



SRB100DR

- 1 safety contact, STOP 0
- Safety relay module for double reset
- Suitable for signal processing of potential-free outputs, e.g. command devices

Data

Ordering data

	SRB100DR
	101186279
EAN (European Article Number)	4250116202218
eCl@ss number, Version 9.0	27-37-18-19

General data

	SRB100DR
	IEC 61508
	IEC/EN 60204-1
	ISO 13849-1
	EN 60947-5-1
	EN 60068-2-78
Enclosure material	Glass-fibre reinforced thermoplastic, ventilated
Material of the contacts, electrical	Ag-Ni, self-cleaning, positive drive
Gross weight	250 g

General data - Features

Electronic Fuse	Yes
Wire breakage detection	Yes
Start input	Yes

Reset after disconnection of supply voltage	Yes
Earth connection detection	Yes
Integral System Diagnostics, status	Yes
Number of LEDs	4
Number of openers	2
Number of safety contacts	1

Safety appraisal

EN 60947-5-1
IEC 61508

Safety appraisal - Relay outputs

PFH-Value Stop 0	2.00×10^{-8} /h
Mission time	20 Year(s)

Mechanical data

Mounting	Snaps onto standard DIN rail to EN 60715
Mechanical life, minimum	10,000,000 Operations

Mechanical data - Connection technique

Terminal Connector	Screw connection rigid or flexible
Terminal designations	IEC/EN 60947-1 0.25 mm ² 2.5 mm ²
Tightening torque of Clips	0.6 Nm

Mechanical data - Dimensions

Width	22.5 mm
Height	100 mm
Depth	121 mm

Ambient conditions

IP40
IP54
IP20

Ambient temperature, minimum	-25 °C
Ambient temperature, maximum	+60 °C
Storage and transport temperature, minimum	-40 °C
Storage and transport temperature, maximum	+85 °C
Resistance to vibrations to EN 60068-2-6	10...55 Hz, Amplitude 0.35 mm, ± 15 % 30 g / 11 ms

Ambient conditions - Insulation value

Rated impulse withstand voltage	4 kV
	III
	2

Electrical data

Frequency range	60 Hz 24 VAC -15% / +10%
Rated AC voltage for controls, 50 Hz, minimum	20.4 VAC
Rated control voltage at AC 50 Hz, maximum	26.4 VAC
Rated AC voltage for controls, 60 Hz, minimum	20.4 VAC
Rated control voltage at AC 60 Hz, maximum	26.4 VAC
Rated AC voltage for controls at DC minimum	20.4 VDC
Rated control voltage at DC, maximum	28.8 VDC
Electrical power consumption	3.2 W
Electrical power consumption	6 VA
Contact resistance, maximum	0.1 Ω
Note (Contact resistance)	in new state

Drop-out delay in case
of power failure, typically 80 ms

Drop-out delay in case
of emergency, typically 20 ms

Pull-in delay at
automatic start, maximum, typically 100 ms

Pull-in delay at RESET,
typically 20 ms

Electrical data - Safe relay outputs

Voltage, Utilisation
category AC15 230 VAC

Current, Utilisation
category AC-15 6 A

Voltage, Utilisation
category DC13 24 VDC

Current, Utilisation
category DC13 6 A

Switching capacity,
minimum 10 VDC

Switching capacity,
minimum 10 mA

Switching capacity,
maximum 250 VAC

Switching capacity,
maximum 8 A

Electrical data - Digital inputs

Conduction resistance,
maximum 40 Ω

Electrical data - Relay outputs (auxiliary contacts)

Switching capacity,
maximum 24 VDC

Switching capacity,
maximum 2 A

Electrical data - Electromagnetic compatibility (EMC)

EMC rating EMC-Directive

Status indication

Indicated operating states

Position relay K2
Position relay K1
Position relay K3

Notes

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

Circuit example

The wiring diagram is shown with guard doors closed and in de-energised condition.
Applications: #Picture#Bilddata/Sonstige/_quit01.eps#/Picture# safety relay module for double reset
Start configuration: 2 time-dependent reset/on switches 1st and 2nd monitoring time between the 1st and 2nd reset button from 3 ... 30 seconds adjustable through DIP switches
Note (Wiring diagram) The monitoring time is set through DIP switches located below the cover of the enclosure front. (Factory setting: 3 seconds)
Actuator configuration: 1-channel control (output impulse approx. 200 ms) of the reset input of a downstream safety relay module
Edge detection: After the device is reset, the trailing edge is evaluated, so that errors, e.g. welded contacts or manipulations cannot lead to dangerous situations.
(H2) = Feedback circuit

Pictures

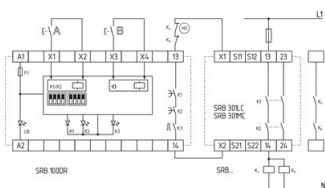
Photo/Product/Catalogue



ID: ksrb1f03

| 798,3 kB | .jpg | 265.994 x 625.122 mm - 754 x 1772
Pixel - 72 dpi
| 99,1 kB | .png | 74.083 x 173.919 mm - 210 x 493
Pixel - 72 dpi

Graphic/Product/Wiring



ID: ksrb1l01

| 117,7 kB | .jpg | 352.778 x 196.497 mm - 1000 x 557
Pixel - 72 dpi
| 35,7 kB | .cdr |

Graphic/Product/Icon

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

ID: kformm02

| 191,1 kB | .jpg | 352.778 x 246.592 mm - 1000 x 699
Pixel - 72 dpi

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The details and data referred to have been carefully checked. Images may diverge from original. Further technical data can be found in the manual. Technical amendments and errors possible.

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