

ITEM 114777 MGB-L2CB-PNC-L-114777

Description	Technical data	Accessories	Downloads
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Features

- › Control panel
- › Emergency stop according to ISO 13850
- › 8 pushbuttons illuminated
- › Operating mode selector switch
- › 1 indicator
- › Including adhesive labels
- › Push-pull plug
- › Including terminal plug for enabling switch (RC12, 12-pin)
- › Pre-assembled on mounting plates
- › Integrated Profinet RT switch

Profinet connection

Connection via push-pull plugs according to IEC 61076-3-117

Profinet RT switch

Point-to-point topology network structure due to integrated RT switch.

Approvals



Mechanical values and environment

Housing material	Reinforced plastic, die-cast zinc nickel-plated, stainless steel
Weight	Net 4,05 kg
Ambient temperature	At $U_B = 24V DC$ -20 ... 55 °C
Degree of protection	IP54
Resilience to vibration	In accordance with EN 60947-5-3
Mechanical life	
	1×10^6
In case of use as door stop, and 1 Joule impact energy	$0,1 \times 10^6$
Installation position	Door hinge DIN left
Reaction time	
Emergency stop / machine stop	Switch-off timemax.250 ms [1]
Enabling switch	Switch-off timemax.250 ms [2]
Operating mode selector switch	Switch-off timemax.220 ms [3]
Door position	Switch-off timemax.550 ms [4]
Bolt position	Switch-off timemax.550 ms [5]
Guard locking	Switch-off timemax.550 ms [6]
Switching frequency	0,25 Hz
Connection	
	Push-pull power [7]
	Push-pull power [8]
According to IEC 61076-3-117 variant 14, screened, Profinet I/O cable, at least cat. 5e	Push-pull RJ45 [9]
According to IEC 61076-3-117 variant 14, screened, Profinet I/O cable, at least cat. 5e	Push-pull RJ45 [10]
	Plug connector RC12 [11]
Guard locking principle	Open-circuit current principle
Locking force F_{Zh}	2000 N

Electrical connection ratings

Current consumption	max.500 mA
Rated insulation voltage U_i	75 V
Rated impulse withstand voltage U_{imp}	0,5 kV
Maximum feed-in current in the connection block	

	X1, X2	max.4000 mA
EMC protection requirements		In accordance with EN 61000-4 and EN 61326-3-1
Degree of contamination (external, according to EN 60947-1)		3
Connecting cable		
	Ethernet	Profinet I/O cable, at least cat. 5e
Safety class		III
Transponder coding		Multicode
		Power supply X1
Operating voltage DC		
	L1	24 V DC -15% ... 10% [12]
Auxiliary voltage DC		
	L2	24 V DC -15% ... +10% [13]
Fusing		
	external	Slow blow min.1 A
		Power supply X2
Operating voltage DC		
	L1	24 V DC -15% ... 10% [14]
Auxiliary voltage DC		
	L2	24 V DC -15% ... +10% [15]

Interface, bus

Data interface		
	Ethernet	
Data protocol		
	Bus protocol	Profinet (IEC 61158 type 10)
	Safety protocol	Profisafe (IEC 61784-3-3)

Operating distance

Assured switch-off distance S_{ar}		
	Door position	max.65 mm

Controls and indicators

Assignment diagram		L2
Assignment diagram		C3
Assignment diagram		B2
Control/indicator		
		Position 1
Version		Illuminated push buttons
Special features		
Color		Green
Switching element		1NO

Slide-in label	Inicia estação
Control/indicator	
	Position 2
Version	Illuminated push buttons
Special features	
Color	Red
Switching element	1NO
Slide-in label	Para estação
Control/indicator	
	Position 3
Version	Illuminated push buttons
Special features	
Color	Green
Switching element	1NO
Slide-in label	Liga água de refrigeração
Control/indicator	
	Position 4
Version	Illuminated push buttons
Special features	
Color	white
Switching element	1NO
Slide-in label	Fim de ciclo
Control/indicator	
	Position 5
Version	Illuminated push buttons
Slide-in label	without marking
Special features	
Color	white
Switching element	1NO
Control/indicator	
	Position 6
Version	Illuminated push buttons
Special features	
Color	Red
Switching element	1NO
Slide-in label	Desliga água de refrigeração
Control/indicator	
	Position 7
Version	Emergency stop
Special features	
Color	
Switching element	2 pos. driven NC
Control/indicator	
	Position 8
Version	Illuminated push buttons
Special features	

Color	white
Switching element	1NO
Slide-in label	Libera porta de segurança
Control/indicator	
	Position 11
Version	Cover for indicators
Special features	
Color	Green
Switching element	
Slide-in label	Área segura
Control/indicator	
	Position 12
Version	Illuminated push buttons
Special features	
Color	Yellow
Switching element	1NO
Slide-in label	Rearma área segura
Control/indicator	
	Position 13
Version	Operating mode selector switch
Special features	
Color	
Switching element	Code 2 of 3
Slide-in label	Destravada ; Travada ; Travada central

Miscellaneous

Product version number	V3.30.10
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Reliability values acc. to EN ISO 13849-1

	Monitoring of guard locking and the safety guard position
Category	4
Performance Level	PL e
PFH _D	4.07×10^{-8} [16]
Diagnostic Coverage (DC)	99
	Emergency stop
B10 _D	
Emergency stop	0.1×10^6
	Emergency-stop evaluation
Category	4
Performance Level	PL e
PFH _D	4.1×10^{-8}
	Selector switch evaluation
Category	4
Performance Level	PL e

PFH _D	4.1 x 10 ⁻⁸
	Enabling switch
B10 _D	According to manufacturer's specifications
Enabling switch	
	Enabling switch evaluation
Category	4
Performance Level	PL e
PFH _D	4.1 x 10 ⁻⁸

Safety Integrity Level	SIL 3 (EN 62061:2005)
Mission time	20

[1, 2, 3, 4, 5, 6] The reaction time is the max. time between the change in the input status and the deletion of the corresponding bit in the bus protocol.

[7] X1 (The document PROFINET "Cabling and Interconnection Technology" from the PNO aids in the correct selection of wiring.)

[8] X2 (The document PROFINET "Cabling and Interconnection Technology" from the PNO aids in the correct selection of wiring.)

[9] X3 (The document PROFINET "Cabling and Interconnection Technology" from the PNO aids in the correct selection of wiring.)

[10] X4 (The document PROFINET "Cabling and Interconnection Technology" from the PNO aids in the correct selection of wiring.)

[11] X14

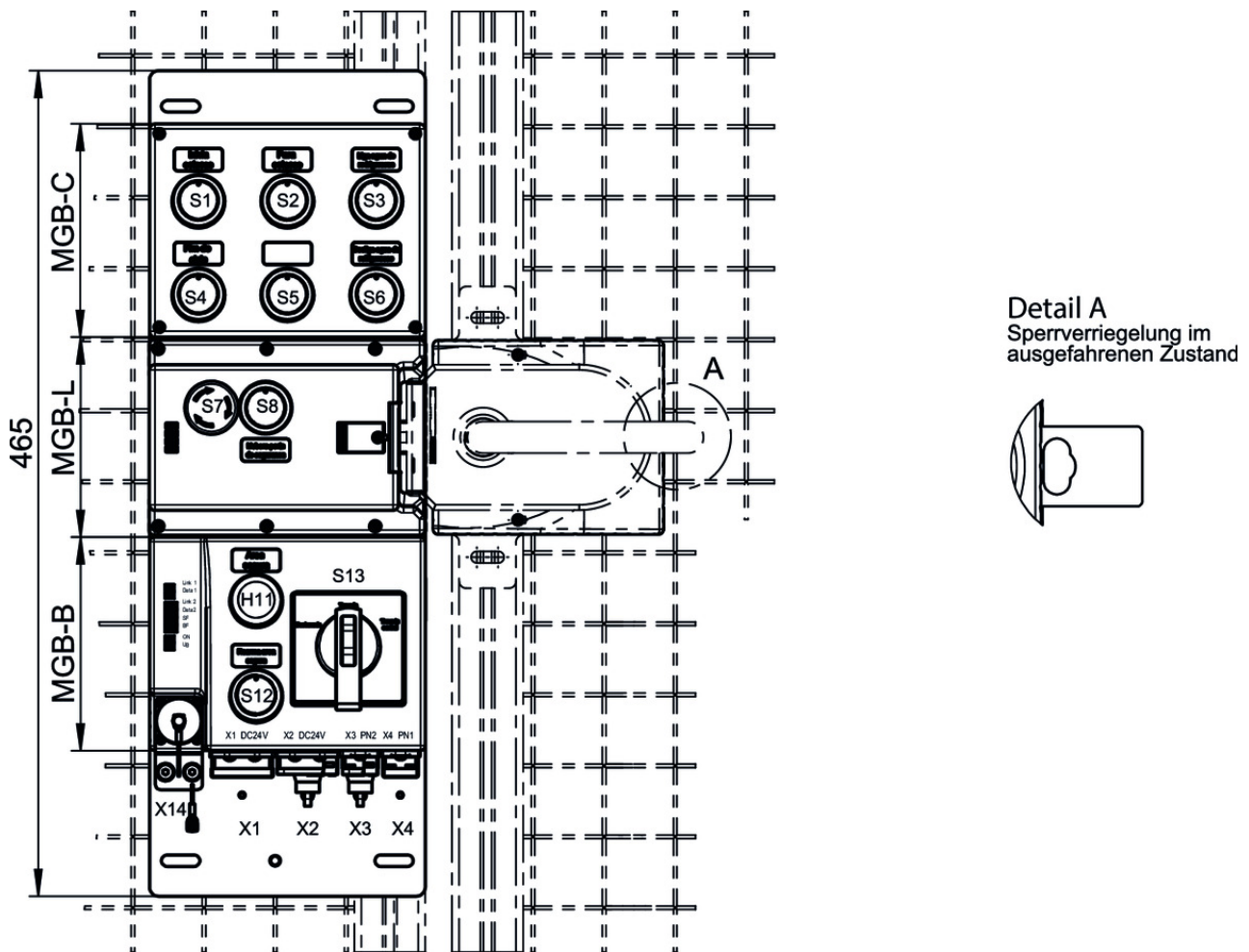
[12] (Reverse polarity protected, regulated, residual ripple <5%, PELV)

[13] The auxiliary voltage is not required for the MGB system

[14, 15] For looping through for connected devices

[16] Fixed failure rate without consideration of faults in wearing parts.

Dimension drawing



Miscellaneous accessories

▼ Lens set 5 colors



120344 AY-SET-LNS-0001-120344

▼ Lens set 6 colors



120378 AY-SET-LNS-0002-120378

▼ Lens set labeled



120377 AY-SET-LNS-SY01-120377



126158 AY-SET-LNS-SY03-126158



125359 AY-SET-LNS-SY02-125359

▼ Adhesive labels

114529 MGB-A-PLATESET-NN01-114529

▼ Features

- › Adhesive labels suitable for MGB evaluation modules, bus modules and control modules
 - › silver, blank
 - › Packaging unit = 10 pcs.
-

▼ Lens set, three colors



158307 AY-SET-LNS-SY04-158307

Enabling switch

▼ ZSB, housing G3, 3-stage, +/- pushbuttons, cable with plug connector RC12



077029 ZSB077029

▼ Features

- › 3-stage function
 - › Housing G3
 - › Straight connection cable, 5 m
 - › Plug connector
 - › Two illuminated buttons
 - › Including holder
-

▼ ZSB, housing G3, 3-stage, +/- pushbuttons illuminated, cable with plug connector RC12



085058 ZSB085058

▼ Features

- › 3-stage function
 - › Housing G3
 - › Straight connection cable, 12 m
 - › Plug connector
 - › Two illuminated buttons
 - › Including holder
-

▼ ZSB, housing G1, 3-stage, +/- pushbuttons, cable with plug connector RC12



077040 ZSB077040

▼ Features

- › Housing G1
 - › 3-stage function
 - › Straight connection cable, 5 m
 - › Plug connector
 - › 2 buttons
-

▼ ZSA, 3-stage with cable and plug connector RC12



099495 ZSA099495C2038

▣ Features

- Housing G1
- 3-stage function
- Straight connection cable with plug connector, 15 m
- Direct connection to safety switch



097567 ZSA097567C2038

▣ Features

- Housing G1
- 3-stage function
- Straight connection cable with plug connector, 10 m
- Direct connection to safety switch



092141 ZSA092141C2038

▣ Features

- Housing G1
- 3-stage function
- Straight connection cable with plug connector, 5 m
- Direct connection to safety switch



100873 ZSA100873C2038

▣ Features

- Housing G1
- 3-stage function
- Straight connection cable with plug connector, 25 m
- Direct connection to safety switch

▣ ZSM, + and - buttons, plug connector RC12



113290 ZSM2300-113290

▣ Features

- 3-stage function
- + and - buttons
- Plug connector
- Straight connection cable, 13 m



099716 ZSM2300-099716





▣ Features

- 3-stage function
- + and - buttons
- Plug connector
- Straight connection cable, 5 m




Instructions

▣ Operating Instructions Safety Systems MGB-L..B-PN.-... (PROFINET) with Data Structure Type A

from V3.30.0





	Doc. no.	Version	Language	Download
Betriebsanleitung Sicherheitssysteme MGB-L..B-PN.-... (PROFINET) mit Datenstruktur Typ A ab V3.30.0	114575	04-03/15		 2.7 MB
Operating Instructions Safety Systems MGB-L..B-PN.-... (PROFINET) with Data Structure Type A from V3.30.0	114575	04-03/15		 2.8 MB

Sicherheitsinformation (Teil der Betriebsanleitung Sicherheitssystem MGB-L.B-PN.-... (PROFINET)) ab V3.30.0





	Doc. no.	Version	Language	Download
Sicherheitsinformation (Teil der Betriebsanleitung Sicherheitssystem MGB-L.B-PN.-... (PROFINET)) ab V3.30.0 Safety Information (Part of the Operating Instructions Safety System MGB-L.B-PN.-... (PROFINET)) from V3.30.0	123621	02-03/15	 	 0.2 MB

Application example

Anschluss MGB-L1B-PN... an Siemens S7 315F (TIA Portal V13)







	Doc. no.	Version	Language	Download
Anschluss MGB-L1B-PN... an Siemens S7 315F (TIA Portal V13)	AP000226	01-02/17		 1.5 MB
Connecting MGB-L1B-PN... to Siemens S7 315F (TIA Portal V13)	AP000226	01-02/17		 1.7 MB

Anschluss MGB-L2B-PN... an Siemens S7 315F

	Doc. no.	Version	Language	Download
Anschluss MGB-L2B-PN... an Siemens S7 315F	AP000222	02-09/16		 2.0 MB
Connection of MGB-L2B-PN... to Siemens S7 315F	AP000222	02-09/16		 1.6 MB

Declaration of conformity

EU-Konformitätserklärung

	Doc. no.	Version	Language	Download
EU-Konformitätserklärung Declaración UE de conformidad Déclaration UE de conformité Dichiarazione di conformità EU declaration of conformity	2123624	06-01/17	    	 0.3 MB