

SAFETY SWITCHES GHG 981 FOR ZONE 22

Occupational safety always has top priority!

For this reason, whenever it is necessary to carry out maintenance, cleaning or repair work, it must be possible to isolate machines and installations from the electrical power supply in an absolutely safe and reliable way.

5 If safety switches that meet the requirements of the Employer's Liability Insurance Association of the Chemical Industry are used, previous standard, time-consuming measures e.g. the disconnection of motors, are no longer necessary.

The CEAG GHG 981 safety switches have been approved for use in explosive dust atmospheres in Zone 22 and with their padlocking facilities they can be used as a load break switch to provide the safety you require. The enclosures are designed in the high degree of protection IP 66, are available in plastic, powder-coated sheet steel and electro-polished stainless steel versions and feature an earth terminal. They are extremely robust and corrosion-resistant and are, therefore, suitable for use in harsh industrial environments with extreme ambient temperatures from -55°C to +55°C. The switches can be locked in the "OFF" position by means of max. 3 padlocks. To prevent manipulation, enclosure covers of safety switches cannot be opened in the locked position without destroying the enclosure.

The switches are available in 3-, 4- or 6-pole versions in sizes ranging from 25 A to 800 A. They feature a full AC 23A motor switching capacity and isolating properties to EN 60947-3 with compulsory opening of the main current contacts. Optionally, an EMERG.-STOP version to EN 60204-1, featuring a red handle with a yellow backplate, is also available. The additional leading or lagging auxiliary contact guarantees double safety for extreme switching conditions.

Special features of the safety switches are the easy-to-install design and the easily accessible connection terminals. Safety switches for currents up to 800 A are built into enclosures made of powder-coated sheet steel or electro-polished stainless steel. These enclosures can be fitted with screw-on flanges.

- **Approved for use in explosive dust atmospheres in Zone 22 and for industrial applications**
- **For max. currents from 25 A up to 800 A**
- **AC 23A switching capacity**
- **High degree of protection IP 66**
- **Reliable corrosion protection**
- **Large temperature range from - 55°C up to +55°C**





Technical data

GHG 981 in plastic and metal design

Marking accd. to 94/9/EC	⊕ II 3 D Ex tc IIIC T80 °C /T85 °C/T90 °C/T95 °C Dc
Type Examination Certificate	CCH 12 ATEX 1026 X
Permissible ambient temperature	-55 °C up to +40 °C/45 °C/50 °C/55 °C see technical values
Rated voltage	up to max. 690 V
Rated current	see table
Frequency	50 Hz
Degree of protection accd. to EN 60529	IP66
Aux. 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)
Enclosure colour	Plastic = black / sheet steel = RAL 7032 / stainless steel 316L = electro-polished

GHG 981 (25 A)

Back-up fuse	up to 415 V AC	up to 690 V AC
	40 A gG	25 A gG
Rated making/breaking capacity AC-23A accd. EN 60947-3	23 A	12 A
Terminal cross section	4 mm ² - 10 mm ²	

GHG 981 (40 A)

Back-up fuse	up to 415 V AC	up to 690 V AC
	100 A gG	80 A gG
Rated making/breaking capacity AC-23A accd. EN 60947-3	40 A	20 A
Terminal cross section	16 mm ² - 35 mm ²	

Ordering details

Rated current	No. of poles	Enclosure material	Cable entry	Order No.
25 A	3 pole	glass-fibre reinforced polyester	2xM32 / 1xM25	GHG 981 0048 R0211
25 A	4 pole	glass-fibre reinforced polyester	2xM32 / 1xM25	GHG 981 0048 R0212
25 A	6 pole	glass-fibre reinforced polyester	4xM32 / 1xM25	GHG 981 0048 R0213
25 A	3 pole	sheet steel polyester powder coated	2xM32 / 1xM25	GHG 981 0048 R0214
25 A	4 pole	sheet steel polyester powder coated	2xM32 / 1xM25	GHG 981 0048 R0215
25 A	6 pole	sheet steel polyester powder coated	4xM32 / 1xM25	GHG 981 0048 R0216
25 A	3 pole	stainless steel AISI 316L, electro-polished	2xM32 / 1xM25	GHG 981 0048 R0217
25 A	4 pole	stainless steel AISI 316L, electro-polished	2xM32 / 1xM25	GHG 981 0048 R0218
25 A	6 pole	stainless steel AISI 316L, electro-polished	4xM32 / 1xM25	GHG 981 0048 R0219
40 A	3 pole	glass-fibre reinforced polyester	2xM40 / 1xM25	GHG 981 0048 R0221
40 A	4 pole	glass-fibre reinforced polyester	2xM40 / 1xM25	GHG 981 0048 R0222
40 A	6 pole	glass-fibre reinforced polyester	4xM40 / 1xM25	GHG 981 0048 R0223
40 A	3 pole	sheet steel polyester powder coated	2xM40 / 1xM25	GHG 981 0048 R0224
40 A	4 pole	sheet steel polyester powder coated	2xM40 / 1xM25	GHG 981 0048 R0225
40 A	6 pole	sheet steel polyester powder coated	4xM40 / 1xM25	GHG 981 0048 R0226
40 A	3 pole	stainless steel AISI 316L, electro-polished	2xM40 / 1xM25	GHG 981 0048 R0227
40 A	4 pole	stainless steel AISI 316L, electro-polished	2xM40 / 1xM25	GHG 981 0048 R0228
40 A	6 pole	stainless steel AISI 316L, electro-polished	4xM40 / 1xM25	GHG 981 0048 R0229

Ex-safety switches



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 (80 A)

Back-up fuse	up to 415 V AC	up to 690 V AC
	125 A gG	125 A gG
Rated making/breaking capacity AC-23A accd. EN 60947-3	80 A	40 A
Terminal cross section	50 mm ² - 70 mm ²	

GHG 981 (100 A)

Back-up fuse	up to 415 V AC	up to 690 V AC
	315 A gG	355 A gG
Rated making/breaking capacity AC-23A accd. EN 60947-3	100 A	100 A
Terminal cross section	50 mm ² - 70 mm ²	

Ordering details

Rated current	No. of poles	Enclosure material	Cable entries	Order No.
80 A	3 pole	glass-fibre reinforced polyester	2xM50 / 1xM25	GHG 981 0048 R0231
80 A	4 pole	glass-fibre reinforced polyester	2xM50 / 1xM25	GHG 981 0048 R0232
80 A	6 pole	glass-fibre reinforced polyester	4xM50 / 1xM25	GHG 981 0048 R0233
80 A	3 pole	sheet steel polyester powder coated	2xM50 / 1xM25	GHG 981 0048 R0234
80 A	4 pole	sheet steel polyester powder coated	2xM50 / 1xM25	GHG 981 0048 R0235
80 A	6 pole	sheet steel polyester powder coated	4xM50 / 1xM25	GHG 981 0048 R0236
80 A	3 pole	stainless steel AISI 316L, electro-polished	2xM50 / 1xM25	GHG 981 0048 R0237
80 A	4 pole	stainless steel AISI 316L, electro-polished	2xM50 / 1xM25	GHG 981 0048 R0238
80 A	6 pole	stainless steel AISI 316L, electro-polished	4xM50 / 1xM25	GHG 981 0048 R0239
100 A	3 pole	glass-fibre reinforced polyester	2xM50 / 1xM25	GHG 981 0048 R0241
100 A	4 pole	glass-fibre reinforced polyester	2xM63 / 1xM25	GHG 981 0048 R0242
100 A	6 pole	glass-fibre reinforced polyester	4xM50 / 1xM25	GHG 981 0048 R0243
100 A	3 pole	sheet steel polyester powder coated	2xM50 / 1xM25	GHG 981 0048 R0244
100 A	4 pole	sheet steel polyester powder coated	2xM63 / 1xM25	GHG 981 0048 R0245
100 A	6 pole	sheet steel polyester powder coated	4xM50 / 1xM25	GHG 981 0048 R0246
100 A	3 pole	stainless steel AISI 316L, electro-polished	2xM50 / 1xM25	GHG 981 0048 R0247
100 A	4 pole	stainless steel AISI 316L, electro-polished	2xM63 / 1xM25	GHG 981 0048 R0248
100 A	6 pole	stainless steel AISI 316L, electro-polished	4xM50 / 1xM25	GHG 981 0048 R0249



Technical data

GHG 981 (160 A)

Back-up fuse	up to 415 V AC 315 A gG	up to 690 V AC 355 A gG
Rated making/breaking capacity AC-23A accd. EN 60947-3	160 A	160 A
Terminal cross section	95 mm ² - M8 x 25	

GHG 981 (250 A)

Back-up fuse	up to 415 V AC 315 A gG	up to 690 V AC 355 A gG
Rated making/breaking capacity AC-23A accd. EN 60947-3	250 A	250 A
Terminal cross section	185 mm ² - M10 x 30	

GHG 981 (400 A)

Back-up fuse	up to 415 V AC 500 A gG	up to 690 V AC 500 A gG
Rated making/breaking capacity AC-23A accd. EN 60947-3	400 A	400 A
Terminal cross section	1 x 240 mm ²	

Ordering details

Rated current	No. of poles	Enclosure material	Cable entries	Order No.
160 A	3 pole	glass-fibre reinforced polyester	2xM63 / 1xM25	GHG 981 0048 R0251
160 A	4 pole	glass-fibre reinforced polyester	2xM63 / 1xM25	GHG 981 0048 R0252
160 A	6 pole	glass-fibre reinforced polyester	4xM50 / 1xM25	GHG 981 0048 R0253
160 A	3 pole	sheet steel polyester powder coated	2xM63 / 1xM25	GHG 981 0048 R0254
160 A	4 pole	sheet steel polyester powder coated	2xM63 / 1xM25	GHG 981 0048 R0255
160 A	6 pole	sheet steel polyester powder coated	4xM50 / 1xM25	GHG 981 0048 R0256
160 A	3 pole	stainless steel AISI 316L, electro-polished	2xM63 / 1xM25	GHG 981 0048 R0257
160 A	4 pole	stainless steel AISI 316L, electro-polished	2xM63 / 1xM25	GHG 981 0048 R0258
160 A	6 pole	stainless steel AISI 316L, electro-polished	4xM50 / 1xM25	GHG 981 0048 R0259
250 A	3 pole	sheet steel polyester powder coated	2xM63 / 1xM25	GHG 981 0048 R0261
250 A	4 pole	sheet steel polyester powder coated	2xM63 / 1xM25	GHG 981 0048 R0262
250 A	6 pole	sheet steel polyester powder coated	4xM63 / 1xM25	GHG 981 0048 R0263
250 A	3 pole	stainless steel AISI 316L, electro-polished	2xM63 / 1xM25	GHG 981 0048 R0264
250 A	4 pole	stainless steel AISI 316L, electro-polished	2xM63 / 1xM25	GHG 981 0048 R0265
250 A	6 pole	stainless steel AISI 316L, electro-polished	4xM63 / 1xM25	GHG 981 0048 R0266
400 A	3 pole	sheet steel polyester powder coated	2xM63 / 1xM25	GHG 981 0048 R0271
400 A	4 pole	sheet steel polyester powder coated	2xM63 / 1xM25	GHG 981 0048 R0272
400 A	6 pole	sheet steel polyester powder coated	4xM63 / 1xM25	GHG 981 0048 R0273
400 A	3 pole	stainless steel AISI 316L, electro-polished	2xM63 / 1xM25	GHG 981 0048 R0274
400 A	4 pole	stainless steel AISI 316L, electro-polished	2xM63 / 1xM25	GHG 981 0048 R0275
400 A	6 pole	stainless steel AISI 316L, electro-polished	4xM63 / 1xM25	GHG 981 0048 R0276

Ex-safety switches



GHG 981 (630 A)



GHG 981 (800 A)

Technical data

GHG 981 (630 A)

Back-up fuse	up to 415 V AC	up to 690 V AC
	800 A gG	800 A gG
Rated making/breaking capacity AC-23A accd. EN 60947-3	630 A	630 A
Terminal cross section	2 x 185 mm ² - M12 x 40	

GHG 981 (800 A)

Back-up fuse	up to 415 V AC	up to 690 V AC
	800 A gG	800 A gG
Rated making/breaking capacity AC-23A accd. EN 60947-3	800 A	800 A
Terminal cross section	2 x 240 mm ² - M12 x 40	

Ordering details

Rated current	No. of poles	Enclosure material	Cable entry	Order No.
630 A	3 pole	sheet steel polyester powder coated	4xM80 / 1xM25	GHG 981 0048 R0281
630 A	4 pole	sheet steel polyester powder coated	4xM80 / 1xM25	GHG 981 0048 R0282
630 A	3 pole	stainless steel AISI 316L, electro-polished	4xM80 / 1xM25	GHG 981 0048 R0284
630 A	4 pole	stainless steel AISI 316L, electro-polished	4xM80 / 1xM25	GHG 981 0048 R0285
800 A	3 pole	sheet steel polyester powder coated	4xM80 / 1xM25	GHG 981 0048 R0291
800 A	4 pole	sheet steel polyester powder coated	4xM80 / 1xM25	GHG 981 0048 R0292
800 A	3 pole	stainless steel AISI 316L, electro-polished	4xM80 / 1xM25	GHG 981 0048 R0294
800 A	4 pole	stainless steel AISI 316L, electro-polished	4xM80 / 1xM25	GHG 981 0048 R0295

Accessories

Cable glands

Type	Version	
Plastic cable glands	M20 up to M63	see: page 2.3.5 or http://www.coopercrouse-hinds.eu/products/de
Metal cable glands	ADE 1 F2	see: page 2.3.14 or http://www.coopercrouse-hinds.eu/products/de



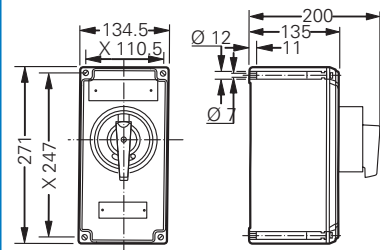
40 A sheet steel

40 A plastic

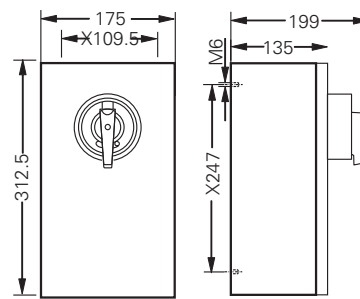
25 A stainless steel

25 plastic

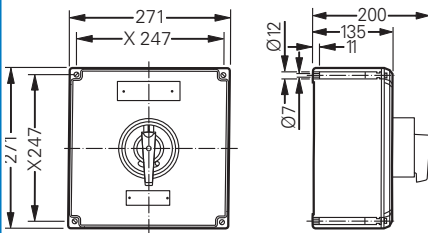
Dimension drawing



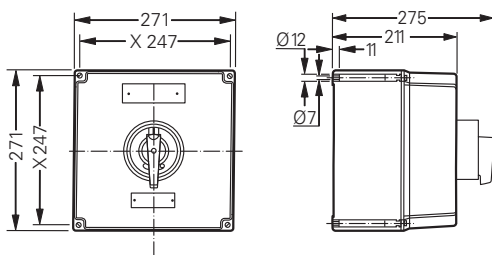
25 A, 3-/4-pole, plastic



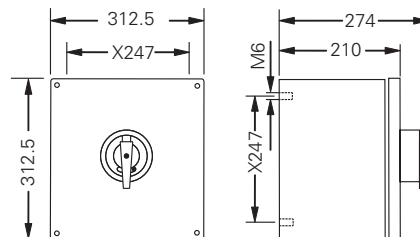
25 A, 3-/4-/6-pole, metal



25 A, 6-pole, plastic



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



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

X = fixing dimensions

| Ex-safety switches |



80 A 3-pole plastic

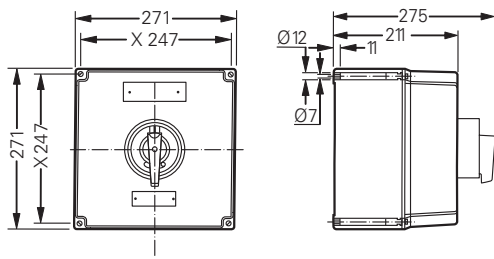
80 A 6-pole sheet steel

100 A 3-pole plastic

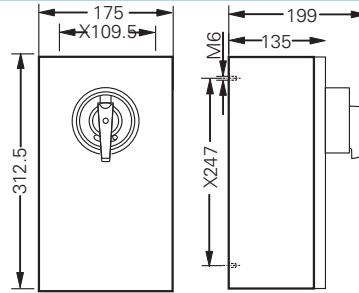
100 A 6-pole stainless steel

Dimension drawing

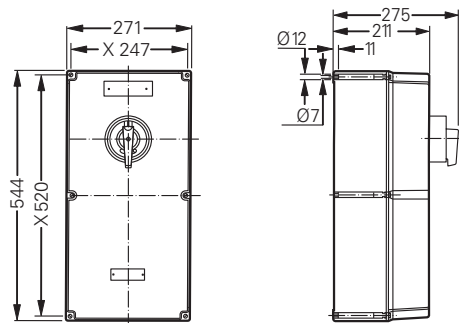
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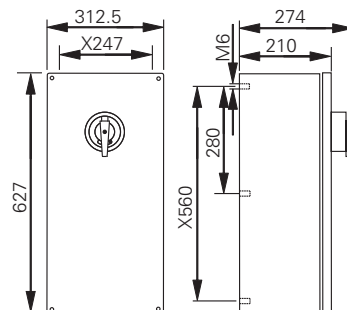
80 A, 3-/4-pole, plastic
100 A, 3-pole, plastic
160 A, 3-pole, plastic



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

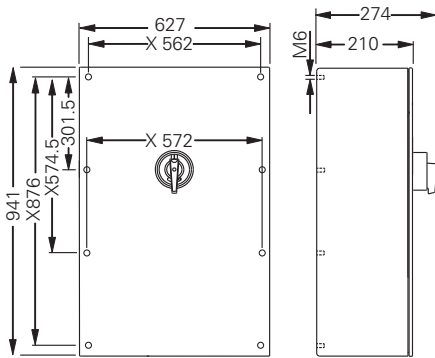


GHG 981 (630 A)



GHG 981 (800 A)

Dimension drawing



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

X = fixing dimensions