



atex@atexdelvalle.com | www.atexdelvalle.com

# EX CIRCUIT BREAKERS MODULE



# Delvalle, wide experience in manufacturing solutions for hazardous area



## WE PUT AT YOUR DISPOSAL

We offer over **45 years** providing hazardous area **solutions** to demanding customers who require very specific characteristics and behaviour according to the sector and their needs.

## WHEREVER YOU GO

We are committed to working closely with our customers, providing them with exceptional service and offering an advanced and **extensive range of hazardous area products** with very competitive prices.

## CONSULTING & ENGINEERING

Atex Delvalle adapts to our clients' needs by offering hazardous-area systems. Atex-delvalle are the leading certified assembler of Ex junction boxes, our **customized services**, **experienced design** and drafting 3D support.

## HIGH STANDARD OF QUALITY AND SERVICES

We only use materials provided by companies who offer the very highest quality, suitable and certified products. Our success is due to **top quality** assurance: ISO 9001, SGS, UL, TÜV, ISO 14000, Ohsas 1800, Atex, IECEx.



**100%**

Diseñado y fabricado íntegramente en España  
*Entirely designed and manufactures in Spain*



## CONTACT US

Confidentiality, reliability & quality

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[atex@atexdelvalle.com](mailto:atex@atexdelvalle.com)  
+34 945 601 381

ALSO ONLINE



Please contact our technical sales department.

A team of professionals with high experience and ability to solve all your queries.





Zones 1 and 2

# EX CIRCUIT BREAKERS MODULE



Examples



**They Are Designed for  
Rated Currents of 0.5/40A  
and Can Switch 6 or 10 kA**

Circuit breakers that provide reliable protection for conductors in hazardous areas offers a variety of different circuit breakers designed for specific intended purposes in hazardous areas, each and every one of which provides outstanding protection against overloading and short-circuiting.

Delvalle produces various types of circuit breaker, which protect your systems against overloading and short-circuiting. They are designed for rated currents of 0.5-40A and can switch 6 or 10 kA.

➔ [FOR MORE INFORMATION CLICK HERE](#)



# EX CIRCUIT BREAKERS MODULE

## TECHNICAL DATA

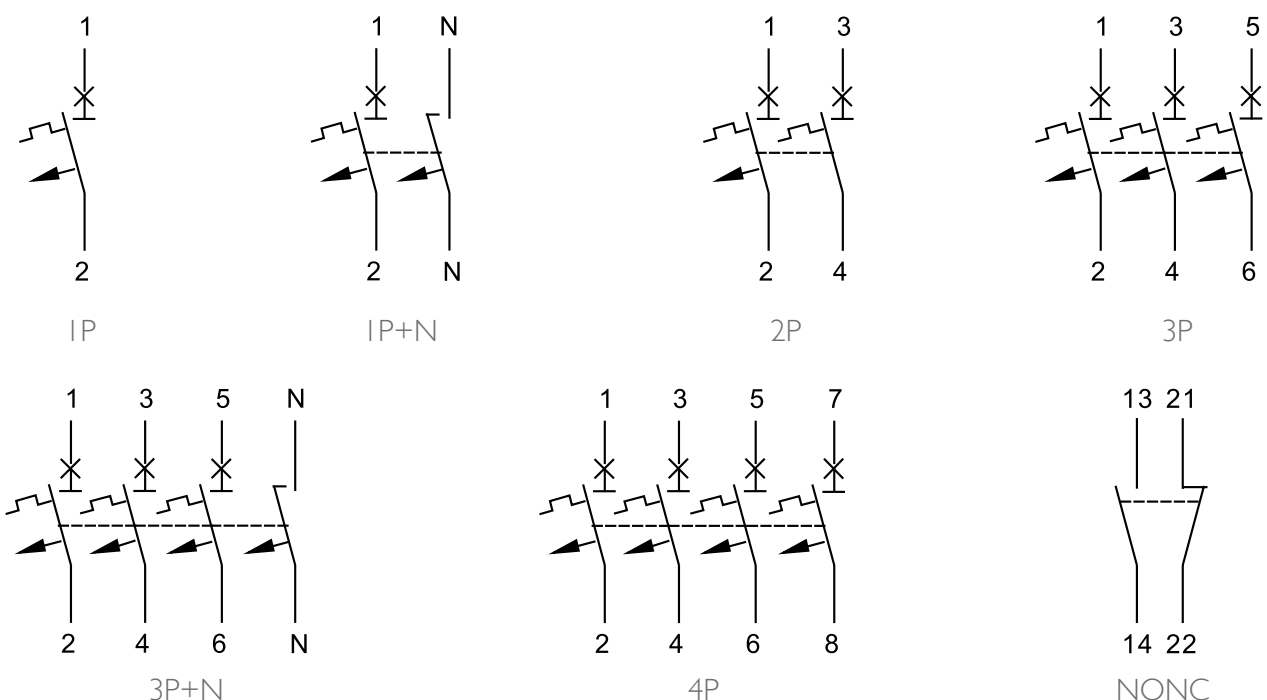
- Zones 1 and 2.
- Rated voltage: 230V / 400V, 50 / 60Hz; 250V DC.
- Rated current: Max. 40A.
- Rated ON/OFF capacity: 6kA, 10kA.
- Trip character: C, D characteristic curve.
- Aux.contact: 250V/400V, 50/60Hz, 4A; 110V DC 0,5A.
- Terminals:
  - Main contacts 1 - 10mm<sup>2</sup> (6 - 10mm<sup>2</sup> used in connection with compression lug).
  - Auxiliary contact 1 - 2.5mm<sup>2</sup>.
- Material of enclosure: unsaturated resin.

| N° POLES  | 1P     | 1P+N   | 2P     | 3P     | 4P | 3P+N |
|-----------|--------|--------|--------|--------|----|------|
| DIMENSION | 1      | 2      | 3      | 4      |    |      |
| WEIGHT    | 0,85kg | 1,07kg | 1,43kg | 1,90kg |    |      |

## CERTIFICATES

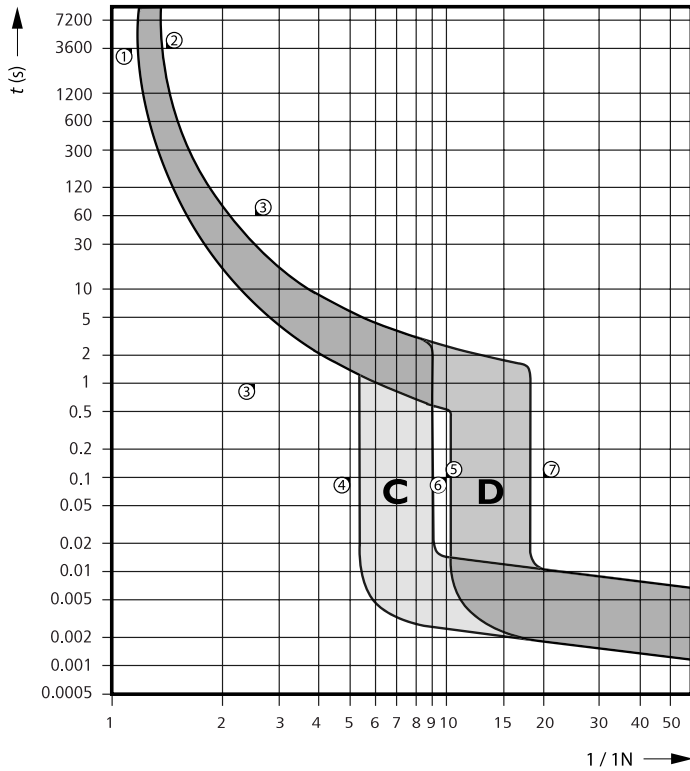
- Certificates number:
  - CML I9ATEX1299U
  - IECEx CML 19.0084U
- Type protection:
  - II2G Ex db eb IIC Gb
- Standard:
  - Directive 2014/34/EU
  - EN IEC 60079-0:2018
  - EN 60079-1:2014
  - EN IEC 60079-7:2015+A1:2018
  - IEC 60079-0:2017
  - IEC 60079-1:2014-06
  - IEC 60079-7:2017
- Ambient temperature:
  - -20°C <Ta<+60°C (IIC)
  - -40°C <Ta<+60°C (IIB)
- Operating temperature:
  - -20°C <Ta<+110°C (IIC)
  - -40°C <Ta<+110°C (IIB)

## ELECTRICAL DIAGRAM



# EX CIRCUIT BREAKERS MODULE

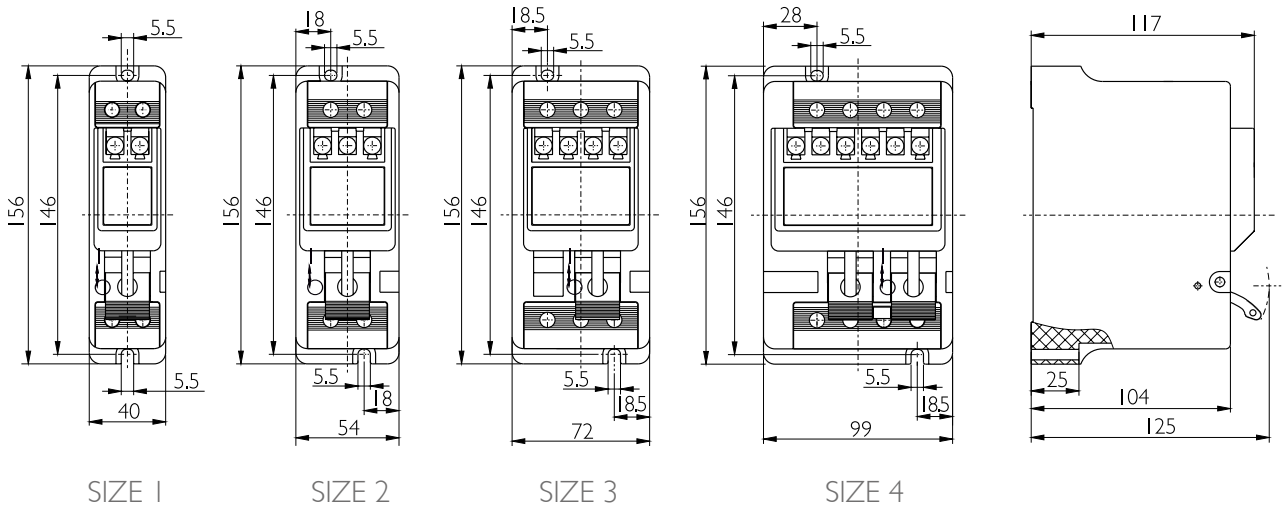
## TRIP CURVE (Ambient Temperature: 30°C)



TRIP CHARACTERISTIC IEC/EN60898-1

|   |   |
|---|---|
| ① | Rated non-tripping current<br>$I_{nt}=1.13 I_N; t > 1h$           |
| ② | Rated tripping current<br>$I_t=1.45 I_N; t < 1h$                  |
| ③ | $2.55 I_N; t=1-60 s (I_N \leq 32A)$<br>$t=1-120 s (I_N \leq 32A)$ |
| ④ | C $5 I_N; t > 0.1s$   |
| ⑤ | Curve 10 $I_N; t < 0.1s$  |
| ⑥ | D $10 I_N; t > 0.1s$  |
| ⑦ | Curve 20 $I_N; t < 0.1s$  |

## PLAN AND DIMENSIONS



| DIMENSIONS | NUMBER OF POLES   |
|------------|---|
| SIZE 1     | IP IP+N   |
| SIZE 2     | 2P IP + Auxiliary contact                               |
| SIZE 3     | 3P 2P + Auxiliary contact                               |
| SIZE 4     | 3P + N 4P 3P + Auxiliary contact 4P + Auxiliary contact |

# EX CIRCUIT BREAKERS MODULE

## REFERENCES

Reference configuration. Examples: CB05A/IP/C/6, CB10A/IP+N/D/6 or CB32/4P/C/6/NONC.

| 1    | + | 2   | + | 3                                    | + | 4              | + | 5                     | + | 6                                     |
|------|---|---|---|--------------------------------------|---|----------------|---|-----------------------|---|---------------------------------------|
| Code |   | Rated Current   |   | Number of Poles                      |   | Trip Character |   | Rated ON/OFF Capacity |   | Auxiliary Contacts                    |
|      |   | 05: 0.5A<br>1: 1A<br>2: 2A<br>3: 3A<br>4: 4A<br>6: 6A<br>10: 10A<br>16: 16A<br>20: 20A<br>25: 25A<br>32: 32A<br>40: 40A |   | IP<br>IP+N<br>2P<br>3P<br>3P+N<br>4P |   | C<br>D         |   | 6: 6 KA<br>10: 10 KA  |   | NONC: NONC<br>No Auxiliary Contact: _ |
| CB   |   | 32  | / | 4P                                   | / | C              |   | 6                     | / | NONC                                  |

| REFERENCES EX CIRCUIT BREAKER MODULE IP S/AUXILIARY   |   |
|---|---|
| REFERENCE   | DESCRIPTION                                   |
| CB05A/IP/_/~  | EX CIRCUIT BREAKER MODULE 0.5A IP CURVE _ ~kA |
| CB1A/IP/_/~   | EX CIRCUIT BREAKER MODULE 1A IP CURVE _ ~kA   |
| CB2A/IP/_/~   | EX CIRCUIT BREAKER MODULE 2A IP CURVE _ ~kA   |
| CB3A/IP/_/~   | EX CIRCUIT BREAKER MODULE 3A IP CURVE _ ~kA   |
| CB4A/IP/_/~   | EX CIRCUIT BREAKER MODULE 4A IP CURVE _ ~kA   |
| CB6A/IP/_/~   | EX CIRCUIT BREAKER MODULE ~A IP CURVE _ ~kA   |
| CB10A/IP/_/~  | EX CIRCUIT BREAKER MODULE 10A IP CURVE _ ~kA  |
| CB16A/IP/_/~  | EX CIRCUIT BREAKER MODULE 1~A IP CURVE _ ~kA  |
| CB20A/IP/_/~  | EX CIRCUIT BREAKER MODULE 20A IP CURVE _ ~kA  |
| CB25A/IP/_/~  | EX CIRCUIT BREAKER MODULE 25A IP CURVE _ ~kA  |
| CB32A/IP/_/~  | EX CIRCUIT BREAKER MODULE 32A IP CURVE _ ~kA  |
| CB40A/IP/_/~  | EX CIRCUIT BREAKER MODULE 40A IP CURVE _ ~kA  |
| Replace "_" of the reference with "C" or "D", to choose trip curve<br>Replace "~" of the reference with "6" or "10", to choose rated capacity |   |

| REFERENCES EX CIRCUIT BREAKER MODULE IP+N S/AUXILIARY   |   |
|---|---|
| REFERENCE   | DESCRIPTION                                     |
| CB05A/IP+N/_/~  | EX CIRCUIT BREAKER MODULE 0.5A IP+N CURVE _ ~kA |
| CB1A/IP+N/_/~   | EX CIRCUIT BREAKER MODULE 1A IP+N CURVE _ ~kA   |
| CB2A/IP+N/_/~   | EX CIRCUIT BREAKER MODULE 2A IP+N CURVE _ ~kA   |
| CB3A/IP+N/_/~   | EX CIRCUIT BREAKER MODULE 3A IP+N CURVE _ ~kA   |
| CB4A/IP+N/_/~   | EX CIRCUIT BREAKER MODULE 4A IP+N CURVE _ ~kA   |
| CB6A/IP+N/_/~   | EX CIRCUIT BREAKER MODULE ~A IP+N CURVE _ ~kA   |
| CB10A/IP+N/_/~  | EX CIRCUIT BREAKER MODULE 10A IP+N CURVE _ ~kA  |
| CB16A/IP+N/_/~  | EX CIRCUIT BREAKER MODULE 1~A IP+N CURVE _ ~kA  |
| CB20A/IP+N/_/~  | EX CIRCUIT BREAKER MODULE 20A IP+N CURVE _ ~kA  |
| CB25A/IP+N/_/~  | EX CIRCUIT BREAKER MODULE 25A IP+N CURVE _ ~kA  |
| CB32A/IP+N/_/~  | EX CIRCUIT BREAKER MODULE 32A IP+N CURVE _ ~kA  |
| CB40A/IP+N/_/~  | EX CIRCUIT BREAKER MODULE 40A IP+N CURVE _ ~kA  |
| Replace "_" of the reference with "C" or "D", to choose trip curve<br>Replace "~" of the reference with "6" or "10", to choose rated capacity |   |

| REFERENCES EX CIRCUIT BREAKER MODULE 2P S/AUXILIARY   |   |
|---|---|
| REFERENCE   | DESCRIPTION                                   |
| CB05A/2P/_/~  | EX CIRCUIT BREAKER MODULE 0.5A 2P CURVE _ ~kA |
| CB1A/2P/_/~   | EX CIRCUIT BREAKER MODULE 1A 2P CURVE _ ~kA   |
| CB2A/2P/_/~   | EX CIRCUIT BREAKER MODULE 2A 2P CURVE _ ~kA   |
| CB3A/2P/_/~   | EX CIRCUIT BREAKER MODULE 3A 2P CURVE _ ~kA   |
| CB4A/2P/_/~   | EX CIRCUIT BREAKER MODULE 4A 2P CURVE _ ~kA   |
| CB6A/2P/_/~   | EX CIRCUIT BREAKER MODULE ~A 2P CURVE _ ~kA   |
| CB10A/2P/_/~  | EX CIRCUIT BREAKER MODULE 10A 2P CURVE _ ~kA  |
| CB16A/2P/_/~  | EX CIRCUIT BREAKER MODULE 1~A 2P CURVE _ ~kA  |
| CB20A/2P/_/~  | EX CIRCUIT BREAKER MODULE 20A 2P CURVE _ ~kA  |
| CB25A/2P/_/~  | EX CIRCUIT BREAKER MODULE 25A 2P CURVE _ ~kA  |
| CB32A/2P/_/~  | EX CIRCUIT BREAKER MODULE 32A 2P CURVE _ ~kA  |
| CB40A/2P/_/~  | EX CIRCUIT BREAKER MODULE 40A 2P CURVE _ ~kA  |
| Replace "_" of the reference with "C" or "D", to choose trip curve<br>Replace "~" of the reference with "6" or "10", to choose rated capacity |   |

| REFERENCES EX CIRCUIT BREAKER MODULE 3P S/AUXILIARY   |   |
|---|---|
| REFERENCE   | DESCRIPTION                                   |
| CB05A/3P/_/~  | EX CIRCUIT BREAKER MODULE 0.5A 3P CURVE _ ~kA |
| CB1A/3P/_/~   | EX CIRCUIT BREAKER MODULE 1A 3P CURVE _ ~kA   |
| CB2A/3P/_/~   | EX CIRCUIT BREAKER MODULE 2A 3P CURVE _ ~kA   |
| CB3A/3P/_/~   | EX CIRCUIT BREAKER MODULE 3A 3P CURVE _ ~kA   |
| CB4A/3P/_/~   | EX CIRCUIT BREAKER MODULE 4A 3P CURVE _ ~kA   |
| CB6A/3P/_/~   | EX CIRCUIT BREAKER MODULE ~A 3P CURVE _ ~kA   |
| CB10A/3P/_/~  | EX CIRCUIT BREAKER MODULE 10A 3P CURVE _ ~kA  |
| CB16A/3P/_/~  | EX CIRCUIT BREAKER MODULE 1~A 3P CURVE _ ~kA  |
| CB20A/3P/_/~  | EX CIRCUIT BREAKER MODULE 20A 3P CURVE _ ~kA  |
| CB25A/3P/_/~  | EX CIRCUIT BREAKER MODULE 25A 3P CURVE _ ~kA  |
| CB32A/3P/_/~  | EX CIRCUIT BREAKER MODULE 32A 3P CURVE _ ~kA  |
| CB40A/3P/_/~  | EX CIRCUIT BREAKER MODULE 40A 3P CURVE _ ~kA  |
| Replace "_" of the reference with "C" or "D", to choose trip curve<br>Replace "~" of the reference with "6" or "10", to choose rated capacity |   |

| REFERENCES EX CIRCUIT BREAKER MODULE 4P S/AUXILIARY   |   |
|---|---|
| REFERENCE   | DESCRIPTION                                   |
| CB05A/4P/_/~  | EX CIRCUIT BREAKER MODULE 0.5A 4P CURVE _ ~kA |
| CB1A/4P/_/~   | EX CIRCUIT BREAKER MODULE 1A 4P CURVE _ ~kA   |
| CB2A/4P/_/~   | EX CIRCUIT BREAKER MODULE 2A 4P CURVE _ ~kA   |
| CB3A/4P/_/~   | EX CIRCUIT BREAKER MODULE 3A 4P CURVE _ ~kA   |
| CB4A/4P/_/~   | EX CIRCUIT BREAKER MODULE 4A 4P CURVE _ ~kA   |
| CB6A/4P/_/~   | EX CIRCUIT BREAKER MODULE ~A 4P CURVE _ ~kA   |
| CB10A/4P/_/~  | EX CIRCUIT BREAKER MODULE 10A 4P CURVE _ ~kA  |
| CB16A/4P/_/~  | EX CIRCUIT BREAKER MODULE 1~A 4P CURVE _ ~kA  |
| CB20A/4P/_/~  | EX CIRCUIT BREAKER MODULE 20A 4P CURVE _ ~kA  |
| CB25A/4P/_/~  | EX CIRCUIT BREAKER MODULE 25A 4P CURVE _ ~kA  |
| CB32A/4P/_/~  | EX CIRCUIT BREAKER MODULE 32A 4P CURVE _ ~kA  |
| CB40A/4P/_/~  | EX CIRCUIT BREAKER MODULE 40A 4P CURVE _ ~kA  |
| Replace "_" of the reference with "C" or "D", to choose trip curve<br>Replace "~" of the reference with "6" or "10", to choose rated capacity |   |

| REFERENCES EX CIRCUIT BREAKER MODULE 3P+N S/AUXILIARY   |   |
|---|---|
| REFERENCE   | DESCRIPTION                                     |
| CB05A/3P+N/_/~  | EX CIRCUIT BREAKER MODULE 0.5A 3P+N CURVE _ ~kA |
| CB1A/3P+N/_/~   | EX CIRCUIT BREAKER MODULE 1A 3P+N CURVE _ ~kA   |
| CB2A/3P+N/_/~   | EX CIRCUIT BREAKER MODULE 2A 3P+N CURVE _ ~kA   |
| CB3A/3P+N/_/~   | EX CIRCUIT BREAKER MODULE 3A 3P+N CURVE _ ~kA   |
| CB4A/3P+N/_/~   | EX CIRCUIT BREAKER MODULE 4A 3P+N CURVE _ ~kA   |
| CB6A/3P+N/_/~   | EX CIRCUIT BREAKER MODULE ~A 3P+N CURVE _ ~kA   |
| CB10A/3P+N/_/~  | EX CIRCUIT BREAKER MODULE 10A 3P+N CURVE _ ~kA  |
| CB16A/3P+N/_/~  | EX CIRCUIT BREAKER MODULE 1~A 3P+N CURVE _ ~kA  |
| CB20A/3P+N/_/~  | EX CIRCUIT BREAKER MODULE 20A 3P+N CURVE _ ~kA  |
| CB25A/3P+N/_/~  | EX CIRCUIT BREAKER MODULE 25A 3P+N CURVE _ ~kA  |
| CB32A/3P+N/_/~  | EX CIRCUIT BREAKER MODULE 32A 3P+N CURVE _ ~kA  |
| CB40A/3P+N/_/~  | EX CIRCUIT BREAKER MODULE 40A 3P+N CURVE _ ~kA  |
| Replace "_" of the reference with "C" or "D", to choose trip curve<br>Replace "~" of the reference with "6" or "10", to choose rated capacity |   |

# SOLUTIONS FOR HAZARDOUS AREA



With over 50 years of experience in design, manufacture and supply of electrical high quality Atex & IECEX solutions

Atex Delvalle adapts to our clients' needs by offering Hazardous Area enclosures and boxes on demand. They are adapted to your specific requirements of installation and assembly, up to the last detail.

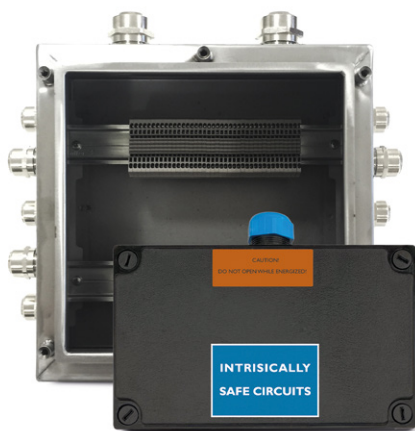
Atex Delvalle designs and manufactures a range of Hazardous Area enclosures; junction and terminal boxes, pressurized, flameproof Ex d and increased Safety Ex e Atex & IECEX compliant enclosures.



ATEX CABLE GLANDS



MOTOR STARTER & LOAD DISCONNECT SWITCHES



CAJAS DE BORNES  
Y/O TERMINALES ATEX



ATEX LIGHTING FIXTURE

# HMI INDUSTRIAL PANELS WORKSTATIONS



FLAMEPROOF ENCLOSURES  
& PULLING BOXES



## CONTROL STATIONS & DISTRIBUTION BOXES

Atex control boxes (Contrex Series), they are specially designed to perform checks, maneuvers and as actuators in explosive atmospheres. They have a rugged, corrosion system and finished in stainless steel or GRP polyester. It allows you to perform maneuvers and controls at the machine in hazardous areas and take programming and automation in a safe area. Offering customers a great combination of possibilities and flexibility. Select the component that best suits your operator panels, keypads, mushrooms, switches, ammeters... and you assemble all with Atex certified, Ex & IECEx and UL.



ENCLOSURES FOR  
CORROSION ENVIRONMENTS

## PRESSURIZED PANELS & ATEX PURGE







**HAZARDOUS AREA SOLUTIONS ATEX E IECEx**



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**Contacta con nosotros, estamos a su disposición**