



SRB-E-301ST

- Plug-in screw terminals with coding
- STOP 0 Function
- 1 oder 2-channel control
- Start button / Auto-start
- 1 Auxiliary contact
- 3 safety contacts

Data

Ordering data

EAN (European Article Number)	4030661478470
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

Approval - Standards

Certificates	TÜV cULus CCC EAC
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General data

Standards	IEC 61508 EN 60947-5-1 IEC 62061 IEC 60204-1 EN ISO 13849-1
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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	175 g

General data - Features

Stop-Category	0
Electronic Fuse	Yes
Wire breakage detection	Yes
Short-circuit recognition	Yes
Removable Terminals	Yes
Start input	Yes
Feedback circuit	Yes
Automatic reset function	Yes
Reset edge detection	Yes
Earth connection detection	Yes
Integral System Diagnostics, status	Yes
Integral System Diagnostics, error code	Yes
Number of auxiliary contacts	1
Number of LEDs	5
Number of openers	2
Number of shutters	1
Number of Safety contacts, STOP 0	3

Safety appraisal

Standards	IEC 62061 IEC 61508 EN ISO 13849-1
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Safety appraisal - Relay outputs

Performance Level, up to	e
Control category to EN13849	4
Diagnostic Coverage (DC) Level	> 94 %
PFH-value	1.25×10^{-8} /h
PFD value	5.30×10^{-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	Snap onto standard DIN rail to EN 60715

Mechanical data - Connection technique

Terminal Connector	Screw connection, plug-in 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	0.5 Nm

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, 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
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 VAC -15% / +20% 24 VDC -20%/+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	2.4 W
Electrical power consumption	7 VA
Contact resistance, maximum	0.1 Ω
Note (Contact resistance)	in new state

Drop-out delay in case of power failure, typically	10 ms
Drop-out delay in case of emergency, typically	10 ms
Pull-in delay at automatic start, maximum, typically	150 ms
Pull-in delay at RESET, typically	150 ms
Switching frequency, maximum	0.3 Hz

Electrical data - Safe relay outputs

Voltage, Utilisation category AC15	230 VAC
Current, Utilisation category AC-15	4 A
Voltage, Utilisation category DC13	24 VDC
Current, Utilisation category DC13	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

Internal operating voltage U_i
Baustein-Status
Fault codes

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
Safety mats

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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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