
Type 411 83


Type 411 82


Type 411 81

Technical data

	Ex-control stations Type 411 81 I Type 411 82 I Type 411 83	
Marking accd. to 2014/34/EU	⟨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, Ex 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	
Rated current	16 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 110 V / I_e 0.5 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
Connecting terminals	2 x 2.5 mm²	
Protection class	I	
Degree of protection accd. to EN 60529	IP66 (standard)	
Cable glands/Gland plates/Enclosure drilling	1 x M25 cable gland or 1 x M20 thread with brass flange	
Enclosure material	Polyamide	
Enclosure colour	black	

	Type 411 81
Dimensions (L x W x H)	85 x 85 x 77.5 mm
Weight (empty)	0.25 kg

	Type 411 82
Dimensions (L x W x H)	125 x 85 x 77.5 mm
Weight (empty)	0.35 kg

	Type 411 83
Dimensions (L x W x H)	165 x 85 x 77.5 mm
Weight (empty)	0.45 kg

	Type 411 82 with measuring instrument AM 72	
Movement	Moving iron	Moving coil
Marking accd. to 2014/34/EU	⟨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.	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 mm²	
Weight	0.70 kg	

[1] Base enclosure can be rotated after wards (entry from top or down)
Other versions available on request



Type 411 81...01



Type 411 81...12



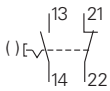
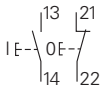
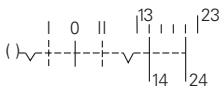
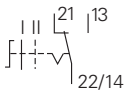
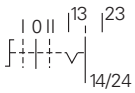
Type 411 81...18



Type 411 81...04

4

Ordering details Type 411 81 with 1 built-in component

Content	Built-in components	Weight approx.	Order No.
	1 x pushbutton DRT 1 NO + 1 NC label: "0, I, START, STOP"	0.40 kg	**GHG 411 8100 R0001**
	1 x mushroom-head pushbutton SGTE 1 NO + 1 NC "Emergency stop"	0.45 kg	**GHG 411 8100 R0002**
	1 x mushroom-head pushbutton SGTE 1 NO + 1 NC "Emergency stop" with key unlocking	0.50 kg	**GHG 411 8100 R0012**
	1 x double pushbutton DDT 1 NO + 1 NC label: "0, I, START, STOP"	0.45 kg	**GHG 411 8100 R0009**
	1 x key-operated switch SLS 2 NO SW 5 "engaging-engaging-engaging" label: "I 0 II"	0.52 kg	**GHG 411 8100 R0018**
	1 x control switch SCT 1 change-over SW 6 "engaging-engaging" label: HAND – AUTO label: "0 – I" label: "I – II"	 0.45 kg 0.45 kg 0.45 kg	 **GHG 411 8100 R0003** **GHG 411 8100 R0004** **GHG 411 8100 R0005**
	1 x control switch SCT 2 NO SW 5 "engaging-engaging-engaging" label: HAND – 0 – AUTO label: "I 0 II" label: "Local Remote Auto"	 0.45 kg 0.45 kg 0.45 kg	 **GHG 411 8100 R0006** **GHG 411 8100 R0007** **GHG 411 8100 R0008**



Type 411 82...18



Type 411 82...17

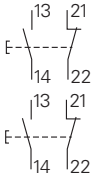
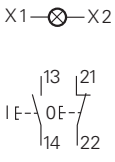
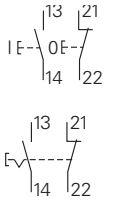
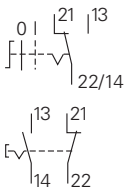
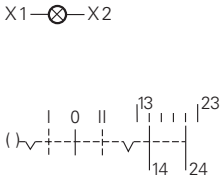


Type 411 82...03



Type 411 82...01

Ordering details Type 411 82 with 2 built-in components

Content	Built-in components	Weight approx.	Order No.
	2 x pushbutton DRT 1 NO + 1 NC each label: "0, I, START, STOP"	0.54 kg	**GHG 411 8200 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"	0.65 kg	**GHG 411 8200 R0003**
	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"	0.57 kg	**GHG 411 8200 R0016**
	1 x control switch SCT 1 change-over SW 6 "engaging-engaging" label: "0 – I" 1 x mushroom-head pushbutton SGTE 1 NO + 1 NC "emergency stop"	0.57 kg	**GHG 411 8200 R0017**
	1 x signal lamp SIL 20-250 V AC/DC coloured lens cover: „white, red, green, yellow" 1 x key-operated switch 2 NO SW 5 "engaging-engaging-engaging" label: "I 0 II"	0.65 kg	**GHG 411 8200 R0018**



Type 411 83...01



Type 411 83...03



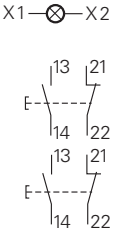
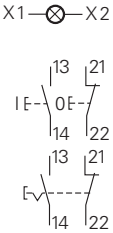
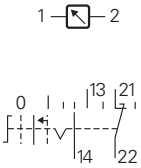
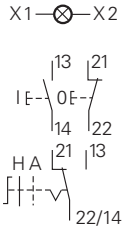
Type 411 83...23



Type 411 83...04

4

Ordering details Type 411 83 with 3 built-in components

Content	Built-in components	Weight approx.	Order No.
	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 each label: “0, I, START, STOP“	0.76 kg	**GHG 411 8300 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 x mushroom-head pushbutton SGTE 1 NO + 1 NC “emergency stop“	0.80 kg	**GHG 411 8300 R0003**
	1 x measuring instrument AM72 CT connection n/1A Scale 0 –100%/150% 1 x control switch SCT 1 NO + 1 NC SW 8 “engaging-engaging-spring return“ label: “0 – I“	0.92 kg	**GHG 411 8300 R0023**
	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 control switch SCT 1 change-over SW 6 “engaging-engaging“ label: “HAND - AUTO“	0.80 kg	**GHG 411 8300 R0004**

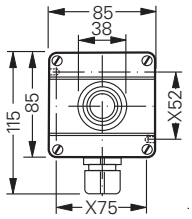


Measuring instrument AM72

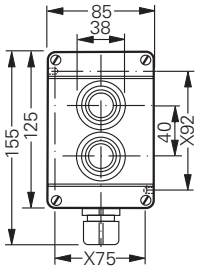
Ordering details measuring instrument AM72, Type 411 82

Content	Movement	Weight	Order No.
Version direct measurement with 1 x entry and cable gland M25			
0 - 1 / 1.5 A	Moving iron	0.70 kg	**GHG 411 8281 R0002**
0 - 2.5 / 3.75 A	Moving iron	0.70 kg	**GHG 411 8281 R0003**
0 - 5 / 7.5 A	Moving iron	0.70 kg	**GHG 411 8281 R0004**
0 - 10 / 15 A	Moving iron	0.70 kg	**GHG 411 8281 R0005**
0 - 16 / 24 A	Moving iron	0.70 kg	**GHG 411 8281 R0007**
0 - 20 / 24 mA 0-100% / 120% (Ri =320 Ω)	Moving coil	0.80 kg	**GHG 411 8285 R0033**
4 - 20 / 24 mA 0-100% / 120% (Ri =320 Ω)	Moving coil	0.80 kg	**GHG 411 8286 R0035**
Version CT connection n/1A with 1 x entry and cable gland M25			
0 - 1 / 1.5 A	Moving iron	0.70 kg	**GHG 411 8282 R0002**
0 - 2.5 / 3.75 A	Moving iron	0.70 kg	**GHG 411 8282 R0003**
0 - 5 / 7.5 A	Moving iron	0.70 kg	**GHG 411 8282 R0004**
0 - 10 / 15 A	Moving iron	0.70 kg	**GHG 411 8282 R0005**
0 - 15 / 22.5 A	Moving iron	0.70 kg	**GHG 411 8282 R0007**
0 - 20 / 30 A	Moving iron	0.70 kg	**GHG 411 8282 R0008**
0 - 30 / 45 A	Moving iron	0.70 kg	**GHG 411 8282 R0009**
0 - 40 / 60 A	Moving iron	0.70 kg	**GHG 411 8282 R0010**
0 - 50 / 75 A	Moving iron	0.70 kg	**GHG 411 8282 R0011**
0 - 60 / 90 A	Moving iron	0.70 kg	**GHG 411 8282 R0012**
0 - 75 / 112.5 A	Moving iron	0.70 kg	**GHG 411 8282 R0013**
0 - 100 / 150 A	Moving iron	0.70 kg	**GHG 411 8282 R0014**
0 – 100% / 150%	Moving iron	0.70 kg	**GHG 411 8282 R0001**

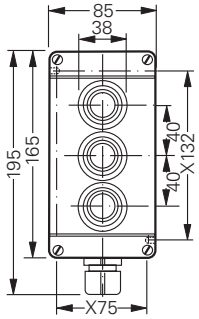
Dimension drawing



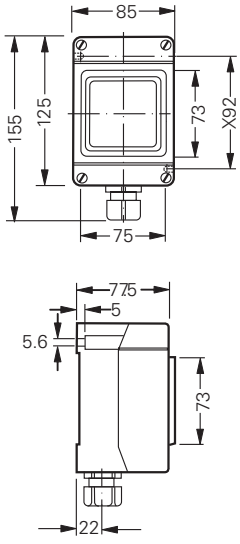
Type 411 81



Type 411 82



Type 411 83



Measuring instrument AM 72

X = fixing dimension

Dimensions in mm



Size 1



Size 2



Size 4

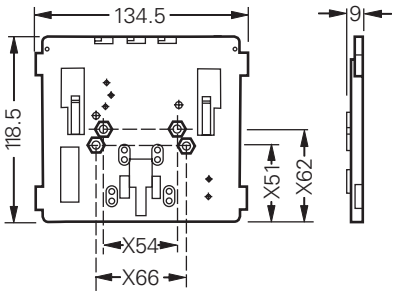
Accessories

Type	Application	Fixing method	OU	Order No.
Mounting plate for type 411 81				
Size 1	Wall mounting	screwless mounting	1	**GHG 610 1953 R0101**
Size 1	Pipe clamp	screwless mounting	1	**GHG 610 1953 R0102**
Size 1	Trellis-work mounting	screwless mounting	1	**GHG 610 1953 R0103**
Size 4	Wall mounting	snap-on1)	1	**GHG 610 1953 R0126**
Size 4	Trellis-work mounting	snap-on1)	1	**GHG 610 1953 R0126**
Size 4	Pipe clamp	snap-on1)	1	**GHG 610 1953 R0130**

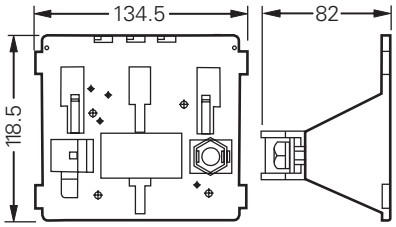
Type	Application	Fixing method	OU	Order No.
Mounting plate for type 411 82 and 411 83				
Size 2	Wall mounting	screwless mounting	1	**GHG 610 1953 R0104**
Size 2	Pipe clamp	screwless mounting	1	**GHG 610 1953 R0105**
Size 2	Trellis-work mounting	screwless mounting	1	**GHG 610 1953 R0106**
Size 4	Wall mounting	snap-on[1)]	1	**GHG 610 1953 R0126**
Size 4	Trellis-work mounting	snap-on[1)]	1	**GHG 610 1953 R0126**
Size 4	Pipe clamp	snap-on[1)]	1	**GHG 610 1953 R0130**
Plug-in fastener for CEAG modules with 5.5 mm and 11 mm mounting size per 4 pieces			10	**GHG 610 1953 R0041**

[1)] snap-on with snap-on mounting 5.5 mm

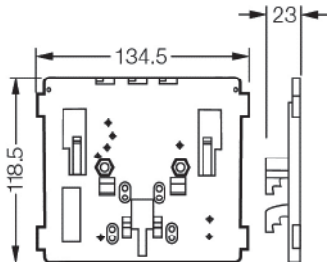
Dimension drawing



Size 1 wall mounting

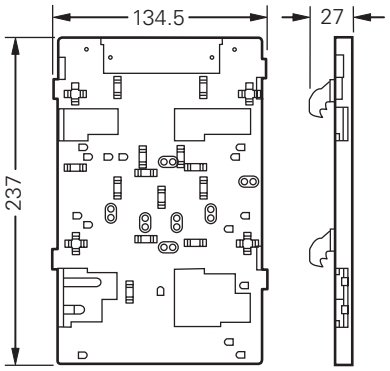


Size 1 pipe mounting



Size 1 trellis-work mounting

X = fixing dimension



Size 4 wall mounting

Dimensions in mm