

Systemlösungen
Verkehrstechnik

System Solutions
Transportation

SENSE EXPERIENCE
EXPERIENCE VISION



Systemlösungen Verkehrstechnik

Seit mehr als 100 Jahren werden bei VEM Bahnmaschinen entwickelt und gefertigt. Mit diesem soliden Erfahrungsschatz sind wir heute in der Lage, den anspruchsvollen Bedürfnissen der internationalen Schienenfahrzeugindustrie nach leistungsfähigen Antriebslösungen Rechnung zu tragen. Dazu gehören hocheffiziente Asynchron-Traktionsmotoren für elektrische oder diesel-elektrische Lokomotiven, Triebzüge, Straßenbahnen und Arbeitsfahrzeuge. Ergänzt wird dieses Angebotsspektrum durch Haupt- und Hilfsbetriebe-Generatoren und deren Regelsysteme. Für den umweltfreundlichen öffentlichen Personennahverkehr hat VEM auch Fahrmotoren für Hybrid- und Trolleybusse im Lieferprogramm.

System Solutions Transportation

VEM has been developing and producing rail traction machines for more than 100 years. This is a treasure trove of experience enabling us to meet the demanding needs of the international rail vehicle industry for high performance drive solutions. That includes highly efficient asynchronous traction motors for electrical or diesel-electrical locomotives, multiple units, trams and working vehicles.

We supplement our range of products with main and auxiliary operating generators and their regulating systems. Beyond this, VEM also offers traction motors for hybrid and trolley buses for environmentally friendly local public transport.



SENSE EXPERIENCE
EXPERIENCE VISION

Drives for high-floor light rail vehicles

Series DKCBZ, air cooled, surface cooling, IP 55



**Stadler Pankow
Tango "Bogestra"
Germany**

DKCBZ 0212-4, 125 kW, 1,779 r.p.m.
with gear ASZA 418



**Stadler Pankow
Tango Lelsys "Lyon"
France**

DKCBZ 0212-4, 125 kW, 1,775 r.p.m.
with gear ASZA 418



**HeiterBlick
Vamos "Bielefeld"
Germany**

DKCBZ 0209-4, 80 kW, 1,778 r.p.m.



Drives for low-floor light rail vehicles

Longitudinal drive for 100% low-floor

Series DKCBZ, air cooled, surface cooling, IP 55



**Bombardier Transportation
Flexity Outlook "Valencia"
Spain**

DKCBZ 0211-4, 105 kW, 1,775 r.p.m.



**Bombardier Transportation
Flexity Outlook "Brüssel"
Belgium**

DKCBZ 0211-4, 105 kW, 1,775 r.p.m.



**Bombardier Transportation
Flexity Outlook "Augsburg"
Germany**

DKCBZ 0211-4, 105 kW, 1,777 r.p.m.



**Bombardier Transportation
Flexity Outlook "Linz"
Austria**

DKCBZ 0211-4, 105 kW, 1,777 r.p.m.



**Bombardier Transportation
Flexity Outlook "Krefeld"
Germany**

DKCBZ 0211-4, 105 kW, 1,777 r.p.m.



Drives for low-floor light rail vehicles

Longitudinal drive for 100% low-floor

Series DKCBZ, air cooled, surface cooling, IP 55



**Bombardier Transportation
Flexity Outlook "Eskisehir"
Turkey**

DKCBZ 0211-4, 105 kW, 1,775 r.p.m.



**Bombardier Transportation
Flexity Outlook "Genf"
Switzerland**

DKCBZ 0211-4, 105 kW, 1,775 r.p.m.



**Bombardier Transportation
Flexity Outlook "Palermo"
Italy**

DKCBZ 0211-4, 105 kW, 1,775 r.p.m.



**Bombardier Transportation
Flexity Outlook "Marseille"
France**

DKCBZ 0211-4, 105 kW, 1,777 r.p.m.



**Bombardier Transportation
Flexity Outlook "Pöstlingberg"
Austria**

DKCBZ 0211-4, 105 kW, 1,777 r.p.m.



Drives for low-floor light rail vehicles

Cross drive for 70% low-floor

Series DKCBZ, air cooled, surface cooling, IP 55

**Bombardier Transportation
Flexity Classic "Plauen"
Germany**

DKCBZ 0210-4, 85 kW, 1,779 r.p.m.



**Bombardier Transportation
Flexity Classic "Dresden"
Germany**

DKCBZ 0210-4, 85 kW, 1,944 r.p.m.



**Bombardier Transportation
Flexity Classic "Leipzig"
Germany**

DKCBZ 0210-4, 85 kW, 1,779 r.p.m.



**Bombardier Transportation
Flexity Classic "Halle"
Germany**

DKCBZ 0210-4, 85 kW, 1,779 r.p.m.



**Bombardier Transportation
Flexity Classic "Dessau"
Germany**

DKCBZ 0210-4, 85 kW, 1,779 r.p.m.



Drives for low-floor light rail vehicles

Cross drive for 70% low-floor

Series DKCBZ, air cooled, surface cooling, IP 55



**Bombardier Transportation
Flexity Classic "Dortmund"
Germany**

DKCBZ 0211-4, 105 kW, 1,777 r.p.m.
with gear ASZA 418



**Vossloh Kiepe
Straßenbahn "Kassel"
Germany**

DKCBZ 0211-4, 105 kW, 1,777 r.p.m.
with gear ASZA 400



**ON'S Industry / Belkommunmash
BKM Minsk
Belarus**

DKCBZ 0211-4, 105 kW, 1,777 r.p.m.



Drives for low-floor light rail vehicles

Cross drive for 70% low-floor

Series DKCBZ, air cooled, surface cooling, IP 55



**Bombardier Transportation
Flexity Classic "Stockholm"
Sweden**

DKCBZ 0211-4, 105 kW, 1,777 r.p.m.



**Bombardier Transportation
Flexity Classic "Norrköping"
Sweden**

DKCBZ 0211-4, 105 kW, 1,777 r.p.m.



**Bombardier Transportation
Flexity Classic "Adelaide"
Australia**

DKCBZ 0211-4, 105 kW, 1,777 r.p.m.



**Bombardier Transportation
Flexity Classic "Frankfurt"
Germany**

DKCBZ 0211-4, 105 kW, 1,775 r.p.m.



Drives for low-floor light rail vehicles

Longitudinal drive for 100% low-floor

Series DKCBZ, air cooled, surface cooling, IP 55

PESA Bydgoszcz
City Tram "Bydgoszcz"
Poland

DKCBZ 0211-4, 105 kW, 1,777 r.p.m.



PESA Bydgoszcz
City Tram "Warschau"
Poland

DKCBZ 0211-4, 105 kW, 1,777 r.p.m.



PESA Bydgoszcz
City Tram "Cluj-Napoca"
Romania

DKCBZ 0211-4, 105 kW, 1,777 r.p.m.



PESA Bydgoszcz
City Tram "Szeged"
Hungary

DKCBZ 0211-4A, 105 kW, 1,777 r.p.m.



PESA Bydgoszcz
City Tram "Stettin"
Poland

DKCBZ 0211-4, 105 kW, 1,777 r.p.m.



Drives for low-floor light rail vehicles

Longitudinal drive for 100% low-floor

Series DKCBZ, air cooled, surface cooling, IP 55



**PESA Bydgoszcz
City Tram "Danzig"
Poland**

DKCBZ 0211-4, 105 kW, 1,777 r.p.m.



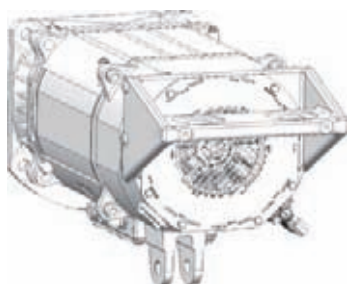
**Bombardier Transportation
Flexity Outlook "Toronto"
Canada**

DKCBZ 0211-4, 105 kW, 1,777 r.p.m.



**Voith Turbo
Solaris "Tramino" Poznan
Poland**

DKCBZ 0211-4, 105 kW, 1,777 r.p.m.



**Voith Turbo
Tram "Helsinki"
Finland**

DKCBZ 1509-4, 65 kW, 1,919 r.p.m.



Drives for low-floor light rail vehicles

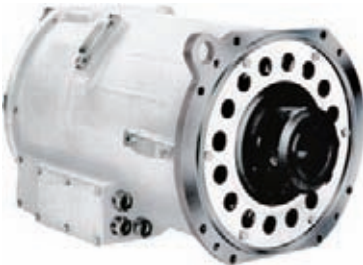
Longitudinal drive for 100% low-floor · Cross drive for 70% low-floor

Series DKWBZ, water-jacket cooling, IP 55



Bombardier Transportation
"VIA Essen"
Germany

DKWBZ 0209-4, 100 kW, 2,380 r.p.m.



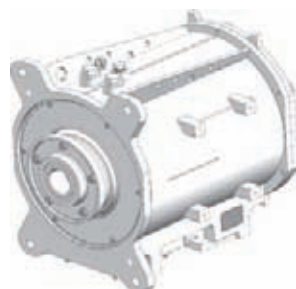
Adtranz/Bombardier Transportation
NGT 6/8 "Dresden"
Germany

DKWBZ 1706-4, 95 kW, 2,004 r.p.m.



Vossloh Kiepe
TramLink "Valencia"/"Leon"
Spain

DKWBZ 0309-4, 100 kW, 2,680 r.p.m.
with gear ASDA 533



Bombardier Transportation
Flexity "Berlin"
Germany

DKWBZ 1606-4, 50 kW, 2,653 r.p.m.



Drives for low-floor suburban rail cars and metros

Series DKOBZ, air cooled, surface cooling, IP 55

**Stadler Pankow
DT8.12 SSB "Stuttgart"
Germany**

DKOBZ 0610-4, 130 kW, 1,775 r.p.m.
with gear ASZA 400



**Bombardier Transportation
Flexity Swift "Docklands"
Great Britain**

DKOBZ 0610-4, 130 kW, 1,775 r.p.m.



**Bombardier Transportation
Flexity Swift "Frankfurt"
HF City Railway U5
Germany**

DKOBZ 0610-4, 130 kW, 1,775 r.p.m.



**Bombardier Transportation
Flexity Swift "Rotterdam"
Netherlands**

DKOBZ 0610-4, 130 kW, 1,775 r.p.m.



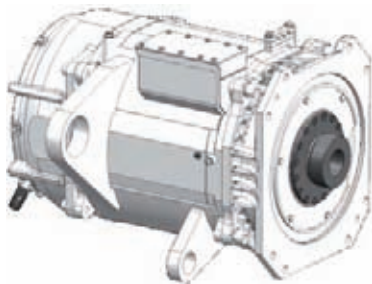
**Bombardier Transportation
Flexity Swift "Bursa"
Turkey**

DKOBZ 0610-4, 1,8 kV, 125 kW, 1,776 r.p.m.



Drives for low-floor suburban rail cars and metros

Series DKOBZ, air cooled, surface cooling, IP 55



Vossloh Kiepe
TrainTram "Leon"
Spain

DKOBZ 0610-4, 130 kW, 1,775 r.p.m.



Vossloh Kiepe
TrainTram "Bitenson"
Spain

DKOBZ 0610-4, 130 kW, 1,781 r.p.m.

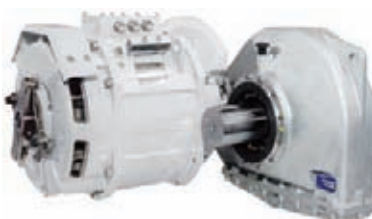


Vossloh Kiepe
TrainTram "Mallorca"
Spain

DKOBZ 0610-4, 145 kW, 1,987 r.p.m.



Series DKABZ, air cooled, drought ventilated, IP 21



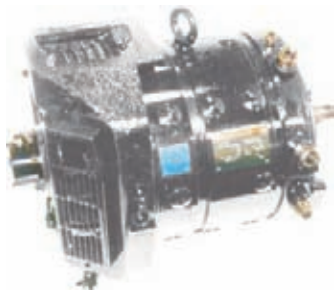
Bombardier Transportation
BR 481 City train "Berlin"
Germany

DKABZ 2806-4, 100 kW, 1,137 r.p.m.
with gear



Drives for suburban rail cars, special purpose vehicles and solutions for modernisation

Series DKABZ, air cooled, drought ventilated, IP 22



Schalker Eisenhütte
CarGo Tram "Dresden"
Germany

DKABZ 0305-4, 42 kW, 1,750 r.p.m.



LEOLINER Fahrzeugbau/HeiterBlick GmbH
NGTW6-L "Leipzig"
Germany

DKABZ 0305-4, 65 kW, 2,016 r.p.m.



LEOLINER Fahrzeugbau/HeiterBlick GmbH
NGTW6-H "Halberstadt"
Germany

DKABZ 0305-4, 65 kW, 2,016 r.p.m.



Drives for suburban rail cars, special purpose vehicles and solutions for modernisation

Series DKABZ, air cooled, drought ventilated, IP 22



Leipziger Fahrzeugservice
Modernisation Satra 2/3 "Sarajevo"
Bosnia-Herzegovina

DKABZ 0306-4, 68 kW, 1,919 r.p.m.



LEOLINER Fahrzeugbau
Modernisation of historical vehicles
"Pöstlingbergbahn"
Austria

DKABZ 0307-4, 50 kW, 1,306 r.p.m.



Drives for monorails

Series DKVBZ, air cooled, foreign ventilated, IP 54



Bombardier Transportation
Monorail "Las Vegas"
USA

DKVBZ 0211-4, 95 kW, 1,781 r.p.m.



Drives for electric regional and IR multiple units (EMU)

Series DKLBZ, air cooled, foreign ventilated, IP 22



PESA Bydgoszcz
Electric multiple unit for EN 95 “WKD”
Poland

DKLBZ 0910-4, 280 kW, 1,647 r.p.m.



PESA Bydgoszcz
Electric Railbus EN 81 “PKP”
Poland

DKLBZ 0910-4, (3 kV) 280 kW, 1,774 r.p.m.



Vossloh Kiepe
Electric multiple “Protos”
Netherlands

DKLBZ 0911-4, 340 kW, 2,008 r.p.m.



Drives for electric regional and IR multiple units (EMU)

Series DKLBZ, air cooled, foreign ventilated, IP 22



ELIN EBG Traction
MAV E-Talent
Hungary

DKLBZ 0911-4, 340 kW, 1,963 r.p.m.



ELIN EBG Traction
MAV E-Talent
Austria

DKLBZ 0911-4, 340 kW, 1,963 r.p.m.



PESA Bydgoszcz
InterRegio Train ED59/74 "PKP"
Poland

DKLBZ 3112-4, (3 kV) 500 kW, 1,681 r.p.m.



Drives for diesel-electric regional multiple units (DEMU)

Series DKABZ, air cooled, drought ventilated, IP 22



INKA Indonesian Railway
Railbus
Indonesia

DKABZ 0909-4, 110 kW, 818 r.p.m.



Drives for locomotives and rail maintenance vehicles



LEW Hennigsdorf
BR 112/143 Deutsche Reichsbahn
Germany
ECFB 1110-127K, 1,055 kW, 1,325 r.p.m.



LEW Hennigsdorf
BR 156/252 Deutsche Reichsbahn
Germany
ECFB 1110-127C, 850 kW, 1,310 r.p.m.



LEW Hennigsdorf
BR 155/250 Deutsche Reichsbahn
Germany
ECFB 1110-127C, 850 kW, 1,310 r.p.m.

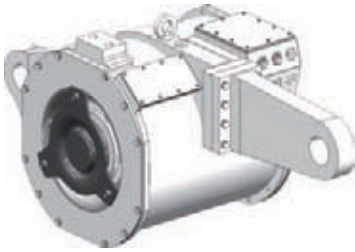


Drives for locomotives and rail maintenance vehicles



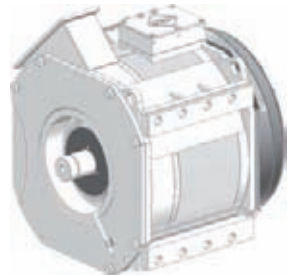
Vossloh Locomotives
DE 18/DE 12
Germany

DKLBZ 3510-4, 400 kW, 865 r.p.m.



Schalker Eisenhütte
Service Loco for Codelco
Chile

DKWBZ 3514-6, 600 kW, 1,592 r.p.m.



LORAM USA
DB AG
Germany

DKWBZ 3509-4, 355 kW, 918 r.p.m.



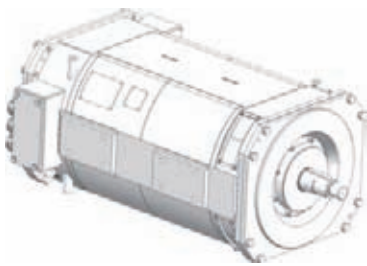
PESA Bydgoszcz
Electric locomotive "GAMA"
Poland

DKLBZ 4512-4, 540 kW, 3,500 r.p.m.
with gear



Drives for trolley busses and hybrid busses

Series DKLBZ, air cooled, drought ventilated, IP 22



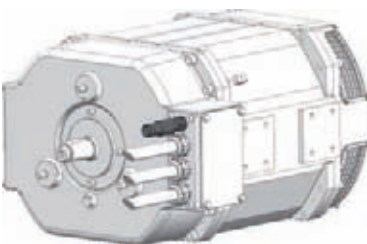
**Belkommunmash
Trolley bus Type 321
Belarus**

DKLBZ 0315-4, 180 kW, 1,480 r.p.m.



**SC Astra Bus Arad
Trolley bus Astra
Romania**

DKLBZ 0315-4, 240 kW, 1,467 r.p.m.



**Vossloh Kiepe
Hybridbus "Dresden"
Germany**

DKLBZ 0309-4, 160 kW, 1,466 r.p.m.



**Vossloh Kiepe
Hybridbus "Leipzig"
Germany**

DKLBZ 0309-4, 160 kW, 1,466 r.p.m.



Main generators for diesel-electric locomotives

Series DREBZ, self-cooled, IP 23



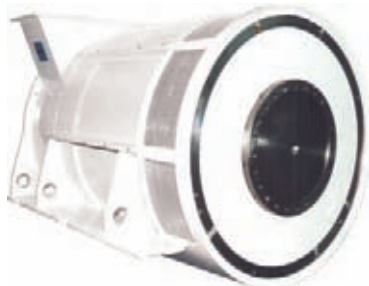
**Vossloh Locomotives
DE 18/DE 12
Germany**

DREBZ 4015-6,
1,900 kVA, 1,405 V, 1,800 r.p.m.



**Siemens VT
NSB Di8
Norway**

DREBZ 4513-6,
1,570 kVA, 1,872 V, 1,800 r.p.m.



**Siemens VT
NSB DE-Loco Di6 Dispolok ME26
Norway/Germany**

DREBZ 5620-8,
2,650 kVA, 1,870 V, 1,000 r.p.m.



**Schalker Eisenhütte
Service Loco for Codelco
Chile**

DREBZ 4015-6, 1,415 kVA, 1,800 r.p.m.



**Schalker Eisenhütte
RHB Lok
Germany**

DREBZ 4015-6,
1,847 kVA, 1,425 V, 1,900 r.p.m.



Main generators for diesel-electric locomotives

Series DREBZ, self-cooled, IP 23



**Bombardier Transportation
TRAXX F140DE
Germany**

DREBZ 4514-6,
2,204 kVA, 1,404 V, 1,860 r.p.m.



**Bombardier Transportation
TRAXX F160DE
Germany**

DREBZ 4514-6,
2,204 kVA, 1,404 V, 1,860 r.p.m.



Auxiliary generator unit for diesel locomotives

Series DREBZ, self-cooled, IP 23



**Siemens VT/Vossloh Locomotives
SNCB HLD 77/78
Belgium**

DREBZ 3508-6,
130 kVA, 420 V, 1,000 r.p.m.



Main generators for diesel-electric multiple units (DEMU)

Series DREBZ, self-cooled, IP 23, under-floor construction



**INKA Indonesia Railway
Railbus
Indonesia**

DREBZ 3108-6,
295 kVA, 660 V, 1,800 r.p.m.



**MTU Friedrichshafen
DEL 02 Lugansk
Ukraine**

DREBZ 3509-6,
400 kVA, 1,150 V, 1,900 r.p.m.



**Siemens VT
ICT-VT 605
Germany**

DREBZ 3509-6,
560 kVA, 1,400 V, 1,800 r.p.m.



Auxiliary generator unit for diesel multiple units

Series DREBZ 0606-4, with hydrostatic motor, exciter unit and support frame for under-floor assembly



Adtranz Henningsdorf
Tilting system DMU
DB AG VT 612
Germany

DREBZ 0606-4, 50 kVA, 400 V, 1,500 r.p.m.



Bombardier Transportation
Regio-Swinger
Croatia

DREBZ 0606-4, 50 kVA, 400 V, 1,500 r.p.m.



INKA Indonesia Railway
DMU
Indonesia

DREBZ 0606-4, 50 kVA, 400 V, 1,500 r.p.m.



Exciter units for main generators and auxiliary generators



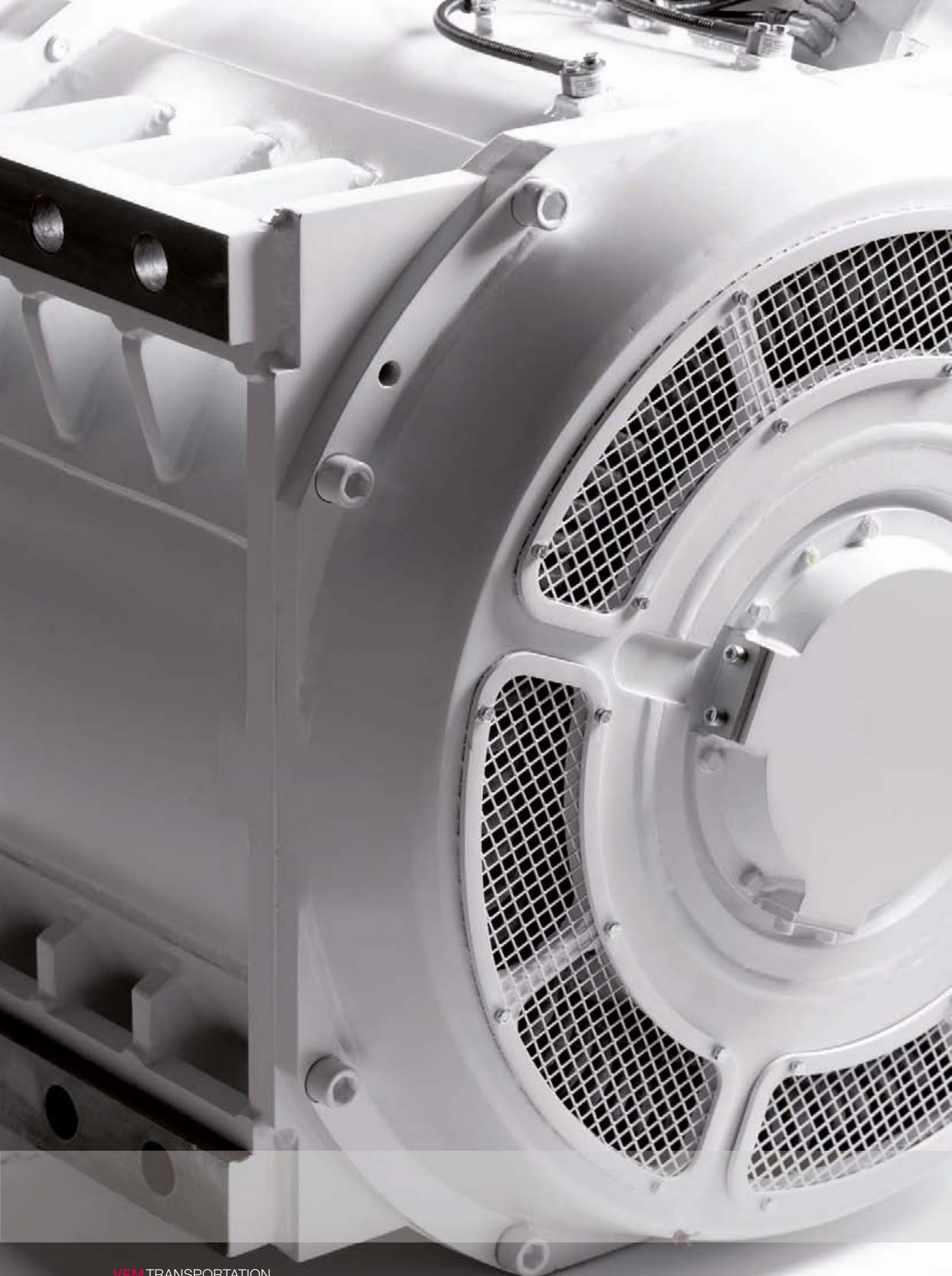
RLAGV 56001-DA DREBZ 3508-6 10.0 ADC



TIBIS-XD 2.1 T10A DREBZ 4514-6 10.0 ADC
CAN-BUS



RLAQX 16007-BA 7,5 kVA 3~
CAN-BUS



SENSE EXPERIENCE
EXPERIENCE VISION

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