DATASHEET



SRB-E-301MC-CC

- Plug-in spring-cage terminal blocks with coding
- 1 Signalling contact
- 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-CC
Article number (order number)	103016932
EAN (European Article Number)	4030661511603
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

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	250 g

General data - Features

Stop-Category	0
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

Standards	EN ISO 13849-1 EN IEC 62061 EN IEC 61508

Safety classification - Relay outputs

Performance Level, up to	e
Category	4
Diagnostic Coverage (DC) Level	> 99 %
PFH value	6.00 x 10^{-9} /h
PFD value	4.00 x 10^{-5}
Safety Integrity Level (SIL), 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	Snaps onto standard DIN rails to IEC 60715

Mechanical data - Connection technique

Terminal designations	IEC 60947-1
Termination	Cage clamp, plug-in rigid or flexible
Cable section, minimum	0.25 mm²
Cable section, maximum	1.5 mm²

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 mounting space	IP54
Degree of protection of clips or terminals	IP20
Ambient temperature	-25 ... +60 °C
Storage and transport temperature, minimum	-40 °C
Storage and transport temperature, maximum	+85 °C
Resistance to vibrations	10 ... 55 Hz, Amplitude 0.35 mm
Restistance 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	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
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

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

Status indication

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

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

Pictures

Product picture (catalogue individual photo)



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| 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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