



## SRB-E-201ST

- **STOP 0 Function**
- **1 Signalling output**
- **2 Safety outputs 5.5 A**
- **1 oder 2-channel control**
- **Start button / Auto-start**
- **Monitoring two-hand control panels to EN 574 IIIC**

## Data

### Ordering data

|                               |               |
|-------------------------------|---------------|
|                               | SRB-E-201ST   |
|                               | 103008067     |
| EAN (European Article Number) | 4030661478456 |
| eCl@ss number, Version 9.0    | 27-37-18-19   |

### Approval - Standards

TÜV  
cULus  
CCC  
EAC

### General data

|                                      |                                                  |
|--------------------------------------|--------------------------------------------------|
|                                      | SRB-E-201ST                                      |
|                                      | ISO 13849-1                                      |
|                                      | EN 60947-5-1                                     |
|                                      | EN 60204-1                                       |
|                                      | IEC 62061                                        |
|                                      | IEC 61508                                        |
|                                      | EN 60068-2-78                                    |
| Enclosure material                   | Glass-fibre reinforced thermoplastic, ventilated |
| Material of the contacts, electrical | AgSn0, Ag-Ni, self-cleaning, positive drive      |
| Gross weight                         | 130 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 LEDs                          | 5   |
| Number of openers                       | 2   |
| Number of shutters                      | 1   |
| Number of fail-safe outputs, Stop 0     | 2   |
| Number of signalling outputs            | 1   |

#### Safety appraisal

ISO 13849-1  
IEC 62061  
IEC 61508

#### Safety appraisal - Fail-safe digital outputs

|                                              |                          |
|----------------------------------------------|--------------------------|
| Performance level, up to                     | e                        |
| Control category to EN13849                  | 4                        |
| PFH-value                                    | $2.66 \times 10^{-9}$ /h |
| PFD value                                    | $2.42 \times 10^{-5}$    |
| Safety Integrity Level (SIL), applicable for | 3                        |
| Mission time                                 | 20 Year(s)               |

#### Mechanical data

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

#### Mechanical data - Connection technique

|                            |                                                               |
|----------------------------|---------------------------------------------------------------|
| Terminal Connector         | Screw connection, plug-in<br>rigid or flexible                |
| Terminal designations      | IEC/EN 60947-1<br>0.25 mm <sup>2</sup><br>2.5 mm <sup>2</sup> |
| Tightening torque of Clips | 0.5 Nm                                                        |

### Mechanical data - Dimensions

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

### Ambient conditions

|                                            |                                                 |
|--------------------------------------------|-------------------------------------------------|
|                                            | IP40                                            |
|                                            | IP54                                            |
|                                            | 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<br>30 g / 11 ms |

### Ambient conditions - Insulation value

|                                 |        |
|---------------------------------|--------|
| Rated impulse withstand voltage | 0.8 kV |
|                                 | III    |
|                                 | 2      |

### Electrical data

|                                                      |                                            |
|------------------------------------------------------|--------------------------------------------|
| Rated operating voltage                              | 24 VDC -20%/+20%, residual ripple max. 10% |
| Operating current                                    | 100 mA                                     |
| Rated AC voltage for controls at DC minimum          | 19.2 VDC                                   |
| Rated control voltage at DC, maximum                 | 28.8 VDC                                   |
| Electrical power consumption                         | 2.4 W                                      |
| 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                         | 1 Hz                                       |

### Electrical data - Fail-safe digital outputs

|                                    |        |
|------------------------------------|--------|
| Voltage drop $U_d$ , maximum       | 0.5 V  |
| Current leakage                    | 1 mA   |
| Voltage, Utilisation category DC12 | 24 VDC |
| Current, Utilisation category DC12 | 2 A    |
| Voltage, Utilisation category DC13 | 24 VDC |
| Current, Utilisation category DC13 | 2 A    |

## Electrical data - Digital inputs

Conduction resistance, maximum 40 Ω

## Electrical data - Digital Output

Voltage, Utilisation category DC12 24 VDC

Current, Utilisation category DC12 0.1 A

## Electrical data - Electromagnetic compatibility (EMC)

EMC rating EMC-Directive

## Status indication

Indicated operating states Internal operating voltage U<sub>i</sub>  
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

### Photo/Product/Catalogue



ID: ksr2f36

| 1,0 MB | .jpg | 281.869 x 655.814 mm - 799 x 1859  
Pixel - 72 dpi  
| 121,8 kB | .png | 74.083 x 172.156 mm - 210 x 488  
Pixel - 72 dpi

### Graphic/Product/Wiring



ID: ksrbel01

| 108,3 kB | .jpg | 352.778 x 294.569 mm - 1000 x 835  
Pixel - 72 dpi

K.A. Schmersal GmbH & Co. KG, Möddinghofe 3, D-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 432021-01-31T12:32:43+01:001201Europe/BerlinSun, 31 Jan 2021 12:32:43

+010043pmSunday.31pm31Europe/BerlinCET3201Europe/BerlinJanuary2021Sun, 31 Jan 2021 12:32:43

+010001pm31