

ISOLATORS-EX Series



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ATEX [Ex II 2 D]
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SWITCHES DISCONNECTORS



VERSIONS

	Switch disconnectors Aluminium – General use
	Switch disconnectors Aluminium – Emergency control
	Switch disconnectors Thermoplastic – General use
	Switch disconnectors Thermoplastic – Emergency control

REFERENCE STANDARDS

ATEX	EN 60079-0 Electrical apparatus for potentially explosive atmospheres. <i>Part 0: general requirements.</i>
ATEX	EN 60079-31 Electrical apparatus for potentially explosive atmospheres. <i>Part 31: equipment dust ignition protection by enclosures "t".</i>
	EN 60947-1 Low-voltage switchgear and controlgear. <i>Part 1: general requirements.</i>
	EN 60947-3 Low-voltage switchgear and controlgear. <i>Part 3: Switches, disconnectors, switch-disconnectors and fuse-combination units.</i>

TECHNICAL CHARACTERISTICS

ATEX Code:	Ex II 2 D
Certificate:	TÜV IT 14 ATEX 006 (aluminium) TÜV IT 14 ATEX 005 (thermoplastic)
Ex Protection type:	
Thermoplastic:	Ex tb IIIC T80°C Db IP66 (Ta -25°C +40°C) Ex tb IIIC T90°C Db IP66 (Ta -25°C +60°C)
Aluminium:	Ex tb IIIC T80°C Db IP65 (Ta -25°C +40°C) Ex tb IIIC T90°C Db IP65 (Ta -25°C +60°C)
Protection degree:	IP65 (aluminium) IP66 (thermoplastic)
Ambient temperature:	-25°C +40/60°C
Maximum permissible surface temperature:	T90°C (aluminium, thermoplastic)
Glow wire test:	650°C (thermoplastic)
Material:	Aluminium/Thermoplastic
Colour:	Satin-finished (aluminium) Grey RAL 7016 (thermoplastic)
Polarity:	2P - 3P - 4P
Rated current:	20A-32A-40A-63A (aluminium) 20A-32A-40A (thermoplastic)

BEHAVIOUR WITH CHEMICAL AND ATMOSPHERIC AGENTS - ALUMINIUM

Saline solution	Acids		Bases		Solvents				Mineral oil	UV rays
	Concentrated	Diluted	Concentrated	Diluted	Hexane	Benzol	Acetone	Alcohol		
Resistant	Limited Resistance	Resistant	Resistant	Resistant	Not Resistant	Not Resistant	Not Resistant	Limited Resistance	Resistant	Resistant

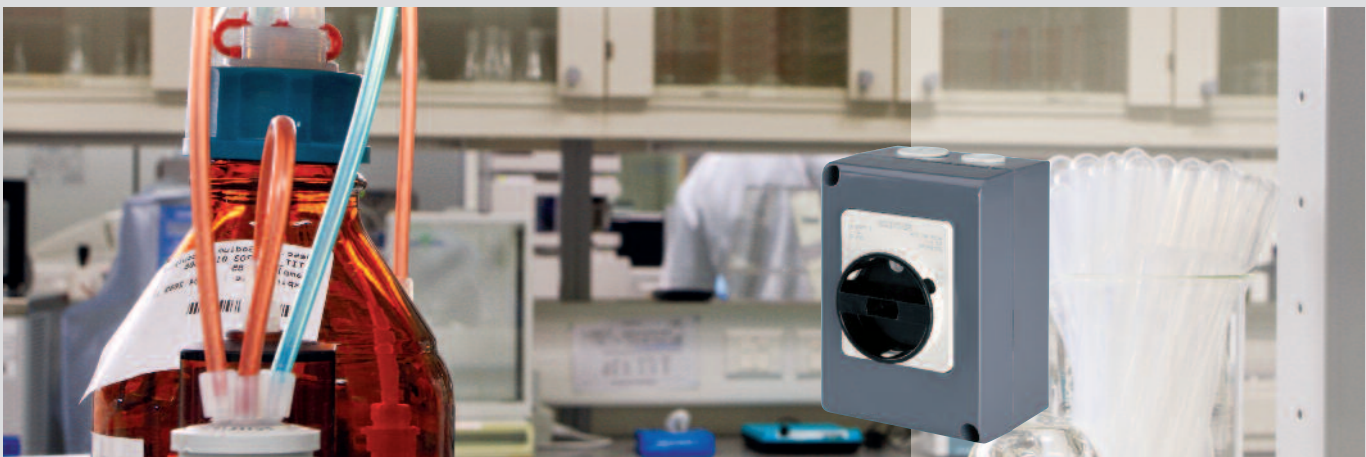
For specific substances please contact our technical service.

BEHAVIOUR WITH CHEMICAL AND ATMOSPHERIC AGENTS - THERMOPLASTIC

Saline solution	Acids		Bases		Solvents				Mineral oil	UV rays
	Concentrated	Diluted	Concentrated	Diluted	Hexane	Benzol	Acetone	Alcohol		
Resistant	Limited Resistance	Resistant	Limited Resistance	Limited Resistance	Resistant	Limited Resistance	Limited Resistance	Resistant	Limited Resistance	Resistant

For specific substances please contact our technical service.

APPLICATION EXAMPLES




ISOLATORS-EX Series



Ex II 2D aluminium enclosure

ELECTRICAL CHARACTERISTICS OF THE SWITCH DISCONNECTORS

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TECHNICAL DATA							
Control device			ISOLATORS-EX Series				
			590.XHGE/X HEM200X	590.XHGE/X HEM320X	590.XHGE/X HEM400X	590.XHGE/X HEM630X	
SCAME switch disconnecter Fam.590 	Rated current		20A	32A	40A	63A	
	Insulating voltage (UI)		690V	690V	690V	690V	
	Duty rated current based on the category	AC23A	415V	20A	32A	35A	63A
			690V	16A	25A	25A	30A
		AC3	400V	16A	28,5A	28,5A	40A
			690V	12A	20A	20A	25A
Nominal frequency		50/60Hz	50/60Hz	50/60Hz	50/60Hz		

TECHNICAL DATA OF POWER / EARTH TERMINALS


POWER TERMINALS - CONNECTABLE WIRES AND TIGHTENING TORQUES		
Power terminal version	Cable section to be used (rigid or flexible) mm ²	Tightening torque (Nm)
20A	4	0.8
32A	6	0.8
40A	6	0.8
63A	10	3.6
Earth terminal	Maximum section 10	2

CABLE GLANDS / CABLE ENTRIES

Versions	Number of cable entries	Maximum cable inlet temperature
590.XHGE200X - 20A	2xM25	-
590.XHEM200X - 20A		
590.XHGE320X - 32A	2xM25	95° C
590.XHEM320X - 32A		
590.XHGE400X - 40A		
590.XHEM400X - 40A		
590.XHGE630X - 63A	2xM32	110° C
590.XHEM630X - 63A		

Ex II 2D thermoplastic enclosure

ELECTRICAL CHARACTERISTICS OF THE SWITCH DISCONNECTORS

TECHNICAL DATA						
Control device				ISOLATORS-EX Series		
				590.XGE/XE M200X	590.XGE/XE M320X	590.XGE/XE M400X
SCAME switch disconnecter Fam.590 	Rated current			20A	32A	40A
	Insulating voltage (UI)			690V	690V	690V
	Duty rated current based on the category	AC23A	415V	20A	32A	35A
			690V	16A	25A	25A
		AC3	400V	16A	28,5A	28,5A
			690V	12A	20A	20A
Nominal frequency			50/60Hz	50/60Hz	50/60Hz	

TECHNICAL DATA OF POWER / EARTH TERMINALS

POWER TERMINALS - CONNECTABLE WIRES AND TIGHTENING TORQUES		
Power terminal version	Cable section to be used (rigid or flexible) mm ²	Tightening torque (Nm)
20A	4	0.8
32A	6	0.8
40A	10	0.8
Earth terminal	Maximum section 10	2

CABLE GLANDS / CABLE ENTRIES

Versions	Number of cable entries	Maximum cable inlet temperature
590.XGE200X - 20A	2xM25 + 1xM20	-
590.XEM200X - 20A		
590.XGE320X - 32A	2xM32 + 1xM20	95° C
590.XEM320X - 32A		
590.XGE400X - 40A		
590.XEM400X - 40A		

The safety switch hereby in the following table will be equipped with cable glands and stopping plug suitable for use in areas at risk of explosion, suitable for the category 2D, zone 21 and 22.

LOCKING TORQUES

Threaded hole	Maximum tightening torque (Nm)
M20	10
M25	12
M32	14

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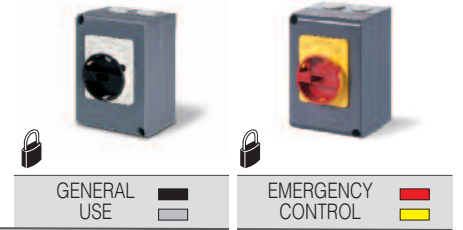


ATEX / IECEx - 2 GD

Ambient	Gas			Dust		
Zone	0 - Ga	1 - Gb	2 - Gc	20 - Da	21 - Db	22 - Dc

ALUMINIUM SWITCHES DISCONNECTORS - IP65

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Current	Poles	Cable inlets	Dimensions (mm)	□	GENERAL USE		EMERGENCY CONTROL	
					■	□	■	□
20A	2	2xM25	105x150x82	1/12	590.XHGE2002		590.XHEM2002	
	3		105x150x82	1/12	590.XHGE2003		590.XHEM2003	
	4		105x150x82	1/12	590.XHGE2004		590.XHEM2004	
32A	2	2xM25	105x150x82	1/12	590.XHGE3202		590.XHEM3202	
	3		105x150x82	1/12	590.XHGE3203		590.XHEM3203	
	4		105x150x82	1/12	590.XHGE3204		590.XHEM3204	
40A	2	2xM25	105x150x82	1/12	590.XHGE4002		590.XHEM4002	
	3		105x150x82	1/12	590.XHGE4003		590.XHEM4003	
	4		105x150x82	1/12	590.XHGE4004		590.XHEM4004	
63A	2	2xM32	150x210x106	1/5	590.XHGE6302		590.XHEM6302	
	3		150x210x106	1/5	590.XHGE6303		590.XHEM6303	
	4		150x210x106	1/5	590.XHGE6304		590.XHEM6304	

□ Package/Bulk Pack.

THERMOPLASTIC SWITCHES DISCONNECTORS - IP66



Current	Poles	Cable inlets	Dimensions (mm)	□	GENERAL USE		EMERGENCY CONTROL	
					■	□	■	□
20A	2	2xM25 + 1xM20	115x190x128	1/12	590.XGE2002		590.XEM2002	
	3		115x190x128	1/12	590.XGE2003		590.XEM2003	
	4		115x190x128	1/12	590.XGE2004		590.XEM2004	
32A	2	2xM32 + 1xM20	115x190x128	1/12	590.XGE3202		590.XEM3202	
	3		115x190x128	1/12	590.XGE3203		590.XEM3203	
	4		115x190x128	1/12	590.XGE3204		590.XEM3204	
40A	2	2xM32 + 1xM20	115x190x128	1/12	590.XGE4002		590.XEM4002	
	3		115x190x128	1/12	590.XGE4003		590.XEM4003	
	4		115x190x128	1/12	590.XGE4004		590.XEM4004	

□ Package/Bulk Pack.

Padlockable handle in two positions (**ON/OFF**).
OFF position = 3 padlocks
ON position = 1 padlock

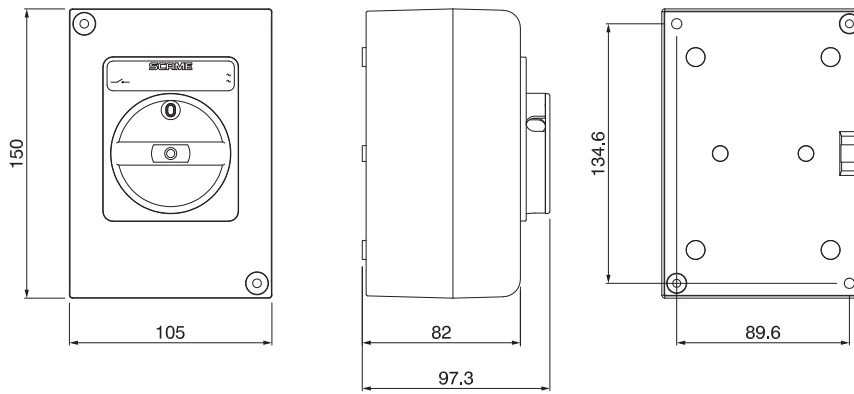
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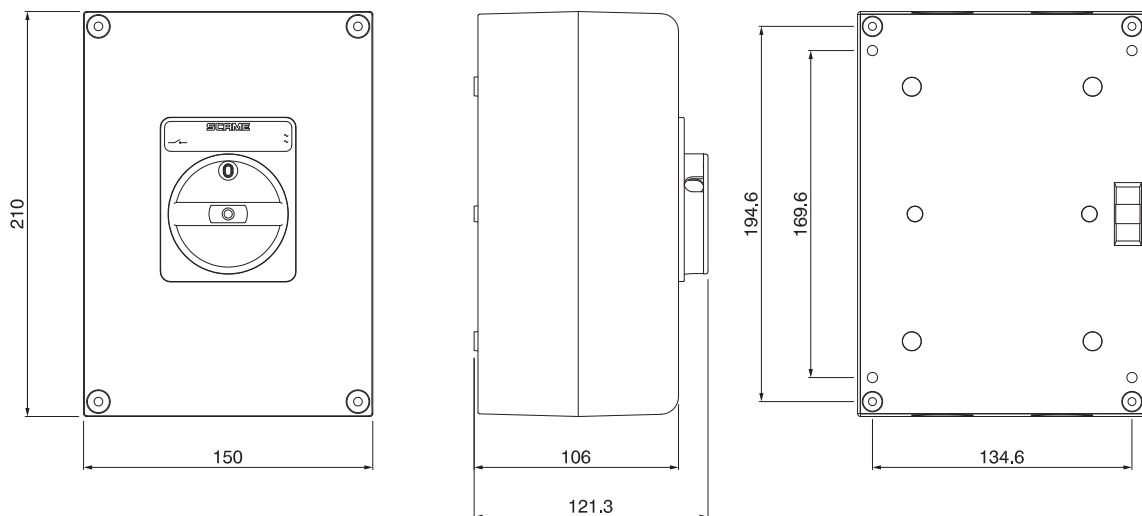
DIMENSIONS

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ALUMINIUM ENCLOSURE 20A-32A-40A

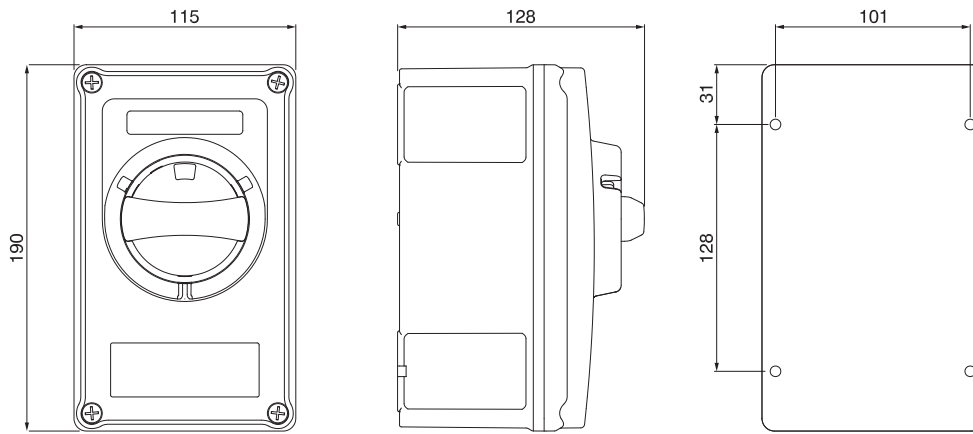


ALUMINIUM ENCLOSURE 63A



(Dimensions in mm)

THERMOPLASTIC ENCLOSURE 20A-32A-40A



(Dimensions in mm)

