L1	75	3634M
VWAM3538	50	707	SD	35	3512M
VWAM3542	50	818	SD	37	3514M
VWAM3546	50	849	SD	41	3518M
VWAM3546T	50	849	SD	41	3518M
VWAM3554	50	890	SD	48	3526M
VWAM3554T	50	890	SD	49	3526M
VWAM3558	50	1095	SD	47	3523M

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
VWAM3558T	50	1182	SD	47	3524M
VWAM3611T	50	1431	SD	86	3628M
VWAM3615T	50	1668	SD	91	3634M
VWAM3710T	50	2038	SD	131	3731M
VWAM3714T	50	2324	SD	147	3740M
VWDL3504	57	594	WD	35	3520L
VWDL3507	57	698	WD	36	3520L
VWDL3510	57	799	WD	42	3524L
VWDL3514	57	959	WD	48	3532LC
VWDM3457	60	493	WD	20	3410M
VWDM3534	60	519	WD	33	3512M
VWDM3538	60	649	WD	29	3512M
VWDM3538-5	61, 156	649	WD	28	3512M
VWDM3542	60	705	WD	33	3516M
VWDM3542-5	61, 156	705	WD	32	3516M
VWDM3546	60	755	WD	35	3518M
VWDM3546-5	61, 156	755	WD	33	3518M
VWDM3546T	60	776	WD	34	3518M
VWDM3554	60	795	WD	41	3526M
VWDM3554T	60	815	WD	43	3526M
VWDM3554T-5	61, 156	815	WD	42	3526M
VWDM3558	60	844	WD	40	3523M
VWDM3558T	60	926	WD	41	3524M
VWDM3558T-5	61, 156	926	WD	41	3524M
VWDM3559	60	1084	WD	49	3532M
VWDM3561T	60	1323	WD	60	3542M
VWDM3611T	60	1217	WD	62	3542M
VWDM3615T	60	1520	WD	76	3634M
VWDM3710T	60	1737	WD	110	3731M
VWDM3714T	60	1981	WD	129	3740M
WCL1406T	95	994	L1	81	3628L
WCL1408T	95	1140	L1	91	3634LC
WCL1409T	95	1407	L1	91	3634L
WCL1508T	95	1620	L1	116	3727L
WCL1509T	95	2013	L1	117	3729L
WCL1511T	95	2482	L1	143	3740L
WCM3212T	100	818	L1	69	3535M
WCM3219T	100	995	L1	83	3627M
WCM3312T	100	1356	L1	114	3726M
WCM3314T	100	1830	L1	137	3731M
WCM3709T	97	1374	L1	100	3640M
WCM3710T	97	1233	L1	124	3731M
WCM3711T	97	1644	L1	126	3729M
WCM3713T	98	1960	L1	160	3748M
WCM3714T	97	1522	L1	136	3740M
WD5600A01SP	63	35	A8	1	
WD5601A01SP	63	15	A8	1	
WD5601A02SP	63	15	A8	1	
WDB13H71	261	87	A8	3	
WDB15H71	261	87	A8	4	
WDB18H71	261	108	A8	6	
WDB21H71	261	114	A8	6	
WDB24H71	261	123	A8	8	
WDB26H71	261	139	A8	9	
WDB30H71	261	154	A8	6	
WDB32H71	261	181	A8	13	
WDGF0518AG	253	675	GB	30	
WDGF1013AG	253	628	GB	20	
WDGF1015AG	253	664	GB	25	
WDGF1015BG	253	664	GB	25	

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
WDGF1018AG	253	675	GB	30	
WDGF1021AG	253	832	GB	35	
WDGF1024BG	253	974	GB	40	
WDGF1513AG	253	628	GB	20	
WDGF1515AG	253	664	GB	25	
WDGF1518AG	253	675	GB	30	
WDGF1521AG	253	832	GB	35	
WDGF1524AG	253	974	GB	40	
WDGF2013AG	253	628	GB	20	
WDGF2015AG	253	664	GB	25	
WDGF2018AG	253	675	GB	30	
WDGF2026BG	253	1113	GB	52	
WDGF3018AG	253	675	GB	30	
WDGF3021AG	253	832	GB	35	
WDGF3024AG	253	974	GB	40	
WDGF3026AG	253	1113	GB	55	
WDGF3032BG	253	1633	GB	87	
WDGF4015AG	253	664	GB	25	
WDGF4018AG	253	675	GB	30	
WDGF4021AG	253	832	GB	35	
WDGF4024AG	253	974	GB	40	
WDGF4026AG	253	1113	GB	55	
WDGF4032BG	253	1633	GB	87	
WDGF5013AG	253	628	GB	20	
WDGF5015AG	253	664	GB	25	
WDGF5021AG	253	832	GB	35	
WDGF5024AG	253	974	GB	40	
WDGF5026AG	253	1113	GB	55	
WDGF5032BG	253	1633	GB	93	
WDGF6015AG	253	664	GB	25	
WDGF6018AG	253	675	GB	30	
WDGF6021AG	253	832	GB	35	
WDGF6024AG	253	974	GB	40	
WDGF6026AG	253	1113	GB	55	
WDGF6032AG	253	1633	GB	92	
WDL3504	57	592	WD	37	3520L
WDL3507	57	693	WD	37	3520L
WDL3510	57	801	WD	41	3524L
WDL3510T	57	823	WD	41	3524L
WDL3514T	57	987	WD	50	3532LC
WDM3538	58	621	WD	27	3512M
WDM3542	58	664	WD	30	3514M
WDM3546	58	674	WD	34	3518M
WDM3546T	58	696	WD	34	3518M
WDM3553TP-9	62	1316	WD	65	3546M
WDM3554T	58	760	WD	40	3526M
WDM3558TP-9	62	1185	WD	41	3524M
WDM3561TP-9	62	1455	WD	63	3544M
WDM3563TP-9	62	1455	WD	63	3544M
WDM3663TP-9	62	1477	WD	90	3634M
WWL3509	129	496	K	33	3428L
WWL3515T	129	809	L1	55	3535LC
WWL3606	129	1034	L1	72	3634L
YPC144A	123	297	K	20	3408C
YPC164A	123	337	K	20	3411C
YPC244A	123	321	K	17	3411C
YPC245A	123	326	K	21	3411C
YPC264A	123	369	K	22	3414C
YPC344A	123	369	K	23	3414C
YPC345A	123	374	K	24	3414C

[1] Shipping weight is approximate.

Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
YPC364A	123	422	K	27	3420C
ZDBRPM18154C	171	6548	E2	210	
ZDBRPM18204C	171	7010	E2	235	
ZDBRPM21304C	171	7827	E2	318	
ZDBRPM21404	171	8242	E2	390	
ZDBRPM25504	171	8981	E2	517	
ZDBRPM25604	171	12383	E2	517	
ZDBRPM25754	171	14432	E2	646	
ZDBRPM281004R1	171	16091	E2	895	
ZDBRPM281254	171	16923	E2	985	
ZDBRPM321254	171	22967	E2	1170	
ZDBRPM321504	171	30109	E2	1310	
ZDBRPM362004	171	33113	E2	1700	
ZDBRPM402004	171	35581	E2	2103	
ZDFRPM18104C	171	6402	E2	200	
ZDFRPM21204C	171	7827	E2	318	
ZDFRPM21254C	171	7912	E2	318	
ZDFRPM25304C	171	8221	E2	536	
ZDFRPM25404	171	8572	E2	635	
ZDM2276T	179	6979	E2	333	0954M
ZDM2332T	179	8180	E2	356	0960M
ZDM2333T	179	5282	E2	317	0944M
ZDM2333T-5	179	5282	E2	289	0942M
ZDM2334T	179	5537	E2	342	0952M
ZDM2334T-5	179	5537	E2	340	0948M
ZDM3581T	179	3291	E2	66	0524M
ZDM3581T-5	179	3291	E2	65	0519M
ZDM3582T	179	3594	E2	62	0526M
ZDM3584T	179	3392	E2	70	0530M
ZDM3584T-5	179	3392	E2	62	0528M
ZDM3587T	179	3517	E2	75	0535M
ZDM3587T-5	179	3517	E2	74	0535M
ZDM3661T	179	4065	E2	112	0632M
ZDM3661T-5	179	4065	E2	110	0628M
ZDM3664T	179	3913	E2	113	0642M
ZDM3665T	179	4209	E2	125	0640M
ZDM3665T-5	179	4209	E2	118	0640M
ZDM3667T	179	3849	E2	99	0630M
ZDM3764T	179	4636	E2	187	0737M
ZDM3768T	179	5328	E2	226	0748M
ZDM3770T	179	4754	E2	170	0735M
ZDM3770T-5	179	4754	E2	170	0735M
ZDM3774T	179	4982	E2	231	0748M
ZDM3774T-5	179	4982	E2	231	0748M
ZDM4100T	179	9409	E2	445	1056M
ZDM4102T	179	10401	E2	462	1062M
ZDM4103T	179	6461	E2	416	1046M
ZDM4104T	179	7186	E2	445	1056M
ZDM4110T	179	9166	E2	610	1256M
ZDM4111T	179	11636	E2	615	1260M
ZDM4115T	179	10099	E2	631	1262M
ZDM4117T	179	12773	E2	624	1264M
ZDNM2237T	179	4627	E2	242	0932M
ZDNM2238T	179	4770	E2	284	0948M
ZDNM2333T	179	4866	E2	286	0948M
ZDNM2334T	179	6129	E2	405	1056M
ZDNM3581T	179	2872	E2	59	0524M
ZDNM3584T	179	3006	E2	58	0524M
ZDNM3661T	179	3543	E2	101	0632M
ZDNM3669T	179	3315	E2	95	0628M
ZDNM3767T	179	4024	E2	173	0734M
ZDNRPM18054C	171	5692	E2	175	
ZDNRPM18074C	171	6241	E2	220	
ZDNRPM21104C	171	7017	E2	305	
ZDPM18010C-BV	168	7233	E2	190	
ZDPM18015C-BV	168	7315	E2	206	
ZDPM18020C-BV	168	8892	E2	236	
ZDPM18025C-BV	168	8913	E2	285	
ZDPM18030C-BV	168	8913	E2	295	
ZDPM21040-BV	168	9339	E2	376	
ZDPM21050-BV	168	9674	E2	415	
ZDPM21060-BV	168	10597	E2	446	
ZDPM25075-BV	168	17411	E2	642	
ZDPM25100-BV	168	18448	E2	688	
ZDPM28125-BV	168	19486	E2	190	
ZDPM28150-BV	168	20523	E2	190	
ZDVSCP2333T	177	6421	E2	374	0942M
ZDVSCP2334T	177	6819	E2	388	0952M
ZDVSCP3661T	177	3902	E2	135	0632M
ZDVSCP3665T	177	4234	E2	128	0641M
ZDVSCP3770T	177	4905	E2	201	0735M
ZDVSCP3774T	177	5368	E2	218	0748M
ZDVSCP4103T	177	8157	E2	481	1056M
ZDVSCP4104T	177	8760	E2	494	1060M
ZDVSCP4110T	177	10047	E2	762	1264M
ZDVSCP4115T	177	11872	E2	757	1278M
ZDVSM2333T	176	5620	E2	295	0942M
ZDVSM2334T	176	5939	E2	317	0952M
ZDVSM3661T	176	3508	E2	118	0632M
ZDVSM3665T	176	3773	E2	129	0641M
ZDVSM3770T	176	4329	E2	184	0735M
ZDVSM3774T	176	5088	E2	210	0748M
ZDVSM4103T	176	7046	E2	457	1056M
ZDVSM4104T	176	7528	E2	472	1060M
ZDVSM4110T	176	8404	E2	715	1264M
ZDVSM4115T	176	9863	E2	721	1278M
ZDVSM4314T	176	11781	E2	907	A36062M
ZDVSM4316T	176	14292	E2	944	A36068M
ZDVSM4400T-4	176	17935	E2	1230	A40064M
ZDVSM4406T-4	176	25685	E2	1806	A44078M
ZDVSM4407T-4	176	30096	E2	2203	A44106M
ZDVSM4408T-4	176	41779	E2	2550	A44128M
ZDVSM4410T-4	176	21819	E2	1667	A44062M
ZDVSM44304T-4	176	41779	E2	2817	A44160M
ZDVSNCP3581T	177	3016	E2	65	0524M
ZDVSNCP3584T	177	3150	E2	72	0533M
ZDVSNCP3587T	177	3459	E2	73	0535M
ZDVSNM2237T	176	4399	E2	211	0750M
ZDVSNM2238T	176	5354	E2	325	0948M
ZDVSNM2333T	176	6069	E2	348	0948M
ZDVSNM3538	176	2136	E2	37	3516M
ZDVSNM3542	176	2201	E2	38	3519M
ZDVSNM3581T	176	2872	E2	59	0524M
ZDVSNM3584T	176	3006	E2	70	0533M
ZDVSNM3587T	176	3315	E2	66	0535M
ZDVSNM3661T	176	3556	E2	111	0635M
ZDVSNM3665T	176	3828	E2	124	0643M
ZDWNM3546T	73	3107	WD	44	3524M
ZDWNM3554T	73	3264	WD	56	3533M
ZDWNM3609T	73	3438	WD	71	3628M

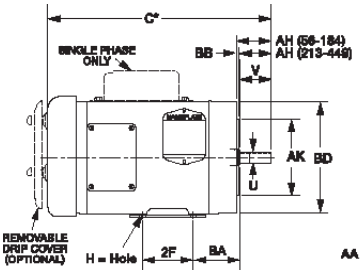
[1] Shipping weight is approximate.

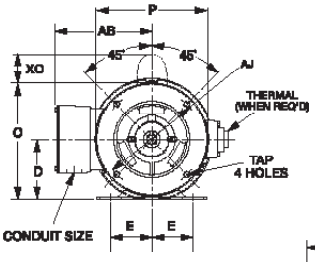
Catalog Number	Page Number	List Price	Mult Sym.	Ship Weight[1]	Type Code
ZDWNM3611T	73	3609	WD	90	3640M
ZDWNM3707T	73	3878	WD	126	3735M
ZDWNM22937T	73	5152	WD	241	3940M
ZDWNM22938T	73	5767	WD	286	3956M

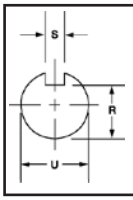
[1] Shipping weight is approximate.

1. Class F Insulated Motor with 1.15 Service Factor or higher that operates within Class “B” temperature limits at rated horsepower.
2. 1.00 Service Factor.
3. Capacitor start, induction run.
5. Belted duty only, roller bearing.
6. F-2 Mounting
7. Copper Bar Rotor
8. Class “H” Insulated.
9. Low Noise Fan Cover
11. F-3 Mounting
12. 1.25 Service Factor
13. 1.35 Service Factor
14. 1.00 Service Factor, Class F Rise
17. Capable of 100% thrust in either direction.
19. 60/50 Hertz motor. 60 Hertz data shown, contact your local Baldor•Reliance office for 50 Hertz data.
20. Class F Insulation.
24. Part Winding Start or DOL.
25. Wye Start, Delta Run or DOL.
27. Motors have ball bearing suitable for coupled loads. If load is belted, a roller bearing may be required, contact your local Baldor•Reliance office.
29. V-dimension is 2.5”.
30. Usable at 208 volts.
33. Voltage @ 60 Hz
35. Design A, Exceeds Design B inrush limits.
36. Can mount as NEMA 56, 143T & 145T frames with NEMA 56 frame shaft dimensions.
37. Can mount as NEMA 56, 143T & 145T frames with NEMA 143T-145T frame shaft dimensions.
40. Brake motors may be mounted for vertical mounting with brake below motor.
41. Brake motors may be mounted for vertical mounting with brake above or below motor.
42. Brake motors must be modified for vertical mounting. Springs included with brake.
45. Horizontal mount, no C-Face. May be converted to C-Face in Mod Express or built as custom motors.
46. Includes 1024 ppr encoder.
47. BA dimension does not meet NEMA standards.
48. Includes phase insulation. Suitable for use on inverter.
50. Voltage @ 50 Hz, usable on 460 Volt 60 Hz
51. Full Load Amps @ 400 Volt nominal - 50 Hz.
52. IP55 Enclosure.
53. Tungsten Carbide Outer Seal
56. Legacy Reliance E-Line motor design. Has F1 side mounted conduit box. Single frame mounting holes in 447 & 449 frame sizes.
57. Can mount as NEMA 145T frame with 145T frame shaft dimensions.
59. Suitable for operation @ 415V, 50 Hz.
60. Totally-Enclosed, Non-Ventilated, Continuous Duty.
63. Foot also drilled for 447T frame mounting.
64. Motors include 100 ohm platinum winding RTDs and space heaters.
65. Capacitor start, capacitor run (two value capacitor).
66. Resilient mount single phase motors with moderate starting torque for fan applications.
67. NEMA 48 Base Mount, not swivel mount.
68. 3 lead.
69. 6 lead suitable for part winding start on 200 volts.
70. Constant velocity fan: 230/460 volts, three phase.
71. Nominal efficiency is based at the 1800 RPM (High RPM) and low speed efficiency is available just not published.
73. SCR Motors with a 3:1 constant torque speed range.
74. V-dimension is 3”.
77. Inverter Duty.
78. Furnished without conduit box. (Order kit BK2400)
80. Motor has thermostat and provisions for adding flange mounted tach.
81. 230/460V 3Ø motor, 200/400V 3Ø motor or 115/230V 1Ø motor connected for voltage shown. Can be reconnected for other voltage.
82. Single voltage motor. Cannot reconnect.
83. May be operated on 50Hz rectified power supply with full nameplate rating. AC supply voltage must be same as 60Hz supply; i.e., either 230 or 460 volts. Motor nameplate is stamped D-50/60. Motor mounted blower may be added to DPG enclosure.
84. May be operated on 50Hz rectified power supply with full nameplate rating only when motor is force ventilated with motor mounted blower. AC supply voltage must be same as 60Hz supply.
85. Cannot be operated at full nameplate rating on 50Hz rectified power supply.
87. Motor has thermostat and provisions for adding adapter mounted tach.
88. Sleeve bearings - coupled loads only.
89. Cooling fan on each end.
90. Foot mounted and 180TC face.
91. Foot mounted and 210TC face.
92. Foot mounted and 250TC face.
93. Foot mounted only.
94. Foot mounted only. These stock models include VPI insulation on L440 only, insulated ODE bearing, shaft ground brush, and stator RTD's.
95. Foot mounted only. Includes filter, VPI, insulated ODE bearing and two sets of thermostats.
96. UL Recognized thermal protection
97. One size smaller flange and shaft.
98. This catalog number cannot be manufactured after March 9, 2015. Replaced by Small Motor Rule Compliant Motors. Contact Baldor for new Catalog Number.
99. G-Series motor design. Has F3 Lead outlet in frame and an arm mounted conduit box for F1 & F2 Lead Location. Dual Frame mounting holes in 445/447 and 447/449 frames.
101. Blower on drive end.
102. Force vent with blower and filter. Full nameplate rating on 50 Hz rectified power, AC supply voltage must be same as 60 Hz supply.
103. Force vent with blower, full nameplate rating on 50 Hz rectified power. AC supply voltage must be same as 60 Hz supply, thermostats and tach provisions.
104. Force vent with blower, cannot run full nameplate on 50 Hz rectified power, thermostats and tach provisions.
105. Force vent with blower on drive end filter, thermostats and tach provisions.

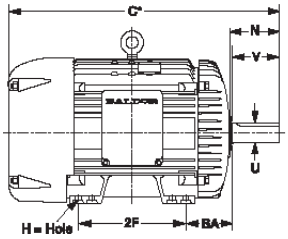
NEMA Quick Reference Chart

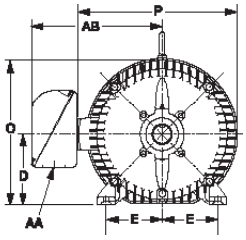






NEMA Shaft	Keyseat Dimensions		NEMA Shaft	Keyseat Dimensions	
(U)	(R)	(S)	(U)	(R)	(S)
3/8	21/64	FLAT	1-7/8	1-19/32	1/2
1/2	29/64	FLAT	2-1/8	1-27/32	1/2
5/8	33/64	3/16	2-3/8	2-1/64	5/8
7/8	49/64	3/16	2-1/2	2-3/16	5/8
1-1/8	63/64	1/4	2-7/8	2-29/64	3/4
1-3/8	1-13/64	5/16	3-3/8	2-7/8	7/8
1-5/8	1-13/32	3/8	3-7/8	3-5/16	1





Drawings represent standard TEFC general purpose motors.

*Dimensions are for reference only.

*Contact your local Sales Office for "C" Dimensions.

Dimensions - N, O, P, AB and XO are specific to Baldor•Reliance.

NEMA FRAME	D	E	2F	H	N	O	P	U	V	AA	AB	AH	AJ	AK	BA	BB	BD	XO	TAP
42	2-5/8	1-3/4	1-11/16	9/32 SLOT	1-1/2	5	4-11/16	3/8	1-1/8	3/8	4-1/32	1-5/16	3-3/4	3	2-1/16	1/8	4-5/8	1-9/16	1/4-20
48	3	2-1/8	2-3/4	11/32 SLOT	1-7/8	5-7/8	5-11/16	1/2	1-1/2	1/2	4-3/8	1-11/16	3-3/4	3	2-1/2	1/8	5-5/8	2-1/4	1/4-20
56 56H	3-1/2	2-7/16	3 5	11/32 SLOT	2-7/16 2-1/8	6-7/8	6-5/8	5/8	1-7/8	1/2	5	2-1/16	5-7/8	4-1/2	2-3/4	1/8	6-1/2	2-1/4	3/8-16
143T 145T	3-1/2	2-3/4	4 5	11/32	2-1/2	6-7/8	6-5/8	7/8	2-1/4	3/4	5-1/4	2-1/8	5-7/8	4-1/2	2-1/4	1/8	6-1/2	2-1/4	3/8-16
182 184 182T 184T	4-1/2	3-3/4	4-1/2 5-1/2 4-1/2 5-1/2	13/32	2-11/16 2-11/16 3-9/16 3-9/16	8-11/16	7-7/8	7/8 7/8 1-1/8 1-1/8	2-1/4 2-1/4 2-3/4 2-3/4	3/4	5-7/8	2-1/8 2-1/8 2-5/8 2-5/8	5-7/8 5-7/8 7-1/4 7-1/4	4-1/2 4-1/2 8-1/2 8-1/2	2-3/4	1/8 1/8 1/4 1/4	6-1/2 6-1/2 9 9	2-3/8	3/8-16 3/8-16 1/2-13 1/2-13
213 215 213T 215T	5-1/4	4-1/4	5-1/2 7 5-1/2 7	13/32	3-1/2 3-1/2 3-7/8 3-7/8	10-1/4	9-9/16	1-1/8 1-1/8 1-3/8 1-3/8	3 3 3-3/8 3-3/8	1	7-3/8	2-3/4 2-3/4 3-1/8 3-1/8	7-1/4	8-1/2	3-1/2	1/4	9	2-3/4	1/2-13
254U 256U 254T 256T	6-1/4	5	8-1/4 10 8-1/4 10	17/32	4-1/16 4-1/16 4-5/16 4-5/16	12-7/8	12-15/16	1-3/8 1-3/8 1-5/8 1-5/8	3-3/4 3-3/4 4 4	1	9-5/8	3-1/2 3-1/2 3-3/4 3-3/4	7-1/4	8-1/2	4-1/4	1/4	10	—	1/2-13
284U 286U 284T 286T 284TS 286TS	7	5-1/2	9-1/2 11 9-1/2 11 9-1/2 11	17/32	5-1/8 5-1/8 4-7/8 4-7/8 3-3/8 3-3/8	14-5/8	14-5/8	1-5/8 1-5/8 1-7/8 1-7/8 1-5/8 1-5/8	4-7/8 4-7/8 4-5/8 4-5/8 3-1/4 3-1/4	1-1/2	13-1/8	4-5/8 4-5/8 4-3/8 4-3/8 3 3	9	10-1/2	4-3/4	1/4	11-1/4	—	1/2-13
324U 326U 324T 326T 324TS 326TS	8	6-1/4	10-1/2 12 10-1/2 12 10-1/2 12	21/32	5-7/8 5-7/8 5-1/2 5-1/2 3-15/16 3-15/16	16-1/2	16-1/2	1-7/8 1-7/8 2-1/8 2-1/8 1-7/8 1-7/8	5-5/8 5-5/8 5-1/4 5-1/4 3-3/4 3-3/4	2	14-1/8	5-3/8 5-3/8 5 5 3-1/2 3-1/2	11	12-1/2	5-1/4	1/4	13-3/8	—	5/8-11
364U 365U 364T 365T 364TS 365TS	9	7	11-1/4 12-1/4 11-1/4 12-1/4 11-1/4 12-1/4	21/32	6-3/4 6-3/4 6-1/4 6-1/4 4 4	18-1/2	19-1/2	2-1/8 2-1/8 2-3/8 2-3/8 1-7/8 1-7/8	6-3/8 6-3/8 5-7/8 5-7/8 3-3/4 3-3/4	3	18 18 18-1/16 18-1/16 18-1/16 18-1/16	6-1/8 6-1/8 5-5/8 5-5/8 3-1/2 3-1/2	11	12-1/2	5-7/8	1/4	13-3/8	—	5/8-11
404U 405U 404T 405T 404TS 405TS	10	8	12-1/4 13-3/4 12-1/4 13-3/4 12-1/4 13-3/4	13/16	7-3/16 7-3/16 7-5/16 7-5/16 4-1/2 4-1/2	21-5/16	22-1/2	2-3/8 2-3/8 2-7/8 2-7/8 2-1/8 2-1/8	7-1/8 7-1/8 7-1/4 7-1/4 4-1/4 4-1/4	3	19-1/4 19-1/4 19-5/16 19-5/16 19-5/16 19-5/16	6-7/8 6-7/8 7 7 4 4	11	12-1/2	6-5/8	1/4	13-7/8	—	5/8-11
444U 445U 444T 445T 447T 449T 444TS 445TS 447TS 449TS	11	9	14-1/2 16-1/2 14-1/2 16-1/2 20 25 14-1/2 16-1/2 20 25	13/16	8-5/8 8-5/8 8-9/16 8-9/16 8-9/16 8-9/16 4-13/16 4-13/16 4-13/16 4-13/16	24.24 24.24 24.24 24.24 24.24 24.24 24.24 24.24 24.24 24.24	27.57 27.57 27.57 27.57 27.57 27.57 27.57 27.57 27.57 27.57	2-7/8 2-7/8 3-3/8 3-3/8 3-3/8 3-3/8 2-3/8 2-3/8 2-3/8 2-3/8	8-5/8 8-5/8 8-3/8 8-3/8 8-3/8 8-3/8 8-1/2 4-5/8 4-5/8 4-3/4	3 3 4 4 4 4 4 4 4 4	22.68 22.68 22.68 22.68 23.86 23.86 22.68 22.68 23.86 23.86	8-3/8 8-3/8 8-1/4 8-1/4 8-1/4 8-1/4 4-1/2 4-1/2 4-1/2 4-1/2	14	16	7-1/2	1/4	16-3/4	—	5/8-11

The above chart provides typical Baldor•Reliance motor dimensions. For more exact dimensional data, please check the specific drawing for each catalog number. NEMA states only a minimum value for AA dimension. AA dimensions shown in chart are Baldor•Reliance typical values meeting or exceeding NEMA. Please check motor drawing for actual dimensions.

Frame L449T is not included in this chart. Please refer to the Large AC motor chart, or to the specific motor drawings for L449T dimensions.

NEMA C-Face	BA Dimensions
143-5TC	2-3/4
182-4TC	3-1/2
213-5TC	4-1/4
254-6TC	4-3/4

Frame	NEMA FRAMES PRIOR TO 1953						
	D	E	F	N	U	V	BA
66	4-1/8	2-15/16	2-1/2	2-1/4	3/4	2-1/4	3-1/8
203	5	4	2-3/4	2-7/16	3/4	2	3-1/8
204			3-1/4				
224	5-1/2	4-1/2	3-3/8	3-1/4	1	3	3-1/2
225			3-3/4				
254	6-1/4	5	4-1/8	3-7/16	1-1/8	3-3/8	4-1/4
284	7	5-1/2	4-3/4	4-1/4	1-1/4	3-3/4	4-3/4
324	8	6-1/4	5-1/4	5-3/8	1-5/8	4-7/8	5-1/4
326			6				
364	9	7	5-5/8	5-5/8	1-7/8	5-3/8	5-7/8
365			6-1/8				
404	10	8	6-1/8	6-3/8	2-1/8	6-1/8	6-5/8
405			6-7/8				
444	11	9	7-1/4	7-1/8	2-3/8	6-7/8	7-1/2
445			8-1/4				
504	12-1/2	10	8	8-5/8	2-7/8	8-3/8	8-1/2
505			9				

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