

Datasheet - SLB 200-C04-1R

Safety light barriers / Safety monitoring modules to monitor safety light barriers / SLB 200-C



- **NOTICE: Not available! SLB 240**
- Up to 2 light barrier pairs SLB 200 can be connected
- 1 safety contact
- 1 Signalling output

(Minor differences between the printed image and the original product may exist!)

Ordering details

Product type description	SLB 200-C04-1R
Article number	101138897
EAN Code	4030661281537
eCl@ss	27-27-92-15

Approval

Approval




Classification

Standards	EN ISO 13849-1, IEC 61508
PL	up d
Control category	up 2
PFH value	
- up to max. 500000 switching cycles/year	1.01 x 10 ⁻⁷ / h at DC 2 A
- up to max. 50000 switching cycles/year	2.8 x 10 ⁻⁷ / h at AC 2 A
SIL	up 2
Mission time	20 Years

Global Properties

Permanent light	SLB 200-C
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Standards	IEC/EN 61496-1/-2, EN ISO 13849-1
Compliance with the Directives (Y/N) 	Yes
Mounting	snaps onto standard DIN rail to EN 60715
Materials	
- Material of the housings	Plastic, glass-fibre reinforced thermoplastic
Weight	350
Start conditions	Test button, Start button, on/off coding
Start input (Y/N)	Yes
Feedback circuit (Y/N)	Yes
Start-up test (Y/N)	No
Automatic reset function (Y/N)	Yes
Reset with edge detection (Y/N)	Yes
Response time	30
Time to readiness	300

Mechanical data

Connection type	Screw connection
Cable section	
- Min. Cable section	-
- Max. Cable section	4
Detachable terminals (Y/N)	No
notice	All indications about the cable section are including the conductor ferrules.
restistance to shock	10 g / 16 ms
Resistance to vibration To EN 60068-2-6	10...55 HZ, Amplitude 0,35 mm

Ambient conditions

Ambient temperature	
- Min. environmental temperature	0
- Max. environmental temperature	+50
Storage and transport temperature	
- Min. Storage and transport temperature	-20
- Max. Storage and transport temperature	+80
Protection class	
- Protection class-Enclosure	IP40
- Protection class-Terminals	IP20
- Protection class-Clearance	IP54
Air clearances and creepage distances To IEC/EN 60664-1	
- Rated impulse withstand voltage U_{imp}	4.8 kV
- Overvoltage category	II To VDE 0110
- Degree of pollution	3 To VDE 0110

Electromagnetic compatibility (EMC)

EMC rating	conforming to EMC Directive
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Electrical data

Type of actuation	DC
Switch frequency	max. 10 HZ
Rated operating voltage U_e	24 VDC \pm 20%
Operating current I_e	180 mA

Outputs

Number of safety contacts	1
Number of auxiliary contacts	0
Number of signalling outputs	1
Switching capacity	
- Switching capacity of the safety contacts	max. 8 A
- Switching capacity of the signaling/diagnostic outputs	500 mA
Fuse rating	
- Protection of the safety contacts	4 A gG D-fuse
Utilisation category To EN 60947-5-1	AC-15: 250 V / 2 A DC-13: 24 V / 2 A
Number of undelayed semi-conductor outputs with signaling function	0
Number of undelayed outputs with signaling function (with contact)	0
Number of delayed semi-conductor outputs with signaling function.	0
Number of delayed outputs with signalling function (with contact).	0
Number of secure undelayed semi-conductor outputs with signaling function	0
Number of secure, undelayed outputs with signaling function, with contact.	0
Number of secure, delayed semi-conductor outputs with signaling function	0
Number of secure, delayed outputs with signaling function (with contact).	0

LED switching conditions display

LED switching conditions display (Y/N)	Yes
Number of LED's	4
LED switching conditions display	
- The integrated LEDs indicate the following operating states.	
- RELAY, green: safety contact on	
- RELAY, red: safety contact off	
- RESTART, yellow: Waiting on authorised operation, RESTART button not yet pressed	
- ERROR, Orange: Internal or external fault (contactor contacts welded or test button [N.C.] not connected)	

Miscellaneous data

Applications



Safety light barriers

Dimensions

Dimensions	
- Width	45 mm
- Height	84 mm
- Depth	118 mm

notice

In order to set for the desired mode of operation and number of light barriers connected, remove the front cover of the safety monitoring module. As supplied all switches are in Position 1.

The required functions can be selected by means of the internal DIP switches.

DIP switch 1

- | | |
|--------------|---------------------------|
| - Position 1 | with Contactor control |
| - Position 2 | without Contactor control |

DIP switch 2	
- Position 1	with start/restart interlock
- Position 2	without start/restart interlock
DIP switch 3	
- Position 1	Connection of 2 light barrier(s)
- Position 2	Connection of 1 light barrier(s)

Inductive loads (e.g. contactors, relays, etc.) are to be suppressed by means of a suitable circuit.

notice - Wiring example

Monitoring up to 2 pairs of light barrier devices and the power contactors using the SLB 200-C safety monitoring module

Test push button (T)

The test push button is connected to X13 and X14 in order to carry out a check of the light barrier monitoring function. The terminals X15 and X16 must be bridged.

Contactor check

To monitor an external contactor, the feedback circuit is connected to X17 and X18. The terminals X19 and X20 must be bridged.

Start push button (S)

The start push button can be used to start the monitoring of the light barriers for a new start or after an interruption. The terminals X3 and X4 must be bridged.

It is also possible to connect only one pair of light barrier devices.

The wiring diagram is shown for the de-energised condition.

Documents

Operating instructions and Declaration of conformity (fr) 267 kB, 06.10.2015

Code: mrl_slb200-c_fr

Operating instructions and Declaration of conformity (pl) 281 kB, 01.07.2015

Code: mrl_slb200-c_pl

Operating instructions and Declaration of conformity (de) 250 kB, 18.06.2015

Code: mrl_slb200-c_de

Operating instructions and Declaration of conformity (es) 259 kB, 06.04.2016

Code: mrl_slb200-c_es

Operating instructions and Declaration of conformity (nl) 573 kB, 30.08.2011

Code: mrl_slb200-c_nl

Operating instructions and Declaration of conformity (jp) 622 kB, 10.05.2011

Code: mrl_slb200-c_jp

Operating instructions and Declaration of conformity (it) 264 kB, 16.07.2015

Code: mrl_slb200-c_it

Operating instructions and Declaration of conformity (en) 263 kB, 18.06.2015

Code: mrl_slb200-c_en

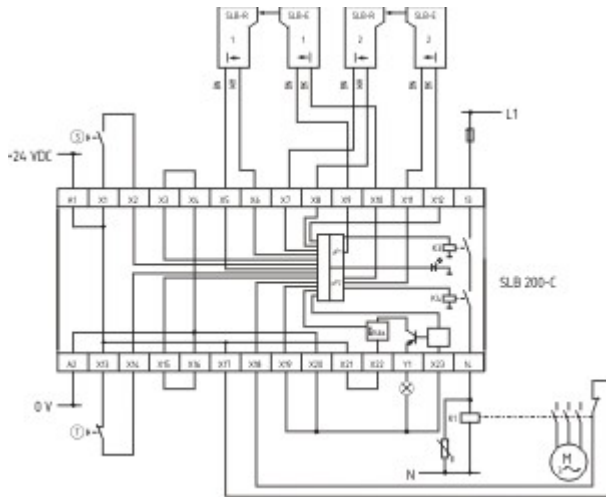
Wiring example (99) 20 kB, 20.08.2008

Code: kslb2l01

BG-test certificate (de, en) 1 MB, 29.04.2015

Code: z_lb2p01

Images



Wiring example

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The data and values have been checked thoroughly. Technical modifications and errors excepted.

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