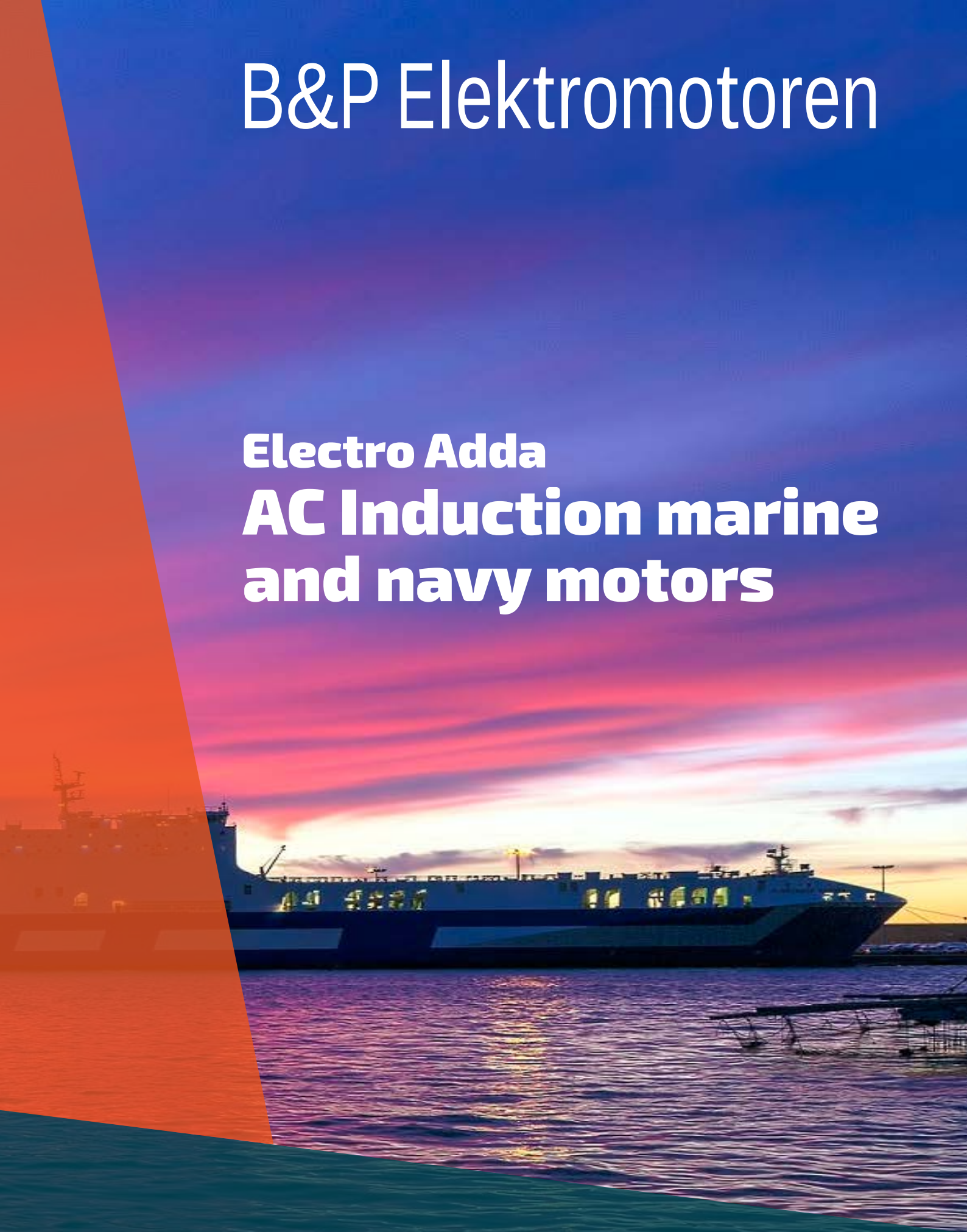
B&P Elektromotoren

Electro Adda
AC Induction marine and navy motors



DESIGNED AND MANUFACTURED IN ITALY

REV 01 06/24

110.000
motors delivered per year

25.000 mq
of manufacturing premises

150 ea
group employees

POWER SUSTAINABILITY
thanks to solar panels

Electro Adda SpA at a glance

Established in 1948, Electro Adda remains a family company with 75+ years of experience in AC Low voltage motors and generators engineered and made in Italy.
Through a global sales service and distribution network – including after sales – we are serving 73 countries with a power range up to 1.5MW
Electro Adda is a totally independent market player active in all major segments (industrial, marine and navy, metals, lifting & material handling, hoists, defense, automotive, renewable energy, O&G, railways)
While design activities are developed by the internal technical department, manufacturing process is fully performed inside our factories.
A large test bay is capable to conduct functional tests – including tests on load.

MADE IN ITALY

From design to manufacturing, the whole process is **made in Italy** in our headquarters in Beverate di Brivio, LC Lake of Como Area in Northern Italy.
Engineered the product, from raw material our internal production creates punched laminations, machining (shaft & frames), electrical and assembly department create the finished unit. Our testing laboratory will check and confirm performance before delivery.

FROM
1948

100% Italian family business

Electro Adda GmbH

Electro Adda Uk, Co, Ltd

Electro Adda S.p.A.

W&P – production of electrical winding

COMPLIANCE WITH DEMANDING MARINE & NAVAL APPLICATIONS

- Designed and built taking into account vessel inclinations (static & dynamic)
- Certified painting systems
- Deck and offshore (wet environments) and below deck (dry environments)
- Mounting configurations, speeds, protection degree and enclosures can be adapted to meet specific vessel installation constraints
- Shock capability up to 300g
- Low magnetic signature

- DEF and MIL Standards
- LOW EMC
- Structural borne noise measurement
- 1/3 octave band vibrations and noise readings
- BV & LR type approval
- Functional test

Certification

Quality is endorsed by third party accreditations (ISO 9001-2015, UL (#E340019-E247839), Atex (#CESI03Atex286Q), Marine, Naval, CSA (#201661) and project identified bodies.
Compliance with appointed classification societies is achieved for marine and naval applications:

BUREAU VERITAS · RINA · ABS · ClassNK · DNV · IRCLASS Indian Register of Shipping · KR KOREAN REGISTER · Lloyd's Register

Customer oriented solutions for marine and naval duties

Depending on the specific duty and location (above or below deck), the Electro Adda product portfolio is flexible in terms of protection degree and cooling as follows:

A series

Steel frame

Power 200÷2000 kW Continuous or intermittent duty (S1 or S2 30 minutes)

Frame sizes 250÷560

Insulation Class F - Option H

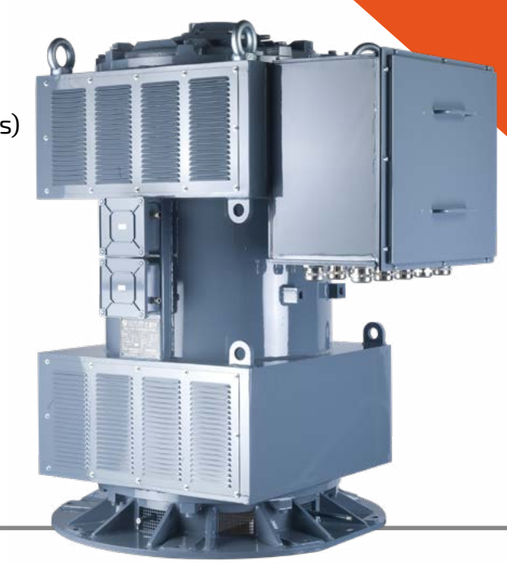
Air cooling (IC01, IC06)

Protection degree IP 23

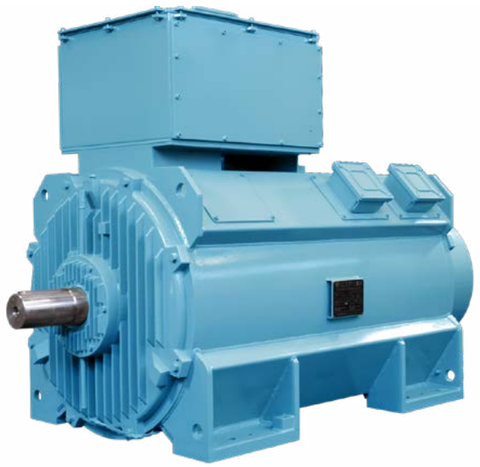
50, 60Hz and variable speed

Advantages:

- Smaller overall dimensions and lighter motors
- High power density



W series



Steel frame

Power 11÷2000 kW Continuous or intermittent duty (S1 or S2 30 minutes)

Frame sizes 132÷560

Insulation Class F - Option H

Water cooling (IC7 A1W7)

Protection degree IP 55 (IP 56 on request)

50, 60Hz and variable speed

Advantages:

- Smaller overall dimensions and lighter motors
- Lower heat release into the working environment
- Lower noise
- No power reduction even at high ambient temperatures
- They can be used at a wide speed range at constant torque without derating
- Suitable for installation in harsh environments
- High power density

C series

Nodular Cast Iron & Steel frame

Power 0.75÷1200 kW

Frame sizes 71 up to 500

Designed to withstand high shock load on all directions

Insulation Class F - Option H

Efficiency class IE2/IE3/IE4

2, 4, 6, 8 pole motors and multi speed motors

Protection degree – cooling:

- IP 55 – IC 411 self-ventilated
- IP 55 – IC 416 forced ventilation

Suitable for inverter supply

IEC60034-1 MIL Standards BVNR483

LOW EMC

Marine and naval rules

LR & BV type approvals – including naval constructions

FECCL series

With DC electromagnetic disc brake

Power 0.13÷280 kW

Frame sizes 63÷355

Insulation Class F - Option H

Protection degree IP 55

Cooling type

- IC 411 self-ventilated
- IC 416 with forced ventilation

Suitable for inverter supply

IEC 60034-1 Standards

EAC Certification (on request)

UL/CSA certification for USA and Canada markets

Marine construction LR approved

IE3 efficiency class

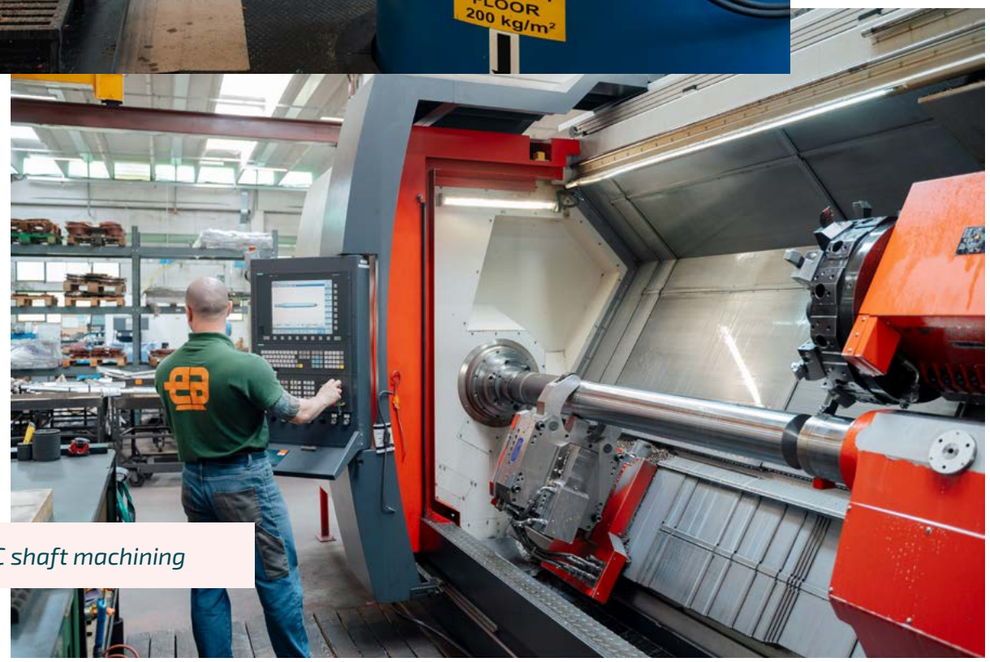
BV and LR Type Approval

DESIGN AND BUILT TO LAST

Electro Adda marine & navy motors are subject to a dedicated manufacturing process which will included:
Detailed design which may include FEM calculations (electrical and mechanical) to confirm compliance with requirements

Selection and traceability of materials – where applicable
In house punching and slotting of electrical steel
Bespoke quality control plan which will reflect class and client's specification as far as applicable

VPI impregnation process & partial discharge readings for enhanced insulation system check



In house CNC shaft machining

Functional test in our laboratory including tests on load

Water Jacket motor under functional test

FROM STANDARD MARINE TO TAILOR MADE

SERVICE: Main propulsion, Auxiliary and PTO/PTI/PTH hybrid propulsion

Starting from a clean compact design, the unit can be configured based on application to meet specific requirements with customized design and options:

- Winding and bearing temperature detectors
- Space heaters
- Class H insulation
- Insulated bearing and shaft grounding brush
- Cable glands
- Vibration sensors
- Special painting cycle per ISO 12944
- Special shaft and/or double shaft extension
- Encoder
- Brake
- Type test

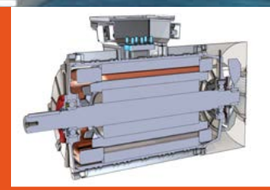
Compliance with major classification societies is available upon request

Main propeller drive motors

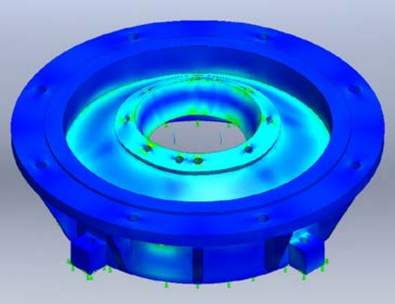
Thruster and positioning motors

Lifeboat and service boat lowering motors

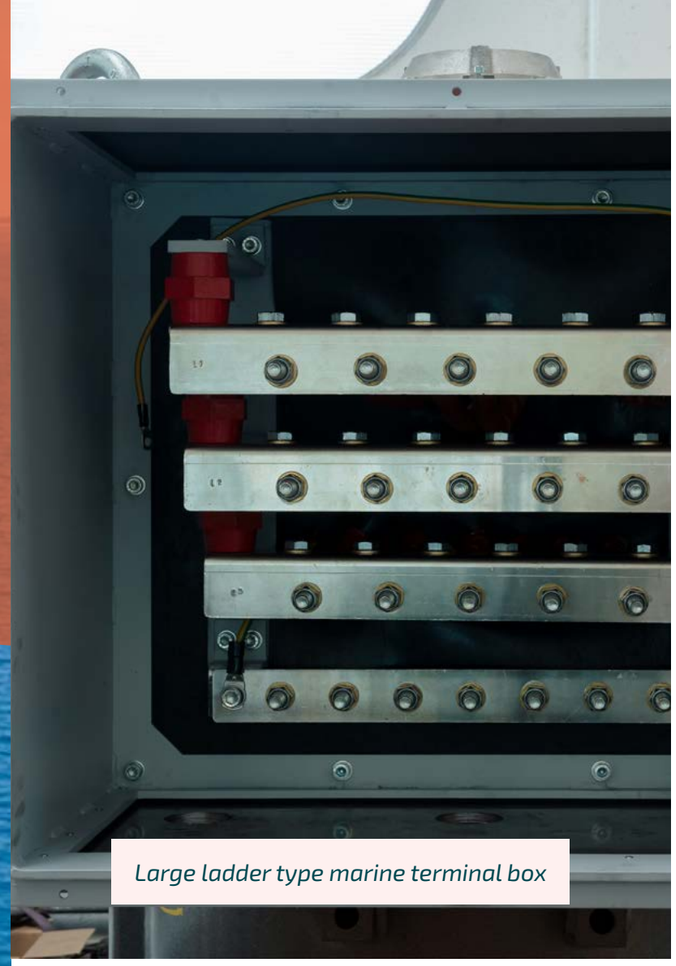
Anchor winch motors



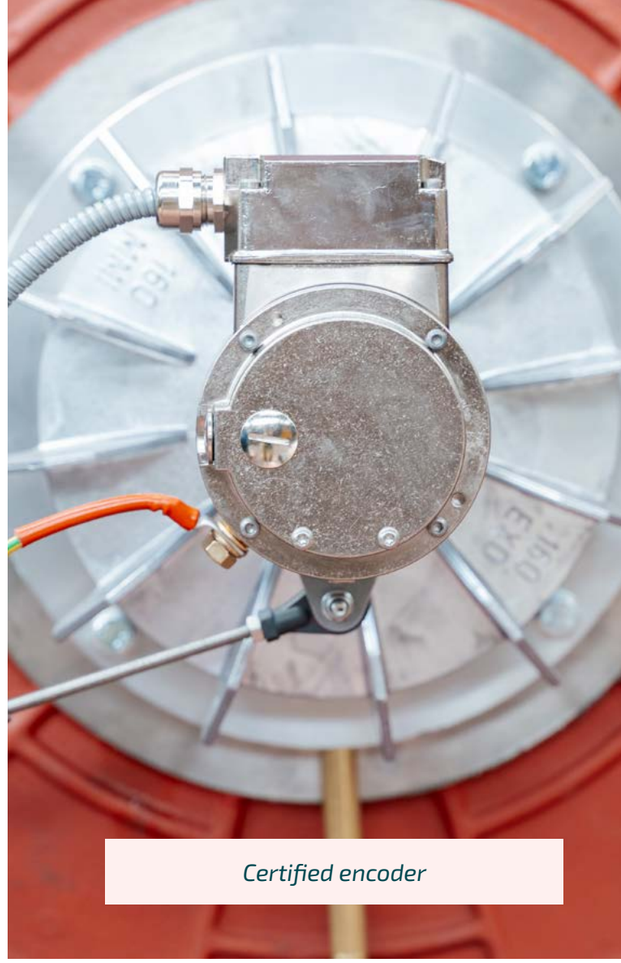
Winch motors



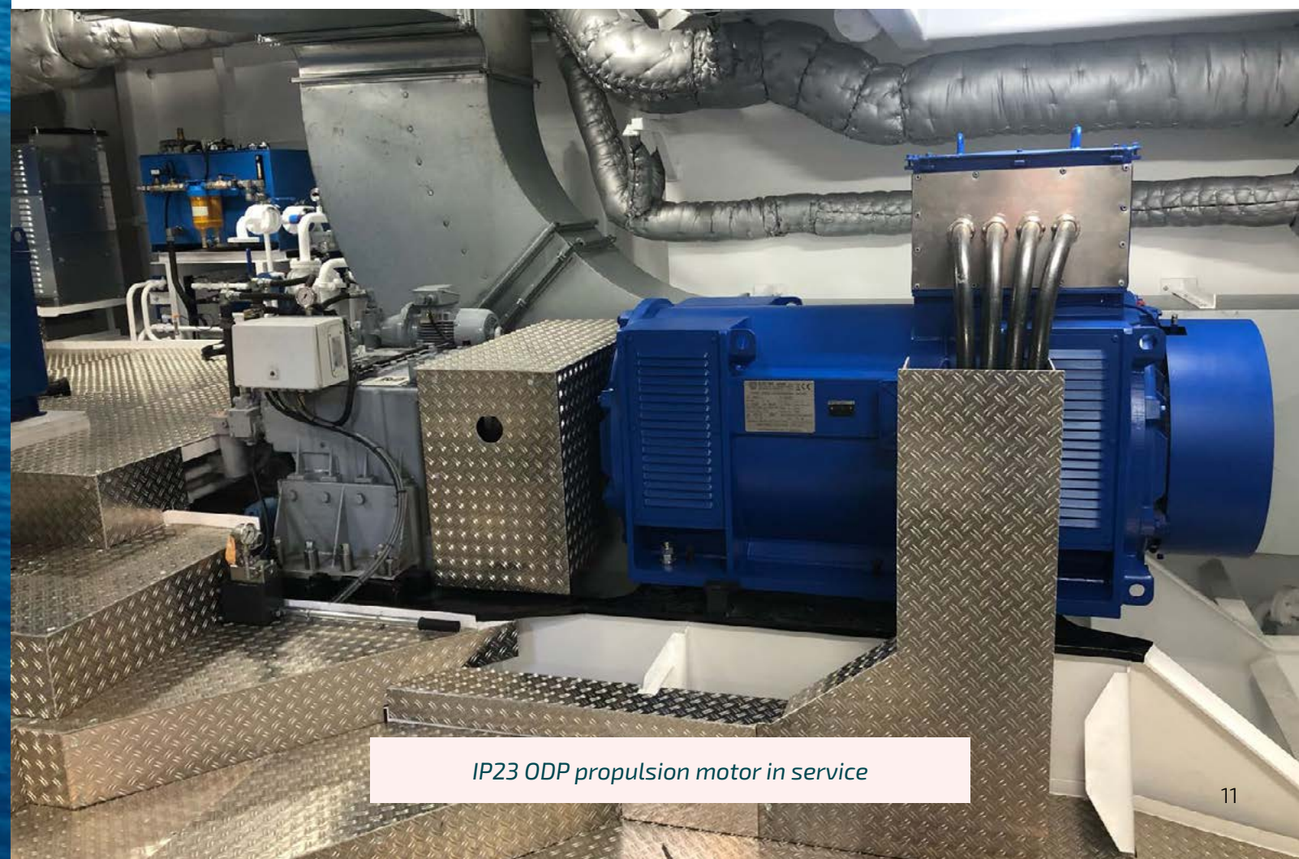
FEM check of motor flange under shock load



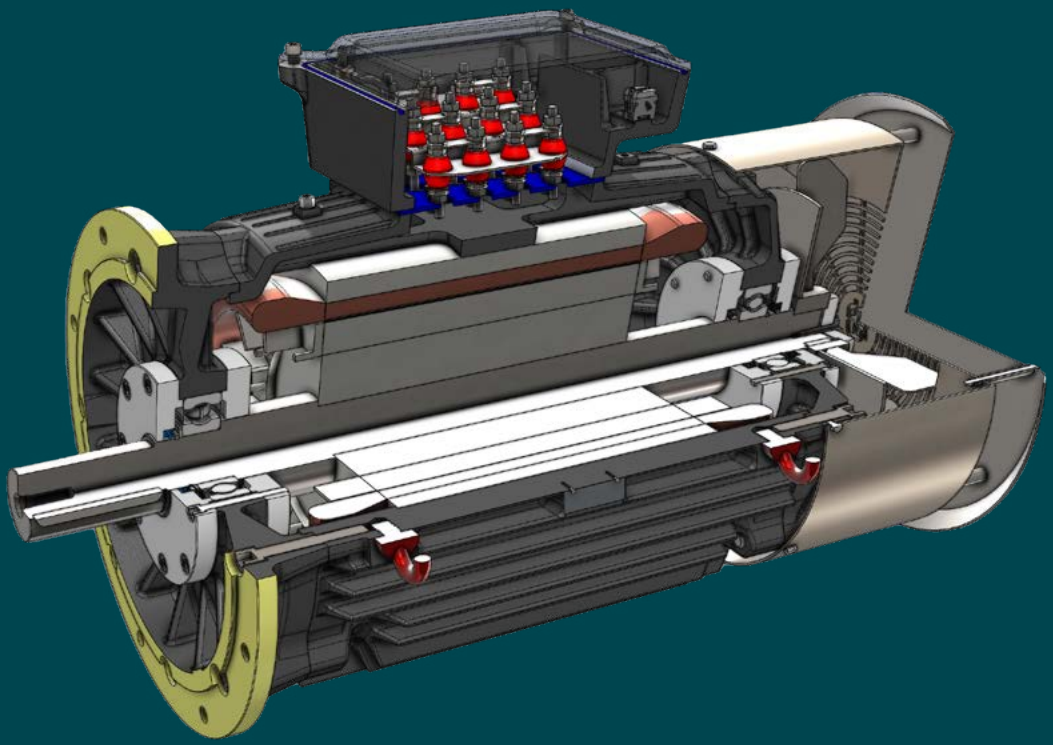
Large ladder type marine terminal box



Certified encoder



IP23 ODP propulsion motor in service



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