Lighting fixtures, boxes and control panels for marine applications

Product overview

CORTEM® GROUP

Cortem Group's products for marine applications deliver high levels of performance and reliability in demanding conditions. They are optimally protected against shocks and corrosion caused by saltwater spray and standing saltwater ensuring that a high level of safety is maintained in the long term.

Junction Boxes and Control Boards

Empty boxes and enclosures for control, monitoring and signalling units

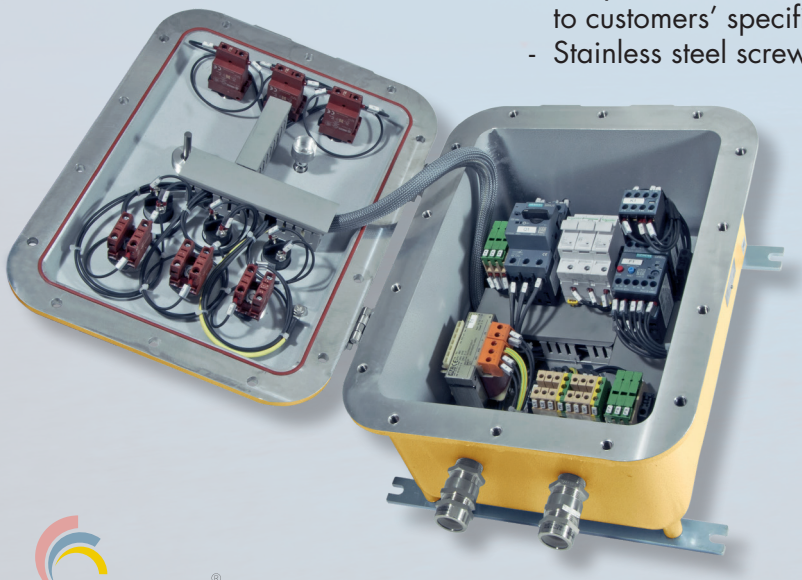
EJB, EJB...A, EJB...W SERIES

EJB and EJB...A series junction boxes are used either as junction boxes with/without terminals or for installation of electrical equipment such as circuit breakers, signals, remote control switches, transformers. The cover may be equipped with a borosilicate, rectangular window to visualize instruments mounted inside. EJB...W series instrument housing boxes, with one or two circular windows, are suitable for containing analogical and digital measuring instruments. The full series has casting hinges.

- Stainless steel hinges mounted as standard on the long side with predisposition of mounting on the short side.
- Body and cover can be drilled and threaded according to customers' specification.
- Stainless steel screws.

Group II, Category 2GD/ 2(1)GD
Ex d IIB+H_2 Gb - Ex tb IIIC Db
Ex d IIB+H_2 T... Gb - Ex tb IIIC T...°C Db
Ex d [ia Ga] IIB+H_2 T... Gb - Ex tb [ia Da] IIIC T...°C Db
IP66/67
Zone 1-2-21-22

Material:
Low copper content aluminium alloy



Control, monitoring and signalling units are used to produce control boards that, when positioned near the electrical equipment being controlled, enable the electrical system to operate correctly and guarantee the safety of personnel when maintenance is being performed on the system. Because they are fitted with a Manual/Automatic selector, they allow operators to select the appropriate conditions to enable work to be performed entirely safely. They offer protection and control for electrical equipment and control circuits located in explosion hazard areas and in particularly aggressive environments. They are used to hold electrical equipment, such as switches, indicators, contactors, transformers, analogue and digital components, etc.... with the option of external control by using lid-mounted Cortem control and signalling devices, such as control levers, pushbuttons, indicator lights, etc.... Cortem designs, develops and supplies full cabling for one or more enclosures tailored to your specific requirements, producing panel boards - including even extremely complex solutions - and providing a full inspection and testing service on request.

CORTEM GROUP
To be sure to be safe.

CCA...E, CCA...EH SERIES

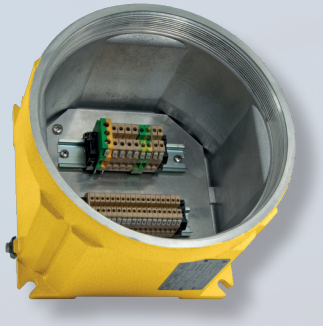
CCA...E series junction boxes are used either as junction boxes with/without terminals or for installation of electrical equipment. CCA...EH series instrument housings, supplied with a borosilicate glass round window, are used to contain analogical and digital instruments.

- In CCA...E and CCA...EH series, the internal components can be easily installed thanks to the external flange structure.
- Stainless steel screws.
- Zone 1-2-21-22
- Low copper content aluminium alloy

Group II, Category 2GD
Ex d IIC Gb - Ex tb IIIC Db
Ex d IIC T6, T5 Gb - Ex tb IIIC T85°C, T100°C Db
Ex d IIC T6/T5 - Ex tb IIIC T85°C/T100°C Db -
Ex d [ia Ga] IIC T...°C, Gb - Ex tb [ia Da] IIIC T...°C Db
IP66
Zone 1-2-21-22

Material:
Low copper content aluminium alloy

These enclosures are customized based on size, on the number of terminals or cables they are due to accommodate, or taking into account the number of cable entries and cabling requirements inside a system. All terminals can be fitted with your requested accessories and mounted on special rails that are fastened to the enclosure's internal mounting frames.
Terminal strips can be arranged in various ways, as specified by the customer and always within the limits allowed by the certificate.



Lighting fixtures for leds tubes or strips

FLFE-...L (Ex de) and FLF-...L (Ex d) series lighting fixtures for LED tubes or strips have two low copper content aluminium heads, a tempered borosilicate glass body, resistant to changes in heat, and a white painted aluminium reflector. The 'Ex de' lighting fixture features an "Ex e" terminal board housing that allows entry to the lamp with a cable gland with an "Ex" seal (normal) as specified in installation standard (EN/IEC 60079.14). The entry to the 'Ex d' lighting fixtures must be through an Ex "barrier" cable gland (sealed) or, in the case of a conduit system, with an EYS, EZS series sealing fittings.

Group II, Category 2GD
Ex db op is IIC T6 Gb - Ex tb op is IIIC T80°C Db
Ex db eb op is IIC T6 Gb - Ex tb op is IIIC T80°C Db
IP66
Zone 1-2-21-22

Material:
Low copper content aluminium alloy

'Ex op is'
safe optical radiation

CORTEM GROUP
To be sure to be safe.

NEW *CORALUM* TREATMENT

Anti-oxidation protection for aluminum alloy products installed in aggressive environments

"Treatment tested in neutral saline fog for 1,440 hours at least, equivalent to high durability in an environment with C5 corrosivity class"

What is *CORALUM*?

CORALUM is a surface protection treatment based on **an electro-ceramic coating** applied by electrolytic deposition method directly on the aluminium alloy. Above *CORALUM* is then applied the **Cortem's thermosetting powder coating based on cross-linked polyester resins RAL 7035 gray special**, pigmented with stainless steel powders to give a greater resistance to impact and an orange peel finish.

"*CORALUM* is a surface treatment exclusively offered on the aluminum alloy products by Cortem Group upon request"

What are the features of *CORALUM*?

CORALUM provides superior performances compared to other treatments when used in aggressive chemical environments of industrial petrochemical plants and, above all, where there is a typical saline-humid environment in coastal and off-shore installations.

According to the most recent heavy tests carried out in the Cortem laboratory in the presence of high concentration salt spray, the normal passivation and painting treatments, supplied "standard" by Cortem on all the painted products, ensure an average life of about 1,000 hours without the oxidation affects on the painted surfaces of the aluminum alloy.

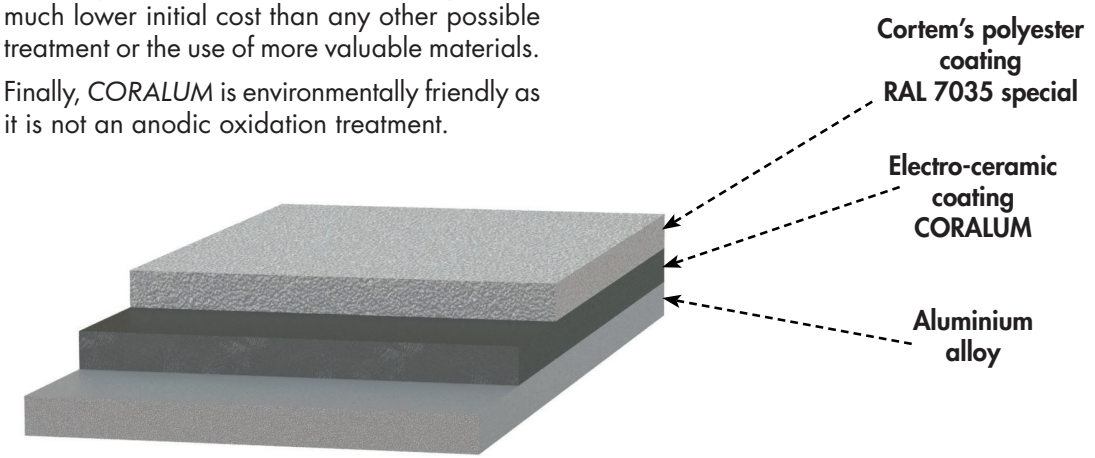
With the simple and effective application of the *CORALUM* treatment, the anti-oxidation characteristics of the aluminum alloy increase by 100%, confirming the equivalence, in terms of classification on corrodibility, according to the C5 - UNI EN ISO 12944:2018 standard typical of steels.

What are the advantages of *CORALUM*?

CORALUM allows to combine all the advantages of aluminum alloys with the typical characteristics of stainless steels such as resistance to corrosion from acids and alkalis, extreme hardness, antistatic and anti-abrasion properties.

This treatment also ensures savings in time and money: less maintenance of the surfaces of all the equipment made of aluminum alloy and a much lower initial cost than any other possible treatment or the use of more valuable materials.

Finally, *CORALUM* is environmentally friendly as it is not an anodic oxidation treatment.



cortem®

Sales
Piazzale Dateo 2
20129 Milano, Italia

Domestic Sales

tel. +39 02 76 1103 29 r.a.
fax +39 02 73 83 402
infomilano@cortemgroup.com

Export Sales

tel. +39 02 76 1105 01 r.a.
fax +39 02 73 83 402
export@cortemgroup.com
saleseurope@cortemgroup.com

Works and Headquarters

Via Aquileia 10, 34070 Villesse (GO), Italia
tel. +39 0481 964911 r.a.
fax +39 0481 964999
info@cortemgroup.com

www.cortemgroup.com

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