



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



**Go to the Engineering Guide**  
For in-depth information on safety standards and use.



**USA** Tel. 1/888/510-4357  
**Canada** Tel. 1/800/221-7060

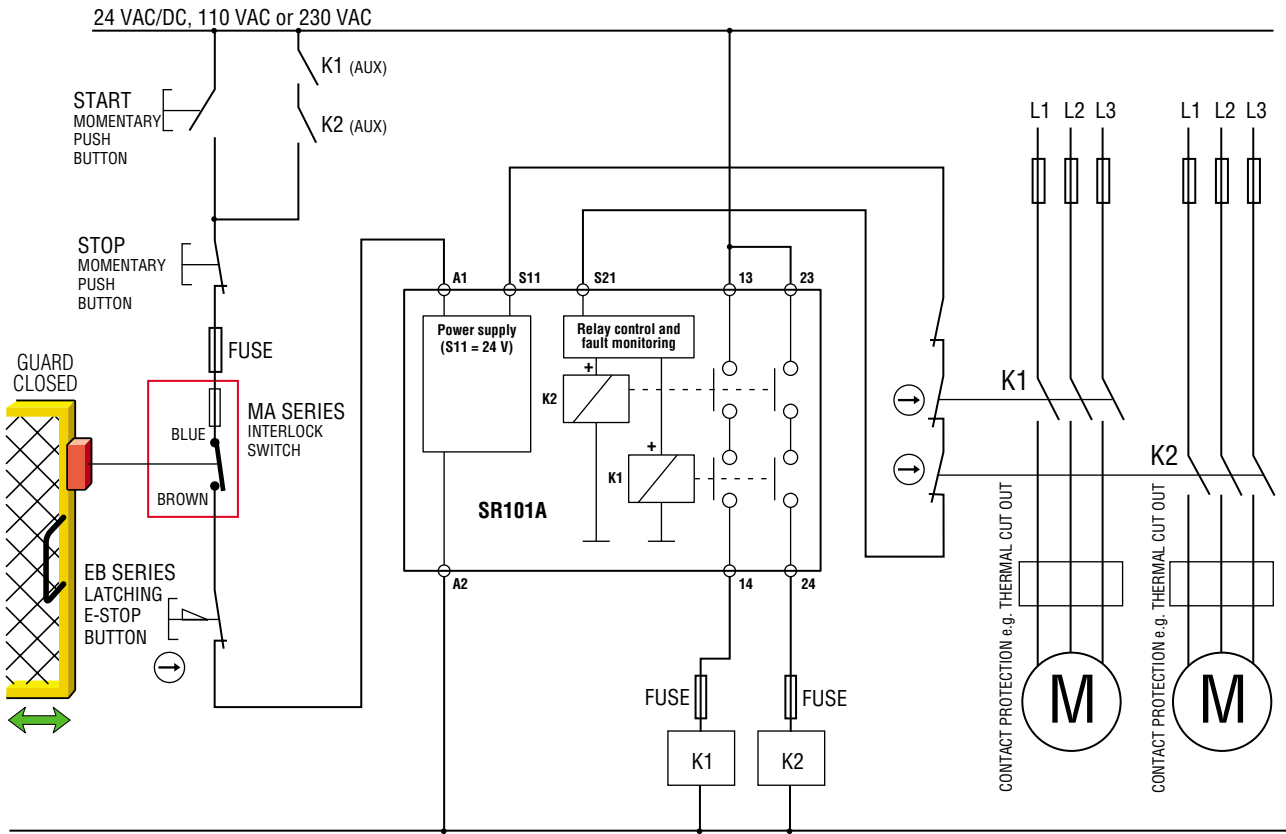
**UK** Tel. +44 (0) 1395-273-209  
**Europe** Tel. +49 (0) 5258-938-776

**Japan** Tel. +81-466-22-1132  
**China** Tel. +86-21-5836-7708  
**Singapore** Tel. +65-648-44-001



**For the Latest Information**  
On the Internet: [www.sti.com](http://www.sti.com)  
E-mail: [sales@sti.com](mailto:sales@sti.com)

■ Application



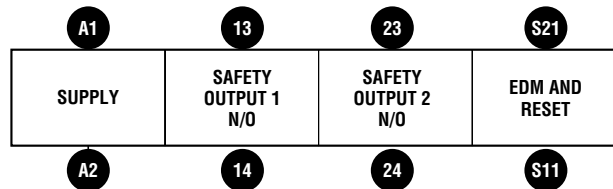
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For a full explanation of the circuit operating principle and fault detection, see "Common Circuit Examples" in the Engineering Section of this catalog.

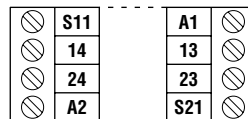
Output Contact Arrangements



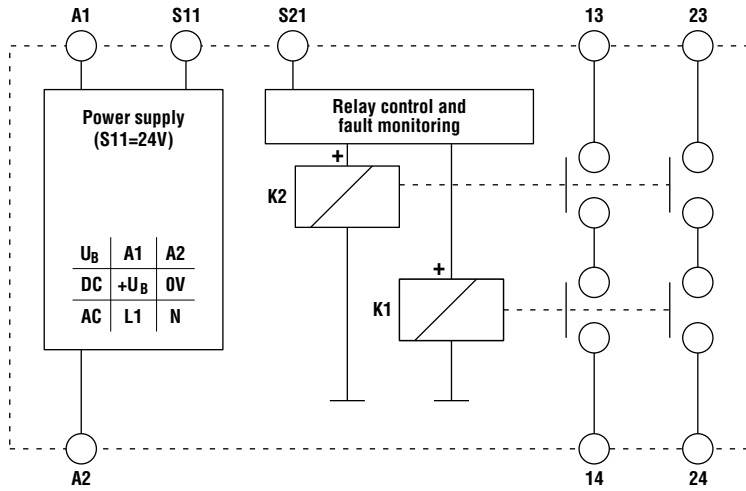
Terminal Connections



Terminal Pin Assignments



## ■ Block Diagram

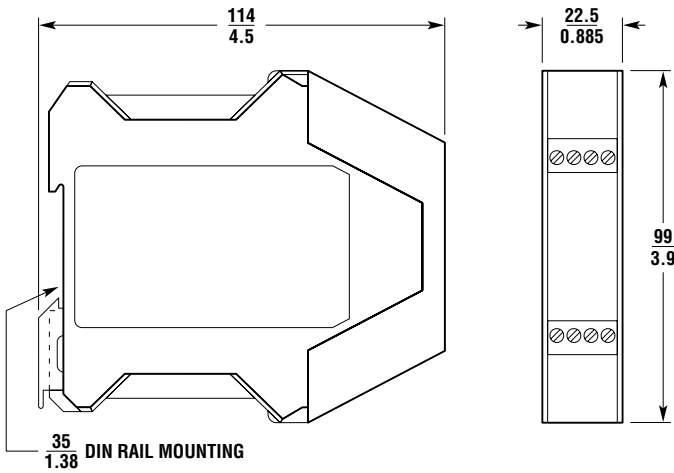


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## ■ Dimensions — mm/in.

SR101A



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## ■ 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) 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, BG, UL and C-UL			
<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 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.