



SRB-E-232ST

- **STOP 0 / 1 Function**
- **2 Safety outputs STOP 0**
- **Drop-out delay 0 ... 30**
- **1 oder 2-channel control**
- **3 safety contacts STOP 1**

Data

Ordering data

| | |
|-------------------------------|---------------|
| Product type description | SRB-E-232ST |
| Article number (order number) | 103014308 |
| EAN (European Article Number) | 4030661500270 |
| eCl@ss number, Version 9.0 | 27-37-18-19 |

Certifications

| | |
|--------------|---------------------|
| Certificates | TÜV cULus EAC |
|--------------|---------------------|

General data

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|--------------------------------------|--|
| Product name | SRB-E-232ST |
| Standards | IEC 61508 IEC/EN 60204-1 ISO 13849-1 EN 60947-5-1 IEC/EN 62061 |
| Enclosure material | Glass-fibre reinforced thermoplastic, ventilated |
| Material of the contacts, electrical | Ag-Ni, self-cleaning, positive drive |
| Gross weight | 170 g |

General data - Features

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|---------------|--------|
| Stop-Category | 0 1 |
|---------------|--------|

| | |
|---|-----|
| 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 | 6 |
| Number of openers | 2 |
| Number of shutters | 1 |
| Number of Safety contacts, STOP 1 | 3 |
| Number of fail-safe outputs, Stop 0 | 2 |
| Number of signalling outputs | 1 |

Safety appraisal

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

Mechanical data

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|--------------------------|--|
| Mounting | Snaps onto standard DIN rail to EN 60715 |
| Mechanical life, minimum | 10,000,000 Operations |

Mechanical data - Connection technique

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|----------------------------|--|
| 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

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|--------|---------|
| Width | 22.5 mm |
| Height | 98 mm |
| Depth | 115 mm |

Ambient conditions

| | |
|-----------------------------------|------|
| Protection class of the enclosure | IP40 |
|-----------------------------------|------|

| | |
|--|---------------------------------|
| Protection class of the Clearance | IP54 |
| Protection class 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

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|---|--------|
| Rated impulse withstand voltage, relay output | 4 kV |
| Rated impulse withstand voltage, semiconductor output | 0.8 kV |
| | III |
| Degree of pollution to IEC/EN 60664-1 | 2 |

Electrical data

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

Electrical data - Fail-safe digital outputs

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|-----------------|-------|
| | 0.5 V |
| Current leakage | 1 mA |

Electrical data - Safe relay outputs

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|-------------------------------------|---------|
| Voltage, Utilisation category, AC15 | 230 VAC |
| Current, Utilisation category, AC15 | 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

Electrical data - Relay outputs (auxiliary contacts)

Switching capacity, maximum 24 VDC

Switching capacity, maximum 1 A

Electrical data - Electromagnetic compatibility (EMC)

EMC-Directive

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

Documents

Operating instructions and Declaration of conformity

(903,3 kB, 10.05.2019, Revision B)

BG-test certificate

UL Certificate

(385,1 kB, 01.08.2019)

CCC certification

(4,7 MB, 31.03.2020)

EAC certification

Brochure

(1,3 MB, 30.07.2019)

SISTEMA-VDMA library

(134,9 kB, 19.06.2019)

Pictures

Product picture (catalogue individual photo)



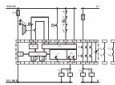
ID: ksrb2f33

| 1,0 MB | .jpg | 281.869 x 655.814 mm - 799 x 1859
Pixel - 72 dpi

| 198,7 kB | .jpg | 27.093 x 62.992 mm - 320 x 744
Pixel - 300 dpi

| 125,1 kB | .png | 74.083 x 172.156 mm - 210 x 488
Pixel - 72 dpi

Wiring example



ID: ksrbel08

| 127,3 kB | .jpg | 352.778 x 248.356 mm - 1000 x 704
Pixel - 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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