

Features

- Glass fiber reinforced polyester (GRP) enclosures
- Suitable for installation in Zones 1, 2, 21 and 22
- Certified Ex de, Ex ib and Ex tb
- Seven enclosure size options
- Up to 35 lid-mounted operators per control station
- Wide choice of operators, including
 - Pushbuttons
 - LED indicators
 - Illuminated pushbuttons
 - Emergency-stop buttons
 - Pushbuttons with key release
 - Selector switches
 - Potentiometers
 - Ammeters
- Customizable configuration of operators and cable gland types as per specification
- Wide range of labels and accessories available

Assembly



Function

The versatile control stations of the GLCP series can be equipped flexibly with operator elements and LED indicators. A comprehensive range of control functions, contact blocks, cable glands and further accessories allow the configuration of each control station to exactly meet any application requirements and ensure optimal space efficiency.

Enclosures are manufactured from carbon loaded glass fiber reinforced polyester with stainless steel lid fixing bolts. This GRP material is anti-static and UV stabilized, the smooth surface is corrosion resistant and allows easy and fast cleaning.



Configuration examples



Release date 2014-01-27 T164481

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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PROTECTING YOUR PROCESS

Technical data**Electrical specifications**

Operating voltage	250 V AC max.
Operating current	16 A max.

Mechanical Specification

Cover fixing	M6 stainless steel slot head screws
Protection degree	IP66
Cable entry	cable glands as per specification
Cable entry areas	see cable entries table


Material

Enclosure	carbon loaded, anti-static glass fiber reinforced polyester (GRP)
Finish	moulded, self-colour black
Seal	silicone cord
Mass	see dimensions data table
Grounding	none as standard, optional M6 internal / external stud as required

Ambient conditions

Ambient temperature	-40 °C ... 55 °C (-40 ... 131 °F)
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Data for application in connection with Ex-areas

EC-Type Examination Certificate	SIRA 13ATEX3059X
Group, category, type of protection, temperature class	 II 2 GD Ex de IIC T5, T4 Gb Ex ib IIC T5, T4 Gb Ex de ib IIC T5, T4 Gb Ex tb IIIC T135 °C, T95 °C Db

International approvals

IECEx approval	IECEx SIR 13.0021
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Conformity

Protection degree	EN 60529
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General information

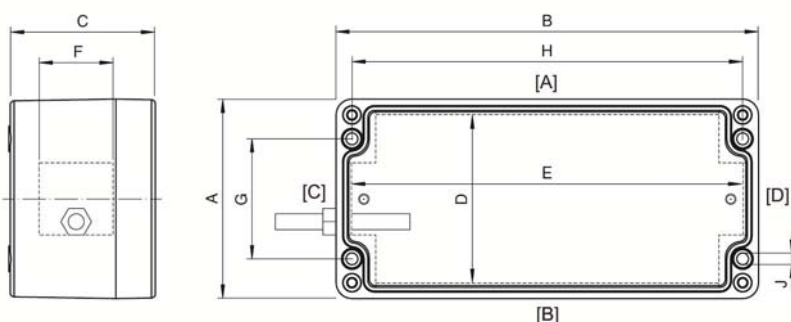
Supplementary information	EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see www.pepperl-fuchs.com .
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Accessories

Optional accessories	see accessories table
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Dimensions

Legend



- A – Maximum external dimension
- B – Maximum external dimension
- C – Maximum external dimension
- D – Internal dimension
- E – Internal dimension
- F – Internal depth
- G – Fixing holes center
- H – Fixing holes center
- J – Fixing holes diameter
- [A] – Entry face
- [B] – Entry face
- [C] – Entry face
- [D] – Entry face

For details see Dimensions Data Table

Dimensions Data Table

Type	Dimensions [mm]			Dimensions internal [mm]			Fixation [mm]			Weight approx. [kg]	Cover fixing screws
	A	B	C	D	E	F	G	H	Diam. J		
GL6**	120	220	90	111	211	54	82	204	6.5	1	M6
GL8**	160	260	91	149	249	56	110	240	6.5	1.7	M6
GL9**	160	360	91	149	349	56	110	340	6.5	2	M6
GL11**D	250	255	165	239	244	127	200	235	6.5	3.1	M6
GL12**	250	400	120	239	389	82	200	380	6.5	3.4	M6
GL13**	405	400	120	394	389	82	355	380	6.5	5.1	M6
GL14**D	405	400	200	394	389	189	355	380	6.5	5.8	M6

Weight shows empty enclosure; it will increase according to operators and installations.

Cable Entries - maximum quantity per size

Enclosure Type	Cable entry area at faces		Cable gland quantity face A/B								Cable gland quantity face C/D					
	A & B [mm]	C & D [mm]	M12	M16	M20	M25	M32	M40	M50	M12	M16	M20	M25	M32	M40	M50
GL6**	59 x 180	52 x 58	18	14	10	6	4	3	2	4	4	2	1	1	1	-
GL8**	64 x 210	59 x 80	24	18	12	7	5	3	3	9	6	4	2	2	1	1
GL9**	64 x 310	59 x 80	34	26	20	11	7	5	4	9	6	4	2	2	1	1
GL11**D	134 x 202	129 x 168	55	40	24	18	12	8	6	45	30	20	15	9	6	4
GL12**	89 x 349	84 x 169	63	45	32	20	14	8	5	28	18	14	8	6	3	2
GL13**	89 x 349	84 x 324	63	45	32	20	14	8	5	54	39	27	18	13	6	5
GL14**D	169 x 346	164 x 321	126	90	55	40	24	18	11	112	78	50	36	24	15	9

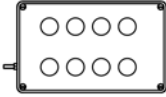
Max. gland quantity per size. For combination of different sizes please contact Pepperl+Fuchs.

Enclosure size GL6 configuration: max. 4 functions – operator types see overleaf



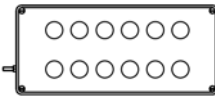
Placement of small operators

Enclosure size GL8 configuration: max. 8 functions – operator types see overleaf



Placement of small operators

Enclosure size GL9 configuration: max. 12 functions – operator types see overleaf

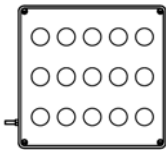


Placement of small operators

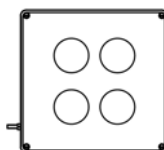


Placement of large operators

Enclosure size GL11D configuration: max. 15 functions – operator types see overleaf

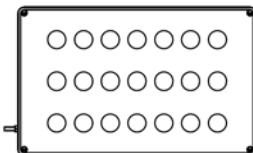


Placement of small operators

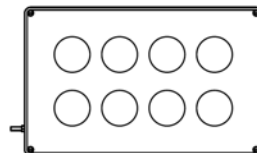


Placement of large operators

Enclosure size GL12 configuration: max. 21 functions – operator types see overleaf

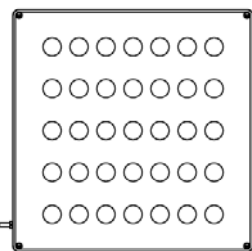


Placement of small operators

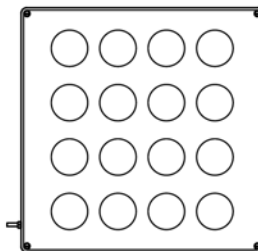


Placement of large operators

Enclosure size GL13 & 14D configuration: max. 35 functions – operator types see overleaf



Placement of small operators



Placement of large operators

Large operators include: Ammeters, 4-pole switch with double contact block, operators with large labels

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Type code / model number

Enclosure type

GL	glass fiber reinforced polyester GRP				
:	Enclosure size				
:	6, 8, 9, 11, 12, 13, 14	see dimensions data table			
:	:	Earth continuity plate			
:	:	0 none			
:	:	1 galvanized steel			
:	:	2 brass			
:	:	3 stainless steel			
:	:	Type of explosion protection			
:	:	1 Ex de, Ex tb			
:	:	3 Ex ib, Ex tb			
:	:	5 Ex de ib, Ex tb			
:	:	Enclosure depth			
:	:	standard depth, see dimensions data table			
:	:	D increased depth			
:	:	Type of solution			
:	:	CP2 control station			
:	:	Item number			
:	:	Yxxxxxx			
GL				.CP2	-Yxxxxxx

Optional accessories

- M6 brass grounding stud assembly
- M6 stainless steel grounding stud assembly
- 1.5 mm thick stainless steel mounting plate
- A5 polycarbonate document wallet
- A4 polycarbonate document wallet
- Engraved traffolyte tag label
- Engraved stainless steel tag label
- Color in-fill stainless steel tag label
- Stainless steel rain canopy / sun shade

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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Ex de Pushbuttons

Pushbutton Operators	Type Code	
Red pushbutton with blank insert	B	A
Red pushbutton with insert labeled "STOP"	B	B
Green pushbutton with blank insert	B	C
Green pushbutton with insert labeled "START"	B	D
Yellow pushbutton with blank insert	B	E
White pushbutton with blank insert	B	F
Blue pushbutton with blank insert	B	G
Black pushbutton with blank insert	B	H
Red/green double pushbutton labeled "0 - I"	B	J
Red pull-to-release mushroom pushbutton labeled "EMERGENCY STOP"	B	K
Black momentary mushroom pushbutton	B	L
Red latching key-release mushroom pushbutton	B	M
Black latching two position key pushbutton	B	N



Lid-mounted Contact Block



Lid-mounted Pull-to-release Emergency Button

Contact Configuration	Type Code	
Lid-mounted contact block with 1 x N/O & 1 x N/C contacts	B	08
Lid-mounted contact block with 2 x N/C contacts	B	18
Lid-mounted contact block with 2 x N/O contacts	B	28

Technical Data Pushbuttons B*				
Rating	AC12	AC15	DC13	DC13
Voltage	250 V	250 V	110 V	24 V
Current	16 A	10 A	0.5 A	1 A
Contact terminal capacity	2 x 4 mm ²	2 x 4 mm ²	2 x 4 mm ²	2 x 4 mm ²

Ex de Illuminated Pushbuttons

Illuminated Pushbutton Operators	Type Code	
Red illuminated lens pushbutton	C	A
Green illuminated lens pushbutton	C	B
Yellow illuminated lens pushbutton	C	C
White illuminated lens pushbutton	C	D
Blue illuminated lens pushbutton	C	E



Lid-mounted Illuminated Contact Block

Contact Configuration	Type Code	
Red lid-mounted 24 - 250 V AC lamp module with 1 x N/C contact	C	08
Green lid-mounted 24 - 250 V AC lamp module with 1 x N/O contact	C	18
Yellow lid-mounted 24 - 250 V AC lamp module with 1 x N/O contact	C	28
White lid-mounted 24 - 250 V AC lamp module with 1 x N/O contact	C	38
Blue lid-mounted 24 - 250 V AC lamp module with 1 x N/O contact	C	48



Lid-mounted Illuminated Blue Pushbutton

Technical Data Illuminated Pushbuttons C*		
Rating	AC15	DC13
Voltage	250 V	24 V
Current	6 A	1 A
Contact terminal capacity	2 x 4 mm ²	2 x 4 mm ²
Power consumption	≤1W	≤1W

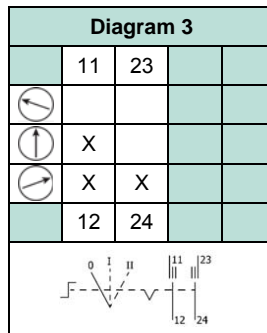
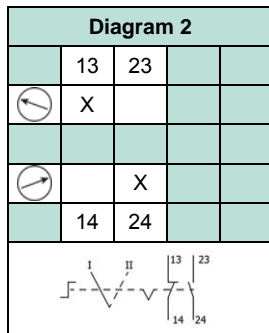
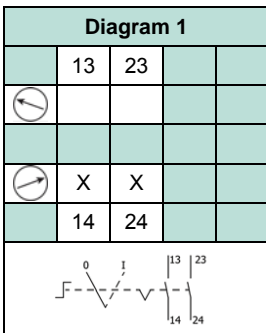
Ex de Rotary Switches - Single Contact Blocks

Ex de Rotary Control Functions

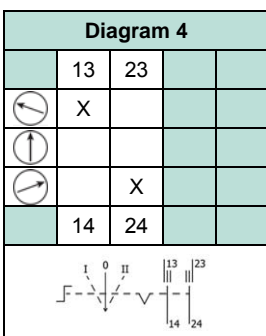
Switches For Use With Single Contact Blocks	Switching Diagram	Action	Marking			Type Code	
Black unshrouded two position selector switch with left off	1	Engage - Engage	0		I	S	A
Black unshrouded two position selector switch	2	Engage - Engage	I		II	S	B
Black unshrouded three position selector switch with left off	3	Engage - Engage - Engage	0	I	II	S	C
Black unshrouded three position selector switch with center off	4	Engage - Engage - Engage	I	0	II	S	D
Black shrouded two position selector switch with left off	1	Engage - Engage	0		I	S	E
Black shrouded two position selector switch	2	Engage - Engage	I		II	S	F
Black shrouded three position selector switch with left off	3	Engage - Engage - Engage	0	I	II	S	G
Black shrouded three position selector switch with center off	4	Engage - Engage - Engage	I	0	II	S	H

Contact Configuration	Type Code
Lid-mounted contact block with 2 x N/O contacts	B 28

Single Block Switching Diagrams



Lid-mounted Contact Block



Lid-mounted Unshrouded Switch

Technical Data Switches S*				
Rating	AC12	AC15	DC13	DC13
Voltage	250 V	250 V	110 V	24 V
Current	16 A	10 A	0.5 A	1 A
Contact terminal capacity	2 x 4 mm ²	2 x 4 mm ²	2 x 4 mm ²	2 x 4 mm ²



Lid-mounted Shrouded Switch

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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Ex de Rotary Switches - Double Contact Blocks

Ex de Rotary Control Functions

Switches For Use With Double Contact Blocks	Switch Block			Rotary Operator							
	Type Code	Switching Diagram	Action	Marking					Type Code		
Lid-mounted four pole one-way switch	T 08	5	Engage - Engage	0				I	S	E	
Lid-mounted double pole changeover switch	T 18	6	Engage - Engage	I				II	S	F	
Lid-mounted double pole changeover with center off	T 38	7	Engage - Engage - Engage	I		0		II	S	H	
Lid-mounted double pole changeover with center off	T 48	8	Spring - Engage - Spring	I		0		II	S	H	
Lid-mounted four pole changeover with center off	T 58	9	Engage - Engage - Engage	I		0		II	T	M	
Lid-mounted changeover with left off	T 28	10	Engage - Engage - Spring	0		I		II	T	L	
Lid-mounted four position selector switch	T 68	11	Engage - Engage - Engage - Engage	I	II			III	IV	T	N

Note: all switches shrouded. Always indicate type codes for both rotary operator and switch block.

Double Block Switching Diagrams

Diagram 5					Diagram 6					Diagram 7					Diagram 8					Diagram 9				
	1	3	5	7		1	3	5	7		1	3	5	7		1	3	5	7		1	3	5	7
								X	X		X	X				X	X				X	X	X	X
	X	X	X	X		X	X						X	X				X	X		X	X	X	X
	2	4	6	8		2	4	6	8		2	4	6	8		2	4	6	8		2	4	6	8

Diagram 10					Diagram 11				
	1	3	5	7		1	3	5	7
	X					X			
			X				X		
								X	
			X	X					X
	2	4	6	8		2	4	6	8



Double Contact Block with Shrouded Switch

Technical Data Switches S*, T*				
Rating	AC12	AC15	DC13	DC13
Voltage	250 V	250 V	110 V	24 V
Current	16 A	10 A	0.5 A	1 A
Contact terminal capacity	2 x 4 mm ²	2 x 4 mm ²	2 x 4 mm ²	2 x 4 mm ²

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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Ex de LED Indicators and Potentiometers

Ex de LED Indicators

LED Lens	Type Code	
Red indicator lens cover	D	A
Green indicator lens cover	D	B
Yellow indicator lens cover	D	C
White indicator lens cover	D	D
Blue indicator lens cover	D	E



Lid-mounted Green LED Module and Green Lens

LED Modules	Type Code	
Red lid-mounted 24 ... 240 V AC LED module	D	08
Green lid-mounted 24 ... 240 V AC LED module	D	18
Yellow lid-mounted 24 ... 240 V AC LED module	D	28
White lid-mounted 24 ... 240 V AC LED module	D	38
Blue lid-mounted 24 ... 240 V AC LED module	D	48



Lid-mounted Red LED Module and Red Lens

Technical Data LED Indicators D*		
Voltage	24 ... 240 V AC	24 ... 36 V DC
Contact terminal capacity	2 x 4 mm ²	2 x 4 mm ²
Power consumption	≤1W	≤1W

Ex de Potentiometer

Potentiometer Operator	Type Code	
Black multi-turn potentiometer handle labeled "0 - 10"	E	A

Potentiometer Lid-mounted Blocks	Type Code	
Lid-mounted 1000 Ω potentiometer	E	08
Lid-mounted 2000 Ω potentiometer	E	18
Lid-mounted 5000 Ω potentiometer	E	28
Lid-mounted 10000 Ω potentiometer	E	38



Lid-mounted Potentiometer

Technical Data Potentiometer E*		
Voltage	200 V DC	
Contact terminal capacity	2 x 4 mm ²	
Power consumption	1W	

Ex e Ammeters and Operator Accessories

Ex e Ammeters

Ammeter Units	Type Code	
Ammeter 1 A with mounting kit and window. Scales see below.	M	01
Ammeter 5 A with mounting kit and window. Scales see below.	M	05

Ammeter Scales	Type Code	
Ammeter scale 0 ... 1 / 5 A	MS	05
Ammeter scale 0 ... 5 / 25 A	MS	15
Ammeter scale 0 ... 15 / 75 A	MS	20
Ammeter scale 0 ... 25 / 125 A	MS	25
Ammeter scale 0 ... 50 / 250 A	MS	35
Ammeter scale 0 ... 75 / 375 A	MS	45
Ammeter scale 0 ... 100 / 500 A	MS	50
Ammeter scale 0 ... 150 / 750 A	MS	55
Ammeter scale 0 ... 200 / 1000 A	MS	60
Ammeter scale 0 ... 250 / 1250 A	MS	65
Ammeter scale 0 ... 500 / 2500 A	MS	80



Lid-mounted Ammeter

Technical Data Ammeter M*	
Voltage	690 V AC
Operating current	1 A & 5 A
Contact terminal capacity	2 x 4 mm ²
Accuracy class	1,5

Operator Accessories

Accessory	Type Code	
Front panel stopping plug	X	A
Small operator label holder - blank	X	B
18 mm x 37 mm white PVC legend	X	B1
Large operator label holder - blank	X	C
12 mm x 57 mm white PVC legend	X	C1
Emergency stop label	X	D
Accidental operation shroud	X	E
Padlockable accidental operation shroud	X	F
Stainless steel emergency stop flap for SS enclosure	X	G
Stainless steel emergency stop flap for GRP enclosure	X	H



Small Operator Label - Blank



Padlockable Accidental Operation Shroud