



SRB-E-301MC

- 1 Signalling contact
- Plug-in screw terminals with coding
- Suitable for applications up to Cat. 4 / PL e und up to SIL 3
- 1 or 2 channel signal evaluation
- Start / feedback circuit monitoring
- Optionally with short-circuit recognition
- 3 safety contacts, stop category 0

Data

Ordering data

Product type description	SRB-E-301MC
Article number (order number)	103014374
EAN (European Article Number)	4030661508696
eCl@ss number, version 12.0	27-37-18-19
eCl@ss number, version 11.0	27-37-18-19
eCl@ss number, version 9.0	27-37-18-19
ETIM number, version 7.0	EC001449
ETIM number, version 6.0	EC001449

Approvals - Standards

Certificates	cULus CCC
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General data

Standards	EN IEC 62061 EN ISO 13849-1 EN IEC 60947-5-1 EN IEC 60947-5-3 EN IEC 60947-5-5 EN IEC 61508 EN IEC 60204-1 EN IEC 60947-1
Climatic stress	EN 60068-2-78
Housing material	Glass-fibre reinforced thermoplastic, ventilated
Gross weight	175 g

General data - Features

Electronic Fuse	Yes
Wire breakage detection	Yes
Cross-circuit detection	Yes
Removable Terminals	Yes
Start input	Yes
Feedback circuit	Yes
Automatic reset function	Yes
Earth connection detection	Yes
Integral system diagnostics, status	Yes
Number of auxiliary contacts	1
Number of LEDs	5
Number of normally closed (NC)	2
Number of Safety contacts, STOP 0	3

Safety classification

Vorschriften	EN ISO 13849-1 EN IEC 62061 EN IEC 61508
Stop-Category	0

Safety classification - Relay outputs

Performance Level, up to	e
Category	4
Diagnostic Coverage (DC) Level	> 99 %
PFH value	6.00×10^{-9} /h
PFD value	4.00×10^{-4}
Safety Integrity Level (SIL), suitable for applications in	3
Mission time	20 Year(s)
Common Cause Failure (CCF), minimum	65

Mechanical data

Mechanical lifetime, minimum	10,000,000 Operations
Mounting	Snap onto standard DIN rails to IEC 60715

Mechanical data - Connection technique

Terminal designations	IEC 60947-1
Cable section, minimum	0.25 mm ²
Cable section, maximum	2.5 mm ²
Tightening torque of Clips	0.5 Nm
Allowed type of cable	solid single-wire flexible
Terminal (mechanical)	Removable screw terminals

Mechanical data - Dimensions

Width	22.5 mm
Height	98 mm
Depth	115 mm

Ambient conditions

Degree of protection of the enclosure	IP40
Degree of protection of the installation space	IP54
Degree of protection of clips or terminals	IP20
Ambient temperature	-25 ... +60 °C
Storage and transport temperature	-40 ... +85 °C
Note (Relative humidity)	non-condensing
Resistance to vibrations	10 ... 55 Hz, Amplitude 0.35 mm
Resistance to shock	30 g / 11 ms

Ambient conditions - Insulation values

Rated impulse withstand voltage U_{imp}	4 kV
Overvoltage category	III
Degree of pollution	2

Electrical data

Frequency range	50 Hz 60 Hz
Operating voltage	24 VAC -15 % / +10 % 24 VDC -15 % / +20 %
Ripple voltage	10 %
Rated operating voltage	24 VAC
Rated operating voltage	24 VDC
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	2.9 W
Electrical power consumption	5 VA
Contact resistance, maximum	0.1 Ω
Note (Contact resistance)	in new state

Drop-out delay in case of power failure, typically	50 ms
Drop-out delay in case of "emergency stop", maximum	10 ms
Pull-in delay at automatic start, maximum	120 ms
Pull-in delay at RESET, typically	20 ms
Switching frequency, maximum	0.3 Hz
Material of the contacts, electrical	Ag-Ni, self-cleaning, positive drive

Electrical data - Safe relay outputs

Voltage, Utilisation category AC-15	230 VAC
Current, Utilisation category AC-15	4 A
Voltage, Utilisation category DC-13	24 VDC
Current, Utilisation category DC-13	4 A
Switching capacity, minimum	10 VDC
Switching capacity, minimum	10 mA
Switching capacity, maximum	250 VAC
Switching capacity, maximum	6 A

Electrical data - Digital inputs

Conduction resistance, maximum	40 Ω
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Electrical data - Relay outputs (auxiliary contacts)

Switching capacity, maximum	24 VDC
Switching capacity, maximum	1 A

Electrical data - Electromagnetic compatibility (EMC)

EMC rating	EMC-Directive
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Status indication

Indicated operating states	Position relay K2 Position relay K1 Internal operating voltage U_i UB: Supply voltage on
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Other data

Note (applications)	Safety sensor Guard system hinged safety guard Emergency-Stop button Pull-wire emergency stop switches Safety light curtain Safety light barriers
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Ordering code

Product type description:
SRB-E-301MC-(1)(2)

	Signalling contact 41/42, NC contacts in parallel
20	Signalling contact 41/42, normally closed contacts in series
(2)	
	Plug-in screw clamps: single wire (rigid) or fine wire (flexible): 0.2 ... 2.5 mm ² ; fine wire with ferrule: 0.25 ... 2.5 mm ²
CC	Plug-in cage clamps: single wire (rigid) or fine wire (flexible): 0.2 ... 1.5 mm ² ; fine wire with ferrule: 0.25 ... 1.5 mm ²

Pictures

Product picture (catalogue individual photo)



ID: ksrb3f37

| 1.1 MB | .jpg | 301.625 x 666.75 mm - 855 x 1890 px - 72 dpi

| 95.4 kB | .png | 74.083 x 163.689 mm - 210 x 464 px - 72 dpi

| 40.5 kB | .jpg | 55.739 x 123.472 mm - 158 x 350 px - 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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