Industrial Motors

Commercial & Appliance Motors

Automation

Digital Solutions

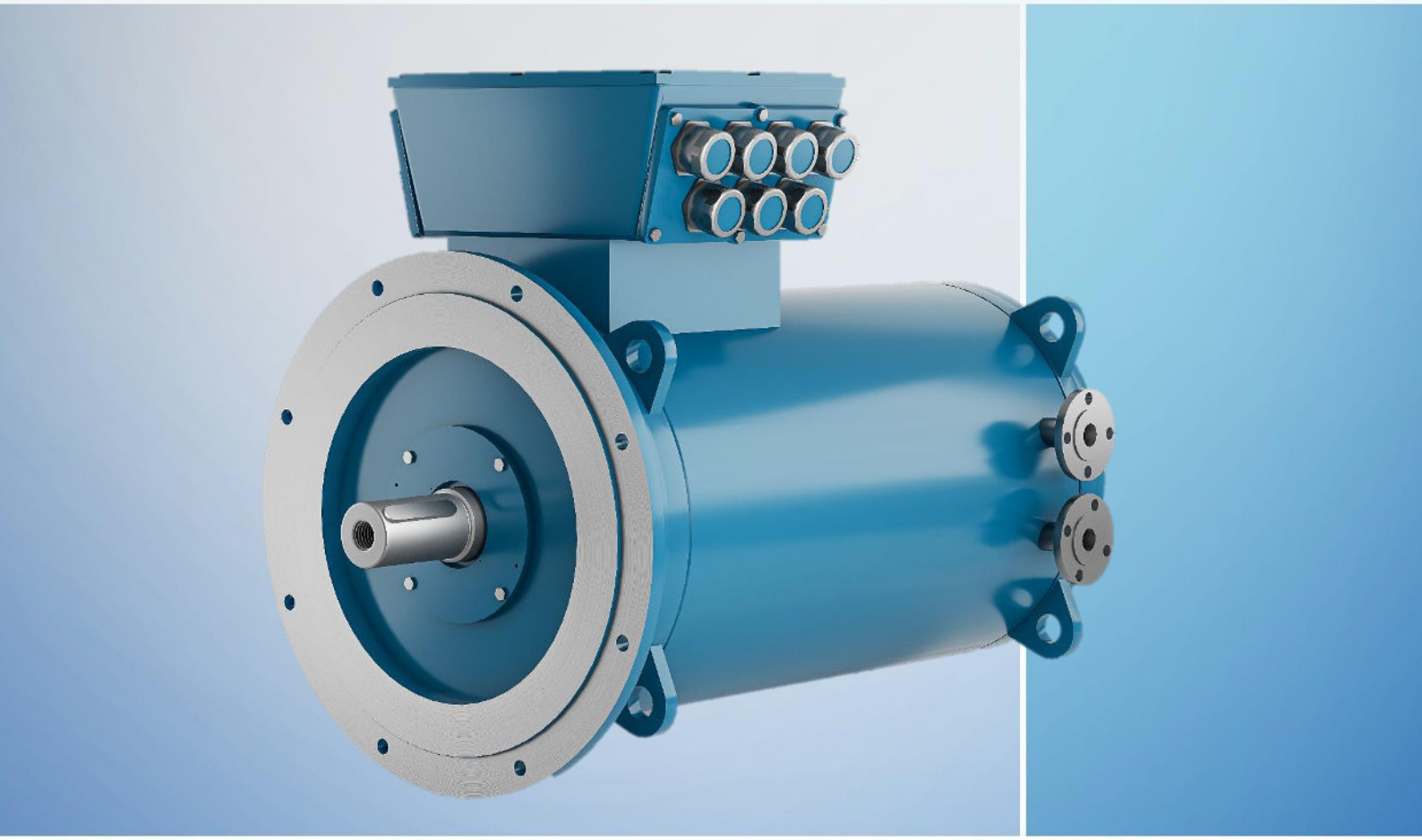
Energy

Transmission & Distribution

Paints

WATER JACKET COOLED INDUCTION MOTORS

Solutions for the **Marine** Industry



rotor WEG Group

Driving efficiency and sustainability

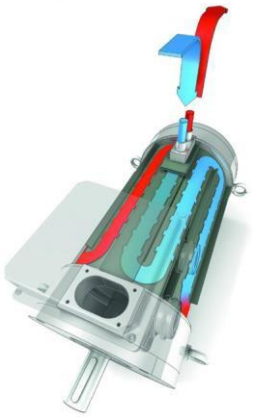
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Water jacket cooled induction motors for marine and industrial applications

Construction and Design

The Water Jacket Cooled motor is designed to operate with a constant flow of water through the channeled water passage around the periphery of the stator frame.

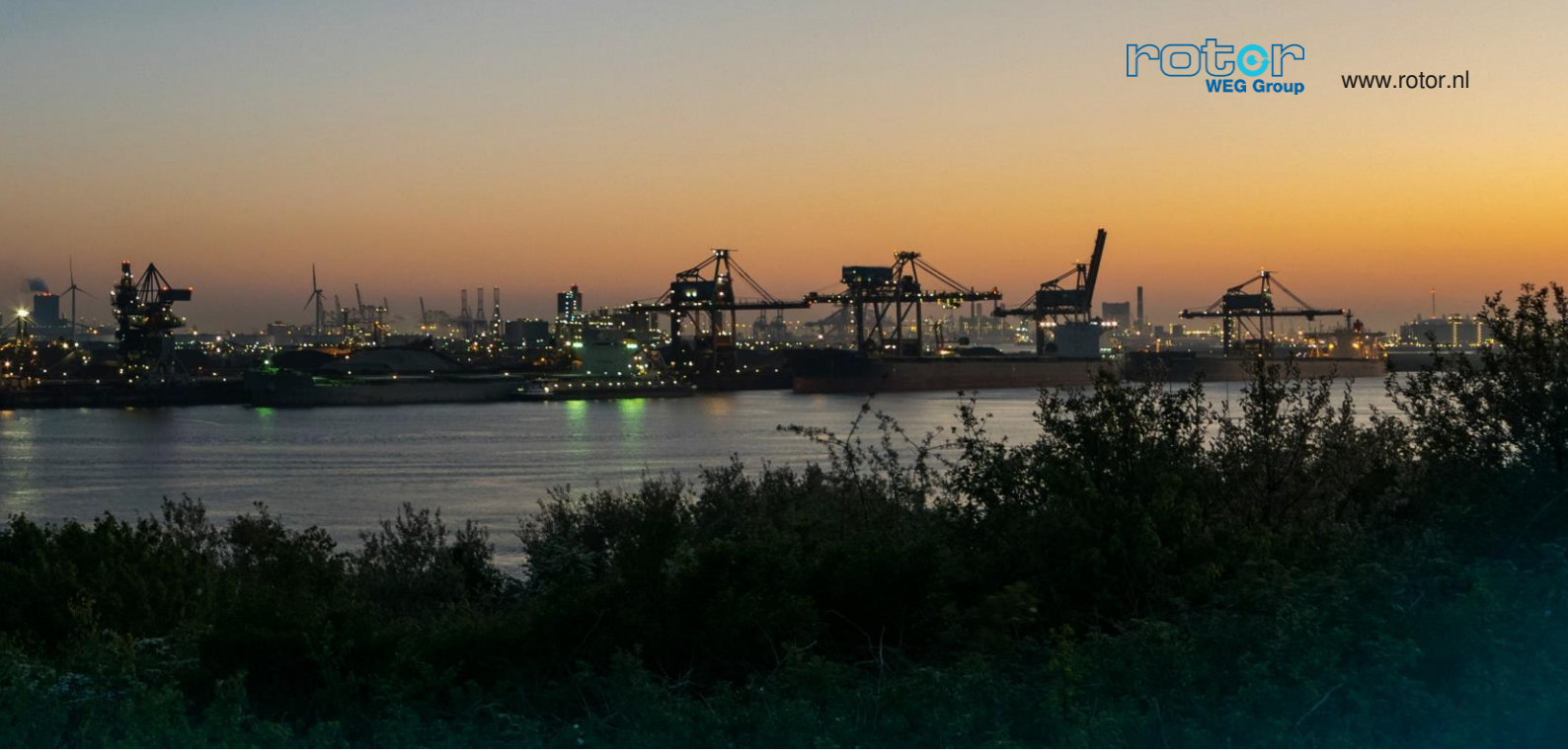


The frame housing is built from fabricated steel -carefully welded. The end shields house the bearings and possess their own water circuit to keep the bearings cool. The water circuits of the housing and the end shields are connected with tubes. The motor is fitted with a terminal box to terminate the cables and accessories. The motor is also fitted with a Water Leakage Detector. The stator core is made from low loss silicon steel laminations, continuous type or ducted type depending on design. The Rotor is a squirrel cage type made from an aluminum die cast or copper cage depending on the design. The stator winding is random wound or form wound as per the requirement of the design, suitable for variable frequency drive applications. The NDE bearing is insulated in such cases.

Standard values for the cooling water to be used in the cooling system:

- pH 6.5 - 9.5
- Alkalinity ($CaCO_3$) > 1mmol/l
- Chloride (Cl) < 120 mg/l
- Conductivity < 1500 µS/cm

Normal tap water, in general meets all of these requirements.



General Specification

Frame Size	IEC 280 - 560
Mounting	IMB3, IMV1 - other mountings on request
Power	160 - 2000 kW (4 pole, 50 Hz base)
Terminal box position	on top for IMB3, other options possible on request
Voltage	380 - 690 V, other options (MV) available on request
Auxiliary terminal box	provided
Frequency	50 Hz, 60 Hz, VSD compatible
Accessories	PTC, PT100, Heater, Water leakage detector
Class of insulation	class F, optional class H on request
Temperature rise	limited to class B or class F as per requirement
Degree of protection	IP55, upgrade to IP56 is possible
Cooling method	IC71W
Compatibility	Industrial and Marine
Painting	C3 - 2K with multiple color options. Higher class of paint is available

Scope

Power S1 duty	4 pole	6 pole	8 pole
Min kW (50 Hz)	160	160	132
Max kW (50 Hz)	2000	2000	1500

The WEG Group's scope of solutions is not limited to the products and solutions presented in this catalogue.
To see our portfolio, consult us



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