Datasheet - SRB200ZHX1

Two-hand control panels / Monitoring two-hand control panels to EN 574 III A / SRB200ZHX1

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

- Monitoring two-hand control panels to EN 574 III A
- 2 safety contacts, STOP 0

Ordering details

Product type description	SRB200ZHX1
Article number	101183408
EAN Code	4250116202478
eCl@ss	27-37-19-01

Approval

Approval	BG USA/CAN

Classification

Standards	EN ISO 13849-1, IEC 61508, EN 60947-5-1, EN 574
PL	up e (STOP 0)
Control category	up 4 (STOP 0)
DC	99% (STOP 0)
CCF	>65 points
PFH value	≤ 2,0 x 10-8/h (STOP 0)
SIL	up 3 (STOP 0)
Mission time	20 Years
- notice	The PFH value is applicable for the combinations listed in the table for contact load (K) (current through enabling paths) and switching cycle

number (n-op/y).
In case of 365 operating days per year and a 24-hour operation, this results in the specified switching cycle times (t-cycle) for the relay contacts.
Diverging applications on request.

K	n-op/y	t-cycle
20 %	525.600	1,0 min
40 %	210.240	2,5 min
60 %	75.087	7,0 min
80 %	30.918	17,0 min
100 %	12.223	43,0 min

Global Properties

Permanent light	SRB200ZHX1
Standards	IEC/EN 60204-1, EN 60947-5-1, EN ISO 13849-1, IEC 61508
Compliance with the Directives (Y/N) CE	Yes
Climatic stress	EN 60068-2-78
Mounting	snaps onto standard DIN rail to EN 60715
Terminal designations	IEC/EN 60947-1
Materials	
- Material of the housings	Plastic, glass-fibre reinforced thermoplastic, ventilated
- Material of the contacts	AgSn0, self-cleaning, positive action
Weight	220
Start conditions	Start button (monitored)
Start input (Y/N)	No
Feedback circuit (Y/N)	Yes
Start-up test (Y/N)	No
Automatic reset function (Y/N)	Yes
Reset with edge detection (Y/N)	No
Pull-in delay	
- ON delay with automatic start	typ. 50 ms
Drop-out delay	
- Drop-out delay in case of emergency stop	typ. 35 ms

Mechanical data

Connection type	Screw connection
Cable section	
- Min. Cable section	0,25
- Max. Cable section	2.5
Pre-wired cable	rigid or flexible
Tightening torque for the terminals	0,6
Detachable terminals (Y/N)	No
Mechanical life	10.000.000 operations
Electrical lifetime	Derating curve available on request
restistance to shock	30 g / 11 ms
Resistance to vibration To EN 60068-2-6	10…55 HZ, Amplitude 0,35 mm, ± 15 %

Ambient conditions

Ambient temperature	
- Min. environmental temperature	−25 °C
- Max. environmental temperature	+60 °C
Storage and transport temperature	
- Min. Storage and transport temperature	−40 °C
- Max. Storage and transport temperature	+85 °C

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 kV
- Overvoltage category	II To VDE 0110
- Degree of pollution	2 To VDE 0110

Electromagnetic compatibility (EMC)

EMC rating	conforming to EMC Directive

Electrical data

Rated DC voltage for controls	
- Max. rated DC voltage for controls	20.4
- Max. rated DC voltage for controls	28.8
Rated AC voltage for controls, 50 Hz	
- Min. rated AC voltage for controls, 50 Hz	-
- Max. rated AC voltage for controls, 50 Hz	-
Rated AC voltage for controls, 60 Hz	
- Min. rated AC voltage for controls, 60 Hz	-
- Max. rated AC voltage for controls, 60 Hz	-
Contact resistance	max. 100 mΩ
Power consumption	1.6
Type of actuation	DC
Rated operating voltage U_e	24 VDC -15% / +20%, residual ripple max. 10%
Electronic protection (Y/N)	Yes
Fuse rating for the operating voltage	Internal electronic trip, tripping current > 0,6 A
Current and tension on control circuits	
- S13, S14, S23, S24	24 VDC, Test current: 10 mA
Bridging in case of voltage drops	typ. 30 ms

Inputs

Monitored inputs	
- Short-circuit recognition (Y/N)	Yes
- Wire breakage detection (Y/N)	Yes
- Earth connection detection (Y/N)	Yes
Number of shutters	2 piece
Number of openers	0 piece
Cable length	1500 m with 1.5 mm²; 2500 m with 2.5 mm²
Conduction resistance	max. 40 Ω

Outputs

Stop category	0
Number of safety contacts	2 piece
Number of auxiliary contacts	0 piece
Number of signalling outputs	0 piece
Switching capacity	

- Switching capacity of the safety contacts	max. 250 VAC, 6 A ohmic (inductive in case of appropriate protective wiring) min. 10 V, 10 mA
Fuse rating	
- Protection of the safety contacts	6.3 A slow blow
- Fuse rating for the auxiliary contacts	2 A slow blow
Utilisation category To EN 60947-5-1	AC-15: 230 V / 6 A DC-13: 24 V / 6 A
Number of undelayed semi-conductor outputs with signaling function	0 piece
Number of undelayed outputs with signaling function (with contact)	0 piece
Number of delayed semi-conductor outputs with signaling function.	0 piece
Number of delayed outputs with signalling function (with contact).	0 piece
Number of secure undelayed semi-conductor outputs with signaling function	0 piece
Number of secure, undelayed outputs with signaling function, with contact.	2 piece
Number of secure, delayed semi-conductor outputs with signaling function	0 piece
Number of secure, delayed outputs with signaling function (with contact).	0 piece

LED switching conditions display

LED switching conditions display (Y/N)	Yes
Number of LED´s	3
LED switching conditions display	
- The integrated LEDs indicate the following operating states.	
- Position relay K1	
- Position relay K2	
- Supply voltage	

Miscellaneous data

Applications	 Two-hand control panels

Dimensions

Dimensions	
- Width	22.5 mm
- Height	100 mm
- Depth	121 mm

notice

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

notice - Wiring example

Button A and B: 0 NC contact / 1 NO contact (note: the NC contact of the buttons A and B must be opened, before the NO contact closes. No overlapping contacts to avoid triggering of fuse F3).

Relay outputs: Suitable for 2 channel control, for increase in capacity or number of contacts by means of contactors or relays with positive-guided contacts.

(H2) = Feedback circuit

The control recognises cross-short, cable break and earth leakages in the monitoring circuit.

Simultaneity monitoring 0,5 seconds

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

Documents

Operating instructions and Declaration of conformity (jp) 1 MB, 22.12.2010
Code: mrl_srb_200zh_x1_jp

Operating instructions and Declaration of conformity (pl) 363 kB, 29.03.2018
Code: mrl_srb_200zh_x1_pl

Operating instructions and Declaration of conformity (de) 273 kB, 09.11.2017
Code: mrl_srb_200zh_x1_de

Operating instructions and Declaration of conformity (nl) 281 kB, 02.08.2018
Code: mrl_srb_200zh_x1_nl

Operating instructions and Declaration of conformity (es) 280 kB, 11.01.2018
Code: mrl_srb_200zh_x1_es

Operating instructions and Declaration of conformity (fr) 285 kB, 05.01.2018
Code: mrl_srb_200zh_x1_fr

Operating instructions and Declaration of conformity (en) 282 kB, 09.11.2017
Code: mrl_srb_200zh_x1_en

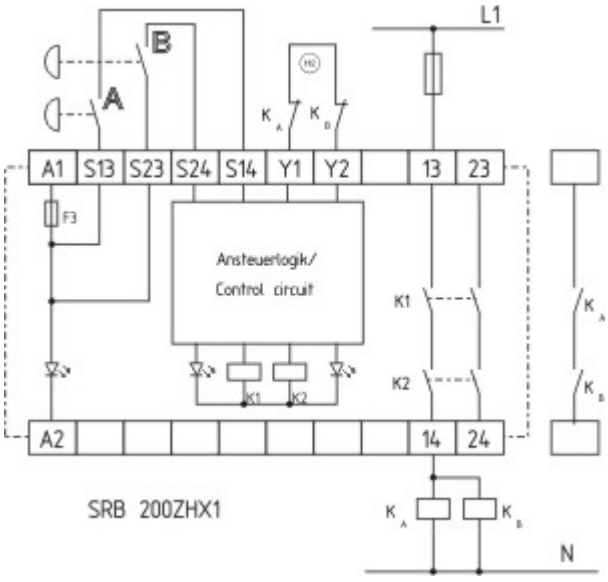
Operating instructions and Declaration of conformity (it) 282 kB, 05.01.2018
Code: mrl_srb_200zh_x1_it

Operating instructions and Declaration of conformity (pt) 287 kB, 16.01.2018
Code: mrl_srb_200zh_x1_pt

Wiring example (99) 16 kB, 04.08.2008
Code: ksrb2l10

EAC certification (ru) 1 MB, 15.03.2018
Code: q_aesp01

Images



Wiring example