



SRB-E-212ST

- Plug-in screw terminals with coding
- STOP 0 / 1 Function
- 1 oder 2-channel control
- 2 safety contacts STOP 0
- 1 Safety output STOP 1
- Drop-out delay adjustable in steps 0 ... 30

Data

Ordering data

Product type description	SRB-E-212ST
Article number (order number)	103007222
EAN (European Article Number)	4030661478487
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	TÜV cULus CCC
--------------	---------------------

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
Housing material	Glass-fibre reinforced thermoplastic, ventilated
Gross weight	170 g

General data - Features

Wire breakage detection	Yes
Cross-circuit detection	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 LEDs	6
Number of normally closed (NC)	2
Number of normally open (NO)	1
Number of Safety contacts, STOP 0	2
Number of safety digital outputs, Stop 1	1
Number of Signalling outputs, STOP 0	1
Number of Signalling outputs, STOP 1	1

Safety classification

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

Stop-Category	0
	1

Safety classification - Relay outputs

Performance Level, up to	e
Category	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

Safety classification - Fail-safe digital outputs

Performance Level, up to	e
Category	4
PFH value	2.66×10^{-9} /h
PFD value	2.42×10^{-5}
Safety Integrity Level (SIL), suitable for applications in	3
Mission time	20 Year(s)

Mechanical data

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

Mechanical data - Connection technique

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
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

IP Degree of protection of the enclosure	IP40
IP Degree of protection of the installation space	IP54
IP Degree of protection of clips or terminals	IP20
Ambient temperature	-25 ... +60 °C
Storage and transport temperature	-40 ... +85 °C
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} , relay output	4 kV
Rated impulse withstand voltage U_{imp} , semiconductor output	0.8 kV
Overvoltage category	III
Degree of pollution	2

Electrical data

Operating voltage	24 VDC -20 % / +20 % ((PELV) supply unit I_{max} 1.0 A, according to EN 60204 (power failure \leq 20 ms))
Ripple voltage	10 %

Rated operating voltage	24 VDC
Rated AC voltage for controls at DC minimum	19.2 VDC
Rated control voltage at DC, maximum	28.8 VDC
Electrical power consumption	3 W
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
Material of the contacts, electrical	Ag-Ni, self-cleaning, positive drive

Electrical data - Safety digital outputs

Voltage drop U_d , maximum	0.5 V
Leakage current I_r , maximum	1 mA
Voltage, Utilisation category DC-12	24 VDC
Current, Utilisation category DC-12	2 A
Voltage, Utilisation category DC-13	24 VDC
Current, Utilisation category DC-13	2 A

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 - Digital Output

Voltage, Utilisation category DC-12 24 VDC

Current, Utilisation category DC-12 0.1 A

Electrical data - Electromagnetic compatibility (EMC)

EMC rating EMC-Directive

Status indication

Indicated operating states Internal operating voltage U_i
Baustein-Status
Fault codes

Other data

Note (applications) Safety sensor
hinged safety guard
Emergency-Stop button
Pull-wire emergency stop switches
Safety light curtain
Two-hand control panels

Pictures

Product picture (catalogue individual photo)



ID: ksrb2f33

| 1.0 MB | .jpg | 281.869 x 655.8140000000001 mm - 799 x 1859 px - 72 dpi

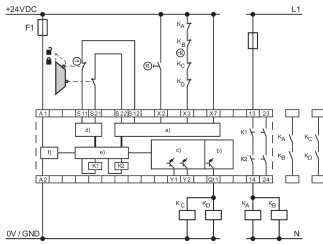
| 125.1 kB | .png | 74.083 x 172.156 mm - 210 x 488 px - 72 dpi

| 46.9 kB | .jpg | 52.917 x 123.47200000000001 mm - 150 x 350 px - 72 dpi

| 37.4 kB | .png | 74.083 x 74.083 mm - 210 x 210 px - 72 dpi

| 12.6 MB | .png | 169.333 x 393.954 mm - 2000 x 4653 px - 300 dpi

Wiring example



ID: ksrbel05

| 1.3 MB | .ai | 297 x 210.002 mm - 841 x 595 px - 72 dpi

| 125.2 kB | .jpg | 352.778 x 258.233 mm - 1000 x 732 px - 72 dpi

K.A. Schmersal GmbH & Co. KG, Möddinghofe 30, 42279 Wuppertal

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: 27/04/2026, 09:34