

E X - C O N T R O L S T A T I O N

Stainless steel Version for Zone 1 and Zone 21

CEAG explosion-protected control stations made of high-grade 316L stainless steel are designed to accommodate up to four built-in components. These stainless-steel control stations with electro-polished surfaces offer protection for applications in the off-shore industry and at sites with especially severe mechanical, chemical and climatic conditions.

CEAG flameproof built-in components, such as signal lamps, pushbuttons and switches, provide snap-on mounting on rails screwed into the enclosures. To facilitate insertion of cables into the entries, the built-in components can be snapped out of the enclosures. Notches in the mounting rails define the position of the built-in components and prevent them from being twisted out of place.

Free mounting areas can be provided for retrofitting certified CEAG components. These are then factory sealed with blanking elements.

Internationally approved.



- High mechanical, chemical and thermal resistance
- Individual configuration
- Clean-room applications



Technical data

Ex-Control stations Type 414 81 | Type 414 82

Marking to 94/9/EC	Ex II 2 G Ex ed ib m IIC T6 Ex II 2 D Ex tD A21 IP66 T80 °C	
EC-Type Examination Certificate	PTB 00 ATEX 3117	
IECEX Certificate of conformity	IECEX BKI 04.0003	
Marking accd. to IECEx	Ex e II T6, Ex e ib IIC T6, Ec ed IIC T6 or Ex ed ib IIC T6	
Permissible ambient temperature	-20 °C to +40 °C -55 °C to +55 °C (option)	
Rated voltage	690 V AC (with control switch GHG 23 to 500 V)	
Rated current	16 A (with control switch GHG 23 max. 10 A)	
Rated making-/rated breaking capacity accd. EN 60947-5-1	Ex41 AC-15: U_e 250 V / I_e 6 A U_e 500 V / I_e 4 A DC-13: U_e 24 V / I_e 6 A U_e 220 V / I_e 1 A	Ex23 AC-15: U_e 230 V / I_e 6 A U_e 500 V / I_e 4 A DC-13: U_e 24 V / I_e 2 A U_e 230 V / I_e 0.5 A
	with gold contact points max. 0.4 A	
Connecting terminals	2 x 4 mm ²	
Insulation class	I	
Degree of protection accd. EN 60529	IP66 (standard)	
Cable glands/Gland plates/Enclosure drilling	1 x drilling Ø 21 mm for cable gland M20	
Enclosure material	Stainless steel AISI 316 L	

Type 414 81

Dimensions (L x W x H)	166 x 140 x 76 mm
Weight (empty)	1.40 kg

Type 414 82

Dimensions (L x W x H)	286 x 140 x 76 mm
Weight (empty)	2.10 kg

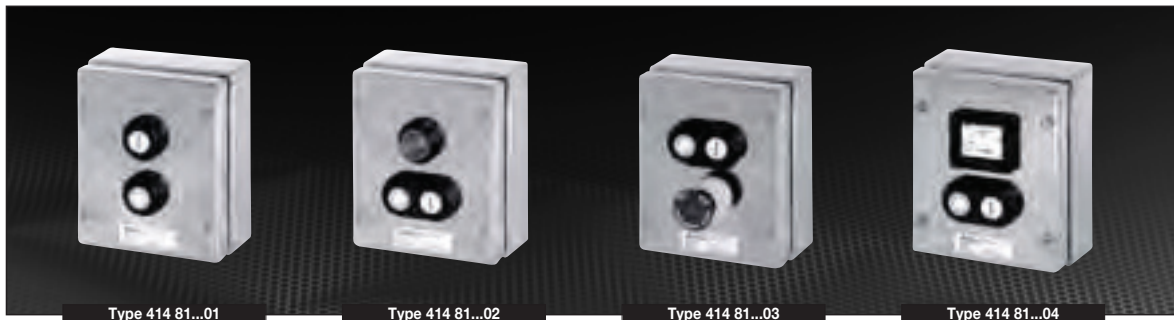
Type 414 81 with measuring instrument AM 72

Movement	Moving iron	Moving coil
Marking to 94/9/EC	Ex II G Ex e II	Ex II G Ex ib IIC
Accuracy	Class 2.5	Class 1.5
Overload range	10-fold -25 sec. 25-fold - 4 sec. 50-fold - 1 sec. indicated 1:1.5	10-fold -5 sec.
Measuring range	n / 1A 0 - 25 A direct	0 - 20 mA 4 - 20 mA
Inductance Li	–	≤ 0.1 mH
Capacitance Ci	–	≤ 0.1 nF
Open circuit voltage Ui	–	30 V
Short circuit current Ii	–	150 mA
Connecting terminals	2 x 1.5 - 4 mm ²	
Weight	1.25 kg	

¹⁾ Base enclosure can be rotated afterwards (entry from top or down)

Other versions available on request

Ex-control stations



Ordering details type 414 81 with 2 built-in components

Version*	Built-in components	Weight approx.	Order No.
	2 x pushbutton DRT 1 NO + 1 NC each label: "0, I, START, STOP"	1.80 kg	GHG 414 8100 R0001
X1—⊗—X2 	1 x signal lamp SIL 20-250 V AC/DC coloured lens cover: "white, red, green, yellow" 1 x double pushbutton DDT 1 NO + 1 NC label: "0, I, START, STOP"	1.85 kg	GHG 414 8100 R0002
	1 x double pushbutton DDT 1 NO + 1 NC label: "0, I, START, STOP" 1 x mushroom-head pushbutton SGTE 1 NO + 1 NC "Emergency stop"	1.85 kg	GHG 414 8100 R0003
1—⊠—2 	1 x measuring instrument AM45 CT connection n/1A Scale 0 –100%/150% 1 x double pushbutton DDT 1 NO + 1 NC label: "0, I, START, STOP"	1.85 kg	GHG 414 8100 R0004

*Without external fixing lugs (see accessories page 9.30)



Ordering details type 414 82 with 4 built-in components

Version*	Built-in components	Weight approx.	Order No.
X1—⊗—X2	1 x signal lamp SIL 20-250 V AC/DC coloured lens cover: "white, red, green, yellow" 2 x pushbutton DRT 1 NO + 1 NC label: "0, I, START, STOP" 1 x mushroom-head pushbutton SGTE 1 NO + 1 NC "Emergency stop"	2.80 kg	GHG 414 8200 R0001
X1—⊗—X2 X1—⊗—X2	2 x signal lamp SIL 20-250 V AC/DC coloured lens cover: "white, red, green, yellow" 2 x double pushbutton DDT 1 NO + 1 NC label: "0, I, START, STOP"	2.80 kg	GHG 414 8200 R0002
X1—⊗—X2	1 x signal lamp SIL 20-250 V AC/DC coloured lens cover: "white, red, green, yellow" 1 x double pushbutton DDT 1 NO + 1 NC label: "0, I, START, STOP" 1 x mushroom-head pushbutton SGTE 1 NO + 1 NC "Emergency stop" 1 x key-operated switch 2 NO SW 5 "engaging-engaging-engaging" label: "I 0 II"	2.90 kg	GHG 414 8200 R0003

*Without external fixing lugs (see accessories page 9.30)

Ex-control stations



Type 414 81..

Ordering details type 414 81 with measuring AM72

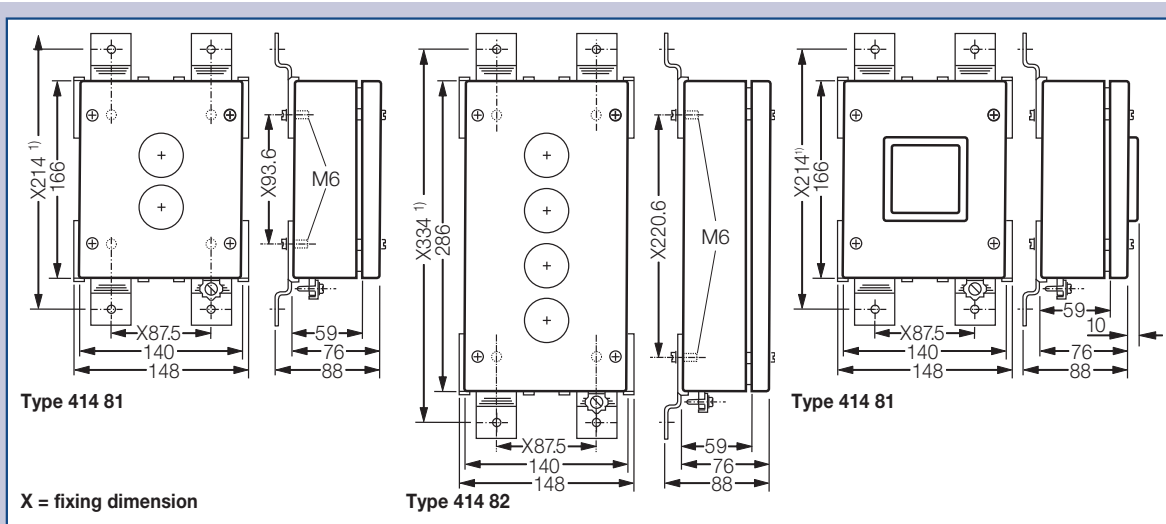
Version	Movement	Weight approx.	Order No.
Version direct measurement with 1 x threaded entry Ø 21 mm (without external fixing lugs)			
0 - 1 / 1.5 A	moving iron	1.25 kg	GHG 414 8181 R0002
0 - 2.5 / 3.75 A	moving iron	1.25 kg	GHG 414 8181 R0003
0 - 5 / 7.5 A	moving iron	1.25 kg	GHG 414 8181 R0004
0 - 10 / 15 A	moving iron	1.25 kg	GHG 414 8181 R0005
0 - 16 / 24 A	moving iron	1.25 kg	GHG 414 8181 R0007
0 - 20 / 24 mA 0-100% / 120% (Ri =320 Ω)	moving coil	1.35 kg	GHG 414 8181 R0033
4 - 20 / 24 mA 0-100% / 120% (Ri =320 Ω)	moving coil	1.35 kg	GHG 414 8181 R0035

Version CT connection n/1A with 1 x threaded entry Ø 21 mm (without external fixing lugs)			
0 - 1 / 1.5 A	moving iron	1.25 kg	GHG 414 8182 R0002
0 - 2.5 / 3.75 A	moving iron	1.25 kg	GHG 414 8182 R0003
0 - 5 / 7.5 A	moving iron	1.25 kg	GHG 414 8182 R0004
0 - 10 / 15 A	moving iron	1.25 kg	GHG 414 8182 R0005
0 - 15 / 22.5 A	moving iron	1.25 kg	GHG 414 8182 R0007
0 - 20 / 30 A	moving iron	1.25 kg	GHG 414 8182 R0008
0 - 30 / 45 A	moving iron	1.25 kg	GHG 414 8182 R0009
0 - 40 / 60 A	moving iron	1.25 kg	GHG 414 8182 R0010
0 - 50 / 75 A	moving iron	1.25 kg	GHG 414 8182 R0011
0 - 60 / 90 A	moving iron	1.25 kg	GHG 414 8182 R0012
0 - 75 / 112.5 A	moving iron	1.25 kg	GHG 414 8182 R0013
0 - 100 / 150 A	moving iron	1.25 kg	GHG 414 8182 R0014
0 - 100% / 150%	moving iron	1.25 kg	GHG 414 8182 R0033

Accessories

Type	Order No.
External fixing lugs (2 pcs)	GHG 610 1941 R0013

Dimension drawing



¹⁾ Scope of delivery without fixing lugs