

Railway Motors

Industrial Motors

Commercial &
Appliance Motors

Automation

Digital &
Systems

Energy

Transmission &
Distribution

Coatings

Safety and Reliability
for Railway applications



Driving efficiency and sustainability



DRIVING THE FUTURE OF RAILWAY RELIABILITY: WEG W22 AND W21 MOTORS

In modern railway applications, electric motors are the unseen force driving critical auxiliary systems. Far beyond basic traction, they are essential for ensuring passenger comfort, operational reliability, and uncompromised safety across the entire network.

Operating on a train means facing extremely demanding conditions, including dust, humidity, wide temperature variations, and constant movement. This is where the robust design of **WEG's W22 and W21 motors** truly stands out. Because maintenance access in railway vehicles is often limited and downtime must be kept to an absolute minimum, our motors are engineered for extended service life, high efficiency, and compact construction.

To guarantee continuous, flawless operation amidst the constant motion of the tracks, the W22 and W21 lines are designed and rigorously tested in full compliance with the **IEC 61373** international standard. This ensures that our motors can effortlessly withstand the intense mechanical stresses, shocks, and vibrations inherent to daily railway transit without compromising performance.

Beyond mechanical endurance, the safety of passengers and railway staff remains our absolute priority. To guarantee this, WEG W22 and W21 motors have been rigorously tested and proven to be in strict accordance with the **EN 45545** European standard. Through the meticulous selection of materials and components, we ensure that in the event of a fire, our motors will strictly limit flame spread and prevent the emission of toxic smoke providing a critical, life-saving layer of safety inside railway vehicles.

As railway networks continue to modernize, you need equipment you can trust. With the W22 and W21 motors, WEG goes beyond basic compliance delivering highly efficient, low-noise auxiliary solutions that lower maintenance costs, elevate service quality, and keep safety at the forefront of every journey.

APPLICATIONS

Air Compressor

Ventilation Fans

Pumps

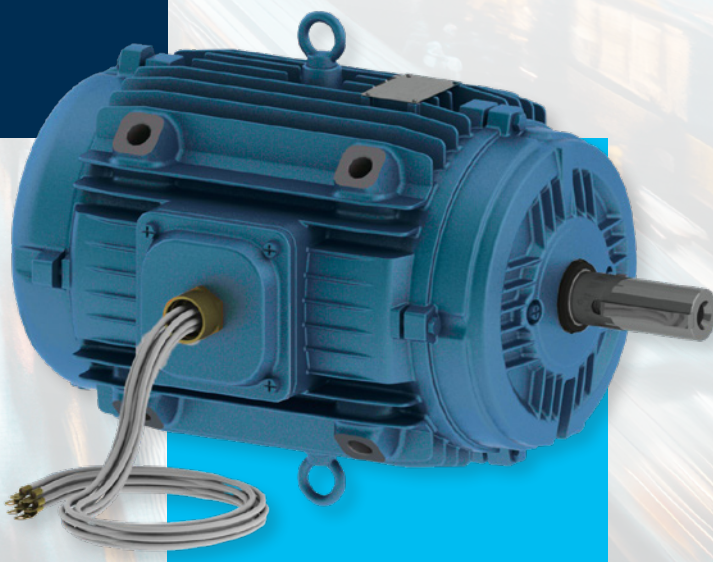


TECHNICAL FEATURES

**Built for
the demands
of the railway
industry**

Lines	W21/W22 – W21/W22 Fan and Exhaust
Efficiency Class	IE3 (IE4 on demand)
Frames (IEC)	63 – 200
IEC Power Ratings	0,12kW – 37kW
Voltage - Frequency	400/690V – 50Hz 460V – 60Hz
Speed Range	750 – 3000rpm
Mounting	B3 – V1 and others
Degree of Protection	IP55 to IP66
Ambient Temperature	40°C as standard
Altitude	1000m as standard
VFD compability	According to IEC 60034-18-42
Frame Material	Aluminium / Cast Iron
Application	Pumps / Compressors / Fans and beyond
Cooling	IC410 – IC411 – IC418
Painting Plan	211P* (W21 motors) / 212P*(W22 motors)

*C5 - Corrosion classification according to ISO 12944



The scope of WEG Group solutions is not limited to products and solutions presented in this catalogue.

To see our portfolio, contact us.

For WEG's worldwide operations visit our website



www.weg.net



 +55 47 3276.4000

 motores@weg.net

 Jaraguá do Sul - SC - Brazil

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The values shown are subject to change without prior notice.
The information contained is reference values.