



SRB100DR

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

Data

Ordering data

EAN (European Article Number)	4250116202218
eCl@ss number, Version 9.0	27-37-18-19
eCl@ss number, Version 11.0	27-37-18-19
ETIM number, version 6.0	EC001449

General data

Standards	IEC 61508 IEC/EN 60204-1 EN 60947-5-1 EN ISO 13849-1
Climatic stress	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

Standards	EN 60947-5-1 IEC 61508
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Safety appraisal - Relay outputs

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

Mechanical data

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

Mechanical data - Connection technique

Terminal Connector	Screw connection rigid or flexible
Terminal designations	IEC/EN 60947-1
Cable section, minimum	0.25 mm ²
Cable section, maximum	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

Degree of protection of the enclosure	IP40
Degree of protection of the mounting space	IP54
Degree of protection of clips or terminals	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 %
Resistance to shock	30 g / 11 ms

Ambient conditions - Insulation value

Rated impulse
withstand voltage U_{imp} 4 kV

Overtoltage category III

Degree of pollution to
IEC/EN 60664-1 2

Electrical data

Frequency range 50 Hz
60 Hz

Rated operating voltage 24 VAC -15% / +10%
24 VDC -15% / +20%, residual ripple max. 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

