



Conforms to EN60204-1, EN954-1, VDE 0113-1  
UL and C-UL listed, BG approved



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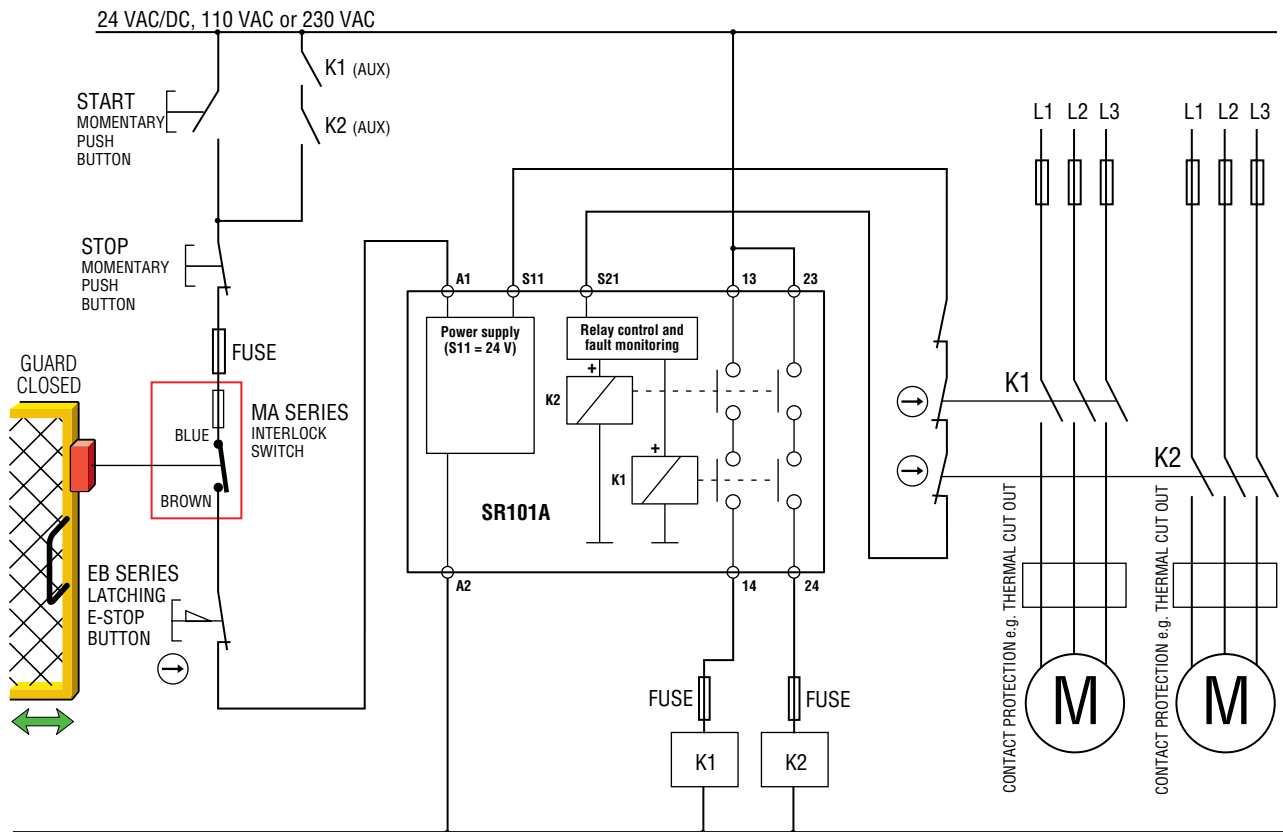
safety monitoring relays

# SR101A

## Single-Channel Safety Monitoring Relay

- Power requirements—the SR101A will accept 24 VAC/DC, 115 VAC, or 230 VAC
- Inputs—a single N/C input channel, *not monitored*, is provided
- Outputs—the SR101A has two N/O outputs to route power to the coils of power contactors
- External Device Monitoring (EDM) is provided with a N/C loop between S11 and S21 on the SR101A
- Reset mode—an automatic reset mode is provided with the SR101A

## Application

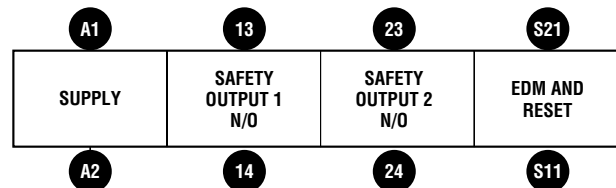


H safety monitoring relays

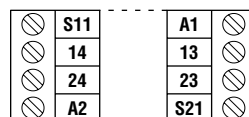
## Output Contact Arrangements



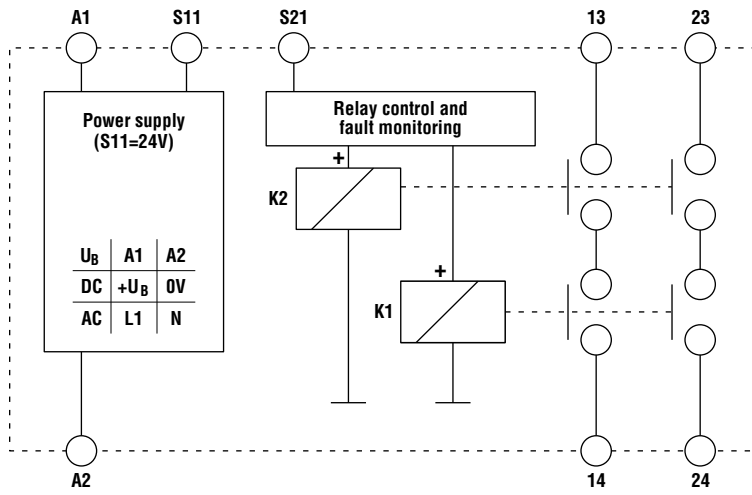
## Terminal Connections



## Terminal Pin Assignments

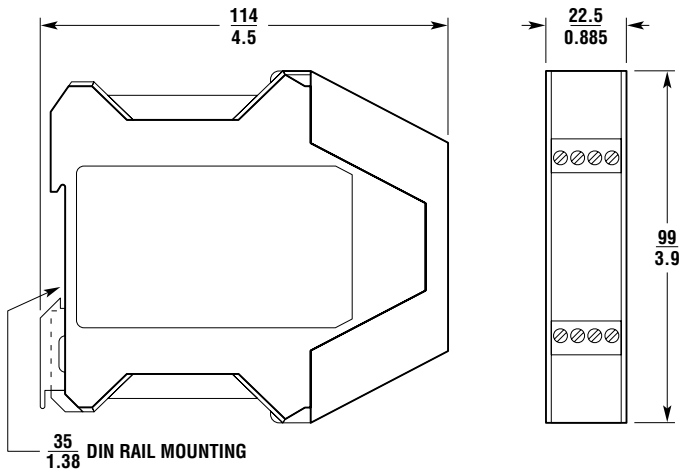


## ■ Block Diagram



## ■ Dimensions — mm/in.

SR101A



## ■ Specifications

| Electrical                           | All Models  | SR101A01  | SR101A02 | SR101A03 |
|--------------------------------------|---|-----------|----------|----------|
| <b>Power Supply:</b>                 | ±10%, 50-60 Hz  | 24 VAC/DC | 115 VAC  | 230 VAC  |
| <b>Power Consumption:</b>            | Approx. 1 VA  |           |          |          |
| <b>Safety Inputs:</b>                | 1 N/C (not monitored)   |           |          |          |
| <b>Outputs:</b>                      | 2 N/O   |           |          |          |
| <b>Output Rating AC:</b>             | Inductive AC-15, 4 A/230 V  |           |          |          |
| <b>Output Rating DC:</b>             | Inductive DC-13, 2 A/24 V   |           |          |          |
| <b>Min Switched Current/Voltage:</b> | 20 mA/24 V  |           |          |          |
| <b>Impulse Withstand Voltage:</b>    | 2500 V  |           |          |          |
| <b>Max Drop-Out Time:</b>            | 75 ms   |           |          |          |
| <b>Max Output Fuse:</b>              | 6 A quick-acting fuse or 4 A slow-acting                                      |           |          |          |
| <b>Reset Mode:</b>                   | Automatic (S11-S21)   |           |          |          |
| <b>Contactor Monitoring:</b>         | N/C loop S11-S21  |           |          |          |
| <b>Mechanical</b>                    |   |           |          |          |
| <b>Mounting:</b>                     | 35 mm (1.38 in.) DIN rail   |           |          |          |
| <b>Case Material:</b>                | Fiber-filled Polyamide PA6.6  |           |          |          |
| <b>Max Wire Size:</b>                | 1 x 2.5 mm (14 AWG) stranded  |           |          |          |
| <b>Weight:</b>                       | 230 g (8.1 oz.)   |           |          |          |
| <b>Color:</b>                        | Red   |           |          |          |
| <b>External Switches:</b>            | None  |           |          |          |
| <b>Indication:</b>                   | Green = K1 Closed, Green = K2 Closed  |           |          |          |
| <b>Mechanical Life:</b>              | 1 x 10 <sup>7</sup> operations  |           |          |          |
| <b>Environmental</b>                 |   |           |          |          |
| <b>Enclosure Protection:</b>         | IP20 terminals, IP40 (NEMA 1) housing   |           |          |          |
| <b>Operating Temperature:</b>        | 24 VAC/DC: -15 to 60°C (5 to 140°F)<br>115/230 VAC: -15 to 40°C (-5 to 104°F) |           |          |          |
| <b>Humidity:</b>                     | 93% RH at 104°C (219°F)   |           |          |          |
| <b>Compliance</b>                    |   |           |          |          |
| <b>Standards:</b>                    | EN 60204-1: 1998, EN 954-1: 1996, VDE 0113 Part 1: 1998-11                    |           |          |          |
| <b>Approvals/Listings:</b>           | CE marked for all applicable directives, UL and C-UL, BG                      |           |          |          |
| <b>Safety Category:</b>              | Cat. 3 per EN954-1 (SR101 internal operation)                                 |           |          |          |

Specifications are subject to change without notice.

Note: The safety contacts of the Omron STI switches are described as normally closed (N/C)—i.e., with the guard closed, actuator in place, and the machine able to be started.

## ■ Ordering

| Model    | Supply    | Inputs | Outputs | Part No.   |
|----------|-----------|--------|---------|------------|
| SR101A01 | 24 VAC/DC | 1 N/C  | 2 N/O   | 44510-1011 |
| SR101A02 | 115 VAC   | 1 N/C  | 2 N/O   | 44510-1012 |
| SR101A03 | 230 VAC*  | 1 N/C  | 2 N/O   | 44510-1013 |

\*230 VAC units are available on special order. Minimum quantities may apply.