

Safety Expansion Unit

- Power requirements—the SR105E will accept 24 VAC/DC or 115 VAC
- 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 EN60204-1, EN954-1, and VDE 0113-1
 UL and C-UL listed
 TÜV Rheinland approved

Specifications

Electrical	All Models	SR105E01	SR105E02
Power Supply:	±10%, 50-60 Hz	24 VAC/DC	115 VAC
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:	EN 60204-1, EN 954-1, VDE 0113-1		
Approvals/Listings:	CE marked for all applicable directives, UL and C-UL, TÜV Rheinland		
Safety Category:	Cat. 3 per EN954-1 (SR105 internal operation)		

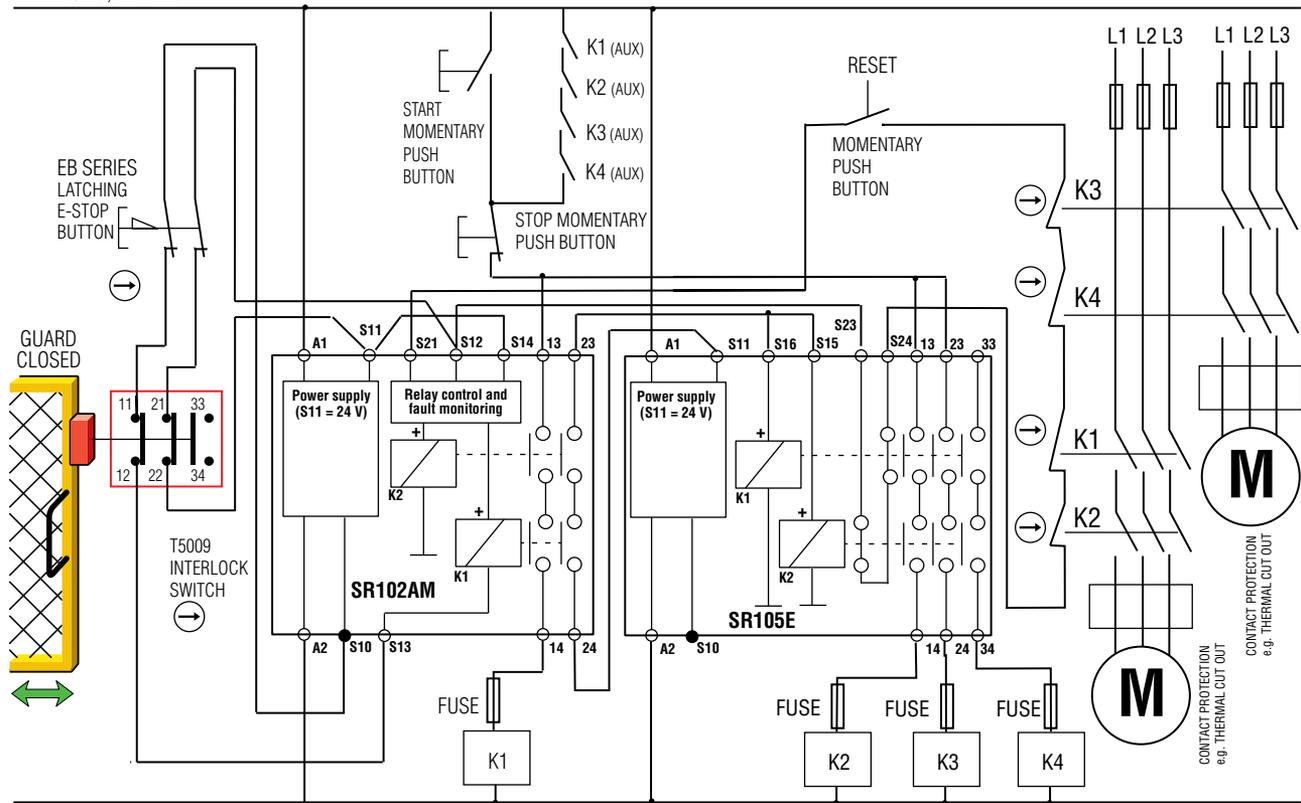
Specifications are subject to change without notice.

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.

Application

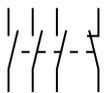
24VAC/DC, 110VAC



For a full explanation of the circuit operating principle and fault detection, see "Common Circuit Examples" in The Safety Library Section of this catalog on page A62

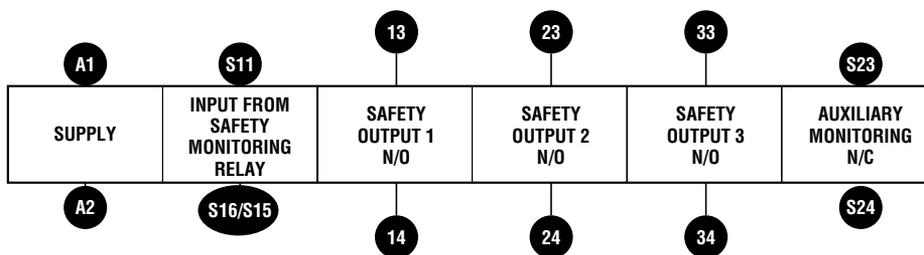
Output Contact Arrangements

Terminal Pin Assignments

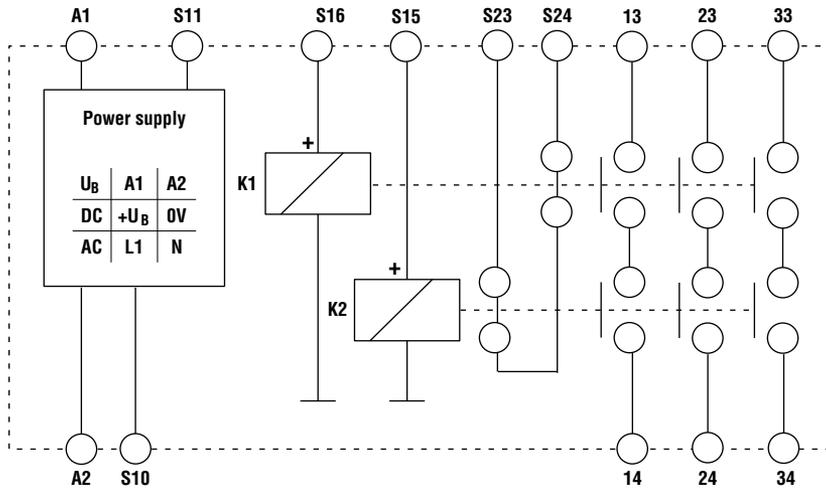


14			S23	A1			13
24			S24	S11			23
34			S10	S15			33
			A2	S16			

Terminal Connections



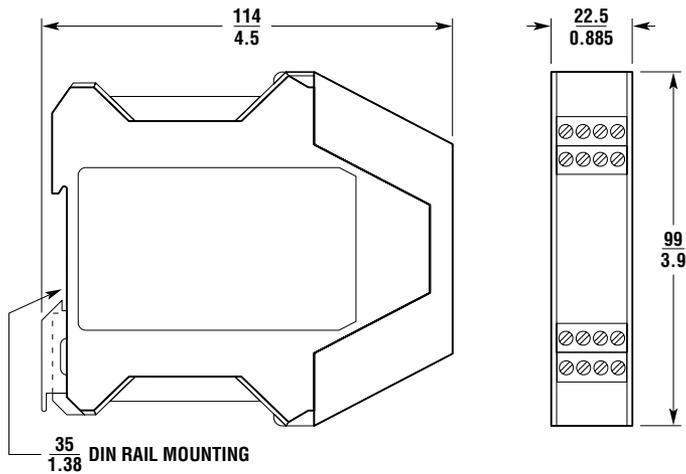
Block Diagram



Dimensions

(mm/in.)

SR105E



Ordering

Model	Supply	Outputs	Auxiliary	Part No.
SR105E01	24 VAC/DC	3 N/O	1 N/C	44510-1051
SR105E02	115 VAC	3 N/O	1 N/C	44510-1052