

Zones 1, 2, 21 and 22



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# SAFETY AND ISOLATION SWITCHES ATEX & IECEX



**GUARANTEE**  
FOR STAINLESS  
ANTICORROSIVE



**GUARANTEE**  
FOR MECHANICAL  
PARTS



• WE ARE •  
**MANUFACTURERS**  
CERTIFIED

**ROBUST AND EASY TO INSTALL**

1.21

# 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%**  
*Entirely designed  
and manufactured  
in Europe*



## CONTACT US

Confidentiality, reliability & quality

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ALSO ONLINE



Please contact our technical sales department.

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





Zones 1, 2, 21 and 22

# SAFETY AND ISOLATION SWITCHES

## ATEX & IECEX

### Robust and Easy to Install



Example screw closure (Geoex)



Example hinged closure (Luxorex)

The Ex safety and isolation switch, allows work with a machine to safely maintain, clean and overhaul it as long as the switch is in the OFF position.

It's made up of two components:

- The control component is a selector, which allows the current to go through the circuit or not. The ON position (1) allows the current, so blocks access to the machine through the mechanical blocker. The OFF position (0) blocks the current, to allow any work on the machine to be carried out.
- The isolation module allows the current to go through the circuit when the selector is in the ON position, and keep the current when the selector is in the OFF one.

This kind of switch is commonly used in any industry which uses machines, because the electrical circuits and tri-phase asynchronous motors need the energy supply and the installation kept separate, in places considered as potentially explosive, such as zones 1, 2, 21 and 22.

The switch is protected by a stainless steel AISI 316L enclosure, specifically designed, waterproof, antirust and with IP66 protection degree. It has a protection "Ex e" and "Ex d", which allows use in zones with a high explosion risk.

We have two types of closures:

- Screw closure (Geoex)
- Hinged closure (Luxorex)

➔ [FOR MORE INFORMATION CLICK HERE](#)

# SAFETY AND ISOLATION SWITCHES **ATEX & IECEX**

## CHARACTERISTICS

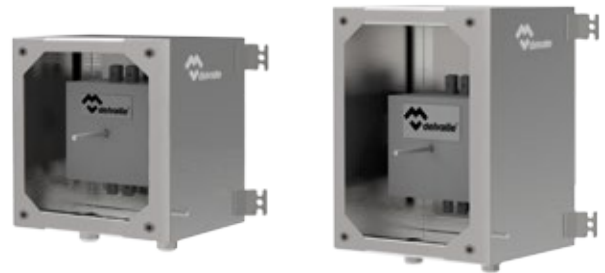
The Ex switch rated current is between 25 and 180A.

It can work between two temperature ranges, which give it a higher use capacity.

- $-20^{\circ}\text{C} \leq T_a \leq 60^{\circ}\text{C}$
- $-20^{\circ}\text{C} \leq T_a \leq 40^{\circ}\text{C}$

The Ex enclosure has:

- The joint between the cover and body, is designed to secure an IP66 degree protection.
- The selector has an IP65 degree protection.
- It's designed with stainless steel AISI 304L.
- It includes two cable glands with "Ex e" protection in either M25 nickel plated brass or in stainless steel.
- It has four wall brackets.
- It has "Ex e" and "Ex d" protection, for use in zones 1, 2, 21 and 22 with explosive atmospheres with dust and gas.



## OPTIONS

- We have two types of closures:
  - Screw closure (Geoex)
  - Hinged closure (Luxorex)
- There are two kinds of Ex selector, one normal and the other an emergency selector, in red and yellow.
- Choice of poles between 3 poles, 3 poles + neutral, 4 poles and 6 poles.
- Possibility of including auxiliary contacts:
- Enclosure is made in AISI 316L stainless steel for marine or highly corrosive places.
- Ex cable glands available in any size and thread.

## ADVANTAGES

- The enclosure can be manufactured in stainless steel 316L.
- It's a necessary device in order to carry out maintaining, cleaning or overhauling.
- It gives a total block.
- Enclosure is made in AISI 316L stainless steel for marine or highly corrosive places.

## PROTECTION MODE

This equipment is certified for use in potentially explosive atmospheres in 1, 2, 21 and 22 zones and it has "Ex e" and "Ex d" (protection).

Atex mark:

- II2G Ex d e IICT6/T5 Gb
- II2D Ex tb IIIC T85°C /T100°C Db
- Certificate number: LOM14ATEX2082

- Certificate number: LOM 17ATEX1011

IECEX mark:

- Ex d e IICT6/T5 Gb
- Ex tb IIIC T85°C/T100°C Db
- Certificate number: EX/LOM/IECEX

## NORMATIVE

Atex directive and regulation:

- Atex directive 2014/34/EU
- EN 60079-0:2012
- EN 60079-1:2007
- EN 60079-7:2015
- EN 60079-31:2010

- IEC 60079-7:2015
- IEC 60079-31:2013

Enclosure regulation:

- IP regulation (IP65): IEC 60529
- IK regulation (IK10): IEC 62262

IECEX regulation:

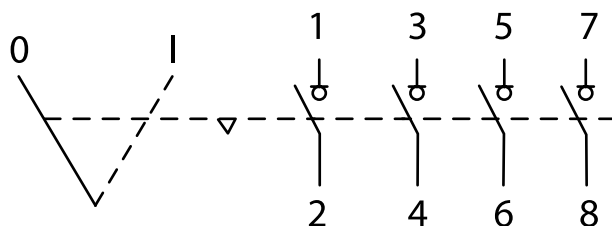
- IEC 60079-0:2011
- IEC 60079-1:2006

Low voltage directive and regulation:

- Directive 2014/35/EU
- EN 61439-1:2011
- EN 61439-2:2011

## ELECTRICAL DIAGRAM

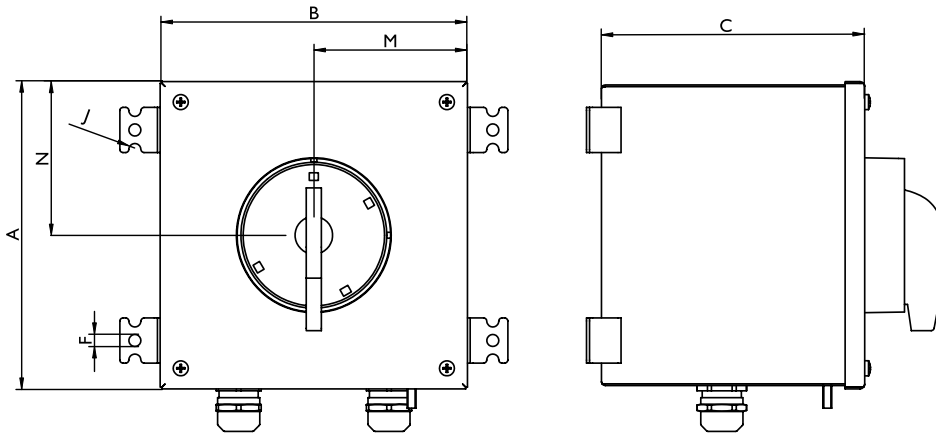
The electrical diagram is the following in case you have chosen four poles.



# SAFETY AND ISOLATION SWITCHES **ATEX & IECEX**

## BLUEPRINT AND DIMENSIONS GEOEX

The planes are the same for all models, even if the measurements change.



**10**  
YEARS  
GUARANTEE  
FOR STAINLESS  
ANTICORROSIVE

**5**  
YEARS  
GUARANTEE  
FOR MECHANICAL  
PARTS

SAFETY AND ISOLATION SWITCH GEOEX - DIMENSIONS (mm)

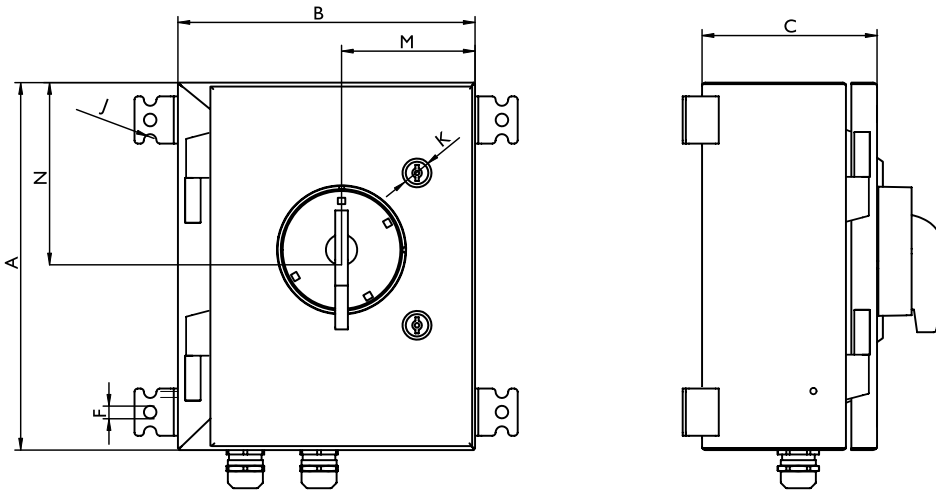
25A							
	A	B	C	F	J	N	M
3P	175	150	110	D10	R5	87,5	75
4P	175	150	110	D10	R5	87,5	75
3P+N	175	150	110	D10	R5	87,5	75
6P	175	150	150	D10	R5	87,5	75
40A							
	A	B	C	F	J	N	M
3P	200	200	175	D10	R5	100	100
4P	200	200	175	D10	R5	100	100
3P+N	200	200	175	D10	R5	100	100
6P	200	200	210	D10	R5	100	100
80A							
	A	B	C	F	J	N	M
3P	250	250	200	D10	R5	125	125
4P	250	250	200	D10	R5	125	125
3P+N	250	250	200	D10	R5	125	125
6P	250	250	240	D10	R5	125	125
180A							
	A	B	C	F	J	N	M
3P	350	275	250	D10	R5	175	137,5
4P	350	275	250	D10	R5	175	137,5
3P+N	350	275	250	D10	R5	175	137,5
6P	350	275	300	D10	R5	175	137,5



# SAFETY AND ISOLATION SWITCHES **ATEX & IECEX**

## BLUEPRINT AND DIMENSIONS LUXOREX

The planes are the same for all models, even if the measurements change.



**10**  
YEARS  
GUARANTEE  
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**5**  
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GUARANTEE  
FOR MECHANICAL  
PARTS

SAFETY AND ISOLATION SWITCH LUXOREX - DIMENSIONS (mm)

25A								
	A	B	C	F	J	K	N	M
3P	300	250	150	D10	R5	D27	150	125
4P	300	250	150	D10	R5	D27	150	125
3P+N	300	250	150	D10	R5	D27	150	125
6P	300	250	200	D10	R5	D27	150	125
40A								
	A	B	C	F	J	K	N	M
3P	270	270	200	D10	R5	D12	135	135
4P	270	270	200	D10	R5	D12	135	135
3P+N	270	270	200	D10	R5	D12	135	135
6P	270	270	250	D10	R5	D12	135	135
80A								
	A	B	C	F	J	K	N	M
3P	300	300	200	D10	R5	D12	150	150
4P	300	300	200	D10	R5	D12	150	150
3P+N	300	300	200	D10	R5	D12	150	150
6P	300	300	250	D10	R5	D12	150	150
180A								
	A	B	C	F	J	K	N	M
3P	350	320	250	D10	R5	D12	175	160
4P	350	320	250	D10	R5	D12	175	160
3P+N	350	320	250	D10	R5	D12	175	160
6P	350	320	300	D10	R5	D12	175	160





# SAFETY AND ISOLATION SWITCHES **ATEX & IECEx**

## REFERENCES

This motor protection includes some different and as consequence of this we have created the next table to know the equipment's code.

TYPE	RATED CURRENT (A)	HANDLE'S COLOUR SWITCH	NUMBER OF POLES	AUXILIARY CONTACTS	EX
SSIS	To choose one	To choose between the black and red one	To choose between 3 poles, 3 poles + neutral, 4 poles and 6 poles	To choose one. In case of want nothing, not write	EX
	25 40 80 180	R  N	3P 3PN 4P 6P	NONC 2NC 2NO NC NO	EX
Version Luxorex, with door		Add "P" to reference. Ex. "SSIS/25-R-4P-NONC-EX-P"			

### EXAMPLE GEOEX

Switch Geoex with 25A rated current, handle in red colour, with 4 poles and one auxiliary contact normally open and another normally closed.

CODE

SSIS/25-R-4P-NONC-EX

### EXAMPLE LUXOREX

Switch Luxorex with 40A rated current, handle in red colour, with 4 poles and one auxiliary contact normally open and another normally closed.

CODE

SSIS/40-R-4P-NONC-EX-P



# 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



ATEX TERMINAL & JUNCTION BOXES



ATEX LIGHTING FIXTURE



## FLAMEPROOF ENCLOSURES & PULLING BOXES

## HMI INDUSTRIAL PANELS WORKSTATIONS



## 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.



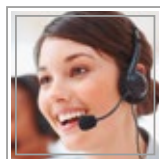
## ENCLOSURES FOR CORROSION ENVIRONMENTS

## PRESSURIZED PANELS & ATEX PURGE





**HAZARDOUS AREA SOLUTIONS ATEX & IECEx**



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**Contact us, we will be available at any time**