



SRB206ST-230V

- 2 safety contacts, STOP 0
- 6 Signalling outputs
- Multi-evaluation of up to 6 safety guards
- Suitable for the signal processing of outputs with contact sensors

Data

Ordering data

Note (Delivery capacity)	Not available!
EAN (European Article Number)	4250116201860
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
Replacement article number	101177164

Approval - Standards

Certificates	cULus EAC
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General data

Standards	IEC 61508 IEC/EN 60204-1 EN 60947-5-1 EN ISO 13849-1
Climatic stress	EN 60068-2-78

Enclosure material	Glass-fibre reinforced thermoplastic, ventilated
Material of the contacts, electrical	AgCdO, self-cleaning, positive drive
Gross weight	320 g

General data - Features

Stop-Category	0
Electronic Fuse	Yes
Wire breakage 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
Number of auxiliary contacts	6
Number of LEDs	4
Number of openers	12
Number of safety contacts	2
Number of signalling outputs	6

Safety appraisal

Standards	EN 60947-5-1 IEC 61508
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Safety appraisal - Relay outputs

Performance level, stop 0, up to	d
Category, Stop 0	3

Diagnostic Coverage (DC) Level, Stop 0	> 60 %
PFH-Value Stop 0	2.00×10^{-7} /h
Safety Integrity Level (SIL), Stop 0, 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 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	0.6 Nm

Mechanical data - Dimensions

Width	45 mm
Height	100 mm
Depth	121 mm

Ambient conditions

Degree of protection of the enclosure	IP40
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Degree of protection of the mounting space	IP54
Degree of protection of clips or terminals	IP20
Ambient temperature, minimum	-25 °C
Ambient temperature, maximum	+45 °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, $\pm 15\%$
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 VDE 0110	2

Electrical data

Frequency range	50 Hz 60 Hz
Rated operating voltage	48 ... 240 VAC
Operating current	275 mA
Rated AC voltage for controls, 50 Hz, minimum	48 VAC
Rated control voltage at AC 50 Hz, maximum	240 VAC
Rated AC voltage for controls, 60 Hz, minimum	48 VAC
Rated control voltage at AC 60 Hz, maximum	240 VAC
Utilisation category AC-15	230 VAC

Utilisation category AC-15	6 A
Utilisation category DC-13	24 VDC
Utilisation category DC-13	6 A
Electrical power consumption	6.8 W
Contact resistance, maximum	0.1 Ω
Note (Contact resistance)	in new state
Drop-out delay in case of "emergency stop", maximum	30 ms
Pull-in delay at RESET, typically	50 ms

Electrical data - Digital inputs

Conduction resistance, maximum	40 Ω
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Electrical data - Electromagnetic compatibility (EMC)

EMC rating	EMC-Directive
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Status indication

Indicated operating states	Position relay K2 Position relay K1 Internal operating voltage U_i
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Other data

Note (applications)	Guard system Emergency-Stop button Pull-wire emergency stop switches
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Notes

Note (General)	Inductive loads (e.g. contactors, relays, etc.) are to be suppressed by means of a suitable circuit.
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Circuit example

Note (Wiring diagram)

The wiring diagram is shown with guard doors closed and in de-energised condition.

Automatic start: The automatic start is programmed by connecting the feedback circuit to the terminals X1/X3. If the feedback circuit is not required, establish a bridge.

Input level: The example shows a 2-channel control of a guard door monitoring with two position switches, whereof one with positive break, external reset button (R) and feedback circuit (H2).

The control system recognises wire-breakage and earth faults in the monitoring circuit.

Relay outputs: Suitable for 2 channel control, for increase in capacity or number of contacts by means of contactors or relays with positive-guided contacts.

If more guard doors are monitored, they must be connected according to the wiring table

A single failure in the sensors does not cause the safety to be lost

If the single failure occurs, the safety function will be maintained. Some, although not all, errors will be recognised. An accumulation of unrecognised errors could cause the safety function to be lost.

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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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