



SRB202MSL

- Muting signalling device monitoring
- 2 safety contacts, STOP 0
- 2 Signalling outputs

Data

Ordering data

EAN (European Article Number)	4250116202577
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	AgSn ₃ O, Ag-Ni, self-cleaning, positive drive
Gross weight	400 g

General data - Features

Stop-Category	0
Electronic Fuse	Yes
Wire breakage detection	Yes
Short-circuit recognition	Yes
Removable Terminals	Yes
Feedback circuit	Yes
Automatic reset function	Yes
Reset after disconnection of supply voltage	Yes
Earth connection detection	Yes
Integral System Diagnostics, status	Yes
Number of auxiliary contacts	2
Number of LEDs	8
Number of openers	2
Number of safety contacts	2
Number of signalling outputs	2

Safety appraisal

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

Performance level, stop 0, up to	e
Category, Stop 0	4
Diagnostic Coverage (DC) Level, Stop	≥ 99 %
PFH-Value Stop 0	2.00×10^{-8} /h
Safety Integrity Level (SIL), Stop 0, suitable for applications in	3
Mission time	20 Year(s)
Common Cause Failure (CCF), minimum	65

Mechanical data

Mechanical life, minimum	10,000,000 Operations
Mounting	Snap 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	45 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	+45 °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, $\pm 15\%$

Resistance to shock 30 g / 11 ms

Ambient conditions - Insulation value

Rated impulse withstand voltage U_{imp} 4 kV

Overvoltage category III

Degree of pollution to IEC/EN 60664-1 2

Electrical data

Frequency range 50 Hz
60 Hz

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

Rated AC voltage for controls at DC minimum 20.4 VDC

Rated control voltage at DC, maximum 28.8 VDC

Utilisation category DC-13 24 VDC

Utilisation category DC-13 2 A

Electrical power consumption 5.6 W

Contact resistance, maximum 0.1 Ω

Note (Contact resistance) in new state

Drop-out delay in case of power failure, typically 60 ms

Drop-out delay in case of emergency, typically 17 ms

Drop-out delay in case of "emergency stop", maximum 20 ms

Pull-in delay at automatic start, maximum, typically 200 ms

Electrical data - Digital inputs

Conduction resistance, maximum 40 Ω

Electrical data - Electromagnetic compatibility (EMC)

EMC rating EMC-Directive

Status indication

Indicated operating states Position relay K2
Position relay K1
Internal operating voltage U_i
Position relay K3
Position relay K5
Position of the muting signalling device LA

Other data

Note (applications) Muting function

Notes

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

Circuit example

Note (Wiring diagram) 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.
The control recognises cross-short, cable break and earth leakages in the monitoring circuit.
The example shows a 2-channel control of 2 muting sensors and an external master reset button.
The wiring diagram is shown with non-actuated muting sensors and in de-energised condition.
(H2) = Feedback circuit
F1 = Electronic fuse

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.

Generated on: 11/9/2021, 9:08 AM