

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 ² (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 ⁷ operations |
| Environmental | |
| Enclosure Protection: | IP20 terminals, IP40 (NEMA 1) housing |
| Operating Temperature: | 24 VAC/DC: -15 to 60°C (5 to 140°F) 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, PLe, PFHd 1.19E-08 |

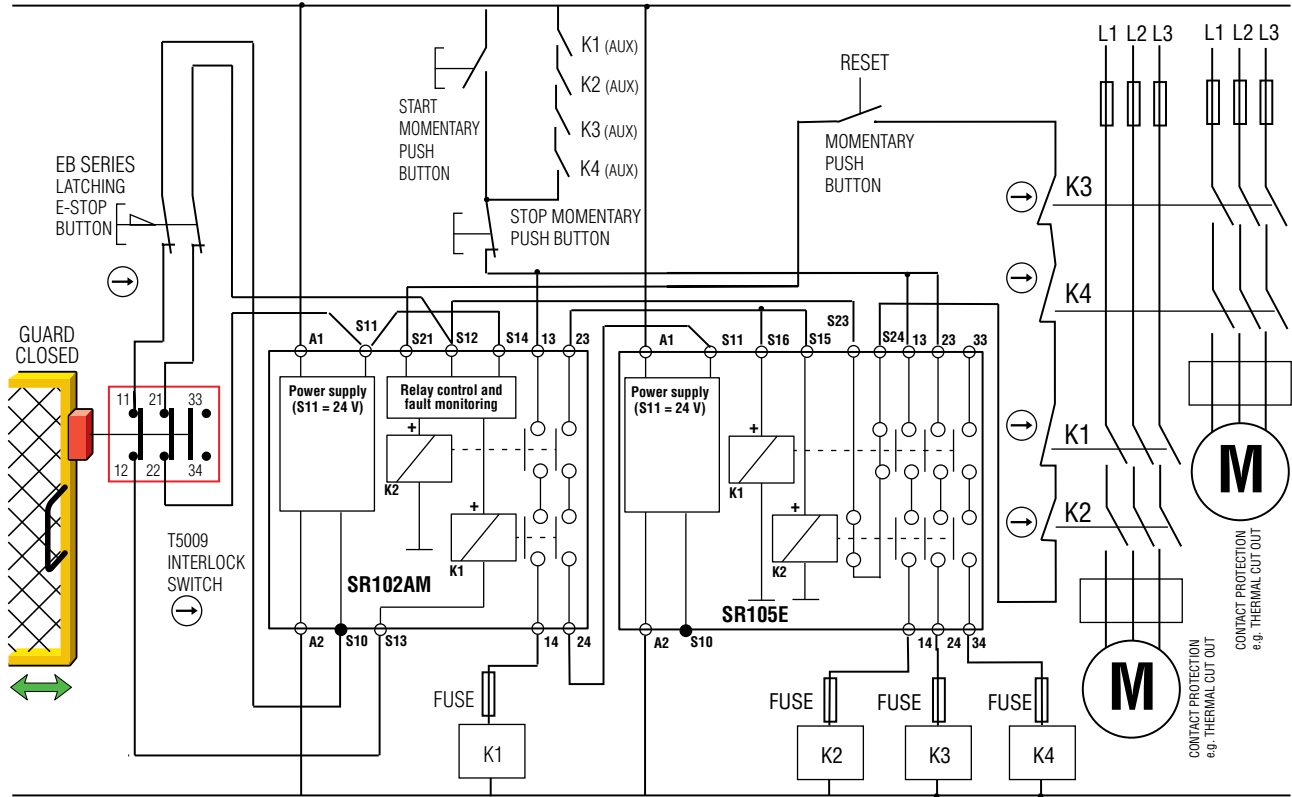
Specifications are subject to change without notice.

Note:

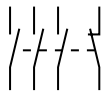
The safety contacts of the STI switches are described as normally closed (N/C)—i.e., with the guard closed, actuator in place, and the machine able to be started.

Application

24VAC/DC, 110VAC



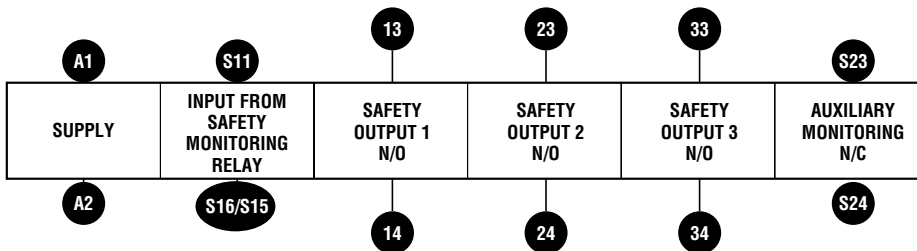
Output Contact Arrangements



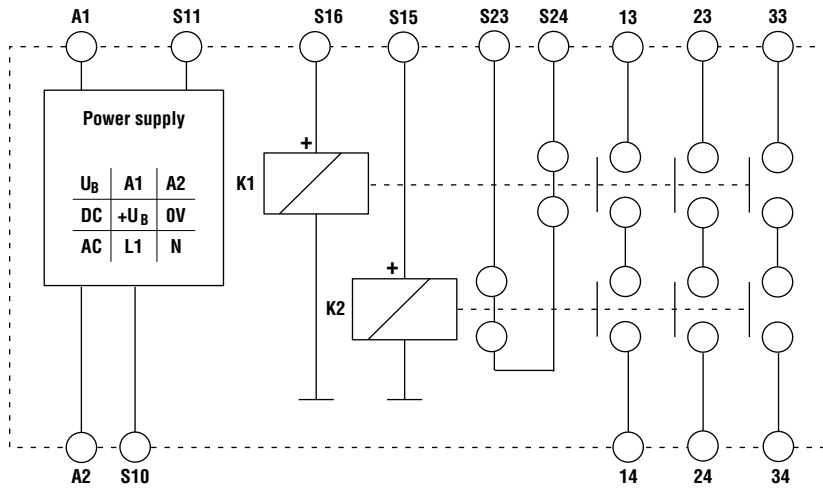
Terminal Pin Assignments

| | | | | | | | |
|----|---|---|-----|-----|---|---|----|
| 14 | ⊗ | ⊗ | S23 | A1 | ⊗ | ⊗ | 13 |
| 24 | ⊗ | ⊗ | S24 | S11 | ⊗ | ⊗ | 23 |
| 34 | ⊗ | ⊗ | S10 | S15 | ⊗ | ⊗ | 33 |
| | ⊗ | ⊗ | A2 | S16 | ⊗ | ⊗ | |

Terminal Connections



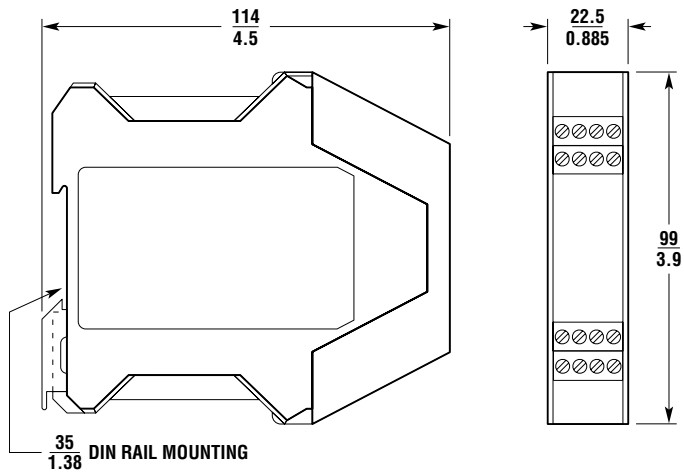
Block Diagram



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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