

## Safety Expansion Unit

- Power requirements—the SR105E will accept 24 VAC/DC
- Outputs—the SR105E has 3 N/O outputs to route power to the coils of power contactors plus 1 N/C auxiliary output for monitoring by the safety monitoring relay
- Expander capability—the SR105E may be used with any other SR Series relay to expand the total available number of N/O outputs to power contactors



Conforms to EN60439-1, EN60947-1/5/7, EN61000-6, EN62061, EN ISO 13849-1  
UL and C-UL listed  
TÜV Rheinland approved

## Specifications

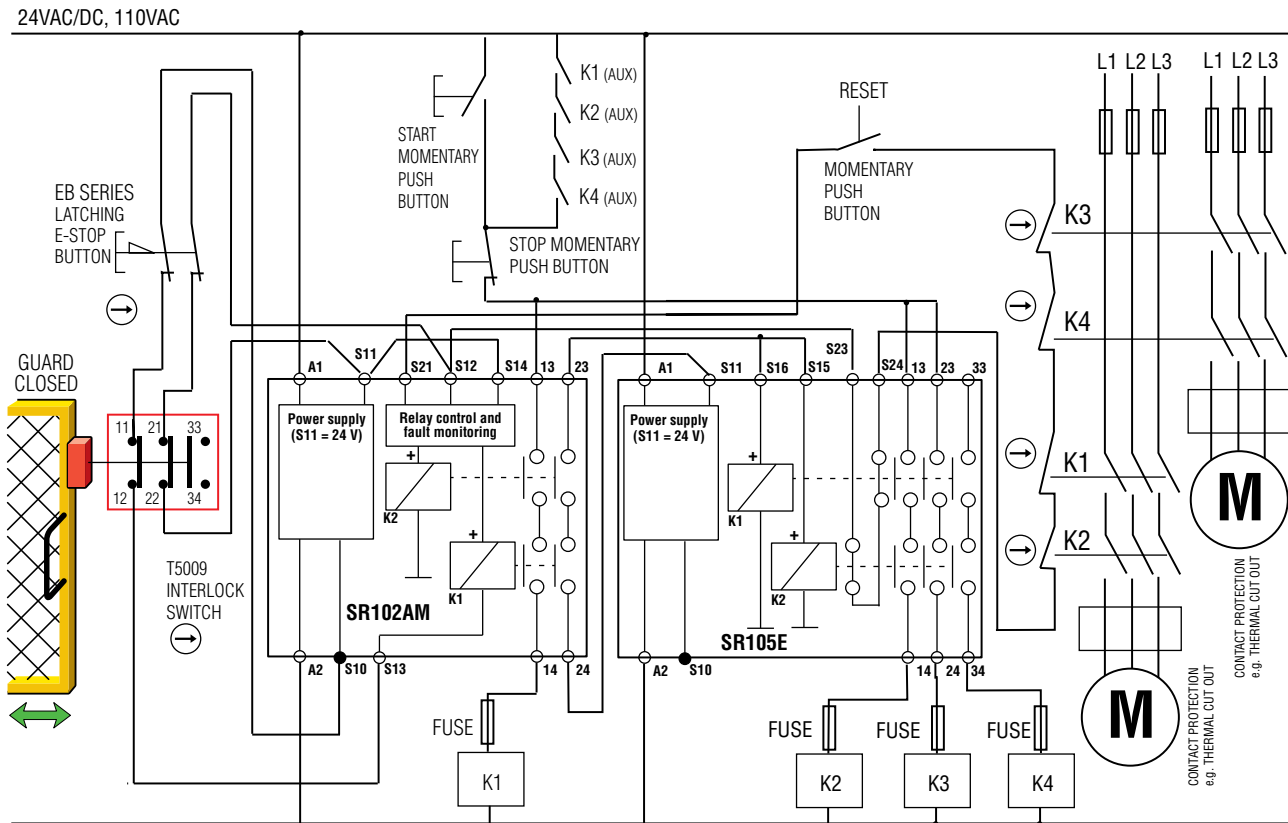
| Electrical                    | All Models   |
|-------------------------------|--|
| Power Supply:                 | ±10%, 50-60 Hz, 24 VAC/DC  |
| Power Consumption:            | Approx. 1 VA   |
| Relay Outputs:                | 3 N/O + 1 N/C auxiliary monitoring for safety monitoring relay           |
| Output Rating AC:             | Inductive AC-15, 4 A/230 V   |
| Output Rating DC:             | Inductive DC-13, 2 A/24 V  |
| Min Switched Current/Voltage: | 20 mA/24 V   |
| Impulse Withstand Voltage:    | 2500 V   |
| Max Drop-Out Time:            | 12 ms (75 ms by removing supply voltage)                                 |
| Max Output Fuse:              | 6 A quick-acting or 4 A slow-acting                                      |
| Mechanical                    |  |
| Mounting:                     | 35 mm (1.38 in.) DIN rail  |
| Case Material:                | Fiber-filled Polyamide PA6.6   |
| Max Wire Size:                | 1 x 2.5 mm <sup>2</sup> (14 AWG) stranded                                |
| Weight:                       | 230 g (8.1 oz.)  |
| Color:                        | Red  |
| External Switches:            | None   |
| Indication:                   | Green = K1 Closed, Green = K2 Closed                                     |
| Mechanical Life:              | 1 x 10 <sup>7</sup> operations   |
| Environmental                 |  |
| Enclosure Protection:         | IP20 terminals, IP40 (NEMA 1) housing                                    |
| Operating Temperature:        | 24 VAC/DC: -15 to 60°C (5 to 140°F)<br>115 VAC: -15 to 40°C (5 to 104°F) |
| Humidity:                     | 93% RH at 104°C (219°F)  |
| Compliance                    |  |
| Standards:                    | EN60439-1, EN60947-1/5/7, EN61000-6, EN62061, EN ISO 13849-1             |
| Approvals/Listings:           | CE marked for all applicable directives, UL and C-UL, TÜV Rheinland      |
| Reliability Data              |  |
| per EN ISO 13849-1:           | Cat 4, PL <sub>e</sub> , PFHd 1.19E-08                                   |

Specifications are subject to change without notice.

Note:

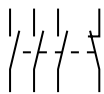
The safety contacts of the STI switches are described as normally closed (N/C)—i.e., with the guard closed, actuator in place, and the machine able to be started.

## Application



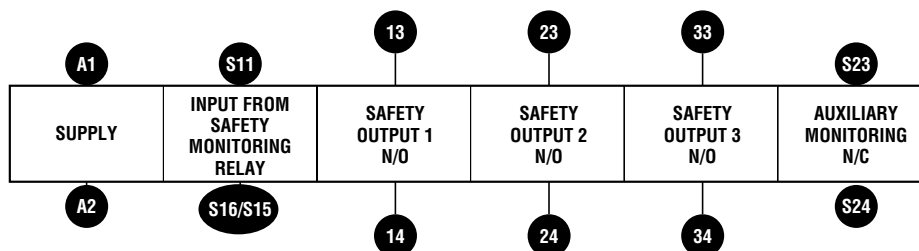
### Output Contact Arrangements

### Terminal Pin Assignments

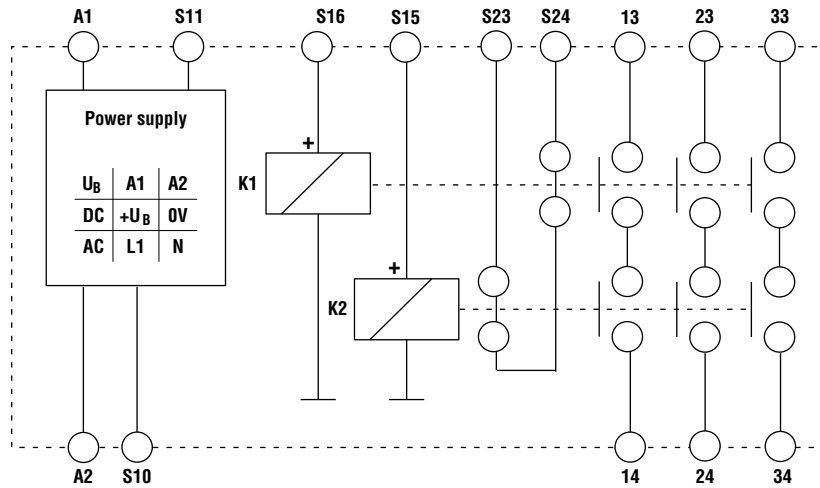


|    |    |    |     |    |     |     |     |    |    |    |
|----|----|----|-----|----|-----|-----|-----|----|----|----|
| 14 | 24 | 34 | S23 | A1 | S11 | S15 | S16 | 13 | 23 | 33 |
|    |    |    | A2  |    |     |     |     |    |    |    |

### Terminal Connections



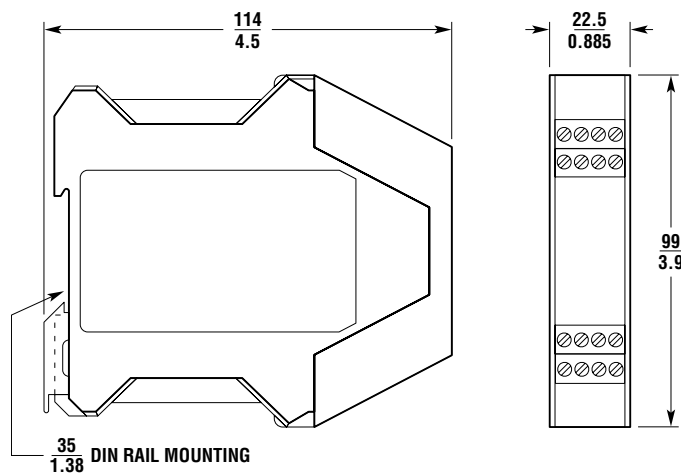
## Block Diagram



## Dimensions

(mm/in.)

SR105E



## Ordering

| Model    | Supply    | Outputs | Auxiliary | Part No.   |
|----------|-----------|---------|-----------|------------|
| SR105E01 | 24 VAC/DC | 3 N/O   | 1 N/C     | 44510-1051 |

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