Example 4

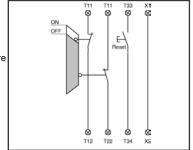
Dual-Channel Door Monitoring according to EN 1088 one limit switch with positive opening contact.

Wire breakage and earth leakage in the Door Monitoring circuits are detected.

Cross-shorts in the Door Monitoring circuits are not detected.

With external Reset button for increased safety requirements.

Safety category 3 or 4 in accordance with EN 954-1.



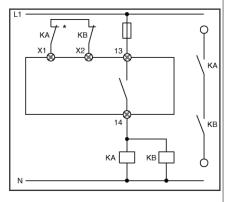
Output wiring examples

Example 5

Single-Channel output.

Suitable for contact reinforcement or contact multiplication, using relays or contactors with positively guided contacts.

*Feedback loop.

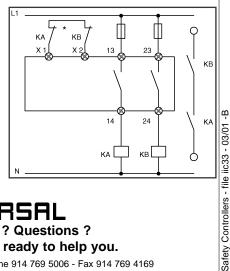


Example 6

Dual-Channel output.

Suitable for contact reinforcement or contact multiplication, using relays or contactors with positively guided contacts.

*Feedback loop.



SCHMERSAL

Technical Problems? Questions? Our Engineering team is ready to help you.

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Guard Door and Emergency-Stop Safety Controllers SRB-NA-R-C.33

Installation Instructions

Safety Category (EN954-1): (CC4)



Features:

Stop Category (EN60204-1): 0

- 3 NO relay outputs, 1 NC auxiliary output (NC auxiliary contact for monitoring only, must not be used in safety enabled circuits)
- Input for reset
- Feedback loop
- Input for E-stop or door monitoring
- LED's for positive guided relay K1, K2 and power supply UR and Ui
- Housing 45 mm, made of thermoplastic in accordance with UL-94-V-0, red RAL 3000
- DIN rail mounting, DIN EN 50 022-35
- . Not for use with BNS Series coded magnet switches



Model Designation	Enabling Outputs	Operating Voltage
SRB-NA-R-C.33-24V	3 NO / 1 NC	24VDC/VAC
SRB-NA-R-C.33-115VAC	3 NO / 1 NC	115VDC
SRB-NA-R-C.33-230VAC	3 NO / 1 NC	230VAC





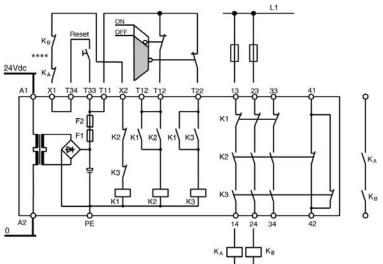






Approvals BG UL UL CSA

Typical Wiring Diagram



Example for Dual Channel Door Monitoring using two limit switches (one with positive opening contacts) and external reset button.

Dual-channel output, suitable for contact reinforcement or contact multiplication, using relays or contactors with positively guided contacts.

**** = Feedback loop

Wiring breakage and earth leakage in the Monitoring circuits are detected.

Technical Data

Operating Voltage

Frequency

Fuse (Power Supply) Power Consumption

Switching Capacity (Enabling Contacts)

Fuse (Enabling Contacts)

Switching Capacity (Monitoring Contacts)

Fuse (Monitoring Contacts) Application Category Pick-Up Delay Drop-Out Delay

Contact Materials / Contacts Contact Resistance Air and Creeping Distances

Connections Dimensions (H/W/D)

Maiaht

Ambient Operating Temperature

Mechanical Life Terminal Labeling 24 VDC -15% / +20%, residual ripple max. 10% 24 VAC, 48 VAC, 115 VAC, 230 VAC -15% / +6%

50/60 Hz (for AC operating)

F2: T 0.25 A/250 (internal F1: TM 0.25 A/250V)

max. 2.5 VA

230 VAC, 6 A resistive (inductive with suitable suppression)

6 A slow blow

24V, 2 A resistive (inductive with suitable suppression)

2 A slow blow

AC 15/DC 13. DIN VDE 0660 Part 200

≤ 20 ms ≤ 50 ms

AgSnO self cleaning, positively driven max. 100 mOhm when new DIN VDE 0110 Part 1 and 2, 4 kV/2

Self lifting terminals min. 0.5 gmm, max 2.5 gmm

83 mm / 45 mm / 140 mm

190 g (280g at 115 VAC and 230 VAC versions) -25 ° C ... +45 ° C (derating curve available)

10⁷ switching cycles DIN EN 50 005 / DIN 50 013

Input wiring examples

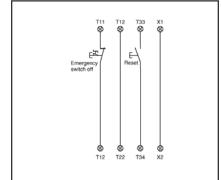
Example 1

Single-Channel Emergency Stop switch according to EN 60 204-1.

Wire breakage and earth leakage in the Emergency Stop circuits are detected.

With external Reset button.

Safety category 2 in accordance with EN 954-1.



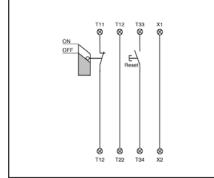
Example 2

Single-Channel Door Monitoring according to EN 1088 one limit switch with positive opening contact.

Wire breakage and earth leakage in the Door Monitoring circuits are detected.

With external Reset button for increased safety requirements.

Safety category 2 in accordance with EN 954-1.



Example 3

Dual-Channel Emergency Stop switch according to EN 60 204-1

Wire breakage and earth leakage in the Emergency Stop circuits are detected.

Cross-shorts in the Emergency Stop circuits are not detected.

With external Reset button.

Safety category 3 or 4 in accordance with EN 954-1.

