

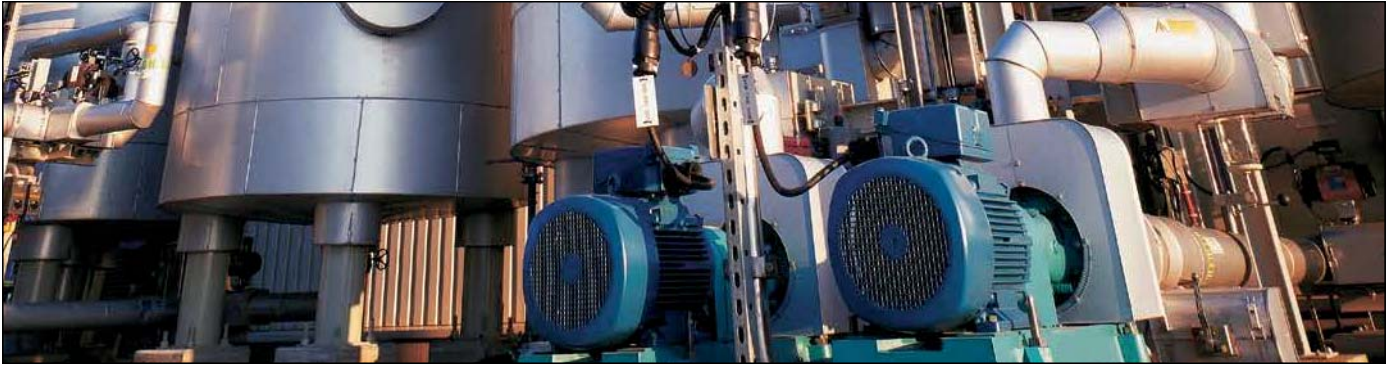


# Ex-Safety and main current switches





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### Applications

Safety switches are used to reliably isolate the power supply on electrical installations and apparatus during maintenance, cleaning and repair work.

Main current switches are used to operate drives, motors and other electrical equipment.

Star-delta starters, reversing starters and pole-changing switches (Dahlander switches) can be implemented with CEAG main current switches.

Motors have to be protected against overloads, phase failures and overheating: CEAG power circuit breakers and manual motor starters feature phase-failure protection as well as thermal and electromagnetic tripping for reliable motor protection. CEAG manual motor starters have such a precise tripping time that they are equally suited for the protection of Ex-e as well as Ex-d motors – to put you on the safe side.

### CEAG safety features

Safety and main current switches can be protected against inadvertent switching on by our integrated locking facility for up to three padlocks in the OFF position. To prevent manipulations, the enclosure covers cannot be opened in the locked position without destroying the enclosure itself.

### AC 3 switching capacity

All CEAG safety switches up to 180 A feature full AC-3 motor switching capacities and isolating properties according to EN 60947-3 with compulsory opening of the main current contacts; optional Emergency

stop versions according to EN 60204-1 are also available.

Additional lagging/leading auxiliary contacts guarantee double safety for extreme switching conditions.

The switch position is always indicated by the switch handle – practically excluding wrong operation.

You'll find these advantages in all CEAG safety, main current and Emergency stop switches as well as in the safety switches for converter drives.

A special safety feature offered by the manual motor starter: It can only be re-activated on site of the drive.

An operating-current trip for remote cut-off is optional.

To take advantage of the short-circuit protection in the starter, a suitable backup fuse must be selected. You'll find the details in the relevant technical data.

### Usage categories

The two most important usage categories for circuit breakers and motor starters: AC-23 for circuit breakers and the more demanding usage category AC-3 for motor starters.

Starters, defined according to AC-3, are used to switch motor loads.

Switches which fall into the AC-3 usage category are used for switching of motor loads under normal operating conditions. Here, the test procedure requires 50 making and breaking samples. Circuit breakers, defined according to AC-23, are designed for occasional separation of motor loads. For this



category EN 60947-4 requires only five making and breaking samples.

The AC-3 usage category makes great demands on the operating cycles and the service life of motor starters. All CEAG safety switches and manual motor starters up to 180 A fulfil these high requirements for the motor-switching capacity of usage category AC-3 as specified by EN 60947-4-1.

#### The new standard IEC 62626-1

The new standard IEC 62626-1 defines the requirements for safety switches (switch-disconnectors) that are used to provide isolation of equipment during repair and maintenance. These requirements go above and beyond those of IEC 60947-3, where no standard previously existed.

The standard divides products into two classifications: Class 0 for general use and Class 1 for harsh and rough/heavy duty conditions.

All products installed in ATEX/IECEx hazardous areas should be rated for Class 1. Class 1

requirements include minimum ratings for mechanical strength, IP protection, tamper resistance, heat/vibration/corrosion resistance, switching capacity, and locking capability.

#### Areas of application

We offer you a wide range of products in all areas: explosion-protected apparatus for gas and dust areas as well as for industrial applications in rough environments.

#### Material

Both explosion-protected as well as industrial switches are provided in impact-resistant polyamide, glass-fibre-reinforced polyester, powder-coated steel, high-grade stainless steel or flameproof enclosures made of light alloy, depending on the area of application and amperage.

All explosion-protected switches are certified according to the ATEX directive.

#### Mounting

Switches up to 180 A can be mounted simply and quickly with the CEAG mounting system to pipes, trellis work and walls. What's more, CEAG switches up to 40 A offer low-cost mounting – in a snap – with the snap-on system.

# 5.1

## GHG 26 / EXKO 2.. Ex-Safety Switches

Rated current from 10 A - 630 A

### Safety for your protection

CEAG safety switches can be protected against inadvertent switching on by our integrated locking facility for up to three padlocks in the OFF position. To prevent manipulations, the enclosure covers cannot be opened in the locked position without destroying the enclosure itself.

### Full AC-3 switching capacity

All CEAG safety switches feature full AC-3 motor switching capacities and isolating properties according to EN 60947-4-1 with compulsory opening of the main current contacts; optional EMERGENCY STOP versions according to EN 60204-1 are also available. An additional lagging/leading auxiliary contacts (option) guarantee double safety for extreme switching conditions.

### Installation-friendly design

The safety switches feature an installation-friendly design and easily accessible connection terminals.

Versions in impact-resistant polyamide or glass-fibre-reinforced polyester enclosures provide the high degree of protection IP66 for safety switches up to 180 A. These can be optionally supplied with snap-on moulded plastic or brass flanges. Safety switches for amperages up to 630 A are supplied in metal enclosures. These can be equipped with screw-on flanges.

### Explosion Group IIB

The described safety switches at the sizes 210- 630 A are also available for Explosion Group IIB, which is sufficient for many of the applications.

### Enclosed Switch-Disconnectors to provide isolation during repair and maintenance.

GHG 26 switches (10-160 A) and GHG 981 switches (25- 80 A) are now confirmed to comply with the new standard IEC 62626-1, requirements Class 1.

The new standard IEC 62626-1 defines the requirements for safety switches (switch-disconnectors) that are used to provide isolation of equipment during repair and maintenance. These requirements go above and beyond those of IEC 60947-3, where no standard previously existed.

The standard divides products into two classifications: Class 0 for general use and Class 1 for harsh and rough/heavy duty conditions.

All products installed in ATEX/ IECEx hazardous areas should be rated for Class 1. Class 1 requirements include minimum ratings for mechanical strength, IP protection, tamper resistance, heat/vibration/corrosion resistance, switching capacity, and locking capability.



### Features

- Full AC-3 switching capacity
- Double safety: additional auxiliary contact
- Cost-saving installation up to 180 A
- Snap-on mounting up to 40 A
- IP66 protection up to 180 A



3-pole EMERGENCY STOP



3-pole

Technical data

Ex-safety switches 10 A

Marking accd. to 2014/34/EU	Ⓔ II 2 G Ex ed IIC T6 / Ⓔ II 2 D Ex tD A21 IP66 T80 °C	
EC-Type Examination Certificate	PTB 00 ATEX 1074	
IECEX Certificate of Conformity	BK1 07.0014	
Marking accd. to IECEx	Ex ed IIC T6 Ex tD A21 IP66 T53 °C	
Permissible ambient temperature	-20 °C up to +40 °C <sup>1)</sup>	
Rated voltage	up to max. 500 V	
Rated current	max. 10 A	
Frequency	50/60 Hz	
Rated making-/ breaking capacity AC-3 accd. EN 60947-3	U <sub>e</sub> 230 V / I <sub>e</sub> 10 A U <sub>e</sub> 400 V / I <sub>e</sub> 10 A U <sub>e</sub> 500 V / I <sub>e</sub> 10 A	
Switch-disconnector for maintenance accd. to IEC 62262-1	Class 1	
Back-up fuse	up to 400 V AC: 20 A gG up to 500 V AC: 16 A gG	
Connecting terminals	main contact	2 x 1.5 - 2.5 mm <sup>2</sup>
	auxiliary-/Signal contact	2 x 0.5 - 2.5 mm <sup>2</sup> (option)
Degree of protection accd. to EN 60529	IP66	
Protection class	I	
Cable glands/enclosure drilling	M20 cable gland see ordering details M25 cable gland see ordering details	
Weight	0.55 kg	
Enclosure material	impact resistant polyamide	
Enclosure colour	black	
Auxiliary contact (option)	1 x NO making - lagging; breaking - leading	
Padlocking facility	can be locked in OFF position with 3 commercially available padlocks (Ø max. 6 mm)	

<sup>1)</sup> Other ambient temperatures on request

## GHG 261 - Ex-safety switches 10 A



3-pole



3-pole EMERGENCY STOP

### Ordering details

Content	Cable gland	Auxiliary contact	Order No.
<b>Safety switch 10 A 3-pole</b>			
3-pole	2 x M25 / 1 x M20	1 NO	<b>GHG 261 0005 R0009</b>
3-pole	2 x M25	none	<b>GHG 261 0007 R0001</b>
3-pole	2 x M20	1 NO	<b>GHG 261 0005 R0005</b>
3-pole EMERGENCY STOP	2 x M25 / 1 x M20	1 NO	<b>GHG 261 0005 R0010</b>
3-pole EMERGENCY STOP	2 x M25	none	<b>GHG 261 0007 R0002</b>
Safety switch 10 A 4-pole	2 x M25	none	<b>GHG 261 0007 R0003</b>

Customized version on request, auxiliary contacts in Ex ia available

### Accessories

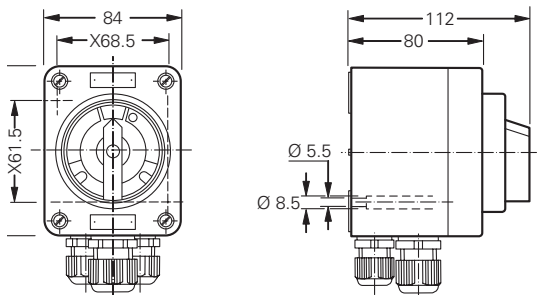
Type	Application	Fixing method	Order No.
<b>Mounting plate for Ex-safety switches 10 A 3-pole</b>			
Size 1	Wall mounting	screwless mounting	<b>GHG 610 1953 R0101</b>
Size 1	Pipe clamp	screwless mounting	<b>GHG 610 1953 R0102</b>
Size 1	Trellis-work mounting	screwless mounting	<b>GHG 610 1953 R0103</b>

Type	Application	OU	Order No.
<b>Accessories for mounting plates</b>			
Label holder with type label (blank) for mounting plate size 1, 2, 2A and 3		10	<b>GHG 610 1953 R0057</b>
Mounting set for pipes 1" (of 27 - 30 mm) for mounting plates with pipe fixing		10	<b>GHG 610 1953 R0020</b>

Type	Application	OU	Order No.
<b>Canopies for mounting plates</b>			
Size 1	for mounting plate size 1	1	<b>GHG 610 1955 R0101</b>

Please pay attention that only order units (OU) according to the ordering details can be delivered.

### Dimension drawing



3-pole

X = fixing dimensions

Dimensions in mm





6-pole EMERGENCY STOP



6-pole



3-pole EMERGENCY STOP



3-pole

Technical data

Ex-safety switches 20 A

Marking accd. to 2014/34/EU	Ⓔ II 2 G Ex ed ia IIC T6 / Ⓔ II 2 D Ex tD A21 IP66 T80 °C	
EC-Type Examination Certificate	PTB 99 ATEX 1161	
IECEX Certificate of Conformity	BK1 07.0012	
Marking accd. to IECEx	Ex ed ia IIC T6 Ex tD A21 IP66 T55 °C	
Permissible ambient temperature	-20 °C up to +40 °C <sup>1)</sup>	
Rated voltage	up to max. 690 V	
Rated current	max. 20 A	
Frequency	50/60 Hz	
Rated making-/rated breaking capacity AC-3 accd. EN 60947-3	U <sub>e</sub> 230 V / I <sub>e</sub> 20 A U <sub>e</sub> 400 V / I <sub>e</sub> 20 A U <sub>e</sub> 500 V / I <sub>e</sub> 16 A U <sub>e</sub> 690 V / I <sub>e</sub> 10 A	
Rated making-/ breaking capacity DC 1/DC 23 accd. EN 60947-3	U <sub>e</sub> 60 V / I <sub>e</sub> 20 A (1 contact) U <sub>e</sub> 120 V / I <sub>e</sub> 20 A (2 contacts in series)	
Rated making-/ breaking capacity DC-13 (L/R = 100 ms) accd. EN 60947-3	U <sub>e</sub> 60 V / I <sub>e</sub> 6 A	
Switch-disconnector for maintenance accd. to IEC 62262-1	Class 1	
Back-up fuse	up to 400 V AC: 35 A gG up to 500 V AC: 35 A gG up to 690 V AC: 25 A gG	
Connecting terminals	main contact	2 x 4 mm <sup>2</sup>
	auxiliary-/Signal contact	2 x 0.5 - 2.5 mm <sup>2</sup> (option)
Protection class	I	
Degree of protection accd. to EN 60529	IP66	
Cable glands/enclosure drilling	M20 cable gland see ordering details M25 cable gland see ordering details M32 cable gland see ordering details Option: metal flange with thread	
Weight	3-pole	approx. 1.48 kg
	6-pole	approx. 2.43 kg
Enclosure material	glass-fibre reinforced polyester	
Enclosure colour	black	
Auxiliary contact (option)	1 x NO making - lagging; breaking - leading 1 x NC (only 6-pole version) making - leading; breaking - lagging	
Padlocking facility	can be locked in OFF position with 3 commercially available padlocks (Ø max. 6 mm)	

<sup>1)</sup> Other ambient temperatures on request

## GHG 262 - Ex-safety switches 20 A



3-pole



3-pole EMERGENCY STOP



6-pole



6-pole EMERGENCY STOP

### Ordering details

Content	Cable gland	Auxiliary contact	Order No.
<b>Safety switch 20 A 3-pole</b>			
3-pole	2 x M32 / 1 x M25	1 NO	GHG 262 2301 R0001
3-pole	2 x M32	none	GHG 262 2304 R0001
3-pole EMERGENCY STOP	2 x M32 / 1 x M25	1 NO	GHG 262 2301 R0002
3-pole EMERGENCY STOP	2 x M32	none	GHG 262 2304 R0002
<b>Safety switch 20 A 4-pole</b>			
4-pole	2 x M20	1 NO + 1 NC	GHG 262 2301 R0007
4-pole	2 x M32 / 1 x M25	1 NO + 1 NC	GHG 262 2301 R0009
4-pole	2 x M32	none	GHG 262 2304 R0004
4-pole	2 x M20	none	GHG 262 2304 R0003
4-pole EMERGENCY STOP	2 x M32 / 1 x M25	1 NO + 1 NC	GHG 262 2301 R0010
<b>Safety switch 20 A 6-pole</b>			
6-pole	4 x M32 / 1 x M25	1 NO + 1 NC	GHG 262 2601 R0001
6-pole	4 x M25	1 NO + 1 NC	GHG 262 2601 R0005
6-pole EMERGENCY STOP	4 x M32 / 1 x M25	1 NO + 1 NC	GHG 262 2601 R0002

Customized version on request, auxiliary contacts in Ex ia available

### Accessories

Type	Application	Fixing method	Order No.
<b>Mounting plate for Ex-safety switches 20 A 3-pole</b>			
Size 2	Wall mounting	snap on	GHG 610 1953 R0104
Size 2	Pipe clamp	snap on	GHG 610 1953 R0105
Size 2	Trellis-work mounting	snap on	GHG 610 1953 R0106
<b>Mounting plate for Ex-safety switches 20 A 6-pole</b>			
Size 3	Wall mounting	snap on	GHG 610 1953 R0118
Size 3	Pipe clamp	snap on	GHG 610 1953 R0110
Size 3	Trellis-work mounting	snap on	GHG 610 1953 R0118
Type		OU	Order No.
<b>Accessories for mounting plates</b>			
	Label holder with type label (blank) for mounting plate size 1, 2, 2A and 3	10	GHG 610 1953 R0057
	Mounting set for pipes 1" (of 27 - 30 mm) for mounting plates with pipe fixing	10	GHG 610 1953 R0020

Type	Application	OU	Order No.
<b>Canopies</b>			
Size 2	for mounting plate size 2	1	GHG 610 1955 R0102
Size 2A	for mounting plate size 2A	1	GHG 610 1955 R0103
Size 3	for pipe mounting plate size 3 vertical	1	GHG 610 1955 R0104
Size 3A	for mounting plates wall/trellis fixing size 3 vertical	1	GHG 610 1955 R0105
Size 3B	for mounting plates pipe fixing size 3 horizontal	1	GHG 610 1955 R0106

Please pay attention that only order units (OU) according to the ordering details can be delivered.



6-pole EMERGENCY STOP



6-pole

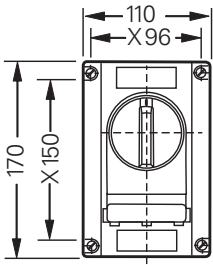


3-pole EMERGENCY STOP

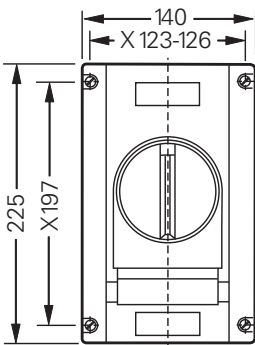
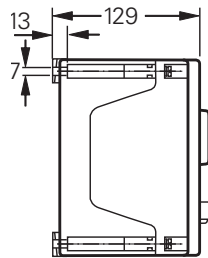


3-pole

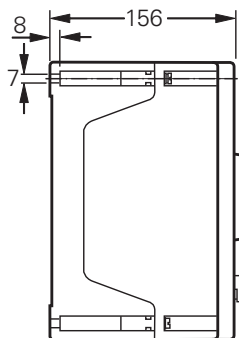
Dimension drawing



3/4-pole



6-pole



X = fixing dimensions

## GHG 263 - Ex-safety switches 40 A



3-pole



3-pole EMERGENCY STOP



6-pole



6-pole EMERGENCY STOP

### Technical data

#### Ex-safety switches 40 A

Marking accd. to 2014/34/EU		Ⓔ II 2 G Ex ed ia IIC T6 / Ⓔ II 2 D Ex tD A21 IP66 T80 °C
EC-Type Examination Certificate		PTB 99 ATEX 1161
IECEX Certificate of Conformity		BKI 07.0012
Marking accd. to IECEx		Ex ed ia IIC T6 Ex tD A21 IP66 T53 °C
Permissible ambient temperature		-20 °C up to +40 °C <sup>1)</sup>
Rated voltage		up to max. 690 V
Rated current		max. 40 A
Frequency		50/60 Hz
Rated making/breaking capacity AC-3 accd. EN 60947-3		U <sub>b</sub> 230 V / I <sub>b</sub> 40 A U <sub>b</sub> 400 V / I <sub>b</sub> 40 A U <sub>b</sub> 500 V / I <sub>b</sub> 40 A U <sub>b</sub> 690 V / I <sub>b</sub> 32 A
Rated making-/ breaking capacity DC 1/DC 23 accd. EN 60947-3		U <sub>b</sub> 60 V / I <sub>b</sub> 40 A (1 contact) U <sub>b</sub> 120 V / I <sub>b</sub> 40 A (2 contacts in series)
Switch-disconnector for maintenance accd. to IEC 62262-1		Class 1
Back-up fuse		up to 400 V AC: 80 A gG up to 500 V AC: 80 A gG up to 690 V AC: 63 A gG
Connecting terminals	main contact	2 x 16 mm <sup>2</sup>
	auxiliary/signal contact	2 x 4 mm <sup>2</sup> (option)
Protection class		I
Degree of protection accd. to EN 60529		IP66
Cable glands/enclosure drilling		M25 cable gland see ordering details M40 cable gland see ordering details Option: metal flange with thread
Weight	3-pole	approx. 2.30 kg
	4-pole	approx. 2.75 kg
	6-pole	approx. 6.50 kg
Enclosure material		glass-fibre reinforced polyester
Enclosure colour		black
Auxiliary contact (option)		1 x NO making - lagging; breaking - leading 1 x NC (only 6-pole version) making - leading; breaking - lagging
Padlocking facility		can be locked in OFF position with 3 commercially available padlocks (Ø max. 6 mm)

<sup>1)</sup> Other ambient temperatures on request



6-pole EMERGENCY STOP



6-pole



3-pole EMERGENCY STOP



3-pole

**Ordering details**

Content	Cable gland	Auxiliary contact	Order No.
<b>Safety switch 40 A 3-pole</b>			
3-pole	2 x M40 / 1 x M25	1 NO	GHG 263 2301 R0001
3-pole	2 x M40	none	GHG 263 2303 R0001
3-pole EMERGENCY STOP	2 x M40 / 1 x M25	1 NO	GHG 263 2301 R0002
3-pole EMERGENCY STOP	2 x M40	none	GHG 263 2303 R0002
<b>Safety switch 40 A 4-pole</b>			
4-pole	2 x M25	1 NO + 1 NC	GHG 263 2301 R0007
4-pole	2 x M25	none	GHG 263 2303 R0003
4-pole	2x M40 / 1 x M25	1 NO + 1 NC	GHG 263 2303 R0009
4-pole	2x M40	none	GHG 263 2303 R0004
<b>Safety switch 40 A 6-pole</b>			
6-pole	4 x M40 / 1 x M25	1 NO + 1 NC	GHG 263 0050 R0001
6-pole	4 x M25	1 NO + 1 NC	GHG 263 0050 R0006
6-pole EMERGENCY STOP	4 x M40 / 1 x M25	1 NO + 1 NC	GHG 263 0050 R0002

Customized version on request, auxiliary contacts in Ex ia available

**Accessories**

Type	Application	Fixing method	Order No.
<b>Mounting plate for Ex-safety switches 40 A 3-pole</b>			
Size 3	Wall mounting	snap on	GHG 610 1953 R0118
Size 3	Pipe clamp	snap on	GHG 610 1953 R0110
Size 3	Trellis-work mounting	snap on	GHG 610 1953 R0118

Type	Application	Fixing method	Order No.
<b>Mounting plate for Ex-safety switches 40 A 6-pole</b>			
Size 3	2 x pipe clamp	screw-on <sup>1)</sup>	GHG 610 1953 R0110

<sup>1)</sup> observe mounting distance

Type	Application	OU	Order No.
<b>Accessories for mounting plates</b>			
Label for label holder and mounting plates size 4 and size 5		10	GHG 610 1953 R0011
Blind plug for mounting plate size 4 and size 5 1 set = 1 pcs.		10	GHG 610 1953 R0134
Plug-in fastener for CEAG modules with 5.5 mm and 11 mm mounting feet 1 set = 4 pcs.		10	GHG 610 1953 R0041
Mounting set for pipes 1" (of 27 - 30 mm) for mounting plates with pipe fixing		10	GHG 610 1953 R0020

Type	Application	OU	Order No.
<b>Canopies</b>			
Size 4	for mounting plate size 4	1	GHG 610 1955 R0107

Please pay attention that only order units (OU) according to the ordering details can be delivered.

**GHG 263 - Ex-safety switches 40 A**



**3-pole**



**3-pole EMERGENCY STOP**



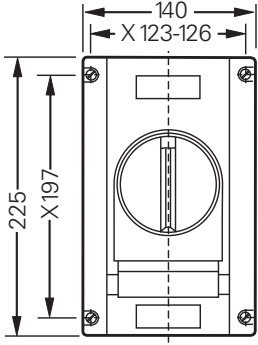
**6-pole**



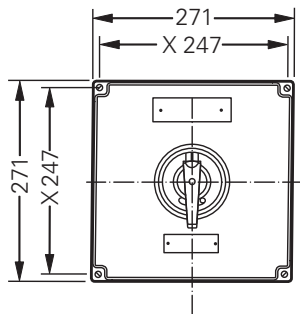
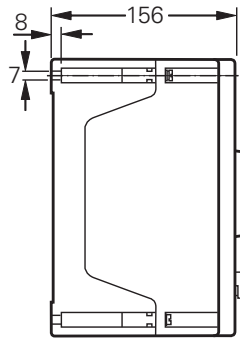
**6-pole EMERGENCY STOP**

**Dimension drawing**

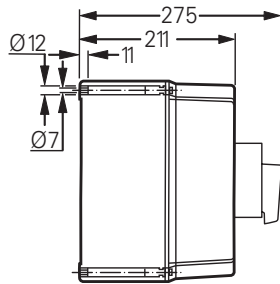
**5**



**3/4-pole**



**6-pole**



**X = fixing dimensions**

Dimensions in mm



6-pole EMERGENCY STOP



6-pole



3/4-pole EMERGENCY STOP



3/4-pole

Technical data

Ex-safety switches 80 A

Marking accd. to 2014/34/EU	⊕ II 2 G Ex ed ia IIC T6 / ⊕ II 2 D Ex tD A21 IP66 T80 °C	
EC-Type Examination Certificate	PTB 00 ATEX 1091	
IECEX Certificate of Conformity	BK1 07.0010	
Marking accd. to IECEx	Ex ed ia IIC T6 Ex tD A21 IP66 T53 °C	
Permissible ambient temperature	-20 °C up to +40 °C <sup>1)</sup>	
Rated voltage	up to max. 690 V	
Rated current	max. 80 A	
Frequency	50/60 Hz	
Rated making/breaking capacity AC-3 accd. EN 60947-3	U <sub>e</sub> 230 V / I <sub>e</sub> 80 A U <sub>e</sub> 400 V / I <sub>e</sub> 80 A U <sub>e</sub> 500 V / I <sub>e</sub> 80 A U <sub>e</sub> 690 V / I <sub>e</sub> 63 A	
Rated making-/ breaking capacity DC 1/DC 23 accd. EN 60947-3	U <sub>e</sub> 60 V / I <sub>e</sub> 80 A (1 contact) U <sub>e</sub> 120 V / I <sub>e</sub> 80 A (2 contacts in series)	
Switch-disconnector for maintenance accd. to IEC 62262-1	Class 1	
Back-up fuse	up to 400 V AC: 160 A gG up to 500 V AC: 160 A gG up to 690 V AC: 125 A gG	
Connecting terminals	main contact	2 x 25 mm <sup>2</sup>
	auxiliary/signal contact	2 x 4 mm <sup>2</sup> (option)
Protection class	I	
Degree of protection accd. to EN 60529	IP66	
Cable glands/enclosure drilling	M25 cable gland see ordering details M32 cable gland see ordering details M50 cable gland see ordering details Option: metal flange with thread	
Weight	3/4-pole	approx. 6.5 kg
	6-pole	approx. 9.0 kg
Enclosure material	glass-fibre reinforced polyester	
Enclosure colour	black	
Auxiliary contact (option)	1 x NO making - lagging; breaking - leading 1 x NC making - leading; breaking - lagging	
Padlocking facility	can be locked in OFF position with 3 commercially available padlocks (Ø max. 6 mm)	

<sup>1)</sup> Other ambient temperatures on request

## GHG 264 - Ex-safety switches 80 A



3/4-pole



3/4-pole EMERGENCY STOP



6-pole



6-pole EMERGENCY STOP

### Ordering details

Content	Cable gland	Auxiliary contact	Order No.
<b>Safety switch 80 A 3-pole</b>			
3-pole	2 x M50 / 1 x M25	1 NO + 1 NC	GHG 264 0020 R0001
3-pole	2 x M50	none	GHG 264 0025 R0001
3-pole EMERGENCY STOP	2 x M50 / 1 x M25	1 NO + 1 NC	GHG 264 0020 R0002
3-pole EMERGENCY STOP	2 x M50	none	GHG 264 0025 R0002
<b>Safety switch 80 A 4-pole</b>			
4-pole	2 x M50 / 1 x M25	1 NO + 1 NC	GHG 264 0020 R0012
4-pole	2 x M50	none	GHG 264 0025 R0004
4-pole	2 x M32	1 NO + 1 NC	GHG 264 0020 R0006
4-pole	2 x M32	none	GHG 264 0025 R0003
<b>Safety switch 80 A 6-pole</b>			
6-pole	4 x M50 / 1 x M25	1 NO + 1 NC	GHG 264 0021 R0001
6-pole EMERGENCY STOP	4 x M50 / 1 x M25	1 NO + 1 NC	GHG 264 0021 R0002

Customized version on request, auxiliary contacts in Ex ia available

### Accessories

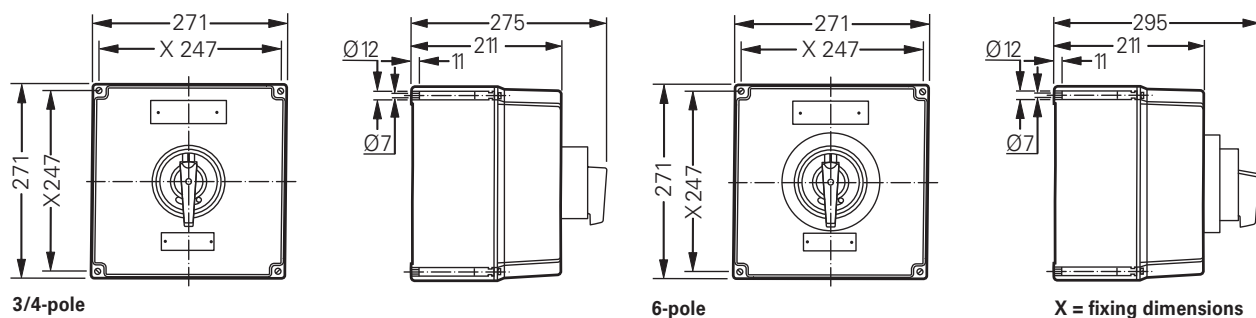
Type	Application	Fixing method	Order No.
<b>Mounting plate for Ex-safety switches 80 A 3/4- and 6-pole</b>			
Size 3	2 x pipe clamp	screw-on <sup>1)</sup>	GHG 610 1953 R0110

<sup>1)</sup> observe mounting distance

Type	OU	Order No.
<b>Accessories for mounting plates</b>		
Type label for label holder and mounting plates size 4 and size 5	10	GHG 610 1953 R0011
Mounting set for pipes 1" (of 27 - 30 mm) for mounting plates with pipe fixing	10	GHG 610 1953 R0020

Please pay attention that only order units (OU) according to the ordering details can be delivered.

### Dimension drawing



Dimensions in mm





6-pole EMERGENCY STOP



6-pole



3/4-pole EMERGENCY STOP



3/4-pole

Technical data

Ex-safety switches 125 A

Marking accd. to 2014/34/EU		⊕ II 2 G Ex de IIC T6 / ⊕ II 2 D Ex tD A21 IP66 T80 °C
EC-Type Examination Certificate	3/4-pole 6-pole	PTB 99 ATEX 1164 PTB 00 ATEX 1073
IECEX Certificate of Conformity		BKI 07.0005
Marking accd. to IECEx		Ex de IIC T6 Ex tD A21 IP66 T53 °C
Permissible ambient temperature		-20 °C up to +40 °C <sup>1)</sup>
Rated voltage		up to max. 690 V
Frequency		50/60 Hz
Rated making/breaking capacity AC-3 accd. EN 60947-3		U <sub>e</sub> 230 V / I <sub>b</sub> 125 A U <sub>e</sub> 400 V / I <sub>b</sub> 125 A U <sub>e</sub> 500 V / I <sub>b</sub> 125 A U <sub>e</sub> 690 V / I <sub>b</sub> 110 A
Switch-disconnector for maintenance accd. to IEC 62262-1		Class 1
Back-up fuse		up to 400 V AC: 200 A gG up to 500 V AC: 200 A gG up to 690 V AC: 160 A gG
Connecting terminals	main contact 3/4-pole 6-pole auxiliary/signal contact	1 x 50/70 mm <sup>2</sup> 6 x 95 mm <sup>2</sup> /2 x 95 mm <sup>2</sup> 2 x 4 mm <sup>2</sup> (option)
Protection class		I
Degree of protection accd. to EN 60529		IP66
Cable glands/enclosure drilling		M25 cable gland see ordering details M40 cable gland see ordering details M63 cable gland see ordering details Option: metal flange with 2 x thread
Weight	3/4-pole 6-pole	approx. 16 kg approx. 31 kg
Enclosure material	3/4-pole 6-pole	glass-fibre reinforced polyester sheet steel polyester powder coated
Enclosure colour	3/4-pole 6-pole	RAL 7032 black
Auxiliary contact (option)		1 x NO making - lagging; breaking - leading 1 x NC making - leading; breaking - lagging
Padlocking facility		can be locked in OFF position with 3 commercially available padlocks (Ø max. 6 mm)

<sup>1)</sup> Other ambient temperatures on request

## GHG 265 / EXKO 2 - Ex-safety switches 125 A



3/4-pole



3/4-pole EMERGENCY STOP



6-pole



6-pole EMERGENCY STOP

### Ordering details

Content	Cable gland	Auxiliary contact	Order No.
<b>Safety switch 125 A 3-pole</b>			
3-pole	2 x M63 / 1 x M25	1 NO + 1 NC	<b>GHG 265 0010 R0001</b>
3-pole	2 x M63	none	<b>GHG 265 0015 R0001</b>
3-pole EMERGENCY STOP	2 x M63 / 1 x M25	1 NO + 1 NC	<b>GHG 265 0010 R0002</b>
3-pole EMERGENCY STOP	2 x M63	none	<b>GHG 265 0015 R0002</b>
<b>Safety switch 125 A 4-pole</b>			
4-pole	2 x M40	1 NO + 1 NC	<b>GHG 265 0010 R0005</b>
4-pole	2 x M63	none	<b>GHG 265 0015 R0003</b>
<b>Safety switch 125 A 6-pole</b>			
6-pole	4 x M63 / 1 x M25	1 NO + 1 NC	<b>EXKO 224716 K 0000</b>
6-pole EMERGENCY STOP	4 x M63 / 1 x M25	1 NO + 1 NC	<b>EXKO 224726 K 0000</b>

Customized version on request, auxiliary contacts in Ex ia available

### Accessories

Type	Application	Fixing method	Order No.
<b>Mounting plate for Ex-safety switches 125 A 3/4-pole<sup>2)</sup></b>			
Size 3	2 x pipe clamp	screw-on <sup>1)</sup>	<b>GHG 610 1953 R0110</b>

<sup>1)</sup> observe mounting distance

<sup>2)</sup> 2 pcs. necessary for mounting

Type	OU	Order No.
<b>Accessories for mounting plates</b>		
Label holder with type label (blank) for mounting plate size 1, 2, 2A and 3	10	<b>GHG 610 1953 R0057</b>
Mounting set for pipes 1" (of 27 - 30 mm) for mounting plates with pipe fixing	10	<b>GHG 610 1953 R0020</b>

Please pay attention that only order units (OU) according to the ordering details can be delivered.



6-pole EMERGENCY STOP



6-pole

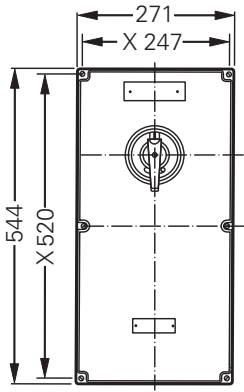


3/4-pole EMERGENCY STOP

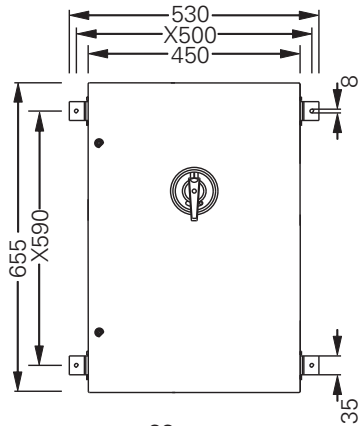
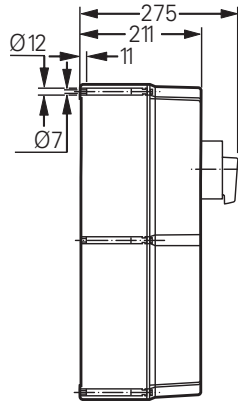


3/4-pole

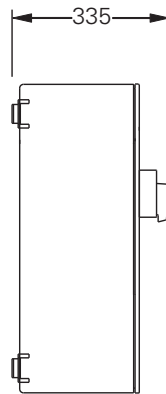
Dimension drawing



3/4-pole



6-pole



X = fixing dimensions

## GHG 266 / EXKO 2 - Ex-safety switches 180 A



3/4-pole



3/4-pole EMERGENCY STOP



6-pole



6-pole EMERGENCY STOP

### Technical data

#### Ex-safety switches 180 A

Marking accd. to 2014/34/EU		Ⓢ II 2 G Ex de IIC T6 Ⓢ II 2 D Ex tD A21 IP66 T80 °C
EC-Type Examination Certificate	3/4-pole 6-pole	PTB 99 ATEX 1164 PTB 00 ATEX 1073
IECEx Certificate of Conformity		BKI 07.0005
Marking accd. to IECEx		Ex de IIC T6 -55 °C up to +45 °C Ex tD A21 IP66 T53 °C
Permissible ambient temperature		-20 °C up to +40 °C <sup>1)</sup>
Rated voltage		up to max. 690 V
Frequency		50/60 Hz
Rated making/breaking capacity AC-3 accd. EN 60947-3		U <sub>e</sub> 230 V / I <sub>e</sub> 180 A U <sub>e</sub> 400 V / I <sub>e</sub> 180 A U <sub>e</sub> 500 V / I <sub>e</sub> 150 A U <sub>e</sub> 690 V / I <sub>e</sub> 125 A
Switch-disconnector for maintenance accd. to IEC 62262-1		Class 1
Back-up fuse		up to 400 V AC: 250 A gG up to 500 V AC: 250 A gG up to 690 V AC: 200 A gG
Connecting terminals	main contact 3-pole 6-pole auxiliary/signal contact	1 x 120 mm <sup>2</sup> 6 x 150 mm <sup>2</sup> /2 x 95 mm <sup>2</sup> 2 x 4 mm <sup>2</sup> (option)
Protection class		I
Degree of protection accd. to EN 60529		IP66
Cable glands/enclosure drilling		M25 cable gland see ordering details M40 cable gland see ordering details M63 cable gland see ordering details Option: metal flange with 2 x thread
Weight	3/4-pole 6-pole	approx. 16.5 kg approx. 31.5 kg
Enclosure material	3/4-pole 6-pole	glass-fibre reinforced polyester sheet steel polyester powder coated
Enclosure colour	3/4-pole 6-pole	black RAL 7032
Auxiliary contact (option)		1 x NO making - lagging; breaking - leading 1 x NC making - leading; breaking - lagging
Padlocking facility		can be locked in OFF position with 3 commercially available padlocks (Ø max. 6 mm)

<sup>1)</sup> Other ambient temperatures on request



6-pole EMERGENCY STOP



6-pole



3/4-pole EMERGENCY STOP



3/4-pole

Ordering details

Content	Cable gland	Auxiliary contact	Order No.
<b>Safety switch 180 A 3-pole</b>			
3-pole	2 x M63 / 1 x M25	1 NC / 1 NO	GHG 266 0006 R0001
3-pole	2 x M63	none	GHG 266 0011 R0001
3-pole EMERGENCY STOP	2 x M63 / 1 x M25	1 NC / 1 NO	GHG 266 0006 R0002
3-pole EMERGENCY STOP	2 x M63	none	GHG 266 0011 R0002
<b>Safety switch 180 A 4-pole</b>			
4-pole	2 x M50	1 NC / 1 NO	GHG 266 0006 R0005
4-pole	4 x M63	none	GHG 266 0011 R0004
4-pole	2 x M50	none	GHG 266 0011 R0003
<b>Safety switch 180 A 6-pole</b>			
6-pole	4 x M63 / 1 x M25	1 NC / 1 NO	EXKO 224716 L 0000
6-pole EMERGENCY STOP	4 x M63 / 1 x M25	1 NC / 1 NO	EXKO 224726 L 0000

Customized version on request, auxiliary contacts in Ex ia available

Accessories

Type	Application	Fixing method	Order No.
<b>Mounting plate for Ex-safety switches 180 A 3/4-pole<sup>2)</sup></b>			
Size 3	2 x pipe clamp	screw-on <sup>1)</sup>	GHG 610 1953 R0110

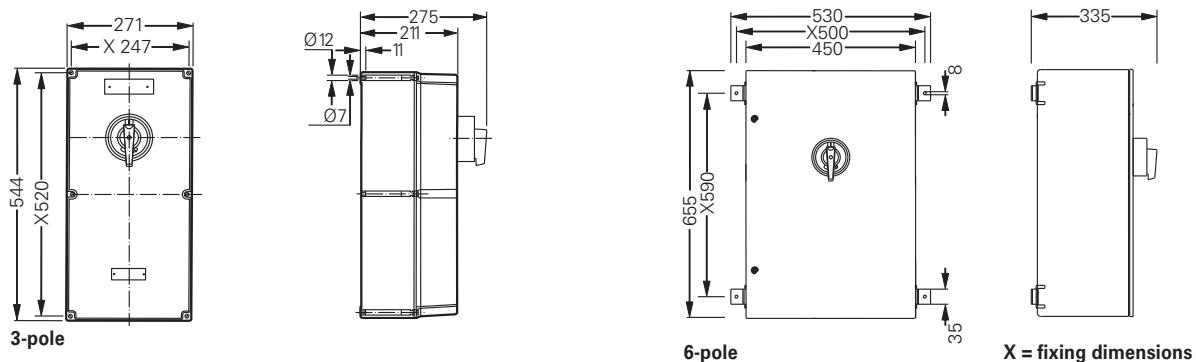
<sup>1)</sup> observe mounting distance

<sup>2)</sup> 2 pcs. necessary for mounting

Type	OU	Order No.
<b>Accessories for mounting plates</b>		
Label holder with label (unlabelled) for mounting plate size 1, 2, 2A and 3	10	GHG 610 1953 R0057
Mounting set for pipes 1" (of 27 - 30 mm) for mounting plates with pipe fixing	10	GHG 610 1953 R0020

Please pay attention that only order units (OU) according to the ordering details can be delivered.

Dimension drawing



Dimensions in mm

## EXKO 7317 - Ex-safety switches 210 A



3-pole



3-pole EMERGENCY STOP



6-pole



6-pole EMERGENCY STOP

### Technical data

#### Ex-safety switches 210 A

Marking accd. to 2014/34/EU	☉ II 2 G Ex de IIC T6, T5 bzw. T4 <sup>1)</sup> / ☉ II 2 D IP66 T80 °C/T95 °C	
EC-Type Examination Certificate	PTB 99 ATEX 1057	
IECEX Certificate of Conformity	IECEX PTB 12.0026	
Marking accd. to IECEx	Ex d IIC T6, T5 or T4 Gb / Ex de IIC T6, T5 or T4 Gb Ex d IIB T6, T5 or T4 Gb / Ex de IIB T6, T5 or T4 Gb	
Permissible ambient temperature	-20 °C up to +40 °C	
Rated voltage	up to max. 690 V	
Rated current	max. 210 A	
Frequency	50/60 Hz	
Rated making/breaking capacity AC-3 accd. EN 60947-3	Ue 230 V / Ie 210 A Ue 400 V / Ie 210 A Ue 500 V / Ie 210 A Ue 690 V / Ie 210 A	
Back-up fuse	up to 400 V AC: 250 A gG up to 500 V AC: 250 A gG up to 690 V AC: 200 A gG	
Connecting terminals	main contact 3-pole 6-pole auxiliary/signal contact	3 x 150 mm <sup>2</sup> /95 mm <sup>2</sup> 6 x 150 mm <sup>2</sup> /2 x 95 mm <sup>2</sup> 2 x 4 mm <sup>2</sup>
Protection class	I	
Degree of protection accd. to EN 60529	IP54 (IP65 optional)	
Cable glands/enclosure drilling	M25 cable gland see ordering details M63 cable gland see ordering details	
Weight	3-pole 6-pole	approx. 41.5 kg approx. 84.5 kg
Enclosure material	aluminium, powder-coated polyester connection box steel, powder-coated	
Colour	Enclosure Cover	grey (RAL 7032) dark grey (RAL 7022)
Auxiliary contact	1 x NO making - lagging; breaking - leading 1 x NC making - leading; breaking - lagging	
Padlocking facility	can be locked in OFF position with 3 commercially available padlocks (Ø max. 6 mm)	

<sup>1)</sup> Also available with Explosion Group IIB



**6-pole EMERGENCY STOP**



**6-pole**



**3-pole EMERGENCY STOP**



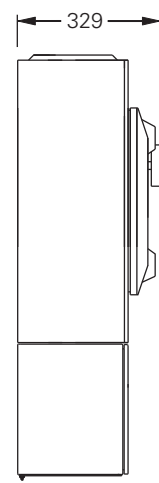
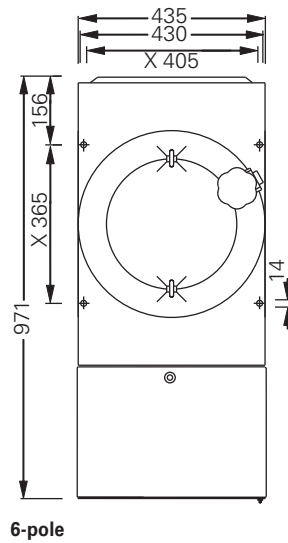
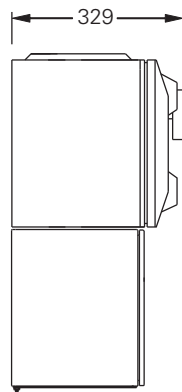
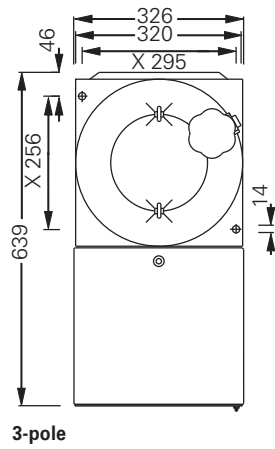
**3-pole**

**Ordering details**

Content	Cable gland	Order No.
<b>Safety switch 210 A 3-pole</b>		
<b>Version with 2 auxiliary contacts (1 NO; 1 x NC)</b>		
3-pole	2 x M63 / 1 x M25	<b>EXKO 731713 S0001</b>
3-pole EMERGENCY STOP	2 x M63 / 1 x M25	<b>EXKO 731723 S0001</b>
<b>Safety switch 210 A 6-pole</b>		
<b>Version with 2 auxiliary contacts (1 NO; 1 x NC)</b>		
6-pole	4 x M63 / 1 x M25	<b>EXKO 731716 S0001</b>
6-pole EMERGENCY STOP	4 x M63 / 1 x M25	<b>EXKO 731726 S0001</b>

Customized version on request, auxiliary contacts in Ex ia available

**Dimension drawing**



X = fixing dimensions

## EXKO 7317 - Ex-safety switches 250 A



3-pole



3-pole EMERGENCY STOP



6-pole



6-pole EMERGENCY STOP

### Technical data

#### Ex-safety switches 250 A

Marking accd. to 2014/34/EU	⊕ II 2 G Ex de IIC T6, T5 bzw. T4 <sup>1)</sup> / ⊕ II 2 D IP66 T80 °C/T95 °C	
EC-Type Examination Certificate	PTB 99 ATEX 1057	
IECEX Certificate of Conformity	IECEX PTB 12.0026	
Marking accd. to IECEx	Ex d IIC T6, T5 or T4 Gb / Ex de IIC T6, T5 or T4 Gb Ex d IIB T6, T5 or T4 Gb / Ex de IIB T6, T5 or T4 Gb	
Permissible ambient temperature	-20 °C up to +40 °C <sup>2)</sup>	
Rated voltage	up to max. 690 V	
Rated current	max. 250 A	
Frequency	50/60 Hz	
Rated making/breaking capacity AC-3 accd. EN 60947-3	U <sub>b</sub> 230 V / I <sub>b</sub> 250 A U <sub>b</sub> 400 V / I <sub>b</sub> 250 A U <sub>b</sub> 500 V / I <sub>b</sub> 250 A U <sub>b</sub> 690 V / I <sub>b</sub> 250 A	
Back-up fuse	up to 400 V AC: 250 A gG up to 500 V AC: 250 A gG up to 690 V AC: 200 A gG	
Connecting terminals	main contact 3-pole 6-pole auxiliary/signal contact	3 x 150 mm <sup>2</sup> /95 mm <sup>2</sup> 6 x 150 mm <sup>2</sup> /2 x 95 mm <sup>2</sup> 2 x 4 mm <sup>2</sup>
Protection class	I	
Degree of protection accd. to EN 60529	IP54 (IP65 optional)	
Cable glands/enclosure drilling	M25 cable gland see ordering details M63 cable gland see ordering details	
Weight	3-pole 6-pole	approx. 41.5 kg approx. 84.5 kg
Enclosure material	aluminium, powder-coated polyester connection box steel, powder-coated	
Colour	Enclosure Cover	grey (RAL 7032) dark grey (RAL 7022)
Auxiliary contact	1 x NO making - lagging; breaking - leading 1 x NC making - leading; breaking - lagging	
Padlocking facility	can be locked in OFF position with 3 commercially available padlocks (Ø max. 6 mm)	

<sup>1)</sup> Also available with Explosion Group IIB

<sup>2)</sup> Other ambient temperatures on request





**6-pole EMERGENCY STOP**



**6-pole**



**3-pole EMERGENCY STOP**



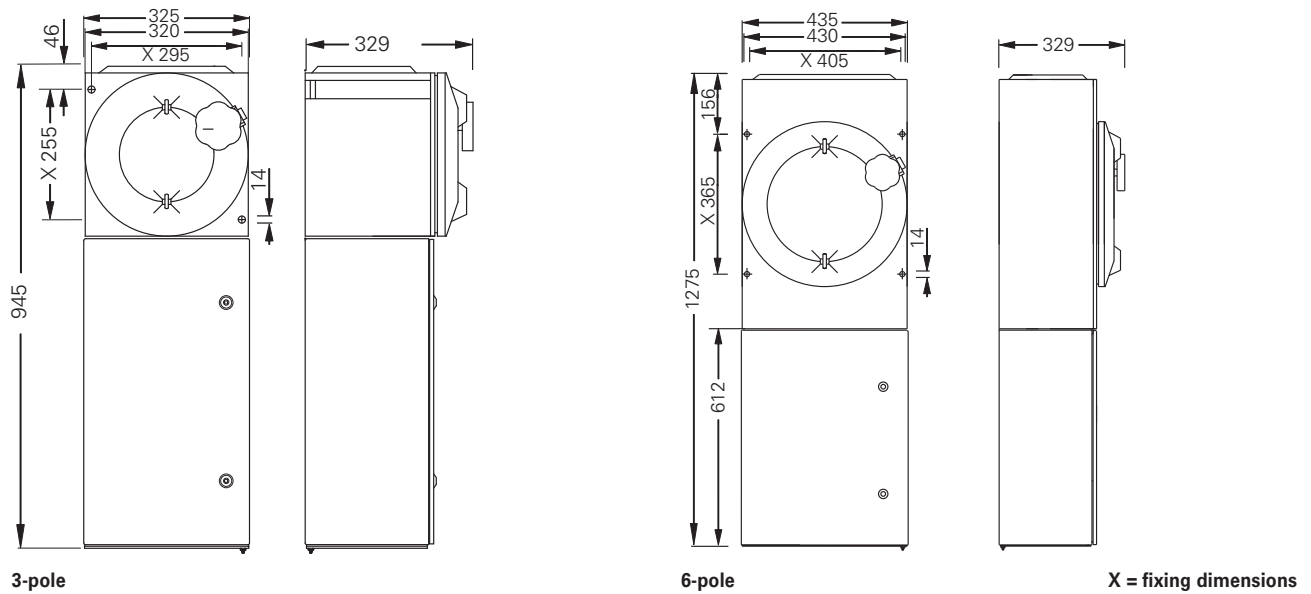
**3-pole**

**Ordering details**

Content	Cable gland	Order No.
<b>Safety switch 250 A 3-pole</b>		
<b>Version with 2 auxiliary contacts (1 NO; 1 x NC)</b>		
3-pole	2 x M63 / 1 x M25	<b>EXKO 731713 T0001</b>
3-pole EMERGENCY STOP	2 x M63 / 1 x M25	<b>EXKO 731723 T0001</b>
<b>Safety switch 250 A 6-pole</b>		
<b>Version with 2 auxiliary contacts (1 NO; 1 x NC)</b>		
6-pole	4 x M63 / 1 x M25	<b>EXKO 731716 T0001</b>
6-pole EMERGENCY STOP	4 x M63 / 1 x M25	<b>EXKO 731726 T0001</b>

Customized version on request, auxiliary contacts in Ex ia available

**Dimension drawing**



**3-pole**

**6-pole**

**X = fixing dimensions**

## EXKO 7317 - Ex-safety switches 400 A



3-pole



3-pole EMERGENCY STOP

### Technical data

#### Ex-safety switches 400 A

Marking accd. to 2014/34/EU	⊕ II 2 G Ex de IIC T6, T5 bzw. T4 <sup>1)</sup> / ⊕ II 2 D IP66 T80 °C/T95 °C	
EC-Type Examination Certificate	PTB 99 ATEX 1057	
IECEX Certificate of Conformity	IECEX PTB 12.0026	
Marking accd. to IECEx	Ex d IIC T6, T5 or T4 Gb / Ex de IIC T6, T5 or T4 Gb Ex d IIB T6, T5 or T4 Gb / Ex de IIB T6, T5 or T4 Gb	
Permissible ambient temperature	-20 °C up to +40 °C <sup>2)</sup>	
Rated voltage	up to max. 690 V	
Rated current	max. 400 A	
Frequency	50/60 Hz	
Rated making/breaking capacity AC-3 accd. EN 60947-3	U <sub>e</sub> 230 V / I <sub>e</sub> 400 A U <sub>e</sub> 400 V / I <sub>e</sub> 400 A U <sub>e</sub> 500 V / I <sub>e</sub> 400 A U <sub>e</sub> 690 V / I <sub>e</sub> 400 A	
Back-up fuse	up to 400 V AC: 500 A gG up to 500 V AC: 500 A gG up to 690 V AC: 500 A gG	
Connecting terminals	main contact	6 x 150 mm <sup>2</sup> /2 x 95 mm <sup>2</sup>
	auxiliary/signal contact	2 x 4 mm <sup>2</sup>
Protection class	I	
Degree of protection accd. to EN 60529	IP54 (IP65 optional)	
Cable glands/enclosure drilling	M25 cable gland see ordering details M63 cable gland see ordering details	
Weight	approx. 64.5 kg	
Enclosure material	aluminium, powder-coated polyester connection box steel, powder-coated	
Colour	Enclosure	grey (RAL 7032)
	Cover	dark grey (RAL 7022)
Auxiliary contact	1 x NO making - lagging; breaking - leading 1 x NC making - leading; breaking - lagging	
Padlocking facility	can be locked in OFF position with 3 commercially available padlocks (Ø max. 6 mm)	

<sup>1)</sup> Also available with Explosion Group IIB

<sup>2)</sup> Other ambient temperatures on request



**3-pole EMERGENCY STOP**



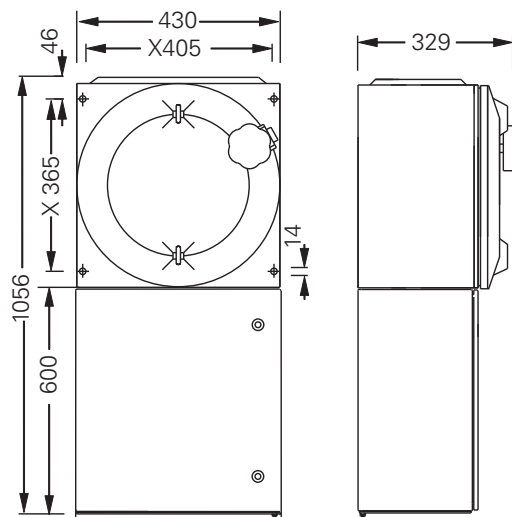
**3-pole**

**Ordering details**

Content	Cable gland	Order No.
<b>Safety switch 400 A 3-pole Version with 2 auxiliary contacts (1 NO; 1 x NC)</b>		
3-pole	4 x M63 / 1 x M25	<b>EXKO 731713 U0001</b>
3-pole EMERGENCY STOP	4 x M63 / 1 x M25	<b>EXKO 731723 U0001</b>

Customized version on request, auxiliary contacts in Ex ia available

**Dimension drawing**



**3-pole**

**X = fixing dimensions**

## EXKO 7317 - Ex-safety switches 630 A



3-pole

### Technical data

#### Ex-safety switches 630 A

Marking accd. to 2014/34/EU	☉ II 2 G Ex de IIC T6, T5 bzw. T4 <sup>1)</sup> / ☉ II 2 D IP66 T80 °C/T95 °C	
EC-Type Examination Certificate	PTB 99 ATEX 1057	
IECEX Certificate of Conformity	IECEX PTB 12.0026	
Marking accd. to IECEx	Ex d IIC T6, T5 or T4 Gb / Ex de IIC T6, T5 or T4 Gb Ex d IIB T6, T5 or T4 Gb / Ex de IIB T6, T5 or T4 Gb	
Permissible ambient temperature	-20 °C up to +40 °C <sup>2)</sup>	
Rated voltage	up to max. 690 V	
Rated current	max. 630 A	
Frequency	50/60 Hz	
Rated making/breaking capacity AC-3 accd. EN 60947-3	U <sub>e</sub> 230 V / I <sub>e</sub> 630 A U <sub>e</sub> 400 V / I <sub>e</sub> 630 A U <sub>e</sub> 500 V / I <sub>e</sub> 630 A U <sub>e</sub> 690 V / I <sub>e</sub> 630 A	
Back-up fuse	up to 400 V AC: 800 A gG up to 500 V AC: 800 A gG up to 690 V AC: 800 A gG	
Connecting terminals	main contact	6 x 240 mm <sup>2</sup> /2 x 120 mm <sup>2</sup>
	auxiliary/signal contact	2 x 4 mm <sup>2</sup>
Protection class	I	
Degree of protection accd. to EN 60529	IP54 (IP65 optional)	
Cable glands/enclosure drilling	M25 cable gland see ordering details M80 Ø 62 - 68 mm see ordering details	
Weight	approx. 245 kg	
Enclosure material	steel, powder-coated polyester connection box steel, powder-coated	
Colour	Enclosure	grey (RAL 7032)
	Cover	dark grey (RAL 7022)
Auxiliary contact	1 x NO making - lagging; breaking - leading 1 x NC making - leading; breaking - lagging	
Padlocking facility	can be locked in OFF position with 3 commercially available padlocks (Ø max. 6 mm)	

<sup>1)</sup> Also available with Explosion Group IIB

<sup>2)</sup> Other ambient temperatures on request



**3-pole**

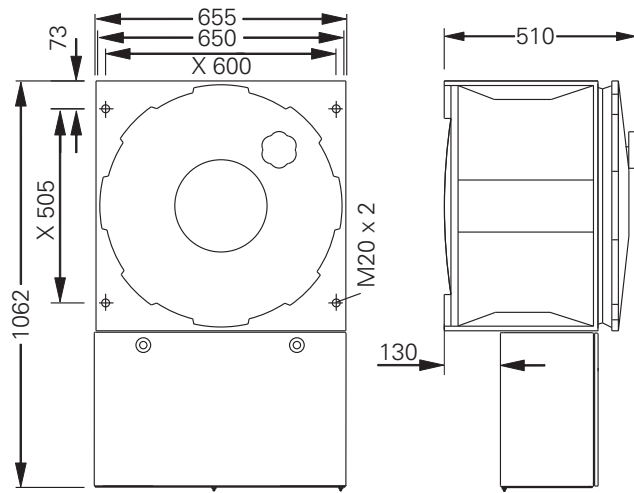
**Ordering details**

Content	Cable gland	Order No.
<b>Safety switch 630 A 3-pole</b>		
<b>Version with 2 auxiliary contacts (1 NO; 1 x NC)</b>		
3-pole	4 x M80 / 1 x M25	<b>EXKO 731713 V0001</b>
3-pole EMERGENCY STOP	4 x M80 / 1 x M25	<b>EXKO 731723 V0001</b>

**5**

Customized version on request, auxiliary contacts in Ex ia available

**Dimension drawing**



**3-pole**

**X = fixing dimensions**

## GHG 262 - Ex-safety switches for three-phase drives 20 A



3-pole, 20 A

### Technical data

#### Ex-safety switches 20 A for controlled three-phase drives

Marking accd. to 2014/34/EU	Ⓔ II 2 G Ex ed ia IIC T6 / Ⓔ II 2 D Ex tD A21 IP66 T80 °C	
EC-Type Examination Certificate	PTB 99 ATEX 1161	
IECEX Certificate of Conformity	BKI 07.0012	
Marking accd. to IECEx	Ex ed ia IIC T6 Ex tD A21 IP66 T55 °C	
Permissible ambient temperature	-20 °C up to +40 °C <sup>1)</sup>	
Rated voltage	up to max. 690 V	
Rated current	max. 20 A	
Frequency	50/60 Hz	
Rated making/breaking capacity AC-3 accd. EN 60947-3	U <sub>e</sub> 230 V / I <sub>e</sub> 20 A U <sub>e</sub> 400 V / I <sub>e</sub> 20 A U <sub>e</sub> 500 V / I <sub>e</sub> 16 A U <sub>e</sub> 690 V / I <sub>e</sub> 10 A	
Back-up fuse	up to 400 V AC: 35 A gG up to 500 V AC: 35 A gG up to 690 V AC: 25 A gG	
Connecting terminals	main contact	2 x 4 mm <sup>2</sup>
	auxiliary/signal contact	2 x 4 mm <sup>2</sup>
Protection class	I	
Degree of protection accd. to EN 60529	IP66	
Cable glands/enclosure drilling	M25 cable gland see ordering details M32 cable gland see ordering details Option: metal flange with 2 x thread	
Weight	approx. 1.48 kg	
Enclosure material	glass-fibre reinforced polyester	
Enclosure colour	black	
Aux. contact	1 x NO making - lagging; breaking - leading 1 x NC making - leading; breaking - lagging	
Safety interlock for electronics	1 x NO making - lagging; breaking - leading	
Padlocking facility	can be locked in OFF position with 3 commercially available padlocks (Ø max. 6 mm)	

<sup>1)</sup> Other ambient temperatures on request



3-pole, 20 A

**Ordering details**

Content	Cable gland	Order No.
<b>Safety switch 20 A</b> <b>Version with 2 auxiliary contacts (1 NO; 1 x NC), 1 x Safety interlock for electronics (1 x NO)</b>		
3-pole	2 x M32 / 2 x M25	<b>GHG 262 0014 R0001</b>

Customized version on request, auxiliary contacts in Ex ia available

**Accessories**

Type	Application	Fixing method	Order No.
<b>Mounting plate for Ex-safety switches 20 A controlled three-phase drives</b>			
Size 3	Wall mounting	screwless mounting	<b>GHG 610 1953 R0118</b>
Size 3	Pipe clamp	screwless mounting	<b>GHG 610 1953 R0110</b>
Size 3	Trellis-work mounting	screwless mounting	<b>GHG 610 1953 R0118</b>

Type	OU	Order No.
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**Accessories for mounting plates**

Label holder with label (unlabelled) for mounting plate size 1, 2, 2A and 3	10	<b>GHG 610 1953 R0057</b>
Mounting set for pipes 1" (of 27 - 30 mm) for mounting plates with pipe fixing	10	<b>GHG 610 1953 R0020</b>

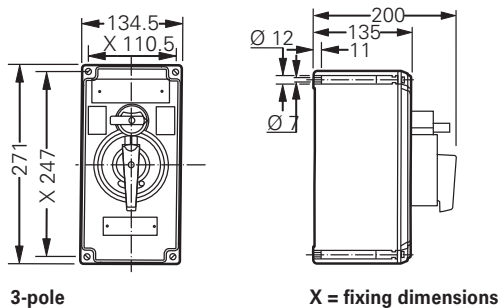
Type	Application	OU	Order No.
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**Accessories for canopies plates**

Size 3	for pipe mounting plate size 3 vertical	1	<b>GHG 610 1955 R0104</b>
Size 3A	for mounting plates wall/trellis fixing size 3 vertical	1	<b>GHG 610 1955 R0105</b>
Size 3	for mounting plates pipe fixing size 3 horizontal	1	<b>GHG 610 1955 R0106</b>

Please pay attention that only order units (OU) according to the ordering details can be delivered.

**Dimension drawing**



## GHG 263 - Ex-safety switches for three-phase drives 40 A



3-pole, 40 A

### Technical data

#### Ex-safety switches 40 A for controlled three-phase drives

Marking accd. to 2014/34/EU	Ⓔ II 2 G Ex ed ia IIC T6 / Ⓔ II 2 D Ex tD A21 IP66 T80 °C
EC-Type Examination Certificate	PTB 99 ATEX 1161
IECEX Certificate of Conformity	BKI 07.0012
Marking accd. to IECEx	Ex ed ia IIC T6 Ex tD A21 IP66 T53 °C
Permissible ambient temperature	-20 °C up to +40 °C <sup>1)</sup>
Rated voltage	up to max. 690 V
Rated current	max. 40 A
Frequency	50/60 Hz
Rated making/breaking capacity AC-3 accd. EN 60947-3	U <sub>e</sub> 230 V / I <sub>e</sub> 40 A U <sub>e</sub> 400 V / I <sub>e</sub> 40 A U <sub>e</sub> 500 V / I <sub>e</sub> 40 A U <sub>e</sub> 690 V / I <sub>e</sub> 32 A
Back-up fuse	up to 400 V AC: 80 A gG up to 500 V AC: 80 A gG up to 690 V AC: 63 A gG
Connecting terminals	main contact 2 x 16 mm <sup>2</sup> auxiliary/signal contact 2 x 4 mm <sup>2</sup>
Protection class	I
Degree of protection accd. to EN 60529	IP66
Cable glands/enclosure drilling	M25 cable gland see ordering details M40 cable gland see ordering details M50 cable gland see ordering details Option: metal flange with 2 x thread
Weight	approx. 4.3 kg
Enclosure material	glass-fibre reinforced polyester
Enclosure colour	black
Aux. contact	1 x NO making - lagging; breaking - leading 1 x NC making - leading; breaking - lagging
Safety interlock for electronics	1 x NO making - lagging; breaking - leading
Padlocking facility	can be locked in OFF position with 3 commercially available padlocks (Ø max. 6 mm)

<sup>1)</sup> Other ambient temperatures on request





3-pole, 40 A

**Ordering details**

Content	Cable gland	Order No.
<b>Safety switch 40 A 3-pole</b> <b>Version with 2 auxiliary contacts (1 NO; 1 x NC), 1 x Safety interlock for electronics (1 x NO)</b>		
3-pole	2 x M40 / 2 x M25	<b>GHG 263 0053 R0001</b>

Customized version on request, auxiliary contacts in Ex ia available

**Accessories**

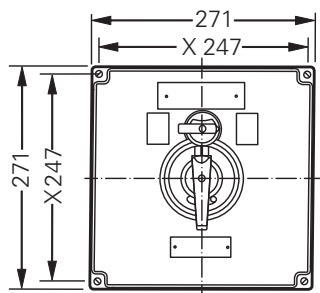
Type	Application	Fixing method	Order No.
<b>Mounting plate for Ex-safety switches 125 A/180 A 3-pole</b>			
Size 3	2 x pipe clamp	screw-on <sup>1)</sup>	<b>GHG 610 1953 R0110</b>

<sup>1)</sup> observe mounting distance

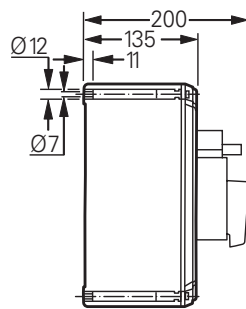
Type	OU	Order No.
<b>Accessories for mounting plates</b>		
Label holder with label (unlabelled) for mounting plate size 1, 2, 2A and 3	10	<b>GHG 610 1953 R0057</b>
Mounting set for pipes 1" (of 27 - 30 mm) for mounting plates with pipe fixing	10	<b>GHG 610 1953 R0020</b>

Please pay attention that only order units (OU) according to the ordering details can be delivered.

**Dimension drawing**



Ex-safety switches 40 A



X = fixing dimensions

## GHG 264 - Ex-safety switches for three-phase drives 80 A



3-pole, 80 A

### Technical data

5

#### Ex-safety switches 80 A for controlled three-phase drives

Marking accd. to 2014/34/EU	Ⓔ II 2 G Ex de IIC T6 / Ⓔ II 2 D Ex tD A21 IP66 T80 °C	
EC-Type Examination Certificate	PTB 00 ATEX 1091	
IECEx Certificate of Conformity	BKI 07.0010	
Marking accd. to IECEx	Ex ed ia II T6 Ex tD A21 IP66 T53 °C	
Permissible ambient temperature	-20 °C up to +40 °C <sup>1)</sup>	
Rated voltage	up to max. 690 V	
Rated current	max. 80 A	
Frequency	50/60 Hz	
Rated making/breaking capacity AC-3 accd. EN 60947-3	U <sub>e</sub> 230 V / I <sub>e</sub> 80 A U <sub>e</sub> 400 V / I <sub>e</sub> 80 A U <sub>e</sub> 500 V / I <sub>e</sub> 80 A U <sub>e</sub> 690 V / I <sub>e</sub> 63 A	
Back-up fuse	up to 400 V AC: 160 A gG up to 500 V AC: 160 A gG up to 690 V AC: 160 A gG	
Connecting terminals	main contact	2 x 25 mm <sup>2</sup>
	auxiliary-/Signal contact	2 x 4 mm <sup>2</sup>
Protection class	I	
Degree of protection accd. to EN 60529	IP66	
Cable glands/enclosure drilling	M25 cable gland see ordering details M40 cable gland see ordering details M50 cable gland see ordering details Option: metal flange with 2 x thread	
Weight	approx. 7.25 kg	
Enclosure material	glass-fibre reinforced polyester	
Enclosure colour	black	
Aux. contact	1 x NO making - lagging; breaking - leading 1 x NC making - leading; breaking - lagging	
Safety interlock for electronics	1 x NO making - lagging; breaking - leading	
Padlocking facility	can be locked in OFF position with 3 commercially available padlocks (Ø max. 6 mm)	

<sup>1)</sup> Other ambient temperatures on request



3-pole, 80 A

**Ordering details**

Content	Cable gland	Order No.
<b>Safety switch 80 A 3-pole</b> <b>Version with 2 auxiliary contacts (1 NO; 1 x NC), 1 x Safety interlock for electronics (1 x NO)</b>		
3-pole	2 x M50 / 2 x M25	<b>GHG 264 0024 R0001</b>

Customized version on request, auxiliary contacts in Ex ia available

**Accessories**

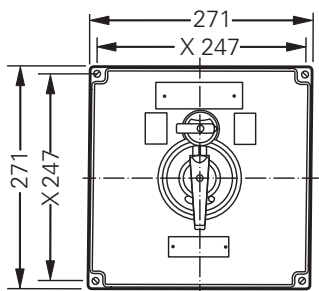
Type	Application	Fixing method	Order No.
<b>Mounting plate for Ex-safety switches 80 A controlled three-phase drives</b>			
Size 3	2 x pipe clamp	screw-on <sup>1)</sup>	<b>GHG 610 1953 R0110</b>

<sup>1)</sup> observe mounting distance

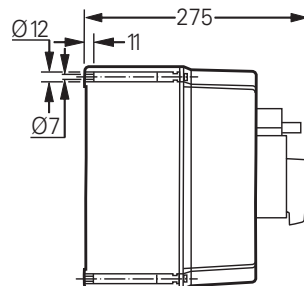
Type	OU	Order No.
<b>Accessories for mounting plates</b>		
Label holder with label (unlabelled) for mounting plate size 1, 2, 2A and 3	10	<b>GHG 610 1953 R0057</b>
Mounting set for pipes 1" (of 27 - 30 mm) for mounting plates with pipe fixing	10	<b>GHG 610 1953 R0020</b>

Please pay attention that only order units (OU) according to the ordering details can be delivered.

**Dimension drawing**



Ex-safety switches 80 A



X = fixing dimensions

# 5.2

## GHG 9810048 Ex-Safety Switches for Zone 22

Rated current from 25 A - 700 A

### The right size for every application

The switches are available in 3-pole, 4-pole, and 6-pole versions in sizes ranging from 25 A to 400A. The 630 A and 700 A sizes are available in 3-pole or 4-pole versions.

On the 25 A through 80 A sizes, they feature full AC-3 switching capacity for squirrel-cage motors during starting or while running per EN 60947-3 Appendix A. This is the most typical industrial application for motors. Sizes 100 A and above feature full AC-23 switching capacity for motor loads or other highly inductive loads per EN60947-3 Appendix A.

### Emergency stop versions according to EN 60204-1

Optional emergency stop versions to EN 60204-1 featuring a red handle with a yellow backplate are also available. The additional leading or lagging auxiliary contact guarantees double safety for extreme switching conditions. All switch versions feature an earth terminal.

Special features of the safety switches include designs for ease of installation and readily accessible connection terminals.

Safety switches rated 160 A and below are available in all 3 material types while those 250 A and above are built into enclosures made of powder-coated sheet steel or electro-polished stainless steel. These enclosures can be fitted with screw-on flanges.

### Enclosed Switch-Disconnectors to provide isolation during repair and maintenance.

GHG 26 switches (10-160 A) and GHG 981 switches (25- 80 A) are now confirmed to comply with the new standard IEC 62626-1, requirements Class 1.

The new standard IEC 62626-1 defines the requirements for safety switches (switch-disconnectors) that are used to provide isolation of equipment during repair and maintenance. These requirements go above and beyond those of IEC 60947-3, where no standard previously existed.

The standard divides products into two classifications: Class 0 for general use and Class 1 for harsh and rough/heavy duty conditions.

All products installed in ATEX/IECEx hazardous areas should be rated for Class 1. Class 1 requirements include minimum ratings for mechanical strength, IP protection, tamper resistance, heat/vibration/corrosion resistance, switching capacity, and locking capability.



### Features

- Approved for use in Zone 22 explosive dust atmospheres and for industrial applications
- For max. currents from 25A up to 700A
- AC-3 switching capacity (25A to 80A)
- AC-23 switching capacity (100A and up)
- Environmental protection to IP66
- Reliable corrosion protection
- Wide temperature range from -55°C to +55°C
- Can be locked in "OFF" position by max. 3 padlocks



### Safety first

Occupational safety always has top priority in any industrial facility. Whenever maintenance, cleaning, or repair work is necessary, it must be possible to safely and reliably isolate machines and installations from the electrical power supply. Safety switches are the most widely used and cost effective isolation method available.

However, not all isolator switches are created equal. If safety switches that meet the requirements of the Raw Materials and Chemical Industry Employers' Liability Insurance Association (BG RCI) are used, time-consuming measures (e.g. the complete disconnection of motors) can be eliminated. Eaton's Crouse-Hinds series GHG981 safety switches meet these standards.

In addition, the GHG981 safety switches have been approved for use in zone 22 areas containing explosive dust. With the built-in padlocking facilities, they can be used as a load break switch with full confidence they will provide the required safety and personnel protection.

### Ready for harsh environments

The enclosures for our GHG 981 safety switches are

designed with IP66 environmental protection and are available in powder-coated sheet steel, glass-reinforced polyester (GRP), or electro-polished stainless steel. They are impact resistant and robust, corrosion-resistant, and are suitable for use in harsh industrial environments with extreme ambient temperatures from -55 °C to +55 °C.

### Lock-out/tag-out capability

All GHG981 safety switches come with built-in lock-out/tag-out capability and can be locked in the "OFF" position by means of max. 3 padlocks. While switched to the "OFF" position, the enclosure covers of safety switches cannot be opened without destroying the enclosure. This provides an extra level of safety as it prevents access to a switch locked in the "OFF" position, eliminating any risk of tampering with the switch position or electrical connections.

### Electrical equipment for use in areas with combustible dust

Combustible dust can be ignited by electrical apparatus in various ways:

by apparatus surface temperatures that are higher than the ignition or glow temperature of the respective dust. The temperature at which the dust ignites is dependent on the properties of the dust, on whether it is present in the form of a cloud or deposits, on the thickness of the layer and on the type of heat source

by sparks at electrical parts such as switches, contacts, commutators, brushes or similar

by the discharge of stored electrostatic energy

by radiated energy (e.g. electromagnetic radiation)

by magnetic impact or friction sparks or a rise in temperature originating from the apparatus.

To avoid ignition hazards, it is necessary that:

- the temperature of any surfaces on which dust deposits can form or that can come into contact with a cloud of dust are kept at a temper-

ature that is lower than the limiting temperatures laid down in EN 50028-1-2

- all parts with electric sparks or with temperatures above the ignition or glow temperature of the dust are built into an enclosure that prevents the ingress of dust in a suitable manner, or
- the energy of the electric circuits is limited to such a degree, that sparks or temperature that could ignite combustible dust are avoided
- all other ignition sources are avoided.

## GHG 9810048 - Ex-safety switches for Zone 22



80 A 3-pole plastic



80 A 6-pole sheet steel



100 A 3-pole plastic



100 A 6-pole stainless steel

### Technical Data

#### GHG 981...

Marking to 2014/34/EU	⊕ II 3 D Ex tc IIIC T80°C Dc
Type Examination Certificate	CCH 15 ATEX 1001
Permissible ambient temperature	-55 °C up to +40 °C/45 °C/50 °C/55 °C see instruction manual
IK-class according to EN 50102	IK 9 =^ 10 J
Rated voltage	up to 690 V
Rated current	see ordering information
Frequency	50 - 60 Hz
Switch-disconnector for maintenance accd. to IEC 62262-1	Class 1 (25 A - 80 A)
Protection class	I and II
Degree of protection accd. to EN 60529	IP66
Auxiliary contact	1 x NO making - lagging, breaking - leading 1 x NC making - leading, breaking - lagging
Padlocking	can be logged in OFF position with 3 commercially padlocks
Enclosure colour	Plastic = black / sheet steel = RAL 7032 / stainless steel 316L = electro-polished

	GHG 981 (25 A)		GHG 981 (40 A)		GHG 981 (80 A)	
Back-up fuse	up to 415 V AC 50 A gG	up to 690 V AC 50 A gG	up to 415 V AC 50 A gG	up to 690 V AC 80 A gG	up to 415 V AC 100 A gG	up to 690 V AC 100 A gG
Rated making-/breaking capacity AC-3 accd. to EN 60947-3 Appendix A	25 A / 3 pole 23 A / 4/6 pole	14 A / 3 pole 14 A / 4/6 pole	40 A / 3 pole 40 A / 6 pole	22 A / 3 pole 17 A / 6 pole	71 A / 3 pole 55 A / 6 pole	23 A / 3 pole 17 A / 6 pole
Connecting terminals	4 mm <sup>2</sup> - 10 mm <sup>2</sup>		16 mm <sup>2</sup> - 35 mm <sup>2</sup>		50 mm <sup>2</sup> - 70 mm <sup>2</sup>	

	GHG 981 (100 A)		GHG 981 (160 A)		GHG 981 (250 A)	
Back-up fuse	up to 415 V AC 315 A gG	up to 690 V AC 355 A gG	up to 415 V AC 315 A gG	up to 690 V AC 355 A gG	up to 415 V AC 315 A gG	up to 690 V AC 355 A gG
Rated making-/breaking capacity AC-3 accd. to EN 60947-3 Appendix A	100 A	100 A	160 A	160 A	250 A	250 A
Connecting terminals	50 mm <sup>2</sup> - 70 mm <sup>2</sup>		95 mm <sup>2</sup> - M8 x 25		185 mm <sup>2</sup> - M10 x 30	

	GHG 981 (400 A)		GHG 981 (630 A)		GHG 981 (700 A)	
Back-up fuse	up to 415 V AC 500 A gG	up to 690 V AC 500 A gG	up to 415 V AC 800 A gG	up to 690 V AC 800 A gG	up to 415 V AC 800 A gG	up to 690 V AC 800 A gG
Rated making-/breaking capacity AC-3 accd. to EN 60947-3 Appendix A	400 A	400 A	630 A	630 A	700 A	700 A
Connecting terminals	1 x 240 mm <sup>2</sup>		2 x 185 mm <sup>2</sup> - M12 x 40		2x240 mm <sup>2</sup> - M12 x 40	



Ordering details GHG 981 25 A - 100 A

Rated current	Poles	Enclosure material	Cable entry (metal thread)	Cable glands (plastic)	Enclosure sizes: GRP			Enclosure sizes: metall				Order No. <sup>1)</sup>
					Size 1	Size 2	Size 3	Size 1	Size 2	Size 3	Size 4	
<b>GHG 981 (25 A)</b>												
25 A	3-pole	GRP		2xM32, 1xM25	X							GHG 981 0048 R1211
25 A	4-pole	GRP		2xM32, 1xM25	X							GHG 981 0048 R1212
25 A	6-pole	GRP		4xM32, 1xM25		X						GHG 981 0048 R1213
25 A	3-pole	Sheet steel, powder-coated	2xM32, 1xM25						X			GHG 981 0048 R1214
25 A	4-pole	Sheet steel, powder-coated	2xM32, 1xM25						X			GHG 981 0048 R1215
25 A	6-pole	Sheet steel, powder-coated	4xM32, 1xM25						X			GHG 981 0048 R1216
25 A	3-pole	316L stainless steel, electro-polished	2xM32, 1xM25						X			GHG 981 0048 R1217
25 A	4-pole	316L stainless steel, electro-polished	2xM32, 1xM25						X			GHG 981 0048 R1218
25 A	6-pole	316L stainless steel, electro-polished	4xM32, 1xM25						X			GHG 981 0048 R1219
<b>GHG 981 (40 A)</b>												
40 A	3-pole	GRP		2xM40, 1xM25	X							GHG 981 0048 R1221
40 A	4-pole	GRP		2xM40, 1xM25	X							GHG 981 0048 R1222
40 A	6-pole	GRP		4xM40, 1xM25	X							GHG 981 0048 R1223
40 A	3-pole	Sheet steel, powder-coated	2xM40, 1xM25						X			GHG 981 0048 R1224
40 A	4-pole	Sheet steel, powder-coated	2xM40, 1xM25						X			GHG 981 0048 R1225
40 A	6-pole	Sheet steel, powder-coated	4xM40, 1xM25						X			GHG 981 0048 R1226
40 A	3-pole	316L stainless steel, electro-polished	2xM40, 1xM25						X			GHG 981 0048 R1227
40 A	4-pole	316L stainless steel, electro-polished	2xM40, 1xM25						X			GHG 981 0048 R1228
40 A	6-pole	316L stainless steel, electro-polished	4xM40, 1xM25						X			GHG 981 0048 R1229
<b>GHG 981 (80 A)</b>												
80 A	3-pole	GRP		2xM50, 1xM25	X							GHG 981 0048 R1231
80 A	4-pole	GRP		2xM50, 1xM25	X							GHG 981 0048 R1232
80 A	6-pole	GRP		4xM50, 1xM25		X						GHG 981 0048 R1233
80 A	3-pole	Sheet steel, powder-coated	2xM50, 1xM25						X			GHG 981 0048 R1234
80 A	4-pole	Sheet steel, powder-coated	2xM50, 1xM25						X			GHG 981 0048 R1235
80 A	6-pole	Sheet steel, powder-coated	4xM50, 1xM25							X		GHG 981 0048 R1236
80 A	3-pole	316L stainless steel, electro-polished	2xM50, 1xM25						X			GHG 981 0048 R1237
80 A	4-pole	316L stainless steel, electro-polished	2xM50, 1xM25						X			GHG 981 0048 R1238
80 A	6-pole	316L stainless steel, electro-polished	4xM50, 1xM25							X		GHG 981 0048 R1239
<b>GHG 981 (100 A)</b>												
100 A	3-pole	GRP		2xM50, 1xM25	X							GHG 981 0048 R0241
100 A	4-pole	GRP		2xM63, 1xM25			X					GHG 981 0048 R0242
100 A	6-pole	GRP		4xM50, 1xM25		X						GHG 981 0048 R0243
100 A	3-pole	Sheet steel, powder-coated	2xM50, 1xM25						X			GHG 981 0048 R0244
100 A	4-pole	Sheet steel, powder-coated	2xM63, 1xM25						X			GHG 981 0048 R0245
100 A	6-pole	Sheet steel, powder-coated	4xM50, 1xM25						X			GHG 981 0048 R0246
100 A	3-pole	316L stainless steel, electro-polished	2xM50, 1xM25						X			GHG 981 0048 R0247
100 A	4-pole	316L stainless steel, electro-polished	2xM63, 1xM25						X			GHG 981 0048 R0248
100 A	6-pole	316L stainless steel, electro-polished	4xM50, 1xM25						X			GHG 981 0048 R0249

<sup>1)</sup> For an emergency stop switch (red handle/yellow back plate), change the 3rd to last digit from R\*2\*\* (standard version) to R\*3\*\* (emergency stop)

## GHG 9810048 - Ex-safety switches for Zone 22



GHG 981 (630 A)



GHG 981 (800 A)

### Ordering details GHG 981 160 A - 700 A

5

Rated current	Poles	Enclosure material	Cable entry (metal thread)	Cable glands (plastic)	Enclosure sizes: GRP			Enclosure sizes: metall				Order No. <sup>1)</sup>
					Size 1	Size 2	Size 3	Size 1	Size 2	Size 3	Size 4	
<b>GHG 981 (160 A)</b>												
160 A	3-pole	GRP		2xM63, 1xM25		X						GHG 981 0048 R0251
160 A	4-pole	GRP		2xM63, 1xM25				X				GHG 981 0048 R0252
160 A	6-pole	GRP		4xM50, 1xM25				X				GHG 981 0048 R0253
160 A	3-pole	Sheet steel, powder-coated	2xM63, 1xM25						X			GHG 981 0048 R0254
160 A	4-pole	Sheet steel, powder-coated	2xM63, 1xM25							X		GHG 981 0048 R0255
160 A	6-pole	Sheet steel, powder-coated	4xM50, 1xM25							X		GHG 981 0048 R0256
160 A	3-pole	316L stainless steel, electro-polished	2xM63, 1xM25						X			GHG 981 0048 R0257
160 A	4-pole	316L stainless steel, electro-polished	2xM63, 1xM25							X		GHG 981 0048 R0258
160 A	6-pole	316L stainless steel, electro-polished	4xM50, 1xM25							X		GHG 981 0048 R0259
<b>GHG 981 (250 A)</b>												
250 A	3-pole	Sheet steel, powder-coated	2xM63, 1xM25								X	GHG 981 0048 R0264
250 A	4-pole	Sheet steel, powder-coated	2xM63, 1xM25								X	GHG 981 0048 R0265
250 A	6-pole	Sheet steel, powder-coated	4xM63, 1xM25								X	GHG 981 0048 R0266
250 A	3-pole	316L stainless steel, electro-polished	2xM63, 1xM25								X	GHG 981 0048 R0267
250 A	4-pole	316L stainless steel, electro-polished	2xM63, 1xM25								X	GHG 981 0048 R0268
250 A	6-pole	316L stainless steel, electro-polished	4xM63, 1xM25								X	GHG 981 0048 R0269
<b>GHG 981 (400 A)</b>												
400 A	3-pole	Sheet steel, powder-coated	2xM63, 1xM25								X	GHG 981 0048 R0274
400 A	4-pole	Sheet steel, powder-coated	2xM63, 1xM25								X	GHG 981 0048 R0275
400 A	6-pole	Sheet steel, powder-coated	4xM63, 1xM25								X	GHG 981 0048 R0276
400 A	3-pole	316L stainless steel, electro-polished	2xM63, 1xM25								X	GHG 981 0048 R0277
400 A	4-pole	316L stainless steel, electro-polished	2xM63, 1xM25								X	GHG 981 0048 R0278
400 A	6-pole	316L stainless steel, electro-polished	4xM63, 1xM25								X	GHG 981 0048 R0279
<b>GHG 981 (630 A)</b>												
630 A	3-pole	Sheet steel, powder-coated	4xM80, 1xM25								X	GHG 981 0048 R0284
630 A	4-pole	Sheet steel, powder-coated	4xM80, 1xM25								X	GHG 981 0048 R0285
630 A	3-pole	316L stainless steel, electro-polished	4xM80, 1xM25								X	GHG 981 0048 R0287
630 A	4-pole	316L stainless steel, electro-polished	4xM80, 1xM25								X	GHG 981 0048 R0288
<b>GHG 981 (700 A)</b>												
700 A	3-pole	Sheet steel, powder-coated	4xM80, 1xM25								X	GHG 981 0048 R0294
700 A	4-pole	Sheet steel, powder-coated	4xM80, 1xM25								X	GHG 981 0048 R0295
700 A	3-pole	316L stainless steel, electro-polished	4xM80, 1xM25								X	GHG 981 0048 R0297
700 A	4-pole	316L stainless steel, electro-polished	4xM80, 1xM25								X	GHG 981 0048 R0298

<sup>1)</sup> For an emergency stop switch (red handle/yellow back plate), change the 3rd to last digit from R\*2\*\* (standard version) to R\*3\*\* (emergency stop)

### Accessories

Type	Version	
<b>Cable glands</b>		
Plastic cable glands	M20 up to M63	see: Main catalogue part 2 - page 2.3.4 - 2.3.11
Metal cable glands	ADE 1 F2	see: Main catalogue part 2 - page 2.3.12 - 2.3.19





40 A sheet steel



40 A plastic

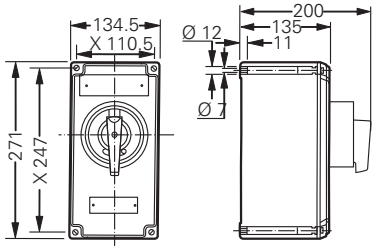


25 A stainless steel

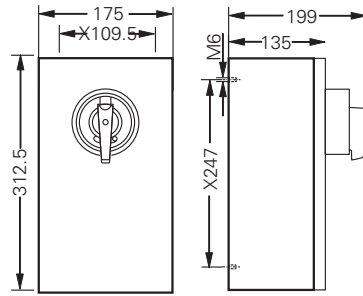


25 plastic

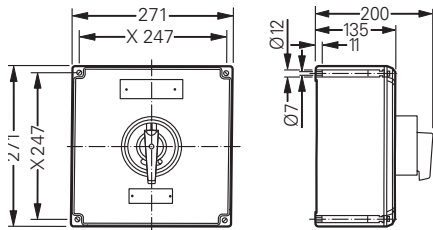
Dimension drawing



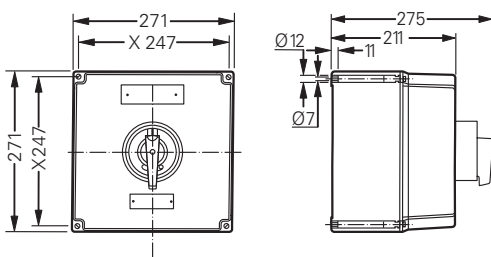
25 A, 3-/4-pole, plastic



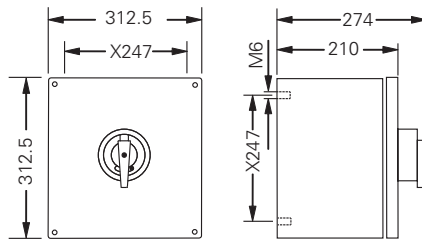
25 A, 3-/4-/6-pole, metal



25 A, 6-pole, plastic



40 A, 3-/4-/6-pole, plastic



40 A, 3-/4-/6-pole, metal

X = fixing dimensions

**GHG 9810048 - Ex-safety switches for Zone 22**



**80 A 3-pole plastic**



**80 A 6-pole sheet steel**



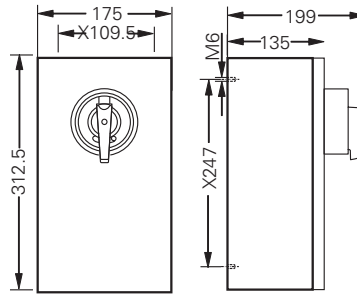
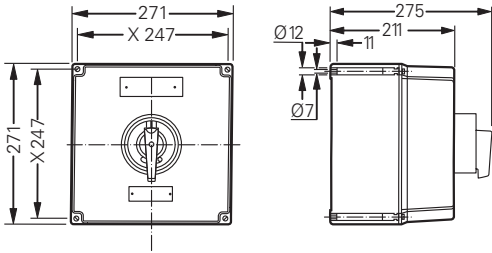
**100 A 3-pole plastic**



**100 A 6-pole stainless steel**

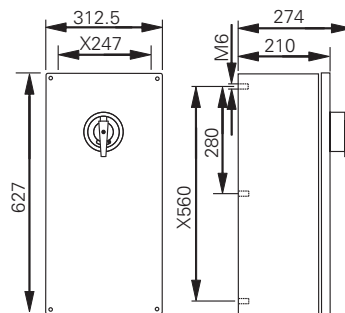
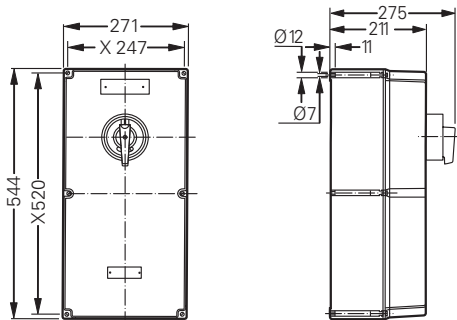
**Dimension drawing**

5



**80 A, 3-/4-pole, plastic  
100 A, 3-pole, plastic  
160 A, 3-pole, plastic**

**80 A, 3-/4-pole, metal  
100 A, 3-pole, metal  
160 A, 3-pole, metal**



**80/100/160 A, 6-pole, plastic  
100 A, 4-pole, plastic  
160 A, 4-pole, plastic**

**80/100/160 A, 6-pole, metal  
100 A, 4-pole, metal  
160 A, 4-pole, metal**

**X = fixing dimensions**

Dimensions in mm

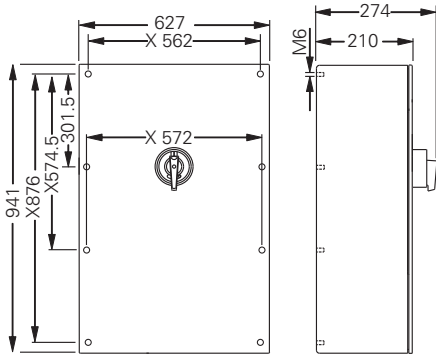


GHG 981 (630 A)



GHG 981 (700 A)

Dimension drawing



- 250 A, 3-/4-/6-pole, metal
- 400 A, 3-/4-/6-pole, metal
- 630 A, 3-/4-pole, metal
- 700 A, 3-/4-pole, metal

X = fixing dimensions

# 5.3

## GHG 981/KO 7317 Industrial Safety Switches

Rated current from 10 A - 630 A

### Industrial safety switches protects

CEAG safety switches can be protected against inadvertent switching on by our integrated locking facility for up to three padlocks in the OFF position. To prevent manipulations, the enclosure covers cannot be opened in the locked position without destroying the enclosure itself.

### Full AC 3 motor switching capacities

Full AC 3 motor switching capacities and isolating properties according to EN 60947-4-1 with compulsory opening of the main current contacts and optional EMERGENCY STOP versions according to EN 60204-1 are further features offered by CEAG safety switches.

Additional lagging/leading auxiliary contacts guarantee double safety for extreme switching conditions.

The safety switches feature an installation-friendly design and easily accessible connection terminals.

### Industrial applications for harsh environments

For rough industrial environments we use the proven enclosures from the explosion-protection areas: impact-resistant, modified moulded-plastic enclosures made of glass-fibre-reinforced polyester, powder-coated steel or stainless

steel 316 L. These can be optionally supplied with snap-on moulded plastic or brass flanges. Metal versions can be equipped with screw-on flanges. Up to 630 A the high degree of protection, IP66, is guaranteed.



### Features

- Full AC-3 switching capacity
- Double safety: additional auxiliary contact
- Cost-saving installation
- Up to 40 A: snap mounting
- Up to 630 A: IP66 protection



**3-pole EMERGENCY STOP**



**3-pole**

**Technical data**

**Industrial safety switch 10 A**

Permissible ambient temperature		-20 °C up to +40 °C
Rated voltage		up to max. 500 V
Rated current		max. 10 A
Frequency		50/60 Hz
Rated making/breaking capacity AC-3 accd. EN 60947-3		U <sub>e</sub> 230 V / I <sub>e</sub> 10 A U <sub>e</sub> 400 V / I <sub>e</sub> 10 A U <sub>e</sub> 500 V / I <sub>e</sub> 10 A
Back-up fuse		up to 400 V AC: 20 A gG up to 500 V AC: 16 A gG
Connecting terminals	main contact auxiliary/signal contact	2 x 1.5 - 2.5 mm <sup>2</sup> 2 x 0.5 - 2.5 mm <sup>2</sup>
Protection class		I
Degree of protection accd. to EN 60529		IP66
Cable glands/enclosure drilling		M20 cable gland see ordering details M25 cable gland see ordering details
Weight		0.55 kg
Enclosure material		impact resistant polyamide
Enclosure colour		black
Auxiliary contact		1 x NO making - lagging; breaking - leading
Padlocking facility		can be locked in OFF position with 3 commercially available padlocks (Ø max. 6 mm)

## GHG 981 - Industrial-safety switches 10 A



3-pole



3-pole EMERGENCY STOP

### Ordering details

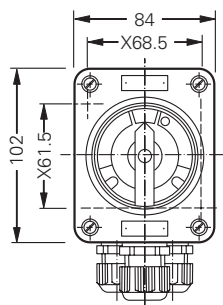
Content	Cable gland	Order No.
<b>Industrial safety switch 10 A</b>		
3-pole	2 x M25 / 1 x M20	<b>GHG 981 0014 R0011</b>
3-pole EMERGENCY STOP	2 x M25 / 1 x M20	<b>GHG 981 0014 R0012</b>
Customized version on request		

### Accessories

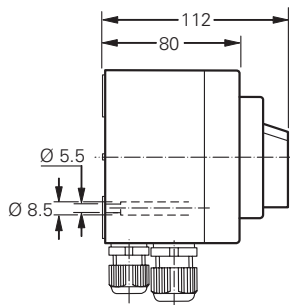
Type	Application	Fixing method	Order No.
<b>Mounting plate for Industrial safety switch 10 A 3-pole</b>			
Size 1	Wall mounting	screwless mounting	<b>GHG 610 1953 R0101</b>
Size 1	pipe clamp	screwless mounting	<b>GHG 610 1953 R0102</b>
Size 1	Trellis-work mounting	screwless mounting	<b>GHG 610 1953 R0103</b>
<b>Type</b>		<b>OU</b>	<b>Order No.</b>
<b>Accessories for mounting plates</b>			
	Label holder with label (unlabelled) for mounting plate size 1, 2, 2A and 3	10	<b>GHG 610 1953 R0057</b>
	Mounting set for pipes 1" (of 27 - 30 mm) for mounting plates with pipe fixing	10	<b>GHG 610 1953 R0020</b>
<b>Type</b>	<b>Application</b>	<b>OU</b>	<b>Order No.</b>
<b>Accessories for canopies plates</b>			
Size 1	Mounting plate size 1	1	<b>GHG 610 1955 R0101</b>

Please pay attention that only order units (OU) according to the ordering details can be delivered.

### Dimension drawing



3-pole



X = fixing dimensions



6-pole EMERGENCY STOP



6-pole



3-pole EMERGENCY STOP



3-pole

Technical data

Industrial safety switch 25 A

Permissible ambient temperature		-20 °C up to +40 °C
Rated voltage		up to max. 690 V
Rated current		max. 25 A
Frequency		50/60 Hz
Rated making/breaking capacity AC-3 accd. EN 60947-3		U <sub>e</sub> 230 V / I <sub>e</sub> 20 A U <sub>e</sub> 400 V / I <sub>e</sub> 20 A U <sub>e</sub> 500 V / I <sub>e</sub> 16 A U <sub>e</sub> 690 V / I <sub>e</sub> 10 A
Back-up fuse		up to 400 V AC: 35 A gG up to 500 V AC: 35 A gG up to 690 V AC: 25 A gG
Connecting terminals	main contact auxiliary/signal contact	2 x 4 mm <sup>2</sup> 2 x 0.5 - 2.5 mm <sup>2</sup>
Protection class		I
Degree of protection accd. to EN 60529		IP66
Cable glands/enclosure drilling		M25 cable gland see ordering details M32 cable gland see ordering details Option: metal flange with 2 x thread
Weight	3-pole 6-pole	approx. 1.48 kg approx. 2.43 kg
Enclosure material		glass-fibre reinforced polyester
Enclosure colour		black
Auxiliary contact		1 x NO making - lagging; breaking - leading 1 x NC (only 6-pole version) making - leading; breaking - lagging
Padlocking facility		can be locked in OFF position with 3 commercially available padlocks (Ø max. 6 mm)

## GHG 981 - Industrial-safety switches 25 A



3-pole



3-pole EMERGENCY STOP



6-pole



6-pole EMERGENCY STOP

### Ordering details

Content	Cable gland	Order No.
<b>Industrial safety switch 25 A 3-pole Version with 1 aux. contacts (NO)</b>		
3-pole	2 x M32 / 1 x M25	GHG 981 0037 R0001
3-pole EMERGENCY STOP	2 x M32 / 1 x M25	GHG 981 0037 R0002
<b>Industrial safety switch 25 A 6-pole Version with 2 auxiliary contacts (1 NO; 1 x NC)</b>		
6-pole	4 x M32 / 1 x M25	GHG 981 0038 R0001
6-pole EMERGENCY STOP	4 x M32 / 1 x M25	GHG 981 0038 R0002
Customized version on request		

### Accessories

Type	Application	Fixing method	Order No.
<b>Mounting plate for Industrial safety switch 25 A 3-pole</b>			
Size 2	Wall mounting	snap on	GHG 610 1953 R0104
Size 2	pipe clamp	snap on	GHG 610 1953 R0105
Size 2	Trellis-work mounting	snap on	GHG 610 1953 R0106
<b>Mounting plate for Industrial safety switch 25 A 6-pole</b>			
Size 3	Wall mounting	snap on	GHG 610 1953 R0118
Size 3	pipe clamp	snap on	GHG 610 1953 R0110
Size 3	Trellis-work mounting	snap on	GHG 610 1953 R0118
<b>Type</b>		<b>OU</b>	<b>Order No.</b>

### Accessories for mounting plates

Label holder with type label (blank) for mounting plate size 1, 2, 2A and 3	10	GHG 610 1953 R0057
Plug-in fastener for CEAG modules with 5.5 mm and 11 mm mounting feet 1 set = 4 pcs.	10	GHG 610 1953 R0041
Mounting set for pipes 1" (of 27 - 30 mm) for mounting plates with pipe fixing	10	GHG 610 1953 R0020

Type	Application	OU	Order No.
<b>Accessories for canopies plates</b>			
Size 2	for mounting plate size 2	1	GHG 610 1955 R0102
Size 2A	for mounting plate size 2A	1	GHG 610 1955 R0103
Size 3	for pipe mounting plate size 3 vertical	1	GHG 610 1955 R0104
Size 3A	for mounting plates wall/trellis fixing size 3 vertical	1	GHG 610 1955 R0105
Size 3B	for mounting plates pipe fixing size 3 horizontal	1	GHG 610 1955 R0106

Please pay attention that only order units (OU) according to the ordering details can be delivered.





6-pole EMERGENCY STOP



6-pole

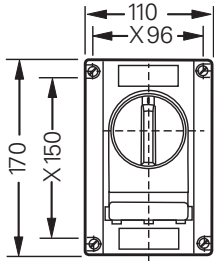


3-pole EMERGENCY STOP

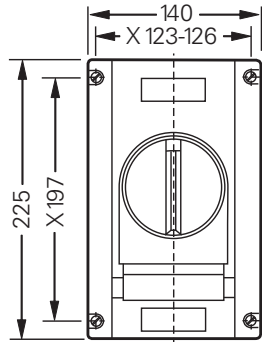
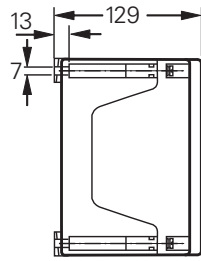


3-pole

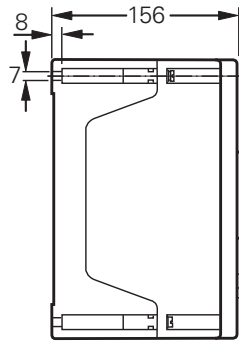
Dimension drawing



3-pole



6-pole



X = fixing dimensions

## GHG 981 - Industrial-safety switches 40 A



3-pole



3-pole EMERGENCY STOP



6-pole



6-pole EMERGENCY STOP

### Technical data

5

#### Industrial safety switch 40 A

Permissible ambient temperature		-20 °C up to +40 °C
Rated voltage		up to max. 690 V
Rated current		max. 40 A
Frequency		50/60 Hz
Rated making/breaking capacity AC-3 accd. EN 60947-3		U <sub>e</sub> 230 V / I <sub>e</sub> 40 A U <sub>e</sub> 400 V / I <sub>e</sub> 40 A U <sub>e</sub> 500 V / I <sub>e</sub> 40 A U <sub>e</sub> 690 V / I <sub>e</sub> 32 A
Back-up fuse		up to 400 V AC: 80 A gG up to 500 V AC: 80 A gG up to 690 V AC: 63 A gG
Connecting terminals	main contact auxiliary/signal contact	2 x 16 mm <sup>2</sup> 2 x 4 mm <sup>2</sup>
Protection class		I
Degree of protection accd. to EN 60529		IP66
Cable glands/enclosure drilling		M25 cable gland see ordering details M40 cable gland see ordering details Option: metal flange on request
Weight	3-pole 6-pole	approx. 2.30 kg approx. 6.50 kg
Enclosure material		glass-fibre reinforced polyester
Enclosure colour		black
Auxiliary contact		1 x NO making - lagging; breaking - leading 1 x NC making - leading; breaking - lagging
Padlocking facility		can be locked in OFF position with 3 commercially available padlocks (Ø max. 6 mm)



6-pole EMERGENCY STOP



6-pole



3-pole EMERGENCY STOP



3-pole

**Ordering details**

Content	Cable gland	Order No.
<b>Industrial safety switch 40 A 3-pole</b>		
<b>Version with 2 auxiliary contacts (1 NO; 1 x NC)</b>		
3-pole	2 x M40 / 1 x M25	<b>GHG 981 0039 R0001</b>
3-pole EMERGENCY STOP	2 x M40 / 1 x M25	<b>GHG 981 0039 R0002</b>
<b>Industrial safety switch 40 A 6-pole</b>		
<b>Version with 2 auxiliary contacts (1 NO; 1 x NC)</b>		
6-pole	4 x M40 / 1 x M25	<b>GHG 981 0024 R0001</b>
6-pole EMERGENCY STOP	4 x M40 / 1 x M25	<b>GHG 981 0024 R0002</b>
Customized version on request		

**Accessories**

Type	Application	Fixing method	Order No.
<b>Mounting plate for Industrial safety switch 40 A 3-pole</b>			
Size 3	Wall mounting	snap on	<b>GHG 610 1953 R0118</b>
Size 3	Pipe clamp	snap on	<b>GHG 610 1953 R0110</b>
Size 3	Trellis-work mounting	snap on	<b>GHG 610 1953 R0118</b>
<b>Mounting plate for Industrial safety switch 40 A 6-pole</b>			
Size 3	2 x pipe clamp	screw-on <sup>1)</sup>	<b>GHG 610 1953 R0110</b>

<sup>1)</sup> observe mounting distance

Type	OU	Order No.
<b>Accessories for mounting plates</b>		
Label holder with type label (blank) for mounting plate size 1, 2, 2A and 3	10	<b>GHG 610 1953 R0057</b>
Plug-in fastener for CEAG modules with 5.5 mm and 11 mm mounting feet 1 set = 4 pcs.	10	<b>GHG 610 1953 R0041</b>
Mounting set for pipes 1" (of 27 - 30 mm) for mounting plates with pipe fixing	10	<b>GHG 610 1953 R0020</b>

Type	Application	OU	Order No.
<b>Accessories for canopies plates</b>			
Size 3	for pipe mounting plate size 3 vertical	1	<b>GHG 610 1955 R0104</b>
Size 3A	for mounting plates wall/trellis fixing size 3 vertical	1	<b>GHG 610 1955 R0105</b>
Size 3B	for mounting plates pipe fixing size 3 horizontal	1	<b>GHG 610 1955 R0106</b>

Please pay attention that only order units (OU) according to the ordering details can be delivered.

**GHG 981 - Industrial-safety switches 40 A**



3-pole



3-pole EMERGENCY STOP



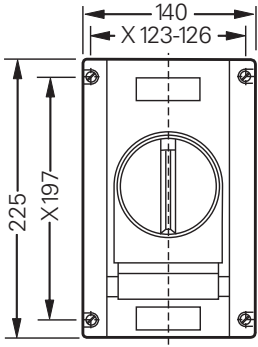
6-pole



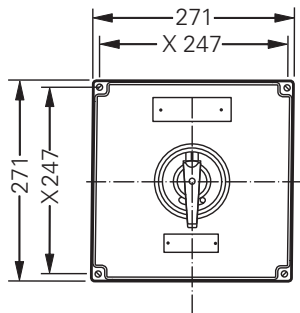
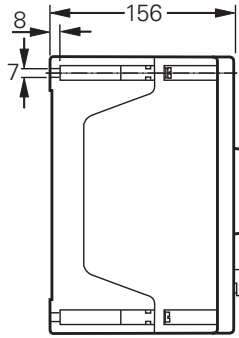
6-pole EMERGENCY STOP

**Dimension drawing**

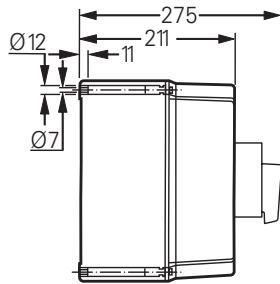
5



3-pole



6-pole



X = fixing dimensions

Dimensions in mm



6-pole EMERGENCY STOP



6-pole



3-pole EMERGENCY STOP



3-pole

Technical data

Industrial safety switch 80 A

Permissible ambient temperature		-20 °C up to +40 °C
Rated voltage		up to max. 690 V
Rated current		max. 80 A
Frequency		50/60 Hz
Rated making/breaking capacity AC-3 accd. EN 60947-3		U <sub>e</sub> 230 V / I <sub>e</sub> 80 A U <sub>e</sub> 400 V / I <sub>e</sub> 80 A U <sub>e</sub> 500 V / I <sub>e</sub> 80 A U <sub>e</sub> 690 V / I <sub>e</sub> 80 A
Back-up fuse		up to 400 V AC: 160 A gG up to 500 V AC: 160 A gG up to 690 V AC: 125 A gG
Connecting terminals	main contact auxiliary/signal contact	2 x 25 mm <sup>2</sup> 2 x 4 mm <sup>2</sup>
Protection class		I
Degree of protection accd. to EN 60529		IP66
Cable glands/enclosure drilling		M25 cable gland see ordering details M50 cable gland see ordering details Option: metal flange with 2 x thread
Weight	3-pole 6-pole	approx. 6.50 kg approx. 9.00 kg
Enclosure material		glass-fibre reinforced polyester
Enclosure colour		black
Auxiliary contact		1 x NO making - lagging; breaking - leading 1 x NC making - leading; breaking - lagging
Padlocking facility		can be locked in OFF position with 3 commercially available padlocks (Ø max. 6 mm)

## GHG 981 - Industrial-safety switches 80 A



3-pole



3-pole EMERGENCY STOP



6-pole



6-pole EMERGENCY STOP

### Ordering details

5

Content	Cable gland	Order No.
<b>Industrial safety switch 80 A 3-pole</b> <b>Version with 2 auxiliary contacts (1 NO; 1 x NC)</b>		
3-pole	2 x M50 / 1 x M25	<b>GHG 981 0025 R0001</b>
3-pole EMERGENCY STOP	2 x M50 / 1 x M25	<b>GHG 981 0025 R0002</b>
<b>Industrial safety switch 80 A 6-pole</b> <b>Version with 2 auxiliary contacts (1 NO; 1 x NC)</b>		
6-pole	4 x M50 / 1 x M25	<b>GHG 981 0026 R0001</b>
6-pole EMERGENCY STOP	4 x M50 / 1 x M25	<b>GHG 981 0026 R0002</b>

Customized version on request

### Accessories

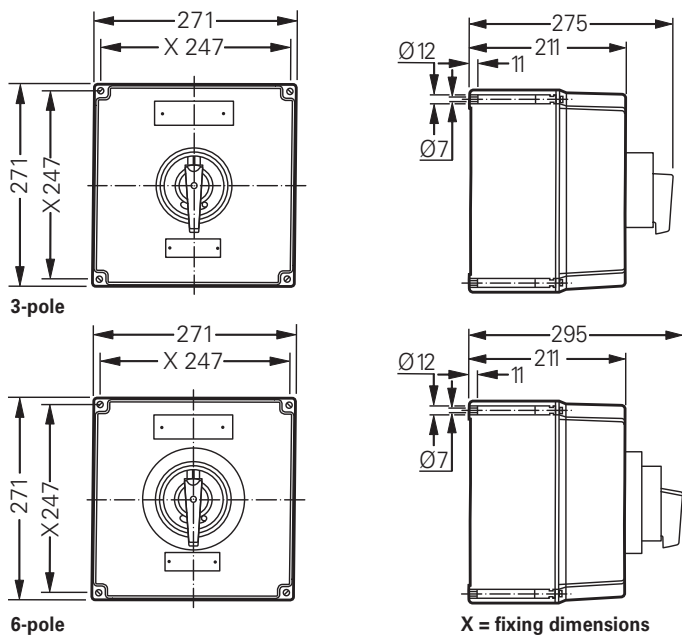
Type	Application	Fixing method	Order No.
<b>Mounting plate for Industrial safety switch</b>			
Size 3	2 x pipe clamp	screw-on <sup>1)</sup>	<b>GHG 610 1953 R0110</b>

<sup>1)</sup> observe mounting distance

Type	OU	Order No.
<b>Accessories for mounting plates</b>		
Label holder with type label (blank) for mounting plate size 1, 2, 2A and 3	10	<b>GHG 610 1953 R0057</b>
Mounting set for pipes 1" (of 27 - 30 mm) for mounting plates with pipe fixing	10	<b>GHG 610 1953 R0020</b>

Please pay attention that only order units (OU) according to the ordering details can be delivered.

### Dimension drawing



Dimensions in mm



6-pole EMERGENCY STOP



6-pole



3-pole EMERGENCY STOP



3-pole

Technical data

Industrial safety switch 100 A

Permissible ambient temperature		-20 °C up to +40 °C
Rated voltage		up to max. 690 V
Rated current		max. 100 A
Frequency		50/60 Hz
Rated making/breaking capacity AC-3 accd. EN 60947-3		U <sub>e</sub> 230 V / I <sub>e</sub> 100 A U <sub>e</sub> 400 V / I <sub>e</sub> 100 A U <sub>e</sub> 500 V / I <sub>e</sub> 100 A U <sub>e</sub> 690 V / I <sub>e</sub> 100 A
Back-up fuse		up to 400 V AC: 200 A gG up to 500 V AC: 200 A gG up to 690 V AC: 160 A gG
Connecting terminals	main contact auxiliary/signal contact	1 x 50/70 mm <sup>2</sup> 2 x 4 mm <sup>2</sup>
Protection class		I
Degree of protection accd. to EN 60529		IP66
Cable glands/enclosure drilling		M25 cable gland see ordering details M50 cable gland see ordering details Option: metal flange with 2 x thread
Weight	3-pole 6-pole	approx. 9.50 kg approx. 16.00 kg
Enclosure material	3-pole 6-pole	glass-fibre reinforced polyester steel, powder-coated polyester
Enclosure colour		black
Auxiliary contact		1 x NO making - lagging; breaking - leading 1 x NC making - leading; breaking - lagging
Padlocking facility		can be locked in OFF position with 3 commercially available padlocks (Ø max. 6 mm)

## GHG 981 -GHG 981 - Industrial-safety switches 100 A



3-pole



3-pole EMERGENCY STOP



6-pole



6-pole EMERGENCY STOP

### Ordering details

Content	Cable gland	Order No.
<b>Industrial safety switch 100 A 3-pole</b>		
<b>Version with 4 auxiliary contacts (2 x NO; 2 x NC)</b>		
3-pole	2 x M50 / 1 x M25	<b>GHG 981 0029 R0004</b>
3-pole EMERGENCY STOP	2 x M50 / 1 x M25	<b>GHG 981 0029 R0005</b>
<b>Industrial safety switch 100 A 6-pole</b>		
<b>Version with 4 auxiliary contacts (2 x NO; 2 x NC)</b>		
6-pole	4 x M50 / 1 x M25	<b>GHG 981 0030 R0001</b>
6-pole EMERGENCY STOP	4 x M50 / 1 x M25	<b>GHG 981 0030 R0002</b>
Customized version on request		

### Accessories

Type	Application	Fixing method	Order No.
<b>Mounting plate for Industrial safety switch</b>			
Size 3	2 x pipe clamp	screw-on <sup>1)</sup>	<b>GHG 610 1953 R0110</b>
<sup>1)</sup> observe mounting distance			
Type		OU	Order No.
<b>Accessories for mounting plates</b>			
Label holder with type label (blank) for mounting plate size 1, 2, 2A and 3		10	<b>GHG 610 1953 R0057</b>
Mounting set for pipes 1" (of 27 - 30 mm) for mounting plates with pipe fixing		10	<b>GHG 610 1953 R0020</b>

Please pay attention that only order units (OU) according to the ordering details can be delivered.





6-pole EMERGENCY STOP



6-pole

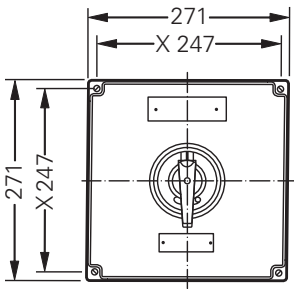


3-pole EMERGENCY STOP

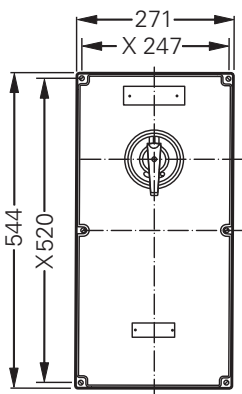
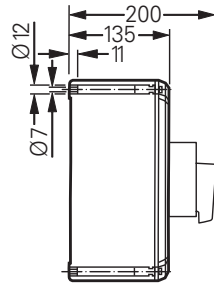


3-pole

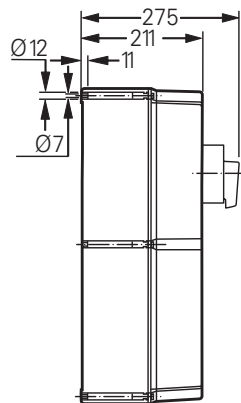
Dimension drawing



3-pole



6-pole



X = fixing dimensions

## GHG 981 - Industrial-safety switches 160 A



3-pole



3-pole EMERGENCY STOP



6-pole



6-pole EMERGENCY STOP

### Technical data

5

#### Industrial safety switch 160 A

Permissible ambient temperature		-20 °C up to +40 °C
Rated voltage		up to max. 690 V
Rated current		max. 160 A
Frequency		50/60 Hz
Rated making/breaking capacity AC-3 accd. EN 60947-3		U <sub>e</sub> 230 V / I <sub>e</sub> 160 A U <sub>e</sub> 400 V / I <sub>e</sub> 160 A U <sub>e</sub> 500 V / I <sub>e</sub> 160 A U <sub>e</sub> 690 V / I <sub>e</sub> 160 A
Back-up fuse		up to 400 V AC: 250 A gG up to 500 V AC: 250 A gG up to 690 V AC: 200 A gG
Connecting terminals	main contact auxiliary/signal contact	1 x 95 mm <sup>2</sup> 2 x 4 mm <sup>2</sup>
Protection class		I
Degree of protection accd. to EN 60529		IP66
Cable glands/enclosure drilling		M25 cable gland see ordering details M63 cable gland see ordering details Double cable pothead Ø 46 -72 mm) Option: metal flange with 2 x thread
Weight	3-pole 6-pole	approx. 9.00 kg approx. 16.50 kg
Enclosure material		glass-fibre reinforced polyester
Enclosure colour		black
Aux. contact		1 x NO making - lagging; breaking - leading 1 x NC making - leading; breaking - lagging
Padlocking facility		can be locked in OFF position with 3 commercially available padlocks (Ø max. 6 mm)



6-pole EMERGENCY STOP



6-pole



3-pole EMERGENCY STOP



3-pole

**Ordering details**

Content	Cable gland	Order No.
<b>Industrial safety switch 160 A 3-pole</b>		
<b>Version with 4 auxiliary contacts (2 x NO; 2 x NC)</b>		
3-pole	2 x M63 / 1 x M25	<b>GHG 981 0031 R0003</b>
3-pole EMERGENCY STOP	2 x M63 / 1 x M25	<b>GHG 981 0031 R0004</b>
<b>Industrial safety switch 160 A 6-pole</b>		
<b>Version with 4 auxiliary contacts (2 x NO; 2 x NC)</b>		
6-pole	4 x M50 / 1 x M25	<b>GHG 981 0032 R0003</b>
6-pole EMERGENCY STOP	4 x M50 / 1 x M25	<b>GHG 981 0032 R0004</b>
Customized version on request		

**Accessories**

Type	Application	Fixing method	Order No.
<b>Mounting plate for Industrial safety switch</b>			
Size 3	2 x pipe clamp	screw-on <sup>1)</sup>	<b>GHG 610 1953 R0110</b>
<sup>1)</sup> observe mounting distance			
Type		OU	Order No.
<b>Accessories for mounting plates</b>			
Label holder with type label (blank) for mounting plate size 1, 2, 2A and 3		10	<b>GHG 610 1953 R0057</b>
Mounting set for pipes 1" (of 27 - 30 mm) for mounting plates with pipe fixing		10	<b>GHG 610 1953 R0020</b>

Please pay attention that only order units (OU) according to the ordering details can be delivered.

**GHG 981 - Industrial-safety switches 160 A**



**3-pole**



**3-pole EMERGENCY STOP**



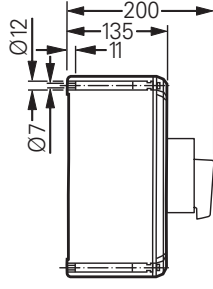
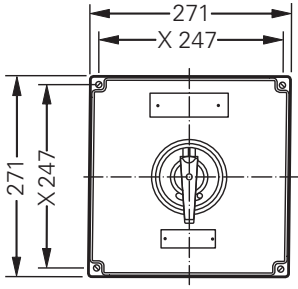
**6-pole**



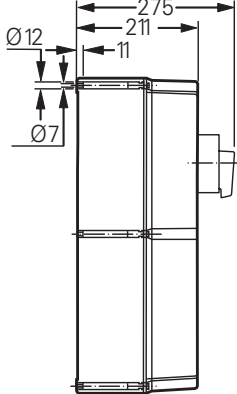
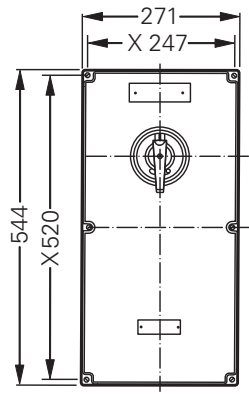
**6-pole EMERGENCY STOP**

**Dimension drawing**

5



**3-pole**



**6-pole**

**X = fixing dimensions**

Dimensions in mm



3-/6-pole EMERGENCY STOP



3-/6-pole

Technical data

Industrial safety switch 250 A

Permissible ambient temperature		-20 °C up to +40 °C
Rated voltage		up to max. 690 V
Rated current		max. 250 A
Frequency		50/60 Hz
Rated making/breaking capacity AC-3 accd. EN 60947-3		U <sub>e</sub> 230 V / I <sub>e</sub> 250 A U <sub>e</sub> 400 V / I <sub>e</sub> 250 A U <sub>e</sub> 500 V / I <sub>e</sub> 250 A U <sub>e</sub> 690 V / I <sub>e</sub> 250 A
Back-up fuse		up to 400 V AC: 250 A gG up to 500 V AC: 200 A gG up to 690 V AC: 200 A gG
Connecting terminals	main contact 3-pole 6-pole auxiliary/signal contact	3 x 150 mm <sup>2</sup> /95 mm <sup>2</sup> 6 x 150 mm <sup>2</sup> /2 x 95 mm <sup>2</sup> 2 x 4 mm <sup>2</sup>
Protection class		I
Degree of protection accd. to EN 60529		IP65
Cable glands/enclosure drilling		M25 cable gland see ordering details M63 cable gland see ordering details
Weight	3-pole 6-pole	approx. 18 kg approx. 31 kg
Enclosure material		sheet steel polyester powder coated
Enclosure colour		RAL 7032
Aux. contact		1 x NO making - lagging; breaking - leading 1 x NC making - leading; breaking - lagging
Padlocking facility		can be locked in OFF position with 3 commercially available padlocks

## KO 7317 - Industrial-safety switches 250 A



3-/6-pole



3-/6-pole EMERGENCY STOP

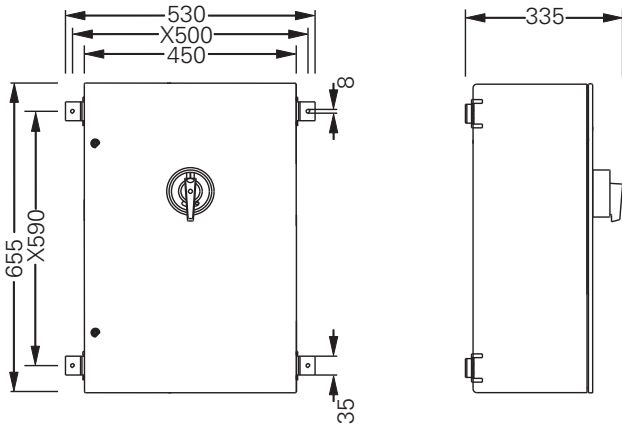
### Ordering details

5

Content	Cable gland	Order No.
<b>Industrial safety switch 250 A 3-pole Version with 2 auxiliary contacts (1 NO; 1 x NC)</b>		
3-pole	2 x M63 / 1 x M25	<b>KO 731713 W0001</b>
3-pole EMERGENCY STOP	2 x M63 / 1 x M25	<b>KO 731723 W0001</b>
<b>Industrial safety switch 250 A 6-pole Version with 2 auxiliary contacts (1 NO; 1 x NC)</b>		
6-pole	4 x M63 / 1 x M25	<b>KO 731716 W0001</b>
6-pole EMERGENCY STOP	4 x M63 / 1 x M25	<b>KO 731726 W0001</b>

Customized version on request

### Dimension drawing



3-/6-pole

X = fixing dimensions

Dimensions in mm



3-pole EMERGENCY STOP



3-pole

**Technical data**

**Industrial safety switch 400 A**

Permissible ambient temperature		-20 °C up to +40 °C
Rated voltage		up to max. 690 V
Rated current		max. 400 A
Frequency		50/60 Hz
Rated making/breaking capacity AC-3 accd. EN 60947-3		U <sub>e</sub> 230 V / I <sub>e</sub> 400 A U <sub>e</sub> 400 V / I <sub>e</sub> 400 A U <sub>e</sub> 500 V / I <sub>e</sub> 400 A U <sub>e</sub> 690 V / I <sub>e</sub> 400 A
Back-up fuse		up to 400 V AC: 500 A gG up to 500 V AC: 500 A gG up to 690 V AC: 500 A gG
Connecting terminals	main contact auxiliary/signal contact	3 x 150 mm <sup>2</sup> /95 mm <sup>2</sup> 2 x 4 mm <sup>2</sup>
Protection class		I
Degree of protection accd. to EN 60529		IP65
Cable glands/enclosure drilling		M25 cable gland see ordering details M63 cable gland see ordering details
Weight		approx. 39.50 kg
Enclosure material		steel, powder-coated polyester
Enclosure colour		RAL 7032
Aux. contact		1 x NO making - lagging; breaking - leading 1 x NC making - leading; breaking - lagging
Padlocking facility		can be locked in OFF position with 3 commercially available padlocks

## KO 7317 - Industrial-safety switches 400 A



3-pole

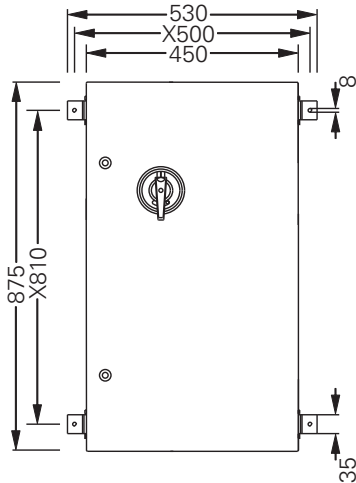


3-pole EMERGENCY STOP

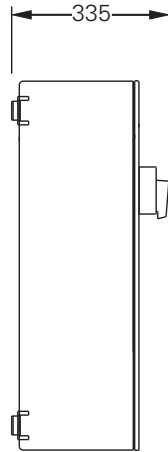
### Ordering details

Content	Cable gland	Order No.
<b>Industrial safety switch 400 A 3-pole Version with 2 auxiliary contacts (1 NO; 1 x NC)</b>		
3-pole	4 x M63 / 1 x M25	<b>KO 731713 X0001</b>
3-pole EMERGENCY STOP	4 x M63 / 1 x M25	<b>KO 731723 X0001</b>
Customized version on request		

### Dimension drawing



3-pole



X = fixing dimensions





3-pole EMERGENCY STOP



3-pole

**Technical data**

**Industrial safety switch 630 A**

Permissible ambient temperature		-20 °C up to +40 °C
Rated voltage		up to max. 690 V
Rated current		max. 630 A
Frequency		50/60 Hz
Rated making/breaking capacity AC-3 accd. EN 60947-3		U <sub>e</sub> 230 V / I <sub>e</sub> 630 A U <sub>e</sub> 400 V / I <sub>e</sub> 630 A U <sub>e</sub> 500 V / I <sub>e</sub> 630 A U <sub>e</sub> 690 V / I <sub>e</sub> 630 A
Back-up fuse		up to 400 V AC: 800 A gG up to 500 V AC: 800 A gG up to 690 V AC: 800 A gG
Connecting terminals	main contact auxiliary/signal contact	3 x 240 mm <sup>2</sup> /120 mm <sup>2</sup> 2 x 4 mm <sup>2</sup>
Protection class		I
Degree of protection accd. to EN 60529		IP65
Cable glands/enclosure drilling		M25 cable gland see ordering details M80 Ø 62 - 68 mm see ordering details
Weight		approx. 40.50 kg
Enclosure material		steel, powder-coated polyester
Enclosure colour		RAL 7032
Aux. contact		1 x NO making - lagging; breaking - leading 1 x NC making - leading; breaking - lagging
Padlocking facility		can be locked in OFF position with 3 commercially available padlocks (Ø max. 6 mm)

## KO 7317 - Industrial-safety switches 630 A



3-pole

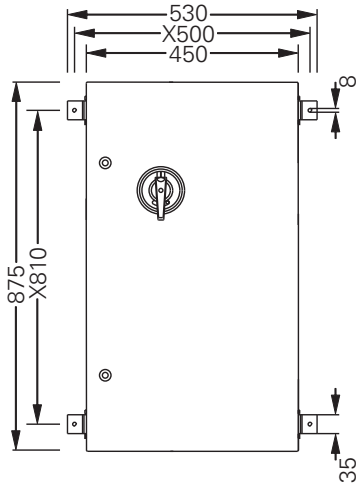


3-pole EMERGENCY STOP

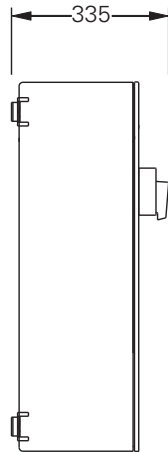
### Ordering details

Content	Cable gland	Order No.
<b>Industrial safety switch 630 A 3-pole Version with 2 auxiliary contacts (1 NO; 1 x NC)</b>		
3-pole	4 x M80 / 1 x M25	<b>KO 731713 Y0001</b>
3-pole EMERGENCY STOP	4 x M80 / 1 x M25	<b>KO 731723 Y0001</b>
Customized version on request		

### Dimension drawing



3-pole



X = fixing dimensions



# 5.4

## GHG 26 Ex-Main Current Switches

Rated current from 10 A - 630 A

### Safety for your protection

5

CEAG main current switches in a number of versions can be protected against inadvertent switching on by our integrated locking facility for up to three padlocks in the OFF position.

### Full AC-3 motor switching capacities

Full AC-3 motor switching capacities and isolating properties according to EN 60947-4-1 with compulsory opening of the main current contacts according to EN 60204-1 are just some of the eminent features offered by CEAG's main current switches.

The main current switches feature an installation-friendly design and easily accessible connection terminals.

Versions in impact-resistant polyamide or glass-fibre-rein-

forced polyester guarantee the high degree of protection IP66 for amperages up to 180 A. These can be optionally supplied with snap-on moulded plastic or brass flanges. They can be equipped with screw-on flanges.

Main current switches >180 A are realized in metal enclosures.

### Internationally approved.



### Features

- Full AC-3 switching capacity
- Cost-saving installation
- Variants: star, delta, Dahlander or reversing switches up to 80 A
- Up to 40 A: snap mounting
- Up to 180 A: IP66 protection



3-pole, 10 A 0-1

**Technical data**

**Ex-Main current switches 10 A**

Marking accd. to 2014/34/EU	Ⓔ II 2 G Ex de IIC T6 / Ⓔ II 2 D Ex tD A21 IP66 T80 °C	
EC-Type Examination Certificate	PTB 00 ATEX 1074	
IECEX Certificate of Conformity	BK1 07.0014	
Marking accd. to IECEx	Ex ed IIC T6 Ex tD A21 IP66 T53 °C	
Permissible ambient temperature	-20 °C up to +40 °C <sup>1)</sup>	
Rated voltage	up to max. 500 V	
Rated current	max. 10 A	
Frequency	50/60 Hz	
Rated making/breaking capacity AC-3 accd. EN 60947-3	U <sub>e</sub> 230 V / I <sub>e</sub> 10 A U <sub>e</sub> 400 V / I <sub>e</sub> 10 A U <sub>e</sub> 500 V / I <sub>e</sub> 10 A	
Back-up fuse	up to 400 V AC: 10 A gG up to 500 V AC: 10 A gG	
Connecting terminals	main contact	2 x 1.5 - 2.5 mm <sup>2</sup>
	auxiliary/signal contact	2 x 0.5 - 2.5 mm <sup>2</sup>
Protection class	I	
Degree of protection accd. to EN 60529	IP66	
Cable glands/enclosure drilling	M25 cable gland see ordering details	
Weight	approx. 0.60 kg	
Enclosure material	impact resistant polyamide	
Enclosure colour	black	
Padlocking facility	can be locked in OFF position with 3 commercially available padlocks (Ø max. 6 mm)	

<sup>1)</sup> Other ambient temperatures on request

## GHG 261 - Ex-main current switches 10 A



3-pole, 10 A 0-I

### Ordering details

Content	Cable gland	Order No.
<b>Ex-Main current switches 10 A</b>		
3-pole 0-I	2 x M25	ON-OFF switch

Customized version on request

### Accessories

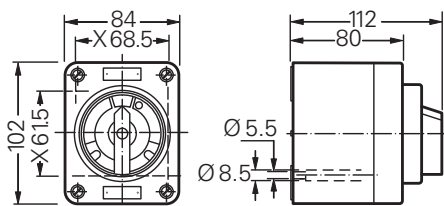
Type	Application	Fixing method	Order No.
<b>Mounting plate for Ex-Main current switches 10 A 3-pole</b>			
Size 1	Wall mounting	screwless mounting	<b>GHG 610 1953 R0101</b>
Size 1	Pipe clamp	screwless mounting	<b>GHG 610 1953 R0102</b>
Size 1	Trellis-work mounting	screwless mounting	<b>GHG 610 1953 R0103</b>

Type	Application	OU	Order No.
<b>Accessories for mounting plates</b>			
Label holder with type label (blank) for mounting plate size 1, 2, 2A and 3		10	<b>GHG 610 1953 R0057</b>
Mounting set for pipes 1" (of 27 - 30 mm) for mounting plates with pipe fixing		10	<b>GHG 610 1953 R0020</b>

Type	Application	OU	Order No.
<b>Protective canopy for mounting plate</b>			
Size 1	for mounting plate size 1	1	<b>GHG 610 1955 R0101</b>

Please pay attention that only order units (OU) according to the ordering details can be delivered.

### Dimension drawing



3-pole, 10 A 0-I

X = fixing dimensions



3-pole, 20 A change-over



3-pole, 20 A 0-1

Technical data

Ex-Main current switches 20 A

Marking accd. to 2014/34/EU	Ⓔ II 2 G Ex ed ia IIC T6 / Ⓔ II 2 D IP66 T55 °C
EC-Type Examination Certificate	PTB 99 ATEX 1161
IECEX Certificate of Conformity	BK1 07.0012
Marking accd. to IECEx	Ex ed ia IIC T6 Ex tD A21 IP66 T55 °C
Permissible ambient temperature	-20 °C up to +40 °C <sup>1)</sup>
Rated voltage	up to max. 690 V
Rated current	max. 20 A
Frequency	50/60 Hz
Rated making/breaking capacity AC-3 accd. EN 60947-3	U <sub>e</sub> 230 V / I <sub>e</sub> 20 A U <sub>e</sub> 400 V / I <sub>e</sub> 20 A U <sub>e</sub> 500 V / I <sub>e</sub> 16 A U <sub>e</sub> 690 V / I <sub>e</sub> 10 A
Back-up fuse	up to 400 V AC: 35 A gG up to 500 V AC: 35 A gG up to 690 V AC: 25 A gG
Connecting terminals	main contact 2 x 4 mm <sup>2</sup> auxiliary/signal contact 2 x 0.5 - 2.5 mm <sup>2</sup>
Protection class	I
Degree of protection accd. to EN 60529	IP66
Cable glands/enclosure drilling	M25 cable gland see ordering details M32 cable gland see ordering details Option: metal flange with thread
Weight	approx. 1.40 kg
Enclosure material	glass-fibre reinforced polyester
Enclosure colour	black
Padlocking facility	can be locked in OFF position with 3 commercially available padlocks (Ø max. 6 mm)

<sup>1)</sup> Other ambient temperatures on request

## GHG 262 - Ex-main current switches 20 A



3-pole, 20 A 0-I



3-pole, 20 A change-over

### Ordering details

Version		Cable gland		Order No.
<b>Ex-Main current switches 20 A 3-pole</b>				
3-pole	0 - I	2 x M32	ON-OFF switch	<b>GHG 262 1301 R0001</b>
	0 - Y - D	3 x M32	Star-delta	<b>GHG 262 0016 R0004</b>
	0 - I - II	3 x M32	Dahlander	<b>GHG 262 0016 R0005</b>
<b>Ex-Main current switches 20 A 3-pole Version with 2 auxiliary contacts (1 NO; 1 x NC)</b>				
3-pole	I - II	3 x M32/1 x M25	Change-over	<b>GHG 262 0016 R0001</b>
	I - 0 - II	3 x M32/1 x M25	Change-over	<b>GHG 262 0016 R0002</b>
	I - 0 - II	3 x M32/1 x M25	Reversing switch	<b>GHG 262 0016 R0003</b>

Customized version on request, auxiliary contacts in Ex ia available

### Accessories

Type	Application	Fixing method	Order No.
<b>Mounting plate for Ex-Main current switches 20 A 3-pole</b>			
Size 2	Wall mounting	snap on	<b>GHG 610 1953 R0104</b>
Size 2	Pipe clamp	snap on	<b>GHG 610 1953 R0105</b>
Size 2	Trellis-work mounting	snap on	<b>GHG 610 1953 R0106</b>
Type		OU	Order No.
<b>Accessories for mounting plates</b>			
	Label holder with type label (blank) for mounting plate size 1, 2, 2A and 3	10	<b>GHG 610 1953 R0057</b>
	Plug-in fastener for CEAG modules with 5.5 mm and 11 mm mounting feet 1 set = 4 pcs.	10	<b>GHG 610 1953 R0041</b>
	Mounting set for pipes 1" (of 27 - 30 mm) for mounting plates with pipe fixing	10	<b>GHG 610 1953 R0020</b>
Type	Application	OU	Order No.
<b>Protective canopy for mounting plate</b>			
Size 2	for mounting plate size 2	1	<b>GHG 610 1955 R0102</b>
Size 2A	for mounting plate size 2A	1	<b>GHG 610 1955 R0103</b>

Please pay attention that only order units (OU) according to the ordering details can be delivered.



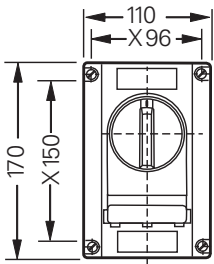


3-pole, 20 A change-over

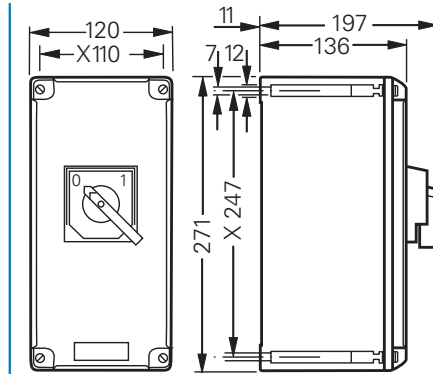
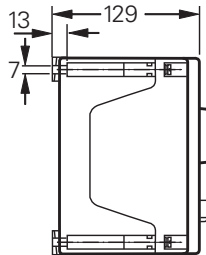


3-pole, 20 A 0-1

Dimension drawing



GHG 262 1301 R0001



GHG 262 0016 R...

X = fixing dimensions

## GHG 263 - Ex-main current switches 40 A



GHG 263 1301 R0001



GHG 263 0048 R....

### Technical data

#### Ex-Main current switches 40 A

Marking accd. to 2014/34/EU	⊕ II 2 G Ex de IIC T6 / ⊕ II 2 D Ex tD A21 IP66 T80 °C
EC-Type Examination Certificate	PTB 99 ATEX 1161
IECEX Certificate of Conformity	BKI 07.0012
Marking accd. to IECEx	Ex ed ia II T6 Ex tD A21 IP66 T55 °C
Permissible ambient temperature	-20 °C up to +40 °C <sup>1)</sup>
Rated voltage	up to max. 690 V
Rated current	max. 40 A
Frequency	50/60 Hz
Rated making/breaking capacity AC-3 accd. EN 60947-3	U <sub>b</sub> 230 V / I <sub>b</sub> 40 A U <sub>b</sub> 400 V / I <sub>b</sub> 40 A U <sub>b</sub> 500 V / I <sub>b</sub> 40 A U <sub>b</sub> 690 V / I <sub>b</sub> 32 A
Back-up fuse	up to 400 V AC: 80 A gG up to 500 V AC: 80 A gG up to 690 V AC: 63 A gG
Connecting terminals	main contact 2 x 16 mm <sup>2</sup>
Protection class	I
Degree of protection accd. to EN 60529	IP66
Cable glands/enclosure drilling	M25 cable gland see ordering details M40 cable gland see ordering details Option: metal flange with thread
Weight	3-pole approx. 2.30 kg 6-pole approx. 6.50 kg
Enclosure material	glass-fibre reinforced polyester
Enclosure colour	black
Padlocking facility	can be locked in OFF position with 3 commercially available padlocks (Ø max. 6 mm)

<sup>1)</sup> Other ambient temperatures on request



GHG 263 0048 R....



GHG 263 1301 R0001

**Ordering details**

Content	Cable gland	Order No.
<b>Ex-Main current switches 40 A 3-pole</b>		
3-pole	0 - I	2 x M40, 1 x M25
	ON-OFF switch	GHG 263 1301 R0001
	0 - Y - D	3 x M40, 2 x M25 screw plug
	Star-delta	GHG 263 0048 R0005
	0 - I - II	3 x M40, 2 x M25 screw plug
	Dahlander	GHG 263 0048 R0006

<b>Ex-Main current switches 40 A 3-pole</b>			
<b>Version with 2 auxiliary contacts (1 NO + 1 x NC)</b>			
3-pole	I - II	3 x M40/1 x M25, 1 x M25 screw plug	Change-over
			GHG 263 0048 R0002
	I - 0 - II	2 x M40/1 x M25, 1 x M25 screw plug	Reversing switch
			GHG 263 0048 R0004

<b>Version with 2 auxiliary contacts (1 NO + 1 x NO)</b>			
3-pole	I - 0 - II	3 x M40/1 x M25, 1 x M25 screw plug	Change-over
			GHG 263 0048 R0003

Customized version on request, auxiliary contacts in Ex ia available

**Accessories**

Type	Application	Fixing method	Order No.
<b>Mounting plate for Ex-Main current switches 40 A 3-pole</b>			
Size 3	Wall mounting	snap on	GHG 610 1953 R0118
Size 3	Pipe clamp	snap on	GHG 610 1953 R0110
Size 3	Trellis-work mounting	snap on	GHG 610 1953 R0118

Type	Application	Fixing method	Order No.
<b>Mounting plate for Ex-Main current switches 40 A 6-pole</b>			
Size 3	2 x pipe clamp	screw-on <sup>1)</sup>	GHG 610 1953 R0110

<sup>1)</sup> observe mounting distance

Type	OU	Order No.
<b>Accessories for mounting plates</b>		
Label holder with type label (blank) for mounting plate size 1, 2, 2A and 3	10	GHG 610 1953 R0057
Plug-in fastener for CEAG modules with 5.5 mm and 11 mm mounting feet 1 set = 4 pcs.	10	GHG 610 1953 R0041
Mounting set for pipes 1" (of 27 - 30 mm) for mounting plates with pipe fixing	10	GHG 610 1953 R0020

Type	Application	OU	Order No.
<b>Protective canopy for mounting plate</b>			
Size 3	for pipe mounting plate size 3 vertical	1	GHG 610 1955 R0104
Size 3A	for mounting plates wall/trellis fixing size 3 vertical	1	GHG 610 1955 R0105
Size 3B	for mounting plates pipe fixing size 3 horizontal	1	GHG 610 1955 R0106

Please pay attention that only order units (OU) according to the ordering details can be delivered.

**GHG 263 - Ex-main current switches 40 A**



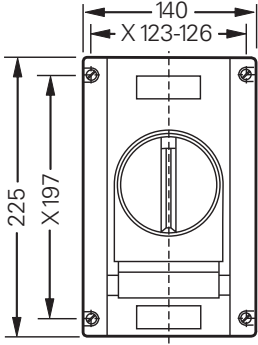
**GHG 263 1301 R0001**



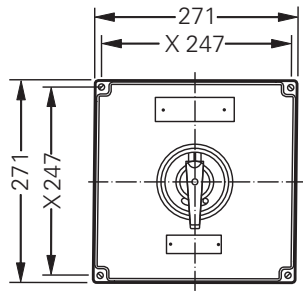
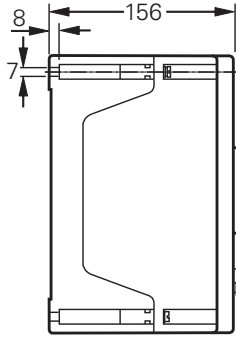
**GHG 263 0048 R...**

**Dimension drawing**

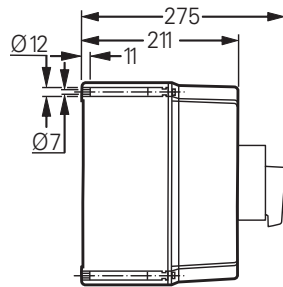
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**GHG 263 1301 R0001**



**GHG 263 0048 R...**



**X = fixing dimensions**

Dimensions in mm



6-pole, 80 A (change-over)

**Technical data**

**Ex-Main current switches 80 A**

Marking accd. to 2014/34/EU	Ⓔ II 2 G Ex de IIC T6 / Ⓔ II 2 D Ex tD A21 IP66 T80 °C	
EC-Type Examination Certificate	PTB 00 ATEX 1091	
Permissible ambient temperature	-20 °C up to +40 °C <sup>1)</sup>	
Rated voltage	up to max. 690 V	
Rated current	max. 80 A	
Frequency	50/60 Hz	
Rated making/breaking capacity AC-3 accd. EN 60947-3	U <sub>e</sub> 230 V / I <sub>e</sub> 80 A U <sub>e</sub> 400 V / I <sub>e</sub> 80 A U <sub>e</sub> 500 V / I <sub>e</sub> 80 A U <sub>e</sub> 690 V / I <sub>e</sub> 63 A	
Back-up fuse	up to 400 V AC: 80 A gG up to 500 V AC: 80 A gG up to 690 V AC: 63 A gG	
Connecting terminals	main contact auxiliary/signal contact	2 x 16 mm <sup>2</sup> 2 x 4 mm <sup>2</sup>
Protection class	I	
Degree of protection accd. to EN 60529	IP66	
Cable glands/enclosure drilling	M25 cable gland see ordering details M50 cable gland see ordering details Option: metal flange with thread	
Weight	3-pole 4-pole	approx. 6.50 kg approx. 9.00 kg
Enclosure material	glass-fibre reinforced polyester	
Enclosure colour	black	
Padlocking facility	can be locked in OFF position with 3 commercially available padlocks (Ø max. 6 mm)	

1) Other ambient temperatures on request

## GHG 264 - Ex-main current switches 80 A



6-pole, 80 A (change-over)

### Ordering details

Content	Cable gland	Order No.
<b>Ex-Main current switches 80 A</b>		
<b>Version with 2 auxiliary contacts (1 NO; 1 x NC)</b>		
4-pole	0 - I without auxiliary contact	2 x M50, 2 x M25, 1 x screw plug
		ON-OFF switch
		<b>GHG 264 0022 R9015</b>
3-pole	I - 0 - II	3 x M50, 1 x M25 screw plug
		Change-over
		<b>GHG 264 0019 R0003</b>
3-pole	I - 0 - II	2 x M50, 1 x M25 screw plug
		Reversing switch
		<b>GHG 264 0019 R0004</b>

Customized version on request, auxiliary contacts in Ex ia available

### Accessories

Type	Application	Fixing method	Order No.
<b>Mounting plate for Ex-Main current switches 80 A 3- and 4-pole</b>			
Size 3	2 x pipe clamp	screw-on <sup>1)</sup>	<b>GHG 610 1953 R0110</b>

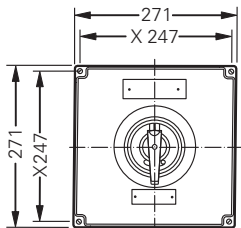
<sup>1)</sup> observe mounting distance

Type	Application	OU	Order No.
<b>Accessories for mounting plates</b>			
Label holder with label (unlabelled) for mounting plate size 1, 2, 2A and 3		10	<b>GHG 610 1953 R0057</b>
Mounting set for pipes 1" (of 27 - 30 mm) for mounting plates with pipe fixing		10	<b>GHG 610 1953 R0020</b>

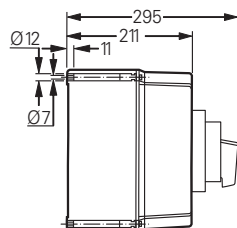
Type	Application	OU	Order No.
<b>Protective canopy for mounting plate</b>			
Size 3	for pipe clamp plate size 3 vertical	1	<b>GHG 610 1955 R0104</b>
Size 3A	for mounting plates wall/trellis fixing size 3 vertical	1	<b>GHG 610 1955 R0105</b>
Size 3B	for mounting plates pipe fixing size 3 horizontal	1	<b>GHG 610 1955 R0106</b>

Please pay attention that only order units (OU) according to the ordering details can be delivered.

### Dimension drawing



GHG264 0019 R....



X = fixing dimensions

Dimensions in mm



# 5.5

## EXKO 7318 Ex-Main Circuit Breakers

Rated current from 63 A - 630 A

### Safety for your protection

5

CEAG main circuit breakers enable making or breaking of circuits under normal operating conditions as well as cutting in, briefly conducting and cutting out currents under exceptional conditions, such as short circuiting.

### Full AC-3 motor switching capacities

Full AC-3 motor switching capacities and isolating properties according to EN 60947-4-1 with compulsory opening of the main current contacts according to EN 60204-1 are just some of the eminent features offered by CEAG power circuit breakers. Versions up to 180 A guarantee the optional high degree of protection IP65. The switch position is always clearly indicated and easily seen.

The main current switches feature an installation-friendly design and easily accessible connection terminals.

Metal versions can be equipped with metal screw-on flanges allowing simple integration in system as well as cost-efficient later extensions. These can be optionally supplied with snap-on moulded plastic or brass flanges.

The described power circuit breakers are also available for Explosion Group IIB, which is sufficient for many of the applications.



### Features

- Full AC-3 motor switching capacity
- High degree of IP protection
- Simple integration into systems





EXKO 73 1813 A

**Technical data**

**Ex-main circuit breaker 63 A**

Marking accd. to 2014/34/EU	Ⓢ II 2 G Ex de ia/ib [ia/ib] IIC T4 – T6 <sup>1)</sup> Ⓢ II 2 D IP66 T80 °C / T95 °C / T130 °C
EC-Type Examination Certificate	PTB 99 ATEX 1057
IECEX Certificate of Conformity	IECEX PTB 12.0026
Marking accd. to IECEx	Ex d IIC T6, T5 or T4 Gb / Ex de IIC T6, T5 or T4 Gb Ex d IIB T6, T5 or T4 Gb / Ex de IIB T6, T5 or T4 Gb
Permissible ambient temperature	–20 °C up to +40 °C <sup>2)</sup>
Rated voltage	up to max. 690 V
Rated current	max. 63 A
Frequency	50/60 Hz
Rated making/breaking capacity AC-3 accd. EN 60947-3	U <sub>e</sub> 230 V / I <sub>e</sub> 63 A U <sub>e</sub> 400 V / I <sub>e</sub> 63 A U <sub>e</sub> 500 V / I <sub>e</sub> 63 A U <sub>e</sub> 690 V / I <sub>e</sub> 63 A
Back-up fuse	up to 400 V AC: 80 A gG up to 500 V AC: 80 A gG up to 690 V AC: 80 A gG
Connecting terminals	main contact 2 x 35 mm <sup>2</sup>
Protection class	I
Degree of protection accd. to EN 60529	IP54 (Option IP65)
Cable glands/enclosure drilling	M50 cable gland see ordering details
Weight	3-pole approx. 17 kg 4-pole approx. 18 kg
Enclosure material	aluminium, powder-coated polyester connection box steel, powder-coated
Colour	Enclosure grey (RAL 7032) Cover dark grey (RAL 7022)

<sup>1)</sup> Also available with Explosion Group IIB

<sup>2)</sup> Other ambient temperatures on request

## EXKO 7318 Ex-main circuit breakers 63 A



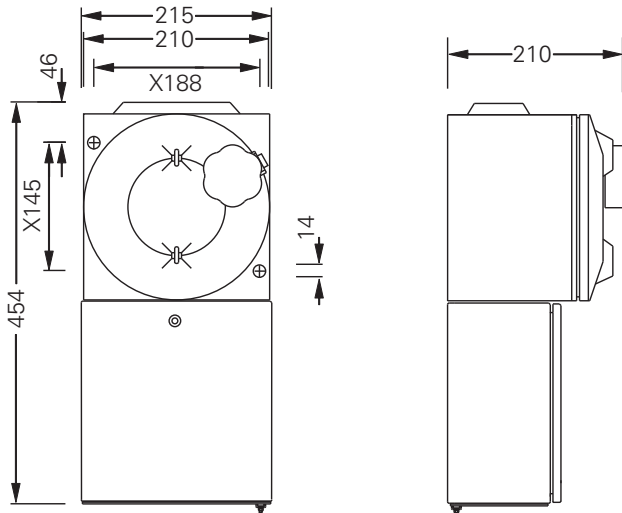
EXKO 73 1813 A

### Ordering details

Content	Cable gland	Order No.
<b>Ex-main circuit breaker 63 A</b>		
3-pole	2 x M50	<b>EXKO 73 1813 A0001</b>
4-pole	2 x M50	<b>EXKO 73 1814 A0001</b>

Customized version on request

### Dimension drawing



X = fixing dimensions



**EXKO 73 1813 B**

**Technical data**

**Ex-main circuit breaker 125 A**

Marking accd. to 2014/34/EU	⊕ II 2 G Ex de ia/ib [ia/ib] IIC T4 – T6 <sup>1)</sup> ⊕ II 2 D IP66 T80 °C / T95 °C / T130 °C
EC-Type Examination Certificate	PTB 99 ATEX 1057
IECEX Certificate of Conformity	IECEX PTB 12.0026
Marking accd. to IECEx	Ex d IIC T6, T5 or T4 Gb / Ex de IIC T6, T5 or T4 Gb Ex d IIB T6, T5 or T4 Gb / Ex de IIB T6, T5 or T4 Gb
Permissible ambient temperature	–20 °C up to +40 °C <sup>2)</sup>
Rated voltage	up to max. 690 V
Rated current	max. 125 A
Frequency	50/60 Hz
Rated making/breaking capacity AC-3 accd. EN 60947-3	U <sub>e</sub> 230 V / I <sub>e</sub> 125 A U <sub>e</sub> 400 V / I <sub>e</sub> 125 A U <sub>e</sub> 500 V / I <sub>e</sub> 125 A U <sub>e</sub> 690 V / I <sub>e</sub> 125 A
Back-up fuse	up to 400 V AC: 160 A gG up to 500 V AC: 160 A gG up to 690 V AC: 160 A gG
Connecting terminals      main contact	50/35 mm <sup>2</sup>
Protection class	I
Degree of protection accd. to EN 60529	IP54 (optional IP65)
Cable glands/enclosure drilling	M50 cable gland see ordering details
Weight                      3-pole 4-pole	approx. 48 kg approx. 52 kg
Enclosure material	aluminium, powder-coated polyester connection box steel, powder-coated
Colour                      Enclosure Cover	grey (RAL 7032) dark grey (RAL 7022)

<sup>1)</sup> Also available with Explosion Group IIB

<sup>2)</sup> Other ambient temperatures on request

## EXKO 7318 Ex-main circuit breakers 125 A



EXKO 73 1813 B

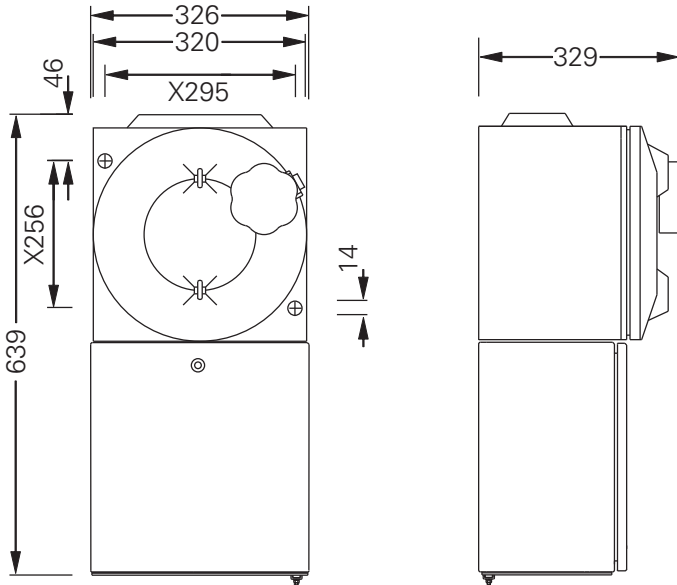
### Ordering details

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Content	Cable gland	Order No.
<b>Ex-main circuit breaker 125 A</b>		
3-pole	2 x M50	<b>EXKO 73 1813 B0001</b>
4-pole	2 x M50	<b>EXKO 73 1814 B0001</b>

Customized version on request

### Dimension drawing



X = fixing dimensions



EXKO 73 1813 C

Technical data

Ex-main circuit breaker 160 A

Marking accd. to 2014/34/EU	⊕ II 2 G Ex de ia/ib [ia/ib] IIC T4 ... T6 <sup>1)</sup> ⊕ II 2 D IP66 T80 °C / T95 °C / T130 °C
EC-Type Examination Certificate	PTB 99 ATEX 1057
IECEX Certificate of Conformity	IECEX PTB 12.0026
Marking accd. to IECEx	Ex d IIC T6, T5 or T4 Gb / Ex de IIC T6, T5 or T4 Gb Ex d IIB T6, T5 or T4 Gb / Ex de IIB T6, T5 or T4 Gb
Permissible ambient temperature	-20 °C up to +40 °C <sup>2)</sup>
Rated voltage	up to max. 690 V
Rated current	max. 160 A
Frequency	50/60 Hz
Rated making/breaking capacity AC-3 accd. EN 60947-3	U <sub>e</sub> 230 V / I <sub>b</sub> 160 A U <sub>e</sub> 400 V / I <sub>b</sub> 160 A U <sub>e</sub> 500 V / I <sub>b</sub> 160 A U <sub>e</sub> 690 V / I <sub>b</sub> 160 A
Back-up fuse	up to 400 V AC: 210 A gG up to 500 V AC: 210 A gG up to 690 V AC: 210 A gG
Connecting terminals      main contact	95/50 mm <sup>2</sup>
Protection class	I
Degree of protection accd. to EN 60529	IP54 (optional IP65)
Cable glands/enclosure drilling	M50 cable gland see ordering details
Weight                      3-pole 4-pole	approx. 48 kg approx. 52 kg
Enclosure material	aluminium, powder-coated polyester connection box steel, powder-coated
Colour                      Enclosure Cover	grey (RAL 7032) dark grey (RAL 7022)

1) Also available with Explosion Group IIB

2) Other ambient temperatures on request

## EXKO 7318 Ex-main circuit breakers 160 A



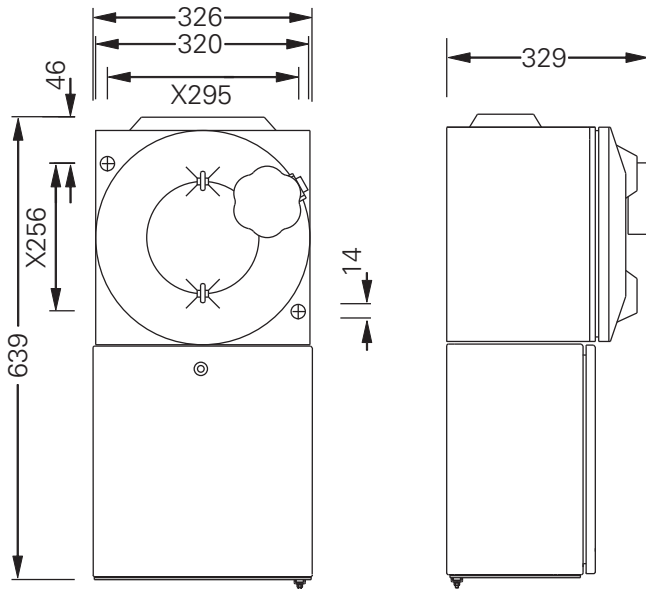
EXKO 73 1813 C

### Ordering details

Content	Cable gland	Order No.
<b>Ex-main circuit breaker 160 A</b>		
3-pole	2 x M50	<b>EXKO 73 1813 C0001</b>
4-pole	2 x M50	<b>EXKO 73 1814 C0001</b>

Customized version on request

### Dimension drawing



X = fixing dimensions



EXKO 73 1813 D

Technical data

Ex-main circuit breaker 250 A

Marking accd. to 2014/34/EU	Ⓢ II 2 G Ex de ia/ib [ia/ib] IIC T4 ... T6 <sup>1)</sup> Ⓢ II 2 D IP66 T80 °C / T95 °C / T130 °C
EC-Type Examination Certificate	PTB 99 ATEX 1057
IECEX Certificate of Conformity	IECEX PTB 12.0026
Marking accd. to IECEx	Ex d IIC T6, T5 or T4 Gb / Ex de IIC T6, T5 or T4 Gb Ex d IIB T6, T5 or T4 Gb / Ex de IIB T6, T5 or T4 Gb
Permissible ambient temperature	-20 °C up to +40 °C <sup>2)</sup>
Rated voltage	up to max. 690 V
Rated current	max. 250 A
Frequency	50/60 Hz
Rated making/breaking capacity AC-3 accd. EN 60947-3	U <sub>e</sub> 230 V / I <sub>e</sub> 250 A U <sub>e</sub> 400 V / I <sub>e</sub> 250 A U <sub>e</sub> 500 V / I <sub>e</sub> 250 A U <sub>e</sub> 690 V / I <sub>e</sub> 250 A
Back-up fuse	up to 400 V AC: 250 A gG up to 500 V AC: 250 A gG up to 690 V AC: 250 A gG
Connecting terminals	main contact 150/95 mm <sup>2</sup>
Protection class	I
Degree of protection accd. to EN 60529	IP54 (optional IP65)
Cable glands/enclosure drilling	M63 cable gland see ordering details
Weight	3-pole approx. 50 kg 4-pole approx. 55 kg
Enclosure material	aluminium, powder-coated polyester connection box steel, powder-coated
Colour	Enclosure grey (RAL 7032) Cover dark grey (RAL 7022)

<sup>1)</sup> Also available with Explosion Group IIB

<sup>2)</sup> Other ambient temperatures on request

## EXKO 7318 Ex-main circuit breakers 250 A



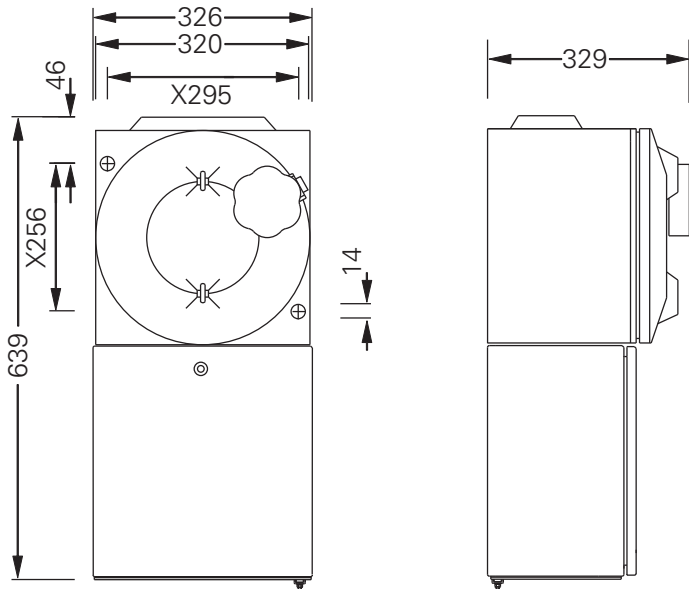
EXKO 73 1813 D

### Ordering details

Content	Cable gland	Order No.
<b>Ex-Main current switches 250 A</b>		
3-pole	2 x M63	<b>EXKO 73 1813 D0001</b>
4-pole	4 x M63	<b>EXKO 73 1814 D0001</b>

Customized version on request

### Dimension drawing



X = fixing dimensions





**EXKO 73 1813 E**

**Technical data**

**Ex-main circuit breaker 400 A**

Marking accd. to 2014/34/EU	⊕ II 2 G Ex de ia/ib [ia/ib] IIC T4 ... T6 <sup>1)</sup> ⊕ II 2 D IP66 T80 °C / T95 °C / T130 °C
EC-Type Examination Certificate	PTB 99 ATEX 1057
IECEX Certificate of Conformity	IECEX PTB 12.0026
Marking accd. to IECEx	Ex d IIC T6, T5 or T4 Gb / Ex de IIC T6, T5 or T4 Gb Ex d IIB T6, T5 or T4 Gb / Ex de IIB T6, T5 or T4 Gb
Permissible ambient temperature	-20 °C up to +40 °C <sup>2)</sup>
Rated voltage	up to max. 690 V
Rated current	max. 400 A (3-pole / max. 300 A (4-pole)
Frequency	50/60 Hz
Rated making/breaking capacity AC-3 accd. EN 60947-3	U <sub>e</sub> 230 V / I <sub>e</sub> 400 A U <sub>e</sub> 400 V / I <sub>e</sub> 400 A U <sub>e</sub> 500 V / I <sub>e</sub> 400 A U <sub>e</sub> 690 V / I <sub>e</sub> 400 A
Back-up fuse	up to 400 V AC: 500 A gG up to 500 V AC: 500 A gG up to 690 V AC: 500 A gG
Connecting terminals      main contact	150/95 mm <sup>2</sup>
Protection class	I
Degree of protection accd. to EN 60529	IP54 (optional IP65)
Cable glands/enclosure drilling	M63 cable gland see ordering details
Weight                      3-pole 4-pole	approx. 85 kg approx. 90 kg
Enclosure material	aluminium, powder-coated polyester connection box steel, powder-coated
Colour                      Enclosure Cover	grey (RAL 7032) dark grey (RAL 7022)

<sup>1)</sup> Also available with Explosion Group IIB

<sup>2)</sup> Other ambient temperatures on request

## EXKO 7318 Ex-main circuit breakers 400 A



EXKO 73 1813 E

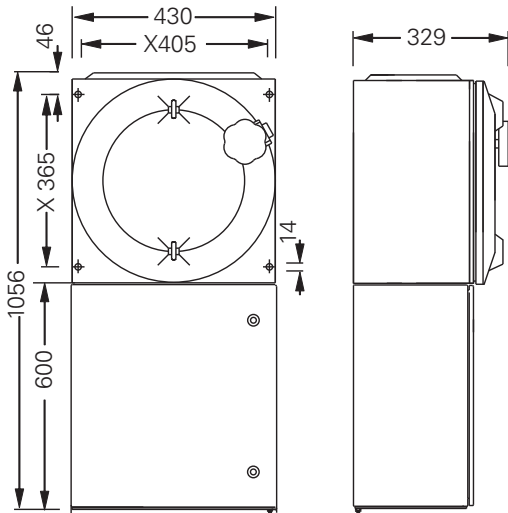
### Ordering details

5

Content	Cable gland	Order No.
<b>Ex-Main current switches 400 A</b>		
3-pole	4 x M63	<b>EXKO 73 1813 E0001</b>
4-pole	4 x M63	<b>EXKO 73 1814 E0001</b>

Customized version on request

### Dimension drawing



X = fixing dimensions



EXKO 73 1813 F

Technical data

Ex-main circuit breaker 630 A

Marking accd. to 2014/34/EU	Ⓢ II 2 G Ex de ia/ib [ia/ib] IIC T4 ... T6 <sup>1)</sup> Ⓢ II 2 D IP66 T80 °C / T95 °C / T130 °C	
EC-Type Examination Certificate	PTB 99 ATEX 1057	
IECEX Certificate of Conformity	IECEX PTB 12.0026	
Marking accd. to IECEx	Ex d IIC T6, T5 or T4 Gb / Ex de IIC T6, T5 or T4 Gb Ex d IIB T6, T5 or T4 Gb / Ex de IIB T6, T5 or T4 Gb	
Permissible ambient temperature	-20 °C up to +40 °C <sup>2)</sup>	
Rated voltage	up to max. 690 V	
Rated current	max. 630 A	
Frequency	50/60 Hz	
Rated making/breaking capacity AC-3 accd. EN 60947-3	U <sub>e</sub> 230 V / I <sub>e</sub> 630 A U <sub>e</sub> 400 V / I <sub>e</sub> 630 A U <sub>e</sub> 500 V / I <sub>e</sub> 630 A U <sub>e</sub> 690 V / I <sub>e</sub> 630 A	
Back-up fuse	up to 400 V AC: 800 A gG up to 500 V AC: 800 A gG up to 690 V AC: 800 A gG	
Connecting terminals	main contact	240/120 mm <sup>2</sup>
Protection class	I	
Degree of protection accd. to EN 60529	IP54 (optional IP65)	
Cable glands/enclosure drilling	M80 Ø 62 - 68 mm see ordering details	
Weight	3-pole 4-pole	approx. 245 kg approx. 250 kg
Enclosure material	aluminium, powder-coated polyester connection box steel, powder-coated	
Colour	Enclosure Cover	grey dark grey

<sup>1)</sup> Also available with Explosion Group IIB

<sup>2)</sup> Other ambient temperatures on request

## EXKO 7318 Ex-main circuit breakers 630 A



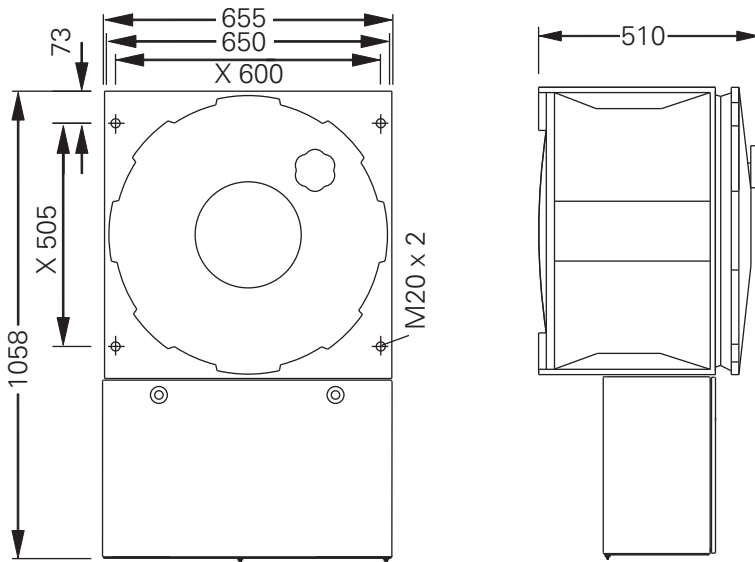
EXKO 73 1813 F

### Ordering details

Content	Cable gland	Order No.
<b>Ex-Main current switches 630 A</b>		
3-pole	4 x M80	<b>EXKO 73 1813 F0001</b>
4-pole	4 x M80	<b>EXKO 73 1814 F0001</b>

Customized version on request

### Dimension drawing



X = fixing dimensions



# 5.6

## GHG 635 Ex-Manual Motor Starters

Rated current up to 25 A

5

Motors have to be protected against overloads, phase failures and overheating: CEAG power circuit breaker and manual motor starter features phase-failure protection as well as thermal and electromagnetic tripping for reliable motor protection.

An optional under-voltage trip or auxiliary contact complements the safety package. The switch position is always indicated by the switch handle – practically excluding wrong operation.

A special safety feature offered by the manual motor starter: It can only be switched on on-site – where the drive is. An operating-current trip for remote switch-off is optional.

CEAG manual motor starters have such a precise tripping time that they are equally suited for the protection of Ex-e as well as Ex-d motors – just to put you on the safe side.



### Features

- Full AC-3 motor switching capacity
- Decisive cost savings with CEAG mounting system
- Easily accessible connection terminals
- High degree of protection IP66
- Isolating properties according to DIN EN 60947-4-1
- Clear indication of switch position
- Phase-failure protection
- Integrated locking facility



GHG 635 (25 A)

## Technical data

### Ex-manual motor starter GHG 635 (25 A)

Marking accd. to 2014/34/EU	Ⓔ II 2 G Ex ed IIC T5/T6 / Ⓔ II 2 D Ex tD A21 IP66 T80 °C	
EC-Type Examination Certificate	PTB 99 ATEX 1162	
IECEX Certificate of Conformity	IECEX BK1 08.0014	
Marking accd. to IECEx	Ex d IIC T6/ Ex tD A21 IP66 T80 °C	
Permissible ambient temperature	at T6 I <sub>e</sub> ≤ 16 A                    -20 °C up to +40 °C at T5 I <sub>e</sub> > 16 A; ≤ 25 A        -20 °C up to +55 °C	
Rated voltage	up to max. 690 V	
Rated current	max. 25 A	
Rated current aux. contact	max. 2 A	
Frequency	50/60 Hz	
Rated making/breaking capacity AC-3 accd. EN 60947-4-1	U <sub>e</sub> 690 V / I <sub>e</sub> 25 A	
Back-up fuse	see table	
Undervoltage trip	tripping at 15 % - 75 % U <sub>n</sub> can be switched on at U > 80 % U <sub>c</sub>	
Connecting terminals	main contact	10 mm <sup>2</sup>
	auxiliary-/Signal contact	2 x 0.75 - 4.0 mm <sup>2</sup>
Thermal tripping characteristic	T II	
Protection class	I	
Degree of protection accd. to EN 60529	IP66	
Cable glands/enclosure drilling	0.1 - 6.3 A                    2 x M25 cable gland <sup>1)</sup> 6.3 - 25 A                    2 x M32 cable gland <sup>1)</sup> , optional metal flange with thread	
Weight	2.5 kg	
Enclosure material	glass-fibre reinforced polyester	
Enclosure colour	black	
Padlocking facility	can be locked in OFF position with 3 commercially available padlocks (Ø max. 6 mm)	

<sup>1)</sup> Version with aux. contact or under voltage trip with additional cable gland M25

## GHG 635-1 Ex-manual motor starters



GHG 635 (25 A)

### Ordering coding for special version

Description	Content	Undervoltage trip	Aux. contact	R...
GHG 635 1	A	B	C	R...

### Coding

<b>A</b>	Content	1	=	Standard version
<b>B</b>	Undervoltage trip	0	=	without undervoltage trip
		1	=	undervoltage trip 230 V
		2	=	undervoltage trip 400 V
		3	=	undervoltage trip 440 V
		4	=	undervoltage trip 500 V
		5	=	undervoltage trip 24 V
		6	=	undervoltage trip 48 V
		7	=	undervoltage trip 60 V
		8	=	undervoltage trip 110 V
9	=	undervoltage trip 415 V		
<b>C</b>	Auxiliary contact	1	=	without aux. contact
		2	=	with aux. contact 1 NO + 1 NC
		3	=	with aux. contact 2 NO

### Short-circuit protection up to 100 kA and maximum backup fuse

Setting range	230 V AC		400 V AC		500 V AC		690 V AC		Temp Class	Order No.				
	Ics	gG, aM	Ics	gG, aM	Ics	gG, aM	Ics	gG, aM		A	B	C	R...	
0.1 A ... 0.16 A									T6	GHG 635 1	1	0	1	R0101
0.16 A ... 0.25 A									T6	GHG 635 1	1	0	1	R0102
0.25 A ... 0.40 A									T6	GHG 635 1	1	0	1	R0103
0.40 A ... 0.63 A									T6	GHG 635 1	1	0	1	R0104
0.63 A ... 1.0 A									T6	GHG 635 1	1	0	1	R0105
1.0 A ... 1.6 A									T6	GHG 635 1	1	0	1	R0106
1.6 A ... 2.5 A							40 kA	25 A	T6	GHG 635 1	1	0	1	R0107
2.5 A ... 4.0 A					40 kA	35/40 A	10 kA	40 A	T6	GHG 635 1	1	0	1	R0108
4.0 A ... 6.3 A					30 kA	50 A	3 kA	40 A	T6	GHG 635 1	1	0	1	R0109
6.3 A ... 9.0 A					30 kA	80 A	3 kA	50 A	T6	GHG 635 1	1	0	1	R0110
9.0 A ... 12.5 A			50 kA	80 A	20 kA	80 A	3 kA	50 A	T6	GHG 635 1	1	0	1	R0111
12.5 A ... 16.0 A			50 kA	100 A	20 kA	100 A	3 kA	50 A	T6	GHG 635 1	1	0	1	R0112
16.0 A ... 20.0 A			50 kA	100 A	20 kA	100 A	2 kA	50 A	T5	GHG 635 1	1	0	1	R0113
20.0 A ... 25.0 A	50 kA	125 A	50 kA	125 A	20 kA	125 A	2 kA	50 A	T5	GHG 635 1	1	0	1	R0114

Customized version on request





GHG 635 (25 A)

**Accessories**

Type	Application	Fixing method	Order No.
<b>Mounting plate for Ex-Main current switches 25 A</b>			
Size 3	Wall mounting	screwless mounting	GHG 610 1953 R0118
Size 3	Pipe clamp	screwless mounting	GHG 610 1953 R0110
Size 3	Trellis-work mounting	screwless mounting	GHG 610 1953 R0118

Type	OU	Order No.
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**Accessories for mounting plates**

Label holder with type label (blank) for mounting plate size 1, 2, 2A and 3	10	GHG 610 1953 R0057
Mounting set for pipes 1" (of 27 - 30 mm) for mounting plates with pipe fixing	10	GHG 610 1953 R0020

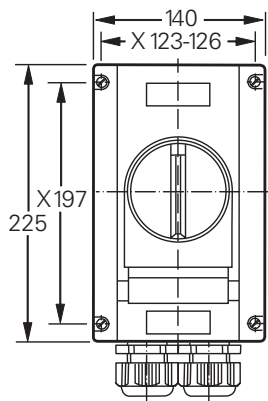
Type	Application	OU	Order No.
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**Protective canopy for mounting plate**

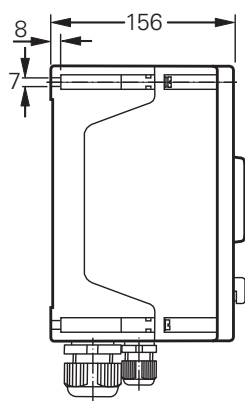
Size 3	for pipe mounting plate size 3 vertical	1	GHG 610 1955 R0104
Size 3A	for mounting plates wall/trellis fixing size 3 vertical	1	GHG 610 1955 R0105
Size 3B	for mounting plates pipe fixing size 3 horizontal	1	GHG 610 1955 R0106

Please pay attention that only order units (OU) according to the ordering details can be delivered.

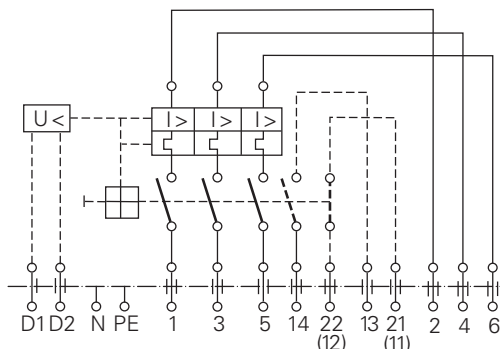
**Dimension drawing Wiring diagram**



GHG 635



X = fixing dimensions



## GHG 635-12 Ex-manual motor starters



GHG 635-12



Panel mounting

### Technical data

#### Ex-manual motor starter GHG 635-12

Marking accd. to 2014/34/EU	⊕ II 2 G Ex d IIC T6 / ⊕ II 2 D Ex tD A21 IP66 T80 °C
EC-Type Examination Certificate	PTB 05 ATEX 1020
Permissible ambient temperature	-20 °C up to +40 °C
Rated voltage	up to max. 690 V
Rated current	0.1 up to 16 A
Frequency	50/60 Hz
Rated making/breaking capacity AC-3 accd. EN 60947-3-4-1	$U_e$ 650 V / $I_e$ 16 A
Rated voltage undervoltage trip	400 V 50/60 Hz (Standard version) 440 V / 500 V / 24 V / 48 V / 60 V on request tripping at 35 % – 70 % $U_c$
Undervoltage trip	can be switched on at $U > 85 \% U_c$
Back-up fuse	up to 400 V AC short circuit proof up to 50 kA up to 6.3 A; 30 kA up to 16 A
Thermal tripping characteristic	T II
Protection class	I
Degree of protection accd. to EN 60529	IP66
Connecting cable	H07RN-F (standard 3 m, other length on request)
Weight	1 kg (without cable)
Enclosure material	glass-fibre reinforced polyamide
Enclosure colour	black
Padlocking facility	can be locked in OFF position with 3 commercially available padlocks (Ø max. 6 mm)

### Short-circuit protection up to 100 kA and maximum backup fuse

Setting range	230 V AC		400 V AC		500 V AC		690 V AC	
	lcs	gG, aM	lcs	gG, aM	lcs	gG, aM	lcs	gG, aM
0.1 A ... 0.16 A								
0.16 A ... 0.25 A								
0.25 A ... 0.40 A								
0.40 A ... 0.63 A								
0.63 A ... 1.0 A								
1.0 A ... 1.6 A								
1.6 A ... 2.5 A		short-circuit no backup-fuse required up to $I_{cc} = 50$ A					40 kA	25 A
2.5 A ... 4.0 A							10 kA	40 A
4.0 A ... 6.3 A					40 kA	50 A	7 kA	40 A
6.3 A ... 9.0 A					30 kA	80 A	5 kA	50 A
9.0 A ... 12.5 A					27 kA	80 A	4.5 kA	50 A
12.5 A ... 16.0 A					25 kA	100 A	4 kA	50 A

Customized version on request



Panel mounting



with mounting plate



GHG 635-12

**Ordering details**

Setting range	undervoltage trip	Cord length	Order No.
<b>Ex-manual motor starter GHG 635-12</b>			
0.1 - 0.16 A	no	2 x 3 m	GHG 635 1200 R0001
	400 V	2 x 3 m	GHG 635 1220 R0001
0.16 - 0.25 A	no	2 x 3 m	GHG 635 1200 R0002
	400 V	2 x 3 m	GHG 635 1220 R0002
0.25 - 0.40 A	no	2 x 3 m	GHG 635 1200 R0003
	400 V	2 x 3 m	GHG 635 1220 R0003
0.40 - 0.63 A	no	2 x 3 m	GHG 635 1200 R0004
	400 V	2 x 3 m	GHG 635 1220 R0004
0.63 - 1.0 A	no	2 x 3 m	GHG 635 1200 R0005
	400 V	2 x 3 m	GHG 635 1220 R0005
1.0 - 1.6 A	no	2 x 3 m	GHG 635 1200 R0006
	400 V	2 x 3 m	GHG 635 1220 R0006
1.6 - 2.5 A	no	2 x 3 m	GHG 635 1200 R0007
	400 V	2 x 3 m	GHG 635 1220 R0007
2.5 - 4.0 A	no	2 x 3 m	GHG 635 1200 R0008
	400 V	2 x 3 m	GHG 635 1220 R0008
4.0 - 6.3 A	no	2 x 3 m	GHG 635 1200 R0009
	400 V	2 x 3 m	GHG 635 1220 R0009
6.3 - 9 A	no	2 x 3 m	GHG 635 1200 R0010
	400 V	2 x 3 m	GHG 635 1220 R0010
9 - 12.5 A	no	2 x 3 m	GHG 635 1200 R0011
	400 V	2 x 3 m	GHG 635 1220 R0011
12.5 - 16 A	no	2 x 3 m	GHG 635 1200 R0012
	400 V	2 x 3 m	GHG 635 1220 R0012

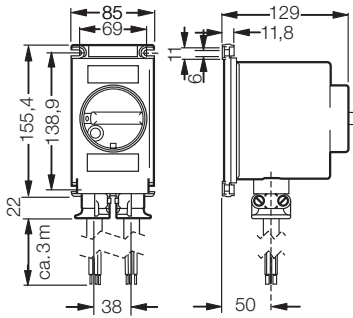
## GHG 635 Ex-manual motor starters



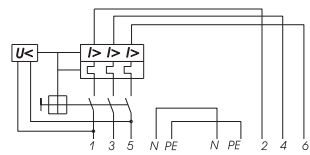
### Accessories

Type	Application	Order No.
5 <b>Mounting plate Ex-manual motor starter GHG 635-12</b>		
Mounting plate	Mounting plate for pipe mounting (1" or 2") and square profile 41 x 41 mm or U-profile 60 x 40 mm incl. snap-on fixing clips	<b>GHG 630 1926 R0001</b>
Screws size 1	5 self-tapping screws for panel mounting 1 - 2 mm wall thickness	<b>GHG 630 1925 R0001</b>
Screws size 2	5 self-tapping screws for panel mounting 2 - 3 mm wall thickness	<b>GHG 630 1925 R0002</b>

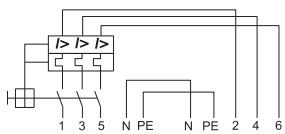
### Dimension drawing Wiring diagram



GHG 635-12



with undervoltage trip



without undervoltage trip

