Motors | Automation | Energy | Transmission & Distribution | Coatings

Asian Market

Electric Motors and Generators for Marine Application

The WEG Group

WEG is a globally-accepted supplier of ***premium electric products for the industry***. Counting on more than ***31,000 employees all over the world and a daily production of 60,000 motors***, WEG became the leading electric motor manufacturer in the Americas and one of the largest suppliers of electric and electronic products and systems in the world. With ***exports to over 135 countries and revenues exceeding US$ 3 billion***, WEG global presence is supported through its branches established in ***29 countries***, manufacturing facilities and a network of distributors and representatives in the 5 continents. All WEG customers in the marine market have a long-lasting relationship with the company due to the commitment WEG has with their projects and to keep their vessels operating.

Availability = Global service network + Spare parts

Partnership = Local single contact point + Project management

Competitiveness = World class technologies + Class approvals

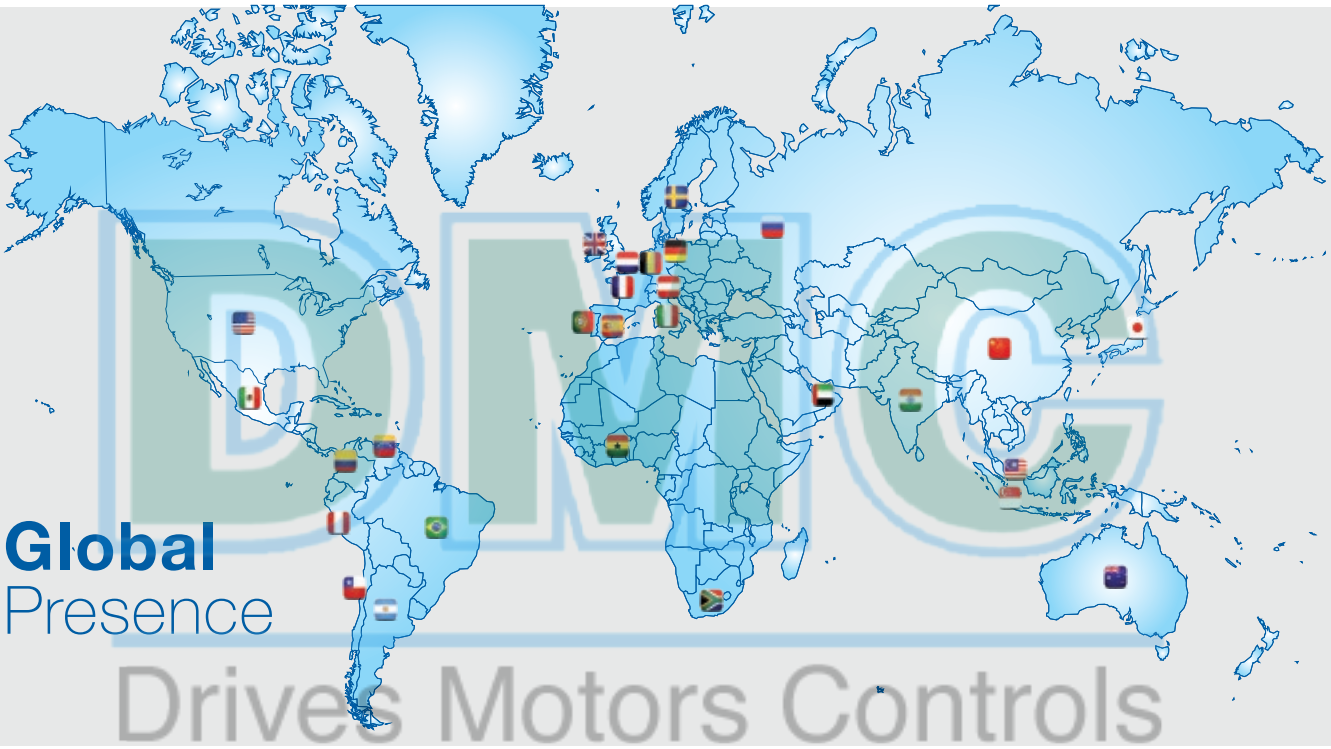
WEGnology = Know-how + One-stop shop

Whenever you need a reliable supplier of products for **marine applications**, count on **WEG**.

DMC
Drives Motors Controls

WEG Serves the **Marine Industry** Globally

Our global structure allows us to be closer to our customers. Over ***32 subsidiaries*** established in key countries are prepared to provide you with technical and commercial support. Our manufacturing plants strategically located in the main markets can serve you with short deliveries and our network of over ***1,250 Authorized Service Agents*** located in the five continents are fully equipped to give you prompt after sales and service support.



Global Presence

Drives Motors Controls

Marine Certifications

U.K. France USA Norway Germany

Company Overview

- Manufacturing plants in 9 countries
- Subsidiaries in 29 countries
- Over 1,250 Authorized Service Agents in the five continents

Global Product Certifications

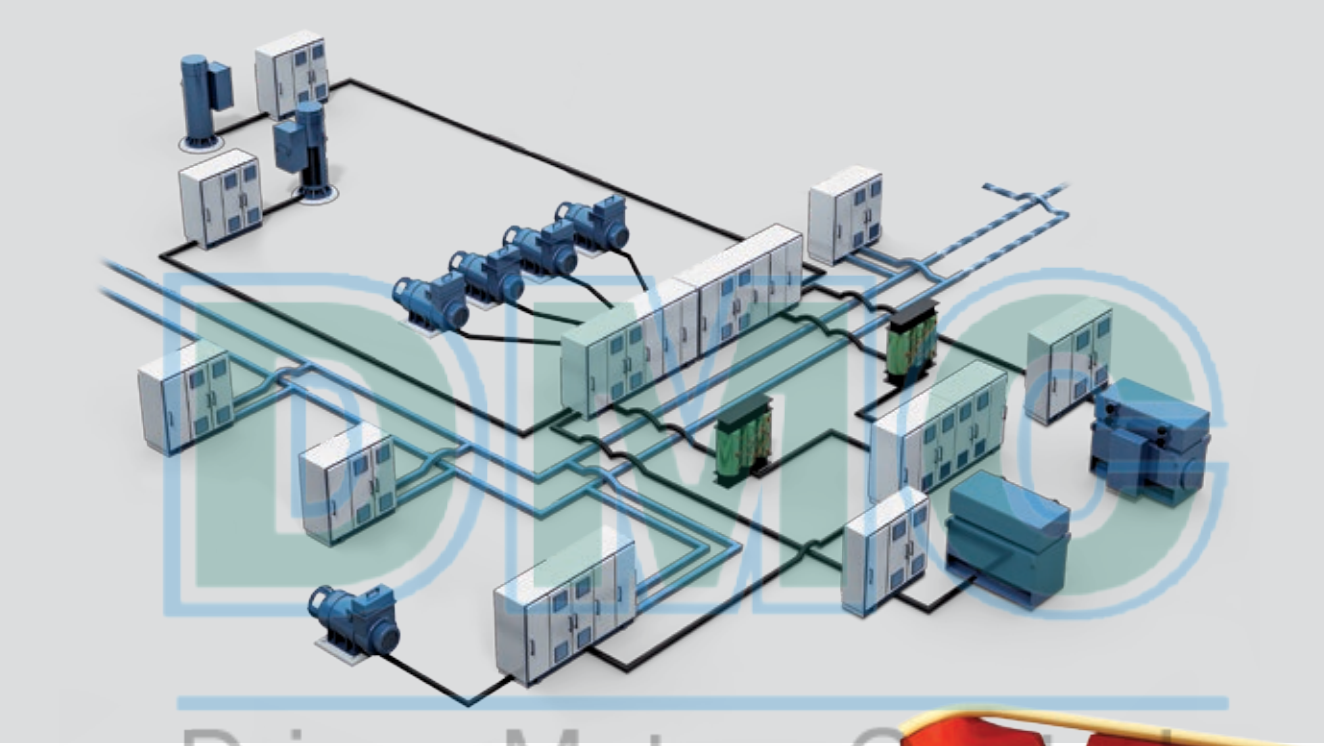
Argentina Australia Belgium Canada Colombia Brazil Nigeria

U.K France China Italy USA South Africa Europe Global

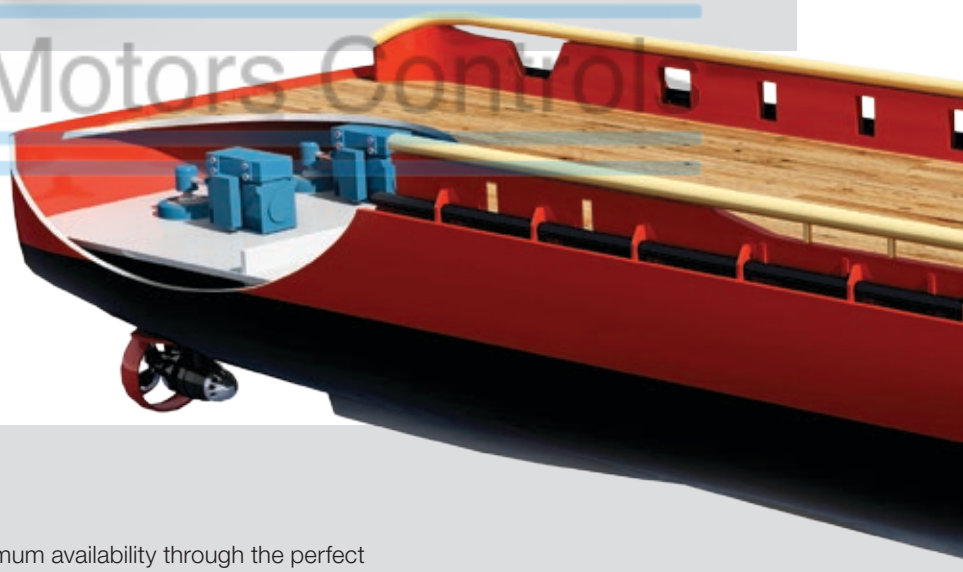
Spain Russia Kazakhstan Belarus Mexico India Saudi Arabia Germany North America

One-stop Shop for Electric Motors ar

With highly efficient and space-saving motors and generators, to fi t for the toughest marine environments on earth. WEG ***quality, cost-effective and environmental friendly products*** are available individually and are fully customizable, making it the perfect solution for system integrators, shipyards, engineering companies, OEMs and ship owners across the globe.



Single line diagram of a typical diesel-eletric propulsion system. WEG eletric motors, generators, VSDs, transformers and switchboards.



WEG marine motors and generators provide maximum availability through the perfect interaction of its individual components. Our portfolio also includes special applications, for example, explosion-proof motors, break motors, motors for suction and discharge pumps on dredgers, motors for bow and azimuth thrusters, electrical motors for onboard pumps, fans, compressors as well as various winches and mooring systems.

Drives Motors Control

nd Generators for the Marine Industry

DMC
Drives Motors Controls

Motors

Efficiency and **reliability** on board

Reliability is what matters when electric motors are required for extreme operating conditions: humid, salt-laden and corrosive atmospheres. WEG offers a complete line of electric motors, suitably designed for several marine applications, providing ***premium efficiency and high power density in a compact solution*** that saves space on board.

WEG motors are fitted with special bearings, reinforced insulation windings, special marine coatings and stainless steel hardware, guaranteeing maximum performance and protection against damaging external effects, such as continuous vibration, heavy pitching and rolling motion under rough sea conditions and aggressive salt-laden ambient.

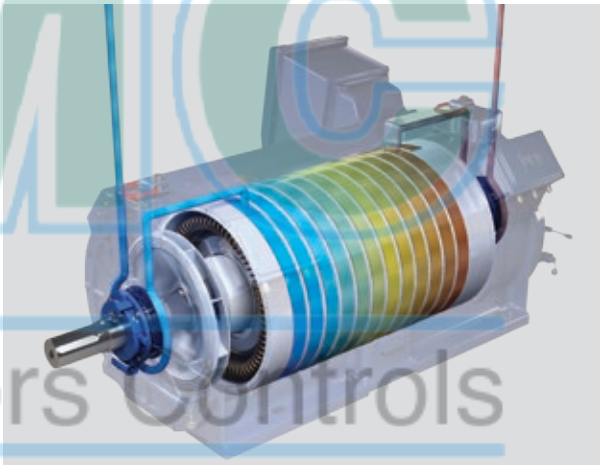
WGM Motors: Water Jacket Cooled

Designed for Tough Application Conditions

WEG Water Jacket Cooled Motors (WGM Line) can be used especially for driving machines that require constant torque even at low speeds, for long periods of operation (for instance during Dynamic Positioning). It is the right choice for demanding applications in tough Marine environments, with higher ambient temperature and limited space availability.

Advantages

- Low Noise Level
- Suitable for variable frequency drive operation
- Minimum thermal dissipation to the environment
- Compact construction
- Suitable for aggressive operating conditions



The motor cooling is guaranteed by a “water jacket” circulating system between the stator core and the outer frame, allowing a more effective heat exchange which results in a higher output power per weight ratio, therefore reducing the size of the motor. This system is ideal for variable speed applications since the thermal efficiency is optimized even on reduced speeds and where space is a concern.

DMC Drives Motors Controls

Master Line

General Purpose Motors
Non-Sparking Motors
Increased Safety Motors
Pressurized Motors

The Master line (M line) motors stand out for the flexibility of their electrical and mechanical design, adapting to the strictest operating requirements in different applications. The result of this innovative development is a product with high efficiency, meeting the requirements of international standards and in line with the world market trends.

- Output: up to 50,000 kW
- Voltage: up to 14,400 V
- Cooling: open, air or water cooled

** NEMA or IEC designs*

Water Cooled Motors

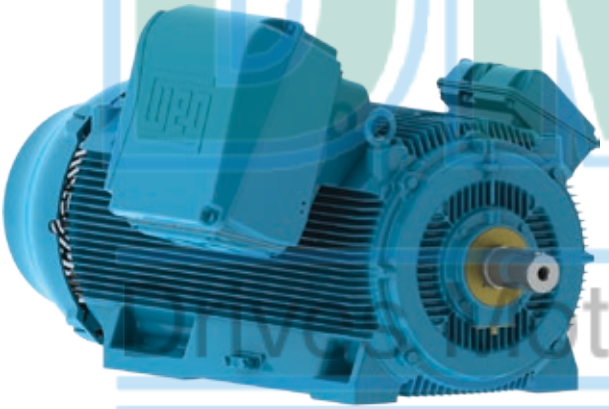
WEG Water Cooled motors were developed to match the increasing market demands for compact design motors with low noise level and high output power ratio per frame size. These motors meet the IE2 efficiency levels defined by IEC 60034-30:2008 Standard, thus ensuring lower energy consumption and consequently reducing their operating costs.

Standard

- Output: 18.5 to 450 kW
- Number of poles: 2 to 8 poles
- Voltage: up to 660 V
- Frequency: 50 or 60 Hz
- Service factor: 1.00 or 1.15
- Degree of protection: IP55
- Insulation class: F or H

HGF: Three Phase Induction Motor

The HGF line is differentiated by its high performance combined with low maintenance costs. This product line is ideal for operating in the toughest applications, which require increased strength and durability of motors.



Standard

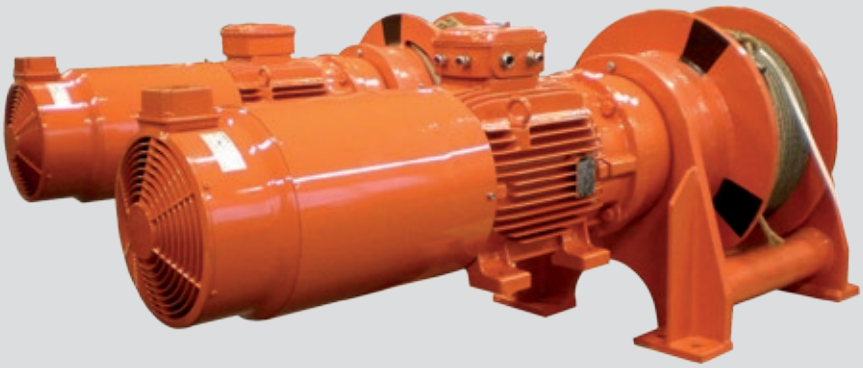
- Rated output: 90 kW to 3,150 kW
- Number of poles: 2, 4, 6, 8, 10 and 12
- Frame sizes: IEC 315 to 630
- Frequency: 50 or 60 Hz
- Voltage: 380 V to 6,600 V
- Service factor: 1.00
- Insulation class: F (DT 80 K)
- Degree of protection: IP55

DMC Drives Motors Controls

Electrical Motors for Special Applications

WEG develops its portfolio of products always thinking about the special features of each special application:

- Explosion-proof motors
- Brake motors
- Motors for suction and discharge pumps on dredgers
- Motors for bow and azimuth thrusters, electrical motors for onboard pumps, fans, compressors as well as various winches and mooring systems

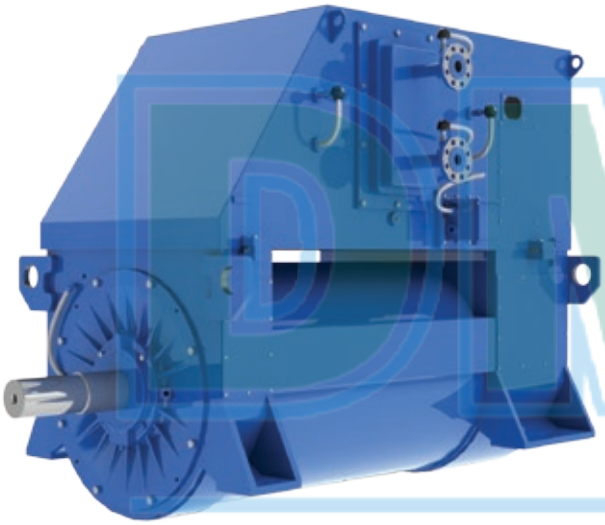


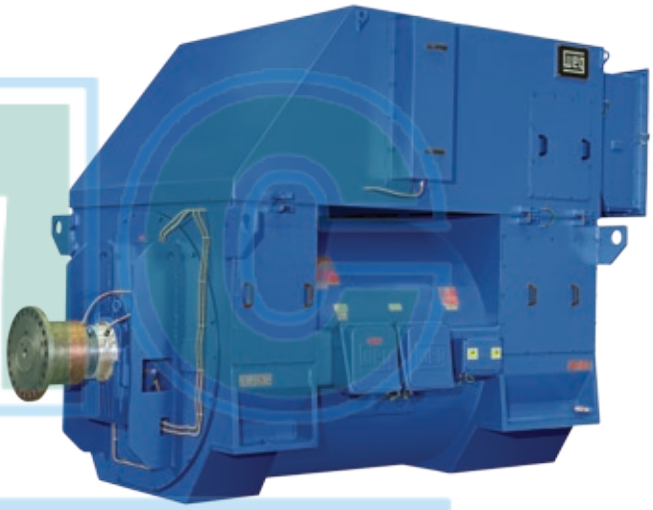
Power Generation

Synchronous Alternators

With extensive experience in the energy sector, WEG offers a ***wide range of alternators to meet the requirements of different applications*** in virtually any environment. WEG alternators ensure reliable on-board power supply. In accordance with international classifications societies and in line with individual customers demands WEG delivers ***fully customized solutions***, enabling our clients to stay at the forefront of their industries.

Marine Lines





Drives Motors Controls

AN10 Line

- Suitable for gen-sets

Technical Data

- Powers: 1,100 to 3,000 kVA
- Frames: 450 to 560 (IEC)
- Voltage: 440, 690 and 4,160 V
- Frequency: 50 to 60 Hz
- Degree of protection: IP55W
- Insulation class: 180 (H)
- Excitation: brushless
- Number of poles: 4

Features	Benefits
Special coating, components parts and windings	High resistance to corrosion, environments with oil vapor, salt, high humidity and high temperatures
Excellent performance	
Compact	Its reduced dimensions make it suitable for vessels with strict space limitations in the engine room
Flexibility	This line can be adapted to each project
Reliability	The product has special electromechanical features which ensure durability, mechanical strength and robustness

SG10 Line

- Suitable for gen-sets and main propulsion of larger vessels, drilling rigs an FPSO

Technical Data

- Powers: 3,500 to 50,000 kVA
- Voltage: 380 to 13,800 V
- Frequency: 50 to 60 Hz
- Degree of protection: IP23 or IP55
- Insulation class: 180 (H)
- Excitation: brushless
- Number of poles: 4, 6, 8, 10 and 12

Features	Benefits
Robustness	Excellent performance in severe applications
Versatility	Can be supplied with air-air and air-water cooling or open cooling
Low reactance	Meet the main load start requirements

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DMG Drives Motors Controls

For those countries where there is not a WEG own operation, find our local distributor at www.weg.net.

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The values shown are subject to change without prior notice.