Industrial Motors

Commercial & Appliance Motors

Automation

Digital Solutions

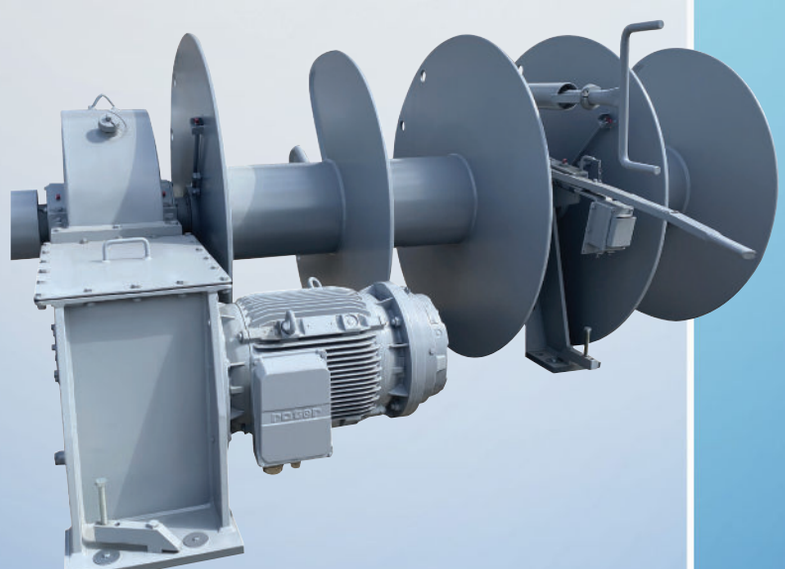
Energy

Transmission & Distribution

Paints

ROTOR BRAKE MOTORS

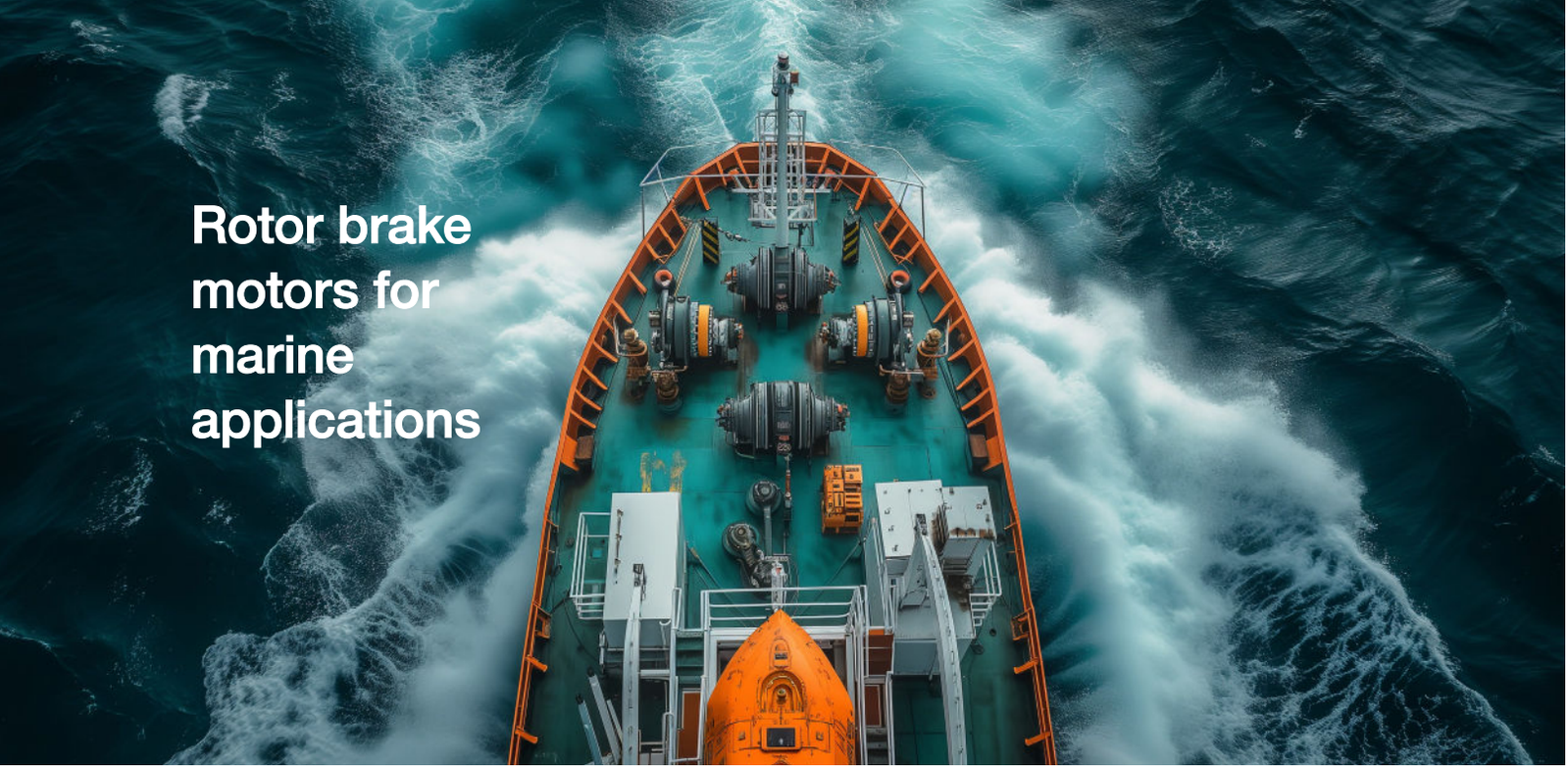
Solutions for the **Marine** Industry



rotor WEG Group

Driving efficiency and sustainability

WEG



Rotor brake motors for marine applications

DESIGNED TO LAST IN HARSH MARITIME ENVIRONMENTS

Rotor's 6RN Brake Motor's strong and robust features are specifcally designed to meet the requirements of arduous marine and offshore applications.

The motor's flexible and customizable design offers a reliable solution to challenging maritime applications. The 6RN series is the base structure of the design, ensuring modularity and the ability to modify quickly to offer a customized solution.

Depending on the demand of the application - high quality marine brakes are offered, Dellner Bubenzer*®, Stromag*® or equivalent as options.

Baumer Hubner*® encoders are offered as a recommended solution. Rotor offers the best in class marine duty motors meeting the highest safety standards.

Multiple configuration options for Brakes, Encoders and Force Cooling units are offered based on the demand of the application or customer specifications.

Technical Summary

6RN MOTORS:

- Cast iron integral feet construction
- IEC*® frame size 63 - 400
- Large size terminal box
- Insulation Class F; optional Class H, tropical treatment is standard, prepared for frequency converter duty
- 3 x PTCs and standstill heating elements as standard
- High maximum torque
- Sealed to protect against rough marine environment - up to IP66
- Bearings: SKF or equivalent
- Multiple Class Type approved for marine

Encoders:

- High resistance to shock and vibrations
- Suitable for the harshest marine environments
- HTL & TTL signals, up to 5000 pulses

Brakes:

- Electromagnetic spring applied safety brakes up to IP67
- Wide selection of brands and types
- Customer specific solutions - Manual Hand Release, Microswitch etc. as options
- Fitting options and features for all marine environments

Force Cooling Units (IC416):

- Careful selection of Wistro*® or equivalent cooling units

** The following trademarks are not owned by or under the control of WEG Group or Rotor: IEC is a trademark or trade name of International Electromechanical Commission; Dellner Bubenzer is a trademark or tradename of Dellner Bubenzer GmbH; Stomag is a trademark or trade name of Altra Industrial Corp.: Baumer Hubner is a trademrk or trade name of Baumer Holding AG; Wistro is a tradeamrk or trade name of WISTRO Elektro-Mechanik GmbH.*

Brake Motors Overview

The brake selection depends greatly on the application. The applications can vary widely. A 'holding brake' is required for certain applications. This brake is not used for dynamic braking (full speed braking) but is engaged after the motor coasted down and while stationary. This is often required for electric motors with large moment of inertia attached on the shaft. In these situations the rotating energy would be converted into a lot of heat during dynamic (full speed) braking.

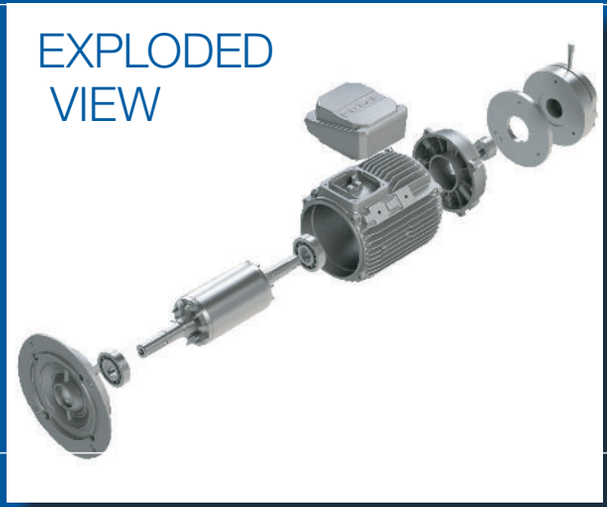
The correct brake selection can be made after consultation with the motor / brake supplier or manufacturer. The final solution thus depends largely on the application and other site conditions.

Housing size	Flange dimensions	Brake options in Nm		
		IP55/56/65/Ex-nA	IP 67 marine brake	Ex-d brakes
63	A140	4		
71	A140	8		8
	A160			
80	A160	16		22
	A200	10/25		
90	A160	16		22
	A200	25		
100	A200	32/60	Available on request	40
	A250	50	Available on request	
112	A250	32/50/60	Available on request	60
132	A250	100	Available on request	150
	A300	100, 160	Available on request	
160	A300	150/160/250	Available on request	180
	A350	160	Available on request	
180	A300	250	250/300/400	355
	A350		250/400	
200	A300		250/300/400	460
	A400		250/300/400/630	
225	A350	500	400/630	460
	A400		400/630/1000	
	A450		400/630/1000	
250	A450		630/1000	1000
	A550		630/1000	
280	A450		1000/1600	1200
	A550		1000/1600	
315	A550			
	A660		2500/4000	
	A800		2500/4000/6300/10000	
355	A800		2500/4000/6300/10000	
400				
450				

IP 65 and Ex-d brakes are independent of the flange dimensions and apply only to each housing size

This diagram provides a generic overview of the different types of brakes that can be mounted on Rotor nl® electric motors. The overview shows brake options that are available. Please contact our trained team for the correct brake selection.

EXPLODED VIEW



Rotor Brake Motors are widely used for open deck applications including:

- Anchor winches
- Capstans
- Launch & Recovery Systems (IL.A.R.S)
- Mooring winches
- Cranes & Gantries
- Davits

Please contact us with your specific requirement - we will custom engineer the optimal configuration for you with our proven knowledge of Application Engineering and capabilities to perform special modifications.

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

Learn about WEG around the world

www.weg.net

rotor
WEG Group

Tel: **+31 (0) 545 464640**

Email: **sales@rotor.nl**

Website: **www.rotor.nl**

Cód: XXXXXXXXX | Rev: 00 | Data (m/a): 08/2024