



**PRIORITIZING  
SAFETY WITH  
CUSTOMIZED  
SOLUTIONS**

POWER CONNECTION,  
LIGHTING AND ENCLOSURE



When it comes to ensuring safety in potentially explosive environments, it is essential to have high-quality standard Ex products and customized engineered solutions.

Most applications are found in the chemical and pharmaceutical, industries, as well as in offshore oil installations, refineries, petrochemical facilities, ships, FPSOs, and other industries where explosive dust may be dangerous, such as textile manufacturing, food processing, and grain silos.

Our solutions can withstand extremely high temperatures and are suitable for installation in areas where there is a potential risk of an explosive atmosphere due to flammable gases, vapours, or dust.

Our personalized approach ensures that every element is carefully analyzed and that the solution is completely fitted to the customer's requirements.

With our commitment to quality and meticulous attention to detail, we guarantee the successful completion of every project, ensuring total client satisfaction.

# EXPLOSIVE ATMOSPHERE

- ▶ In certain environments, the presence of gases, vapours, aerosols, or combustible dusts can lead to the formation of explosive atmospheres. In the event of ignition, the effects can be devastating for both workers and facilities.
- ▶ MARECHAL® and TECHNOR® devices are carefully designed to provide the highest levels of safety, reliability, and longevity in the most demanding environments.



## KNOW YOUR ATMOSPHERE

### EXPLOSIVE OR POTENTIALLY EXPLOSIVE ATMOSPHERE?

#### What is it?

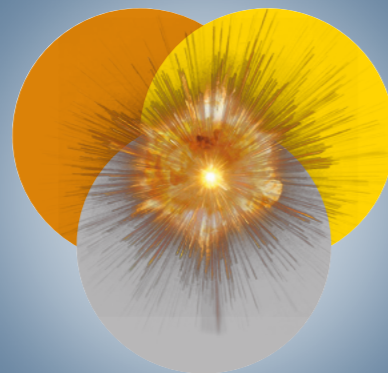
An explosive atmosphere is the result of a mixture of air with a flammable substance (liquid, gas, vapour, or dust) in which, after ignition, the combustion spreads throughout the mixture. A potentially explosive atmosphere (ATEX) is an atmosphere that could become explosive due to unforeseen local and/or operational conditions. An explosion can occur when the three elements of the "Explosion Triangle" – fuel, ignition source, and oxygen – are present in optimal conditions and in sufficient quantities.

#### "Triangle" of the explosion: the three elements

- 1. Fuel:** a flammable substance (liquid, gas, vapour, or dust) within its explosivity limits.
- 2. Ignition source:** high temperature, electrical arc, static electricity, naked flames, etc., with sufficient energy.
- 3. Oxygen (air):** one of the elements required to sustain combustion.

To prevent explosions, one of these three elements must be eliminated as much as possible.

**1**  
Combustible



**2**  
Source of ignition

**3**  
Oxygen (air)

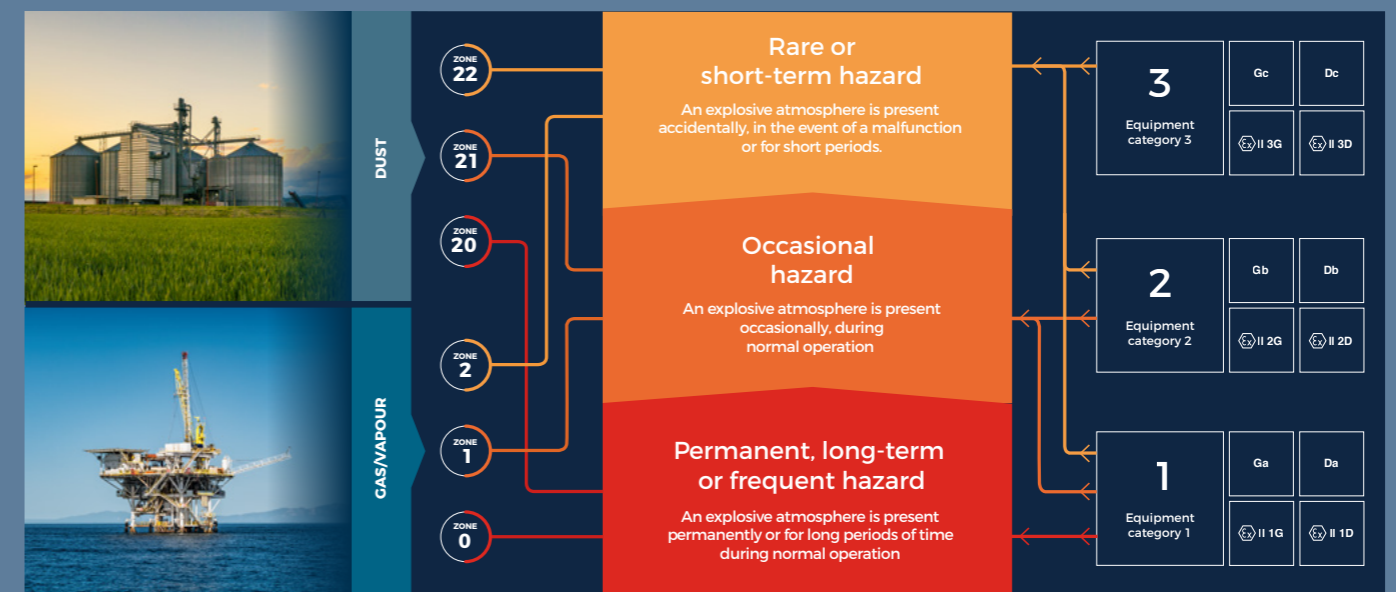
## IDENTIFYING HAZARDOUS ZONES

Numerous industries, such as chemicals, oil, gas, pharmaceuticals, food processing, energy production, mining, and others, may contain areas at risk of explosion (commonly referred to as ATEX zones).

ATEX zones are environments where the risk of explosion is high due to the presence of flammable substances, and as such, they must be clearly marked.

The European ATEX directive defines six zones based on the frequency and duration of the presence of flammable substances <sup>(1)</sup>. It is essential to properly identify these zones to ensure safety and compliance in potentially explosive environments.

<sup>(1)</sup> It refers to the EN 1127-1 standard, which specifies that "an explosion is a violent oxidation or decomposition reaction involving a rise in temperature, pressure, or both simultaneously."



## AVOID IGNITION

Products intended to operate in potentially explosive atmosphere must:

- prevent the formation of an arc likely to cause an explosion or contain inflammation,
- resist shocks, to a higher degree than usually is required for normal industrial products,
- not to be likely to accumulate electrostatic charges that may generate a spark,
- have a maximum temperature below the self-ignition temperature of the surrounding atmosphere.

From the design of the equipment, it is necessary to consider the type(s) of protection adapted to the equipment intended to be installed in potentially explosive atmospheres by acting on one of the following actions:

- deletion of the potentially explosive atmosphere,
- deletion of the source of ignition,
- non-propagation of ignition.

For our electrical equipment, they are designed:

- not to generate enough energy to cause ignition, a spark, or excessive temperature, or
- not to propagate ignition to the surrounding atmosphere.

## CUSTOMIZED SOLUTIONS FOR ALL ENVIRONMENTS

### EMPOWERING SAFETY FOR HAZARDOUS AREAS

Discover a range of standard devices and customized solutions to fit your requirements and facilities, including a selection of connectors, boxes, and lighting configurations for any application or environment.

With MARECHAL® and TECHNOR® products by your side, the possibilities are countless.

### SAFE KEY SOLUTIONS

MARECHAL® and TECHNOR® have Ex solutions that can be used in Zones 1-21 & 2-22.

### SAFETY FIRST

From design to production, we ensure compliance with established global guidelines for hazardous areas, guaranteeing reliable products. Securing worldwide certifications reinforces our dedication to meeting international standards.

### HIGH MANUFACTURING STANDARDS

MARECHAL® and TECHNOR® intended for use in potentially explosive atmospheres comply with:

- ATEX European Directive 2014/34/EU,
- International regulations (IECEX),
- other national Ex regulations.

## CERTIFIED EXCELLENCE: HOW OUR PRODUCTS MEET Ex STANDARDS



CANADA  
US  
CSA



COLOMBIA  
RETIE



BRAZIL  
INMETRO (Portaria 179)



EUROPE  
ATEX



EURASIA  
EAC Ex



IA  
CERTIFICATE  
SOUTH AFRICA



UNITED ARAB  
EMIRATES  
ECAS-Ex



INDIA  
PESO



SOUTH KOREA  
KCs (Korean Ex  
Certification)



JAPAN  
CML Ex - Ordinance on  
Examination of Machines and  
Other Equipment  
of the Ministry of Health,  
Labour and Welfare.



SINGAPORE  
GREEN BUILDING COUNCIL



WORLDWIDE  
IECEX



WORLDWIDE  
IECEX



## TECHNOR® THE IDEAL SOLUTION FOR YOUR BUSINESS

### THE HIGHEST QUALITY

TECHNOR ITALSMEA brings extensive expertise in the development and design of explosion-proof equipment for hazardous environments. A wide range of specialized products engineered and manufactured in Italy since 1969 meet the highest safety standards, conforming to ATEX and IECEx certifications:

- explosion-proof distribution and control boxes made from durable aluminum and AISI 316L stainless steel,
- increased safety junction boxes and local control stations available in aluminum, AISI 316L stainless steel, or GRP,
- high-efficiency LED lighting solutions for hazardous areas,
- warning and indicator lights, including low-to medium-intensity obstruction lights,
- comprehensive earthing systems to ensure safety in hazardous environments.

### CONSULTING APPROACH

Our approach is centered on providing customized, expert guidance for customers operating in hazardous environments. From the start, TECHNOR ITALSMEA collaborates closely with clients to assess needs, risks, and compliance with safety standards such as ATEX and IECEx.

### VALUE-ADDED SOLUTIONS

By offering customized solutions and ongoing support throughout the project lifecycle, we ensure the proper selection, installation, and maintenance of safety-critical equipment, optimizing performance and reliability for global operations.

### PREMIUM KEY POINTS

TECHNOR ITALSMEA's products offer premium features designed for hazardous environments. Their explosion-proof enclosures, made from durable materials like aluminum and AISI 316L stainless steel, provide maximum protection. Advanced energy-efficient LED lighting ensures long life and reliable performance in extreme temperatures. Products are corrosion-resistant, with options in stainless steel or GRP, and can be customized for specific operational needs.

Integrated safety features include earthing systems and warning lights, ensuring compliance with ATEX and IECEx standards. Built for harsh environments, TECHNOR® products are robust, shockproof, and require minimal maintenance, offering long-term reliability and efficiency across industries such as oil, gas, and chemicals.

## CHOOSING MARECHAL®: THE BENEFITS YOU CAN RELY ON

### SAFETY FIRST - THE SAFEST Ex DEVICES

- Disconnect your equipment and machines safely and swiftly with no arcing, or any access to live parts, for maintenance purposes (under-load breaking up to 200A, even in hazardous areas).
- Ensure full compliance with LOTO (Lock-Out Tag-Out) procedures for each device and facilitate compliance with the European Machinery Directive.



### ENSURING CONTINUOUS OPERATION

We prioritize continuous operation with reduced and simplified maintenance. Our systems feature auxiliary contacts for signal and control transmissions, alongside pilot contacts for electrical interlocking, ensuring seamless operation and enhanced efficiency.



### HARSH ENVIRONMENT RESISTANCE

Our products are built to endure severe environments with either GRP or metal casings. Laser marking provides permanent product identification, ensuring durability and ease of maintenance.



### REDUCE YOUR ENVIRONMENTAL FOOTPRINT

We focus on sustainability by reducing energy consumption and minimizing our devices' carbon footprint. Using durable materials and spring-loaded butt-style contact technology ensures efficiency and longevity. QR codes enable access to digital instructions.





# SELECTION GUIDE

## HIGH-CURRENT CONNECTORS - FROM 5 A TO 680 A

| RANGE         | CURRENT (A)              | U MAX (AC/DC) | MAX NB OF CONTACTS | MAX NUMBER OF AUX./PIL. | DECONTACTOR™ (BREAK: AC/DC) | MATERIAL | IP             | IK   | ATEX ZONES   | TYPE OF PROTECTION | PAGE  |
|---------------|--------------------------|---------------|--------------------|-------------------------|-----------------------------|----------|----------------|------|--------------|--------------------|-------|
| PNCX          | 5                        | 250 V AC/DC   | 4+E                | /                       | /                           | GRP      | IP66/IP67/IP69 | IK08 | 1, 2, 21, 22 | e, tb              | 14-15 |
| DXN Zone 1-21 | 20 - 32 - 63             | 750 V AC/DC   | 4+E                | UP TO 2 AUX.            | Yes                         | GRP      | IP66/IP67      | IK09 | 1, 2, 21, 22 | db eb, tb          | 16-17 |
| DX            | 20 - 32 - 63 - 125 - 200 | 750 V AC/DC   | 4+E                | /                       | Yes                         | METAL    | IP65/IP66      | IK10 | 1, 2, 21, 22 | d e, tD            | 18-19 |
| SPeX          | 680                      | 1,000 V AC/DC | 1                  | /                       | /                           | GRP      | IP65/IP66      | IK08 | 1, 2, 21, 22 | e, tb              | 22-23 |

## LOW-CURRENT CONNECTORS - FROM 12 TO 37 CONTACTS

| RANGE                   | CURRENT (A) | U MAX (AC/DC) | MAX NB OF CONTACTS | MAX NUMBER OF AUX./PIL. | DECONTACTOR™ (BREAK: AC/DC) | MATERIAL | IP                          | IK   | ATEX ZONES   | TYPE OF PROTECTION | PAGE  |
|-------------------------|-------------|---------------|--------------------|-------------------------|-----------------------------|----------|-----------------------------|------|--------------|--------------------|-------|
| MULTICONTACT CONNECTORS | 10          | 440 V AC/DC   | 36 + E             | /                       | /                           | METAL    | IP65/IP66*<br>or IP66/IP67* | IK09 | 1, 2, 21, 22 | e OR i, tb         | 20-21 |

\* Depending on the reference.

## ENCLOSURES AND BOXES

| RANGE   | SPECIFICATIONS                                   | MATERIAL   | ATEX ZONES   | TYPE OF PROTECTION   | DIMENSIONS                 | PAGE  |
|---------|--|--|--------------|--|----------------------------|-------|
| B2X/CDX | EMPTY ENCLOSURES - INCREASED SAFETY ENCLOSURES   | GRP casing                                       | 1, 2, 21, 22 | ⊕ II 2 G D Ex eb IIC Gb, Ex tb IIIC Db   | 3 dimensions               | 24-25 |
| B2X     | DISTRIBUTION AND SOCKET-OUTLET OR JUNCTION BOXES | GRP casing                                       | 1, 2, 21, 22 | ⊕ II 2 G Ex e IIC Gb OR<br>⊕ II 2 G Ex ia/ib IIC Gb OR<br>⊕ II 2 G Ex e ia/ib IIC Gb<br>⊕ II 2 D Ex tb IIIC Db     | 2 dimensions<br>UP TO 63 A | 24-25 |
| MXBJ    | JUNCTION BOXES                                   | GRP casing, aluminium, stainless steel AISI 316L | 1, 2, 21, 22 | ⊕ II 2 G Ex eb IIC Gb OR<br>⊕ II 2 G Ex ia/ib IIC Gb OR<br>⊕ II 2 G Ex eb ia/ib IIC Gb<br>⊕ II 2 D Ex tb IIIC Db   | Consult us<br>UP TO 690 A  | 26-27 |
| MXBS    | DISTRIBUTION AND SOCKET-OUTLET COMBINATION BOXES | GRP casing, aluminium, stainless steel AISI 316L | 1, 2, 21, 22 | ⊕ II 2 G D Ex eb IIC Gb OR<br>⊕ II 2 G Ex ia/ib IIC Gb OR<br>⊕ II 2 G Ex eb ia/ib IIC Gb<br>⊕ II 2 D Ex tb IIIC Db | Consult us<br>UP TO 680 A  | 26-27 |

## LIGHTING

| MODELS              | APPLICATIONS                    | MATERIAL  | LUMEN (LM)           | IP RATING   | AMBIENT TEMPERATURE (°C)  | RATED VOLTAGE (VAC) | EMERGENCY SERVICE (MIN) | TYPE OF PROTECTION                                       | PAGE  |
|---------------------|---------------------------------|---|----------------------|---|---|---------------------|-------------------------|--|-------|
| EVF-L*/P*TL* SERIES | LED LINEAR LIGHTING FIXTURES    | Copper-free aluminium/GRP                           | From 3,225 to 13,065 | IP66  | -20/+55   | 220 - 240           | 60'<br>180'             | ⊕ II 2 G Ex db eb mb IIC Gb<br>⊕ II 2 D Ex tb IIIC Db    | 28-29 |
| FL1 SERIES          | LED FLOODLIGHT                  | Copper-free aluminium body                          | From 8,000 to 32,000 | IP66  | -30/+60   | 110 - 277           | 180'                    | ⊕ II 2 G Ex db eb mb IIC Gb<br>⊕ II 2 D Ex mb tb IIIC Db | 30-31 |
| WG1 SERIES          | LED WELLGLASS LIGHTING FIXTURES | Copper-free aluminium body                          | From 7,950 to 48,800 | IP66  | -60/+60   | 220 - 240           | 180'                    | ⊕ II 2 G Ex db eb IIC Gb<br>⊕ II 2 D Ex tb IIIC Db       | 32-33 |
| MODELS              | APPLICATIONS                    | MATERIAL  | IP RATING            | AMBIENT TEMPERATURE (°C)                          | TYPE OF PROTECTION **   | PAGE                |                         |  |       |
| EFXE                | LOCAL CONTROL STATIONS          | Copper-free aluminium/<br>AISI 316L stainless steel | IP65/IP66*           | -50/+95   | ⊕ II 1 G Ex ia IIC Ga<br>⊕ II 2 G Ex db eb ia/ib mb* IIC Gb<br>⊕ II 2 D Ex tb IIIC Db                       | 34-35               |                         |  |       |
| EJB                 | FLAMEPROOF ENCLOSURES           | Copper-free aluminium/<br>AISI 316L stainless steel | IP66                 | -50/+60 (with window)<br>-60/+60 (without window) | ⊕ II 2 G Ex db OR db ia/ib IIB+H2<br>Gb OR<br>⊕ II 2(1) G Ex db [ia Ga] IIB+H2 Gb<br>⊕ II 2 D Ex tb IIIC Db | 36-37               |                         |  |       |
| GUB                 | FLAMEPROOF ENCLOSURES           | Copper-free aluminium/<br>AISI 316L stainless steel | IP66                 | -60/+80   | ⊕ II 2 G Ex db OR db ia/ib IIC Gb OR<br>⊕ II 2(1) G Ex db [ia Ga] IIC Gb<br>⊕ II 2 D Ex tb IIIC Db          | 38-39               |                         |  |       |
| GUMT/PTA            | EARTHING SYSTEMS                | Copper-free aluminium/<br>AISI 316L stainless steel | IP66                 | -20/+55   | ⊕ II 2 G Ex db IIC Gb<br>⊕ II 2 D Ex tb IIIC Db   | 40-41               |                         |  |       |

\* Depending on the components installed on.

\*\* Others markings available, depending on the components installed in.



## PNCX CONNECTORS UP TO 5 A

MAXIMUM EFFICIENCY  
**MINIMAL SPACE**  
DESIGNED TO FIT  
**BUILT TO PERFORM**



IP66/  
IP67/IP69



0,75 mm<sup>2</sup>  
2,5 mm<sup>2</sup>



GRP



IK08



-20 °C  
+70 °C



1, 2,  
21, 22

**U**<sub>MAX</sub>

Zone 1-21: 250 V AC/DC



ALSO  
AVAILABLE

ZONE 2-22  
10 A  
440 V AC/DC  
MAR X 13.0001

### KEY POINTS

**Durable performance:** a wide range of temperatures and providing reliable impact resistance.

**Endurance:** 2,000 cycles.

**Enhanced safety and efficiency:** excellent electrical insulation properties.

**Ultra-compact housing:** perfect for installations with strict spatial constraints (dimensions: 185x45x45 mm) and lighting fixtures.

### PNCX MARKINGS

Zone 1 (5A)

Ⓜ II 2 G D Ex e T6 IIC Gb, Ex tb T72 °C  
IIC Db

-20 °C ≤ T<sub>a</sub> ≤ +70 °C

IECEX LCIÉ 16.0001X/LCIE 16 ATEX 3001 X

PNCX  
UP TO 5 A





IP66  
IP67



AC-22A/DC-21A  
AC-23A (DXN1)



GRP



IK09



-40°C  
+60°C



1, 2,  
21, 22

**U<sub>MAX</sub>**

Zone 1-21: up to 750 V AC/DC

Zone 2-22: up to 1,000 V AC/DC

**AVAILABLE FOR ZONE 2-22  
WITHOUT BREAKING CAPACITY.**

### KEY POINTS

**Modular DECONTACTOR™ plug and socket:**

2 in 1 - socket-outlet with integrated switch.  
Modular design for easy customization  
and flexible installation.

**Safest connection:** ensures safe electrical  
connections with its reliable design.

**Ease of use:** incredibly simple to connect and  
disconnect electrical equipment.

**Padlocking facility.**

## DXN DECONTACTOR™ LOAD-BREAKING UP TO 63 A



METAL  
VERSION  
COMING  
SOON



### DXN1 (20 A) - MARKINGS

⊕ II 2 G Ex db eb IIC T\* Gb  
⊕ II 2 D Ex tb IIIC T\*\* Db  
-40°C ≤ T<sub>a</sub> ≤ +60°C \*T5 \*\*T90°C  
-40°C ≤ T<sub>a</sub> ≤ +40°C \*T6 \*\*T70°C  
IECEX LCI 09.0005X/LCIE 99 ATEX 6027 X

### DXN3 (32 A) - MARKINGS

⊕ II 2 G Ex db eb IIC T\* Gb  
⊕ II 2 D Ex tb IIIC T\*\* Db  
-40°C ≤ T<sub>a</sub> ≤ +60°C \*T5 \*\*T77°C  
-40°C ≤ T<sub>a</sub> ≤ +40°C \*T6 \*\*T57°C  
IECEX LCI 09.0006X/LCIE 05 ATEX 6149 X

### DXN6 (63 A) - MARKINGS

⊕ II 2 G Ex db eb IIC T\* Gb  
⊕ II 2 D Ex tb IIIC T\*\* Db  
-40°C ≤ T<sub>a</sub> ≤ +60°C \*T4 \*\*T107°C  
-40°C ≤ T<sub>a</sub> ≤ +40°C \*T5 \*\*T87°C  
IECEX LCI 09.0007X/LCIE 05 ATEX 6150 X

DXN1  
20 A



DXN3  
32 A



DXN6  
63 A





## DX DECONTACTOR™ UP TO 200 A



**U<sub>MAX</sub>**  
750 V AC/DC

### KEY POINTS

**DECONTACTOR™ plug and socket:** 2 in 1 - socket-outlet + integrated switch and padlocking provision.

**Time savings:** quick connection and disconnection which saves you valuable time.

**Resistance:** withstand harsh environmental conditions, making it suitable for all environments.

**Compliance:** meets all safety requirements across the world.

#### DX1 (20 A) MARKINGS

⊕ II 2 G D Ex d e IIC tD A21  
 $-25^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$  T5 T84 °C  
 $-25^{\circ}\text{C} \leq T_a \leq +50^{\circ}\text{C}$  T6 T74 °C  
 IECEx LCI 09.0014/LCIE 05 ATEX 6127

#### DX3 (32 A) MARKINGS

⊕ II 2 G D Ex d e IIC tD A21  
 $-25^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$  T5 T84 °C  
 $-25^{\circ}\text{C} \leq T_a \leq +50^{\circ}\text{C}$  T6 T74 °C  
 IECEx LCI 09.0014/LCIE 05 ATEX 6127

#### DX6 (63 A) MARKINGS

⊕ II 2 G D Ex d e IIC tD A21  
 $-40^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$  T5 T90 °C  
 $-40^{\circ}\text{C} \leq T_a \leq +50^{\circ}\text{C}$  T6 T80 °C  
 IECEx LCI 09.0015/LCIE 04 ATEX 6038

#### DX9 (125 A) MARKINGS

⊕ II 2 G D Ex d e IIC tD A21  
 $-40^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$  T5 T90 °C  
 $-40^{\circ}\text{C} \leq T_a \leq +50^{\circ}\text{C}$  T6 T80 °C  
 IECEx LCI 09.0015/LCIE 04 ATEX 6038

#### DX2 (200 A) MARKINGS

⊕ II 2 G D Ex d e IIC tD A21  
 $-40^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$  T3 T91 °C  
 IECEx LCI 09.0015/LCIE 04 ATEX 6038

MAKING CONNECTIONS SIMPLE  
WITH DECONTACTOR™,  
EVERYTHING BECOMES  
EASIER!



DX1  
20 A



DX3  
32 A



DX6  
63 A



DX9  
125 A



DX2  
200 A





-   
 IP65  
IP66/IP67
-   
 METAL
-   
 IK09
-   
 -40°C  
+60°C\*
-   
 1, 2,  
21, 22

**U<sub>MAX</sub>**  
440 V AC/DC

\* Depending on the reference.

### KEY POINTS

**Crimp the contact:** no need to solder each contact (above 1 mm<sup>2</sup>) and possible to wire very small cables (under 1 mm<sup>2</sup> - soldering).

**Time savings:** easy assembly of crimp contacts.

**Low current:** a convenient and reliable means of connecting multiple circuits and/or control and monitoring signals through a single device.

## MULTICONTACT CONNECTORS UP TO 37 CONTACTS



POLY  
VERSION  
COMING  
SOON



### PXN12C (10 A) MARKINGS

- ⊕ II 2 G Ex e IIC T5 Gb
- ⊕ II 2 G Ex ia/ib IIC T6 Gb
- ⊕ II 2 D Ex tb IIIC T69°C Db
- 40°C ≤ T<sub>a</sub> ≤ +55°C
- IECEX LCIE 14.0041X/LCIE 07 ATEX 6070 X

### DXN25C (10 A) MARKINGS

- ⊕ II 2 G Ex e IIC T\* Gb
- ⊕ II 2 G Ex ia/ib IIC T6 Gb
- ⊕ II 2 D Ex tb IIIC T\*\* Db
- 40°C ≤ T<sub>a</sub> ≤ +40°C T6 T51°C
- 40°C ≤ T<sub>a</sub> ≤ +60°C T5 T71°C
- IECEX LCIE 14.0040X/LCIE 09 ATEX 3050 X

### DXN37C (10 A) MARKINGS

- ⊕ II 2 G Ex e IIC T\* Gb
- ⊕ II 2 G Ex ia/ib IIC T6 Gb
- ⊕ II 2 D Ex tb IIIC T\*\* Db
- 40°C ≤ T<sub>a</sub> ≤ +40°C T6 T56°C
- 40°C ≤ T<sub>a</sub> ≤ +55°C T5 T76°C
- IECEX LCIE 14.0038X/LCIE 07 ATEX 6071 X

PXN12C  
12 CONTACTS



DXN25C  
25 CONTACTS



DXN37C  
37 CONTACTS





IP65  
IP66



GRP



IK08



-20°C  
+60°C

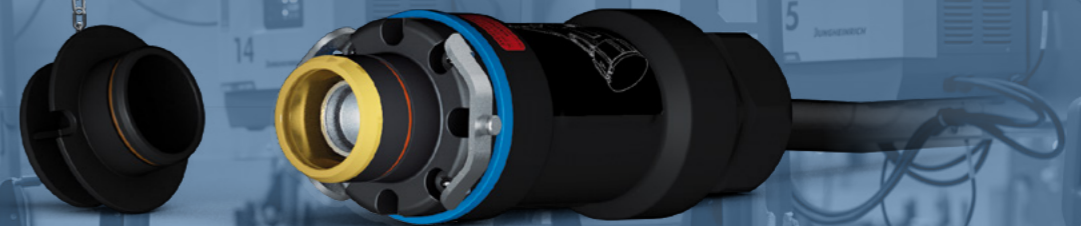


1, 2,  
21, 22

**U<sub>MAX</sub>**  
1,000 V AC/DC

## SPeX SINGLE POLE POWER CONNECTOR UP TO 680 A

# HIGH-POWER APPLICATIONS WITH RELIABLE OVERCURRENT PROTECTION



### KEY POINTS

**High capacity to resist to overloads:** protection for the equipment.

**User confidence:** enhanced safety and protection features, ensuring comfort of use.

**Reliability in harsh environments:** IP65/IP66 protection from dusty or wet environments.

### SPeX (680 A) MARKINGS

⊕ II 2 G Ex e IIC Gb  
⊕ II 2 D Ex tb IIIC Db  
-20 °C ≤ T<sub>a</sub> ≤ +60 °C  
IECEX LCI 12.0005 X/LCIE 07 ATEX 6073 X

SPeX  
680 A





IP66  
IP67

GRP

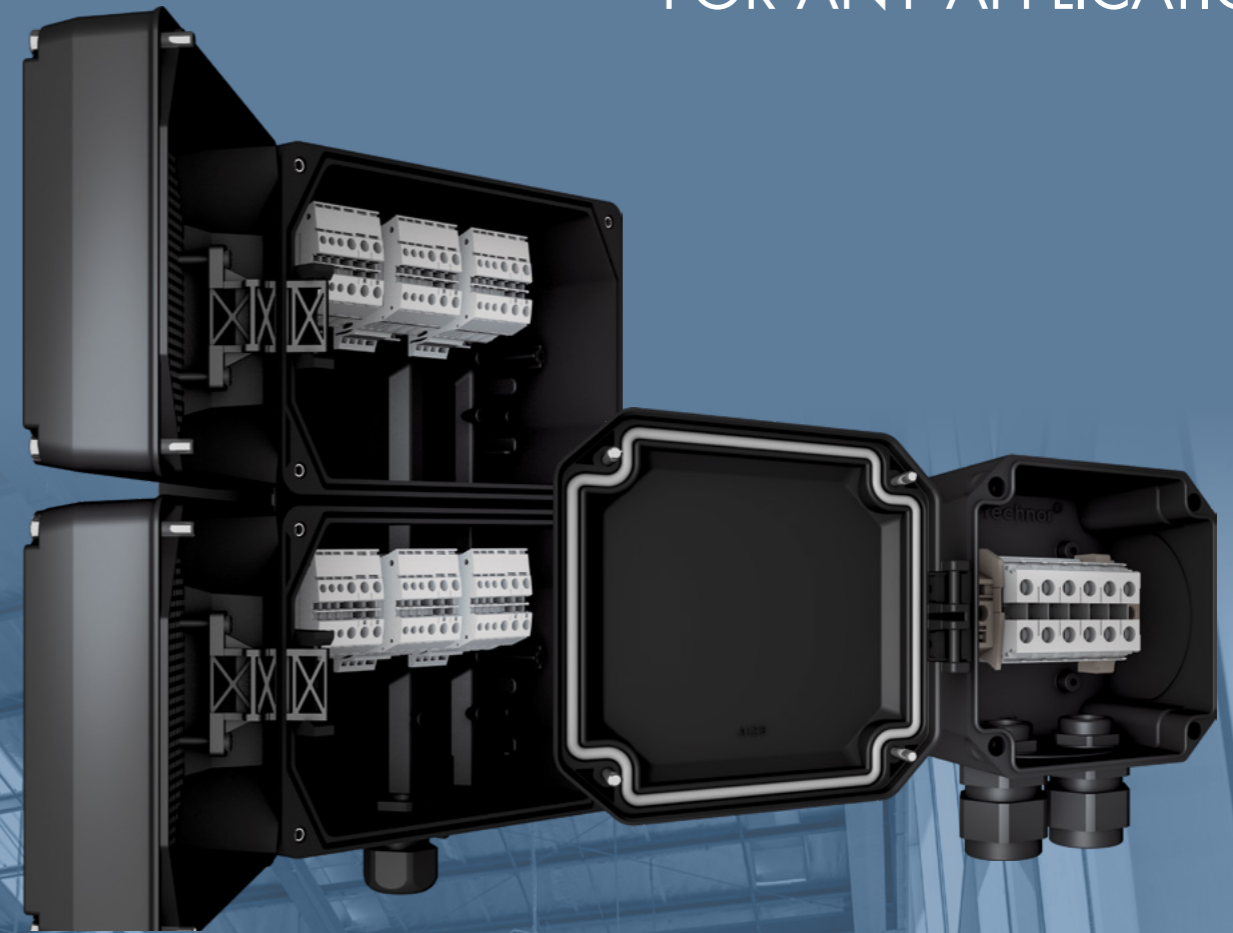
IK09

-50°C  
+90°C

1, 2,  
21, 22

## BOXES UP TO 63 A

ONE MODULAR SOLUTION:  
ENCLOSURES  
FOR ANY APPLICATION



### KEY POINTS

**Modular adaptability:** to 8 cable glands and terminals from 4 mm<sup>2</sup> to 16 mm<sup>2</sup>.

**Ultimate protection:** keep all equipments safe with watertight boxes - IP67.

**All-weather protection:** boxes that withstand extreme temperatures in all regions of the world.

### SPECIFICATIONS

Pre-configured junction boxes with terminals and cable glands for standard or armoured cable glands.

\* Enclosures can be sold empty (with ATEX & IECEx components certificate).

### BOXES (UP TO 63 A) MARKINGS

- ⊕ II 2 G Ex e IIC T<sup>(1)</sup> Gb
- or ⊕ Ex ia/ib IIC T<sup>(1)</sup> Gb
- or ⊕ Ex e ia/ib IIC T<sup>(1)</sup> Gb
- ⊕ II 2 D Ex tb IIIC T<sup>(1)</sup> Db

<sup>(1)</sup> Depending on configurations and ambient T° T6/T5/T4 for the gas.

EMPTY  
BOXES  
UP TO 63 A



ENCLOSURES  
BOXES  
UP TO 63 A





<sup>(1)</sup> For other ambient temperatures, please contact us.

### KEY POINTS

**Maximise space with modular boxes:** compact and adaptation - possible thanks to socket-outlets and terminals (increased safety, intrinsic safety) - to any environments.

**GRP casing, aluminium, stainless steel AISI 316L**

### SPECIFICATIONS

Adaptability of CDX enclosures\* with inclined plates designed for socket-outlets.

Modularity of MXBJ and MXBS enclosures with different combinations of socket-outlets/terminals.

\* CDX enclosures can sold empty (with ATEX & IECEx components certificate).

## BOXES FROM 63 A TO 680 A



FIND YOUR  
PERFECT FIT  
WITH OUR  
EXCLUSIVE BOXES!

### BOXES (FROM 63 A TO 680 A) MARKINGS

- ⊕ II 2 G Ex eb IIC T<sup>(1)</sup> Gb OR
- ⊕ II 2 G Ex ia IIC T<sup>(1)</sup> Gb OR
- ⊕ II 2 G Ex ib IIC T<sup>(1)</sup> Gb OR
- ⊕ II 2 G Ex eb ib OR ia IIC T<sup>(1)</sup> Gb
- ⊕ II 2 D Ex tb IIIC T<sup>(1)</sup> Db

<sup>(1)</sup> Depending on ambient temperature and connectivity equipment used.

BOXES  
FROM 63 A  
TO 680 A



TUNNEL  
WAREHOUSES  
INDOOR & OUTDOOR  
PRODUCTION SITES



IP66



GRP  
METAL



IK10



-20°C  
+60°C



1, 2,  
21, 22

## EVF SERIES LED LINEAR LIGHTING FIXTURES

### KEY POINTS

#### End cups:

- in GRP for the EVF-L\*TL\*LED and EVF2-FL,
- in aluminium with low content of copper/light for the EVF-P\*TL\*LED and EVF2-PL.

**Color rendering index:** ≥ 80 CRI.

**Luminosity:** up to 14,300 lm.

**Luminous efficiency:** 172 lm/W.

**Complementary product:**

MARECHAL PNCX connector (see p. 14).

### EVF SERIES MARKINGS

EVF-L\*/P\*TL\*

⊕ II 2 G Ex db eb mb IIC T3/T4 Gb

⊕ II 2 D Ex tb IIIC T85°C Db

EVF2-PL/FL

⊕ II 3 G Ex ec IIC T4 Gc

⊕ II 3 D Ex tb IIIC T85°C Dc

# ADVANCED LED SOLUTIONS FOR EXTREME CONDITIONS

STAINLESS  
STEEL  
VERSION  
COMING  
SOON



EVF



TUNNEL  
WAREHOUSES  
INDOOR & OUTDOOR  
PRODUCTION SITES



IP66



ALUMINIUM



-30°C  
+60°C



1, 2,  
21, 22

## FL1 LED SERIES LED FLOODLIGHTS

# POWERFUL LIGHTING FOR THE MOST SEVERE ENVIRONMENTS



### KEY POINTS

**Body:** copper-free aluminum and tempered glass.

**Color rendering index:** 80 CRI.

**Luminosity:** up to 32,000 lm.

**Luminous efficiency:** 125 lm/W.

**Complementary product:**

MARECHAL PNCX connector (see p. 14).

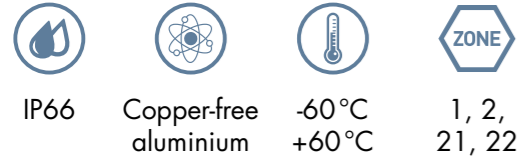
### FL1 LED SERIES MARKINGS

- Ⓢ II 2 G Ex db eb mb IIC T4 Gb
- Ⓢ II 2 D Ex mb tb IIIC T90°C Db

FL1

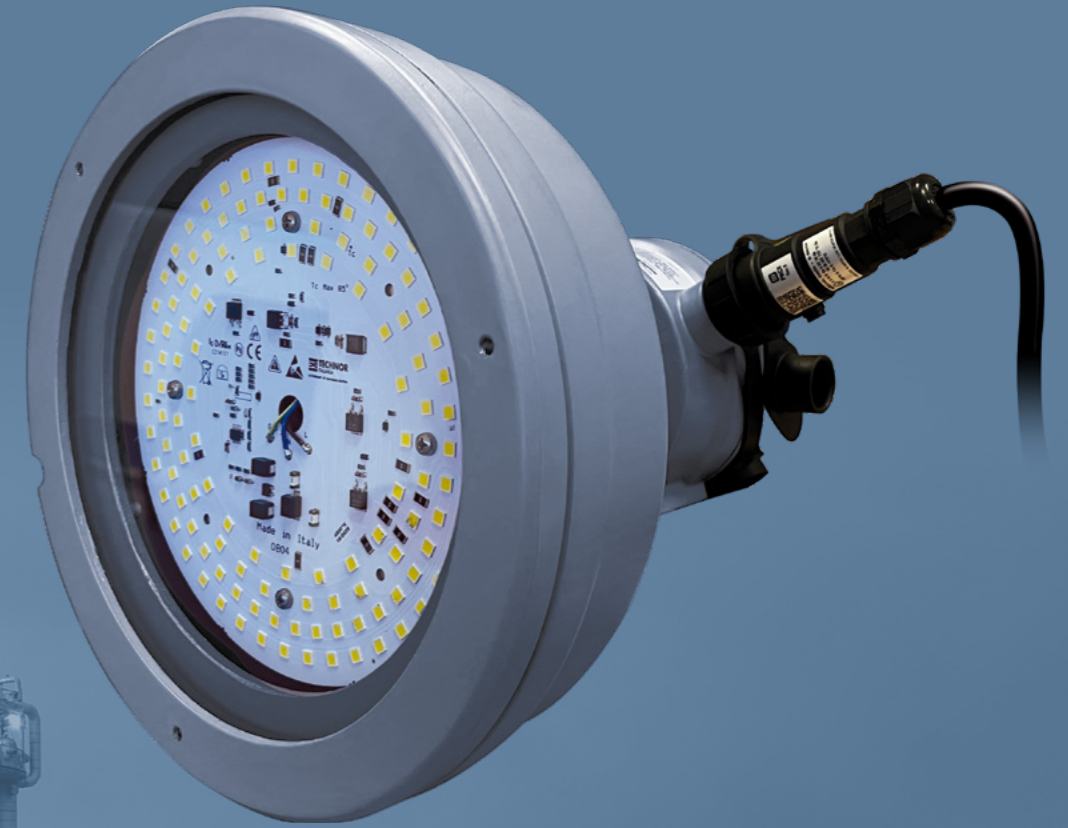


SIDEWALK PERIMETER LIGHTING  
WIDE AREA  
INDOOR & OUTDOOR  
TANKS, WATER TOWERS



## WG1 SERIES LED WELLGLASS LIGHTING FIXTURES

DURABLE,  
HIGH-INTENSITY  
LIGHTING FOR HARSH  
APPLICATIONS



### KEY POINTS

**Body:** copper-free aluminum and tempered glass.

**Color rendering index:** 70 CRI.

**Luminosity:** up to 48,000 lm.

**Luminous efficiency:** up to 187 lm/W  
(up to 175 lm/W for WG2).

**Complementary product:**  
MARECHAL PNCX connector (see p. 14).

### WG1 MARKINGS

- ⊕ II 2 G Ex db eb IIC T6/T5/T4 Gb
- ⊕ II 2 D Ex tb IIIC T85/T100/T135°C Db

ONSHORE & OFFSHORE PLANTS  
 CHEMICAL ATMOSPHERE  
 HIGHLY CORROSIVE ENVIRONMENT



-   
 IP65  
 IP66
-   
 AISI 316L  
 ALUMINIUM
-   
 IK10
-   
 -50°C  
 +95°C
-   
 ZONE  
 1, 2,  
 21, 22

## EFXE SERIES CONTROL STATIONS INCREASED SAFETY

# TRUSTED CONTROL IN HAZARDOUS ENVIRONMENTS



### KEY POINTS

**Material:** AISI 316L stainless steel and copper-free aluminium.

**Certified components:** they can be equipped with standard and emergency push buttons, rotating switches, signaling lamps and measurement instruments...

### EFXE SERIES MARKINGS

- Ⓜ II 1 G Ex ia IIC/IIB T6/T5/T4 Ga
- Ⓜ II 2 G D  
 Ex db eb ia/ib mb\* IIC/IIB T6/T5/T4 Gb  
 AND/OR  
 Ex tb IIIC T85/T100/T135°C Db
- \* Associated equipment protection depending on the components actually mounted.

EFXE



INDOOR & OUTDOOR



IP66



AISI 316L  
ALUMINIUM



IK10



-60°C  
+60°C



1, 2,  
21, 22

## EJB SERIES FLAMEPROOF BOXES

DESIGNED AND  
CUSTOMIZED  
AROUND YOUR  
NEEDS



### KEY POINTS

**Material:** copper-free aluminum or AISI 316L stainless steel.

**Certified components:** they can be equipped with push buttons and mechanical operators, rotating switches, signaling lamps, potentiometers, rotating handles, measurement instruments, electric and electronic equipment.

The cover can be equipped with a window made of tempered glass for a direct reading from outside.

**Coating:** polyurethane painting cycle 5014. Other colors available upon request.

### EJB SERIES MARKINGS

- ⊕ II 2 G Ex db IIB+H<sub>2</sub> T[\*] Gb OR
  - ⊕ II 2 G Ex db ia/ib IIB+H<sub>2</sub> T[\*] Gb AND/OR
  - ⊕ II 2 D Ex tb IIIC T[\*] Db
- \*T<sub>6</sub>/T<sub>85</sub>°C, T<sub>5</sub>/T<sub>100</sub>°C, T<sub>4</sub>/T<sub>135</sub>°C, T<sub>3</sub>/T<sub>200</sub>°C

EJB



INDOOR & OUTDOOR



IP66



AISI 316L  
ALUMINIUM



IK10



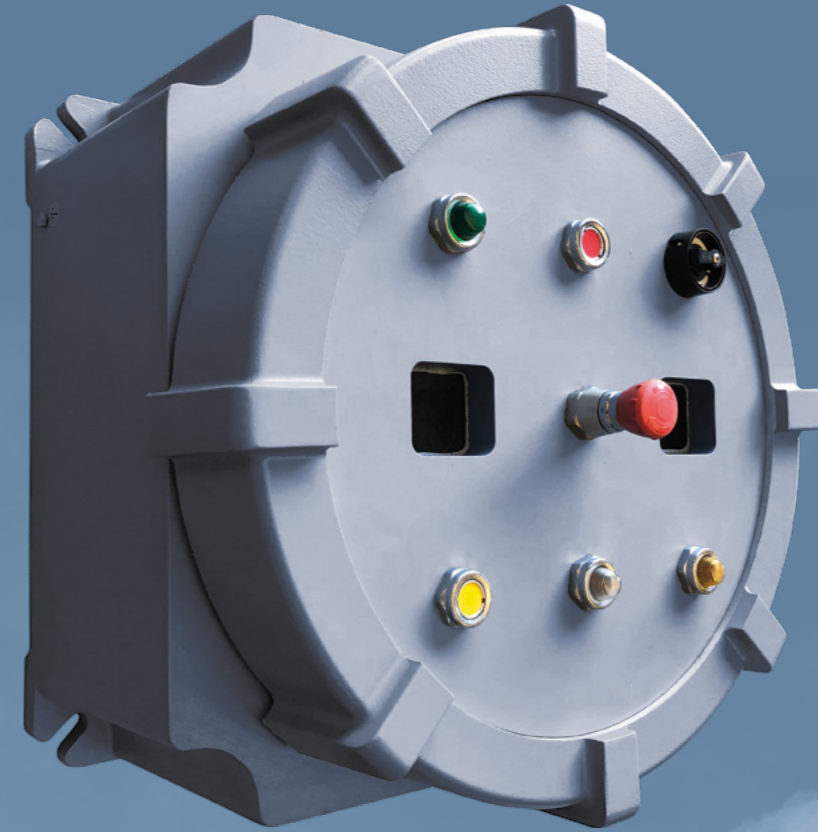
-60°C  
+80°C



1, 2,  
21, 22

## GUB SERIES FLAMEPROOF BOXES

RELIABLE  
EXPLOSION-PROOF  
ENCLOSURES  
FOR ULTIMATE SAFETY  
AND FLEXIBILITY



### KEY POINTS

**Material:** copper-free aluminum or AISI 316L stainless steel. Available with and without window.

**Certified components:** they can be equipped with push buttons and mechanical operators, rotating switches, signaling lamps, potentiometers, rotating handles, measurement instruments, electric and electronic equipment.

Internal mounting plate.

AISI 316L stainless steel external screws.

### GUB SERIES MARKINGS

- Ⓜ II 2 G Ex db IIC T6/T5/T4 Gb OR
- Ⓜ II 2 G Ex db ia/ib IIC T6/T5/T4 Gb  
AND/OR
- Ⓜ II 2 D Ex tb IIIC T85°C/T100°C/T135°C Db
- Ⓜ II 2 D Ex tb ia/ib IIIC T85°C/T100°C/  
T135°C Db

GUB





IP66



AISI 316L  
ALUMINIUM



-20°C  
+55°C



1, 2,  
21, 22

## GUMT/PTA SERIES FLAMEPROOF BOXES

# ELECTROSTATIC DISCHARGE SYSTEM



### KEY POINTS

**Material:** copper-free aluminum or AISI 316L stainless steel.

Ready for one/two double circuit clamps  
PTA ISE0-2.

The system is complete with arrest/consensus optical warning and changeover contact free from output voltage.

This solution is able to **control the discharge of static charges driving it through a dedicated safe path.**

### GUMT/PTA SERIES MARKINGS

Ex II 2 G D  
Ex db IIC T6 Gb  
Ex tb IIIC T85°C Db

GUMT/PTA





SAFETY IS OUR PRIORITY

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ELECTRIC

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