



Type 414 81..

Type GHG 414 82

Type GHG 414 81

Technical data

Ex-control stations Type 414 81 Type 414 82											
Marking accd. to 94/9/EC	ⓧ II 2 G Ex ed ib m IIC T6 ⓧ II 2 D Ex tD A21 IP66 T80 °C										
EC-Type Examination Certificate	PTB 00 ATEX 3117										
IECEX Certificate of Conformity	IECEX BK1 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 up to +40 °C -55 °C up to +55 °C (option)										
Rated voltage	690 V AC (with control switch GHG 23 up 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	<table border="0"> <tr> <td>Ex41</td> <td>Ex23</td> </tr> <tr> <td>AC-15: U_o 250 V / I_o 6 A</td> <td>AC-15: U_o 230 V / I_o 6 A</td> </tr> <tr> <td>U_o 500 V / I_o 4 A</td> <td>U_o 500 V / I_o 4 A</td> </tr> <tr> <td>DC-13: U_o 24 V / I_o 6 A</td> <td>DC-13: U_o 24 V / I_o 2 A</td> </tr> <tr> <td>U_o 220 V / I_o 1 A</td> <td>U_o 230 V / I_o 0.5 A</td> </tr> </table> with gold contact points max. 0.4 A	Ex41	Ex23	AC-15: U _o 250 V / I _o 6 A	AC-15: U _o 230 V / I _o 6 A	U _o 500 V / I _o 4 A	U _o 500 V / I _o 4 A	DC-13: U _o 24 V / I _o 6 A	DC-13: U _o 24 V / I _o 2 A	U _o 220 V / I _o 1 A	U _o 230 V / I _o 0.5 A
Ex41	Ex23										
AC-15: U _o 250 V / I _o 6 A	AC-15: U _o 230 V / I _o 6 A										
U _o 500 V / I _o 4 A	U _o 500 V / I _o 4 A										
DC-13: U _o 24 V / I _o 6 A	DC-13: U _o 24 V / I _o 2 A										
U _o 220 V / I _o 1 A	U _o 230 V / I _o 0.5 A										
Connecting terminals	2 x 4 mm ²										
Protection class	I										
Degree of protection accd. to EN 60529	IP66										
Cable glands/Gland plates/Enclosure drilling	1 x thread 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 accd. to 94/9/EC	ⓧ II G Ex e II	ⓧ 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 max. Ui	-	30 V
Short circuit current max. Ii	-	150 mA
Connecting terminals	2 x 1.5 - 4 mm ²	
Weight	1.25 kg	

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

Other versions available on request

Ex-control stations



Type 414 81...01



Type 414 81...02



Type 414 81...03



Type 414 81...04

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Ordering details Type 414 81 with 2 built-in components

Content*	Built-in components	Weight approx.	Order No.
	2 x pushbutton DRT NO + 1 NC each label: "0, I, START, STOP"	1.80 kg	GHG 414 8100 R0001
	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 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 NO. 9.30)



Type 414 82...03

Type 414 82...02

Type 414 82...01

Ordering details Type 414 82 with 4 built-in components

Content*	Built-in components	Weight approx.	Order No.
<p>X1—⊗—X2</p>	<p>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 SGT 1 NO + 1 NC “emergency stop”</p>	2.80 kg	GHG 414 8200 R0001
<p>X1—⊗—X2</p> <p>X1—⊗—X2</p>	<p>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”</p>	2.80 kg	GHG 414 8200 R0002
<p>X1—⊗—X2</p>	<p>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 SGT 1 NO + 1 NC “emergency stop” 1 x key-operated switch 2 NO SW 5 “engaging-engaging-engaging” label: “I 0 II”</p>	2.90 kg	GHG 414 8200 R0003

*Without external fixing lugs (see accessories NO. 9.30)

Ex-control stations



Type 414 81..

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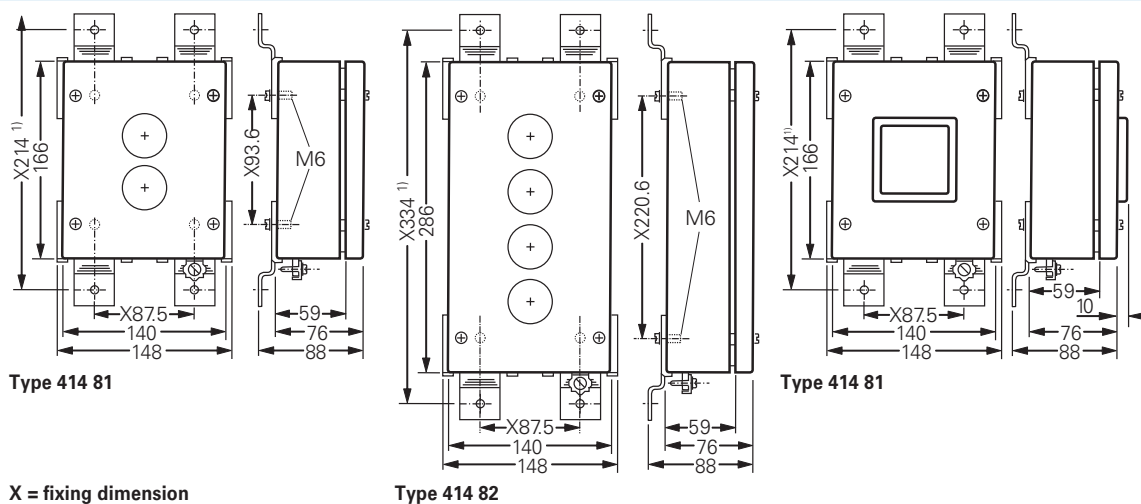
Ordering details Type 414 81 with measuring instrument AM72

Content	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