



GHG 293

GHG 292

## Technical data

Ex-Control switch Type 292 without and Type 293 with measuring instrument		
	with GHG 29 switch	with GHG 28 switch
Marking to 94/9/EC	$\text{Ex}$ II 2 G Ex ed ia IIC T5/T6 $\text{Ex}$ II 2 D Ex tD A21 IP66 T80 °C	$\text{Ex}$ II 2 G Ex ed ia IIC T5/T6 $\text{Ex}$ II 2 D Ex tD A21 IP66 T80 °C
EC-Type Examination Certificate	PTB 99 ATEX 1163	PTB 99 ATEX 1163
IECEX Certificate of Conformity	IECEX BKI 07.0011	IECEX BKI 07.0011
Marking accord. to IECEx	Ex ed ia IIC T5 or T6 Ex tD A21 IP66 T49 °C	Ex ed ia IIC T5 or T6 Ex tD A21 IP66 T49 °C
Permissible ambient temperature	-20 °C to +40 °C -55 °C to +47 °C (T6) ... +55 °C (T5) option	
Rated voltage	max. 500 V	max. 690 V
Rated current	16 A	20 A
Rated current gold contacts	0.4 A	
Overload range (Type 293 only)	10 fold - 25 sec. 25 fold - 4 sec. 50 fold - 1 sec. indicated 1 : 1.5	
Measuring range (Type 293 only)	max. 0 - 25 A direct / n / 1A	
Accuracy (Type 293 only)	Class 2.5	
Circuit (Type 293 only)	moving iron	
Rated marking- / rated breaking capacity accd. to EN 60947-5-1	AC-15: $U_e$ 230 V / $I_e$ 6 A $U_e$ 400 V / $I_e$ 4 A DC-13: $U_e$ 24 V / $I_e$ 2 A $U_e$ 230 V / $I_e$ 0.3 A	AC-15: $U_e$ 230 V / $I_e$ 8 A $U_e$ 400 V / $I_e$ 6 A DC-13: $U_e$ 24 V / $I_e$ 6 A $U_e$ 230 V / $I_e$ 0.4 A
Connecting terminals	2 x 0.5 - 2.5 mm <sup>2</sup> or 1 x 1.0 - 6.0 mm <sup>2</sup>	
Degree of protection accd. EN 60529	IP66	
Cable glands/Gland plates/Enclosure drilling	1 x M25 (Ø 8 - 17 mm) <sup>1)</sup>	
Dimensions (L x W x H)	170 x 110 x 129 mm	225 x 110 x 129 mm
Weight	approx. 1.10 kg (1 level) approx. 1.25 kg (2 level) approx. 1.40 kg (3 level)	approx. 1.90 kg (1 level) approx. 2.05 kg (2 level) approx. 2.20 kg (3 level)
Enclosure material	glass-fibre-reinforced polyester	
Enclosure colour	black	

<sup>1)</sup> Brass flange for metal entries available on request (except for II D at date of publication).

## Ex-Control switches



### Ordering code for Control switch (Code 2) Code A - B1 - B2 - C - D - E1 - E2 - F

A	B1	B2	C	D	E	E2	F 1)
GHG 29_	_	_	_	_	_	_	_

Code	Component	Code
A	Control switch	GHG 292
	Control switch with measuring instrument	GHG 293

Code	Switch mechanism	Code
B1	spring - engaging - spring	4
	engaging - engaging - engaging	5
	engaging - engaging	6
	spring - engaging - engaging	7
	engaging - engaging - spring	8

Code	Contact	Silver contact points	Code	Silver contact points
B2		060		034
		062		037
		065		049
		061		023
		063		019
		067		033
		011		024

Other versions as well as gold contact points are available on request.

Code	Inscription (Contact label)	Code	Inscription (Contact label)	Code
C	0	I	001	0
	I	II	002	I
	STOP	START	003	II
	HAND	AUTO	004	AUS
	SENKEN	HEBEN	005	AUTO
	REMOTE	LOCAL	006	ÖRTLICH
	I	0	007	AUS
	AUS	BETRIEB	008	START
	AUS	0	009	NORMAL
	AUF	0	010	STOP
	Entriegelt	0	011	HEBEN
	OUT	OF	012	SENKEN
	LOCAL	REMOTE	013	OFF
	STOP	0	014	ON
	HAND	0	015	AUS
	AUF	AUS	016	EIN
	HAND	AUS	017	START
		ZU		AUTO
		AUTO		STOP
				HEBEN
				SENKEN
				OFF
				ON
				AUS
				EIN
				START
				AUTO
				STOP
				HEBEN
				SENKEN
				OFF
				ON
				AUS
				EIN
				START
				AUTO
				STOP
				HEBEN
				SENKEN
				OFF
				ON
				AUS
				EIN
				START
				AUTO
				STOP
				HEBEN
				SENKEN
				OFF
				ON
				AUS
				EIN
				START
				AUTO
				STOP
				HEBEN
				SENKEN
				OFF
				ON
				AUS
				EIN
				START
				AUTO
				STOP
				HEBEN
				SENKEN
				OFF
				ON
				AUS
				EIN
				START
				AUTO
				STOP
				HEBEN
				SENKEN
				OFF
				ON
				AUS
				EIN
				START
				AUTO
				STOP
				HEBEN
				SENKEN
				OFF
				ON
				AUS
				EIN
				START
				AUTO
				STOP
				HEBEN
				SENKEN
				OFF
				ON
				AUS
				EIN
				START
				AUTO
				STOP
				HEBEN
				SENKEN
				OFF
				ON
				AUS
				EIN
				START
				AUTO
				STOP
				HEBEN
				SENKEN
				OFF
				ON
				AUS
				EIN
				START
				AUTO
				STOP
				HEBEN
				SENKEN
				OFF
				ON
				AUS
				EIN
				START
				AUTO
				STOP
				HEBEN
				SENKEN
				OFF
				ON
				AUS
				EIN
				START
				AUTO
				STOP
				HEBEN
				SENKEN
				OFF
				ON
				AUS
				EIN
				START
				AUTO
				STOP
				HEBEN
				SENKEN
				OFF
				ON
				AUS
				EIN
				START
				AUTO
				STOP
				HEBEN
				SENKEN
				OFF
				ON
				AUS
				EIN
				START
				AUTO
				STOP
				HEBEN
				SENKEN
				OFF
				ON
				AUS
				EIN
				START
				AUTO
				STOP
				HEBEN
				SENKEN
				OFF
				ON
				AUS
				EIN
				START
				AUTO
				STOP
				HEBEN
				SENKEN
				OFF
				ON
				AUS
				EIN
				START
				AUTO
				STOP
				HEBEN
				SENKEN
				OFF
				ON
				AUS
				EIN
				START
				AUTO
				STOP
				HEBEN
				SENKEN
				OFF
				ON
				AUS
				EIN
				START
				AUTO
				STOP
				HEBEN
				SENKEN
				OFF
				ON
				AUS
				EIN
				START
				AUTO
				STOP
				HEBEN
				SENKEN
				OFF
				ON
				AUS
				EIN
				START
				AUTO
				STOP
				HEBEN
				SENKEN
				OFF
				ON
				AUS
				EIN
				START
				AUTO
				STOP
				HEBEN
				SENKEN
				OFF
				ON
				AUS
				EIN
				START
				AUTO
				STOP
				HEBEN
				SENKEN
				OFF
				ON
				AUS
				EIN
				START
				AUTO
				STOP
				HEBEN
				SENKEN
				OFF
				ON
				AUS
				EIN
				START
				AUTO
				STOP
				HEBEN
				SENKEN
				OFF
				ON
				AUS
				EIN
				START
				AUTO
				STOP
				HEBEN
				SENKEN
				OFF
				ON
				AUS
				EIN
				START
				AUTO
				STOP
				HEBEN
				SENKEN
				OFF
				ON
				AUS
				EIN
				START
				AUTO
				STOP
				HEBEN
				SENKEN
				OFF
				ON
				AUS
				EIN
				START
				AUTO
				STOP
				HEBEN
				SENKEN
				OFF
				ON
				AUS



GHG 293

GHG 292

**Ordering code for Control switch (Code 2) Code A - B1 - B2 - C - D - E1 - E2 - F**

Code	Locking facility	Code
D	None <input type="checkbox"/>	0
	Centre <input type="checkbox"/>	1
	Left <input type="checkbox"/>	2
	Right <input type="checkbox"/>	3

Code	Movement	Code
E1	Direct connection	01
	Ct connection 1 /A	02
	Connection 0 - 20/24 mA (scale 0-100% / 120%)	05
	Connection 4 - 20/24 mA (scale 0-100% / 120%)	06
	Moving-coil connection 0 - 20/24 mA (scale 0-100% / 120%)	07
	Moving-coil connection 4 - 20/24 mA (scale 0-100% / 120%)	08

Code	Mesasuring range/scale	Code	Mesasuring range/scale	Code
E2	0 - 1	002	0 - 75 /112.5 A	013
	0 - 2.5 / 3.75 A <sup>2)</sup>	003	0 - 100 / 150 A	014
	0 - 5 / 7.5 A <sup>2)</sup>	004	0 - 150 / 225 A	015
	0 - 10 / 15 A <sup>2)</sup>	005	0 - 200 / 300 A	016
	0 - 15 / 22.5 A	006	0 - 250 / 375 A	017
	0 - 20 / 30 A <sup>2)</sup>	008	0 - 300 / 450 A	018
	0 - 30 / 45 A	009	0 - 400 / 600 A	019
	0 - 40 / 60 A	010	0 - 500 / 750 A	020
	0 - 50 / 75 A	011	0 - 600 / 900 A	021
	0 - 60 / 90 A	012	0 - 100% / 150%	031

Code	Buil-in components designation		
F1	Entry type	Entry direct in enclosure	GEH
		Entry via plastic flange	FLK
		Entry via metal flange	FLM
F2	Entry element	only threaded entry	BO
		Threaded plug	SV
		Cable entry moulded plastic	GK
		Cable entry metal*	GM*
		Cable entry with plug	GV
F3	Size	M12, M16, M20, M25, M32, M40	M1 Ø ..
		Ø21, Ø26	
F4	Number	No. of entries	..

<sup>1)</sup> The code will represent only a selected part of configuration.

## Ex-Control switches



### Example for ordering code (Code 2)

Control switch with silver contact points, Switch mechanism „5“, Contact arrangement „063“,

Label „HAND-0-AUTO“, can be locked at „0“,

Measuring instrument AM72 for Ct connection „n/1A“, Scale „0 - 50/75 A“,

Cable entry 1 x threaded entry M25 on bottom direct entry.

Code A	B1	B2	C	D	E1	E2	F1	F2	F3	F4
GHG 293 /	5 /	063 /	015 /	1 /	2 /	011 /	GEH /	BO /	M25 /	1

### Ordering details

Switching mechanism	Contact system	Code	Label inscription	Order No.
Control switch Type 292 with silver contacts Version with locking facility in „0“-, or position „right (Code 3)“, cable entry 1 x M25 on bottom.				
6		062	0 I	GHG 292 1000 R0001
6		065	0 I	GHG 292 1000 R0002
4		067	0 I	GHG 292 1000 R0003
8		067	0 I	GHG 292 1000 R0004
4		037	0 I	GHG 292 2000 R0002
8		037	0 I	GHG 292 2000 R0003
5		024	I 0 II	GHG 292 2000 R0004
5		023	HAND OFF AUTO	GHG 292 2001 R0001

Switching mechanism	Contact system	Code	Label inscription	Order No.
Control switch with measuring instrument Type 293 with silver contacts Version with locking facility in „0“-, or „left“ position, Measuring instrument AM 72 for CT connection n/1A, Scale 0 - 100/150 %. 1 x M32 on bottom.				
6		062	0 I	GHG 293 1000 R0001
6		065	0 I	GHG 293 1000 R0002



GHG 293

GHG 292

## Accessories

### Mounting plate for type 292

Type	Application	Mounting technique	OU	Order No.
Size 2	Wall mounting	snap-on	1	GHG 610 1953 R0104
Size 2	Pipe mounting	snap-on	1	GHG 610 1953 R0105
Size 2	Trellis-work mounting	snap-on	1	GHG 610 1953 R0106
Size 4	Wall mounting	snap-on *	1	GHG 610 1953 R0128
Size 4	Trellis-work mounting	snap-on *	1	GHG 610 1953 R0128
Size 4	Pipe mounting	snap-on *	1	GHG 610 1953 R0132

### Mounting plate for type 293

Type	Application	Mounting technique	OU	Order No.
Size 3	Wall mounting	snap-on	1	GHG 610 1953 R0118
Size 3	Pipe mounting	snap-on	1	GHG 610 1953 R0110
Size 3	Trellis-work mounting	snap-on	1	GHG 610 1953 R0118
Size 5	Wall mounting	snap-on *	1	GHG 610 1953 R0128
Size 5	Trellis-work mounting	snap-on *	1	GHG 610 1953 R0128
Size 5	Pipe mounting	snap-on *	1	GHG 610 1953 R0132
Snap-on mounting for CEAG apparatus with 5.5 mm and 11 mm mounting size per 4 pieces			10	GHG 610 1953 R0041

\*snap-on with snap-on mounting 5.5 mm