

# SR208AD & SR209AD

## Dual-Channel Safety Monitoring Relay

- Power requirements—the SR208AD/209AD will accept 24 VAC/DC or 115 VAC.
- Inputs—the SR208AD/209AD will accept single or dual N/C inputs or dual PNP inputs from a light curtain
- Outputs—the SR208AD has 2 N/O immediate outputs plus 3 N/O delayed outputs. The SR209AD has 2 N/O immediate outputs plus 2 N/O and 1 N/C delayed outputs to route power to the coils of power contactors (selectable from 0.5 to 10 sec).
- External Device Monitoring (EDM) is provided with a N/C loop between Y1 and Y2 on the SR208AD/209AD
- Reset mode—monitored manual or automatic/manual reset modes are available on the SR208/209AD
- PLC Compatible—The N/O off delayed outputs make it possible to use the SR208AD/209AD on machines with Programmable Logic Controllers that require some time to execute an orderly shutdown. The N/C on delayed output of the SR209AD may be used to apply power for unlocking a solenoid locking switch.
- The SR208AD/209AD have removable terminal blocks



Conforms to EN60204-1, EN ISO 13849-1, and ISO TR 12100  
UL and C-UL listed

## Specifications

Electrical	All Models	SR208AD01 & SR209AD01	SR208AD02 & SR209AD02
Power Supply:	±10%, 50-60 Hz	24 VAC/DC	115 VAC
Power Consumption:	4 W		
Safety Inputs:	1 N/C or 2 N/C or 2 PNP (light curtain)		
Outputs:	SR208AD: 2 N/O safety, 3 N/O safety delayed*1		
	SR209AD: 2 N/O safety, 2 N/O safety delayed*1, 1 N/C delayed aux		
Max Switched AC:	Inductive AC-15, 6 A/250 VAC		
Max Switched DC:	Inductive DC-13, 3 A/24 VDC		
Min Switched Current/Voltage:	10 mA/10 V		
Impulse Withstand Voltage:	2500 V		
Max Drop-Out Time:	15 ms (0.5 to 10 sec. delayed outputs)		
Max Output Fuse:	6 A slow-acting fuse or 10 A quick-acting fuse		
Reset Mode:	Monitored manual or auto/manual		
External Device Monitoring (EDM):	N/C loop between Y1 and Y2		
<b>Mechanical</b>			
Mounting:	35 mm (1.38 in.) DIN rail		
Case Material:	Polyamide PA6.6		
Max Wire Size:	0.2 to 4 mm <sup>2</sup> (24-12 AWG)		
Weight:		350 g (12.3 oz.)	490 g (17.3 oz.)
Color:	Red		
External Switches:	Output delay adjustment (0.5 to 10 sec.)		
Indication:	Green = Power, Green = CH1 Closed, Green = CH2 Closed, Green = CHT1 Closed, Green = CHT2 Closed		
Mechanical Life:	2 x 10 <sup>6</sup> operations		
<b>Environmental</b>			
Enclosure Protection:	IP20 terminals, IP40 (NEMA 1) housing		
Operating Temperature:	-5 to 55°C (23 to 131°F)		
Humidity:	90% RH		
<b>Compliance</b>			
Standards:	EN60204-1, EN ISO 13849-1, ISO TR12100		
Approvals/Listings:	CE marked for all applicable directives, UL and C-UL		
<b>Reliability Data</b>			
per EN ISO 13849-1:	Cat. 4, PL <sub>e</sub> , PFH <sub>d</sub> 2.38E-09		

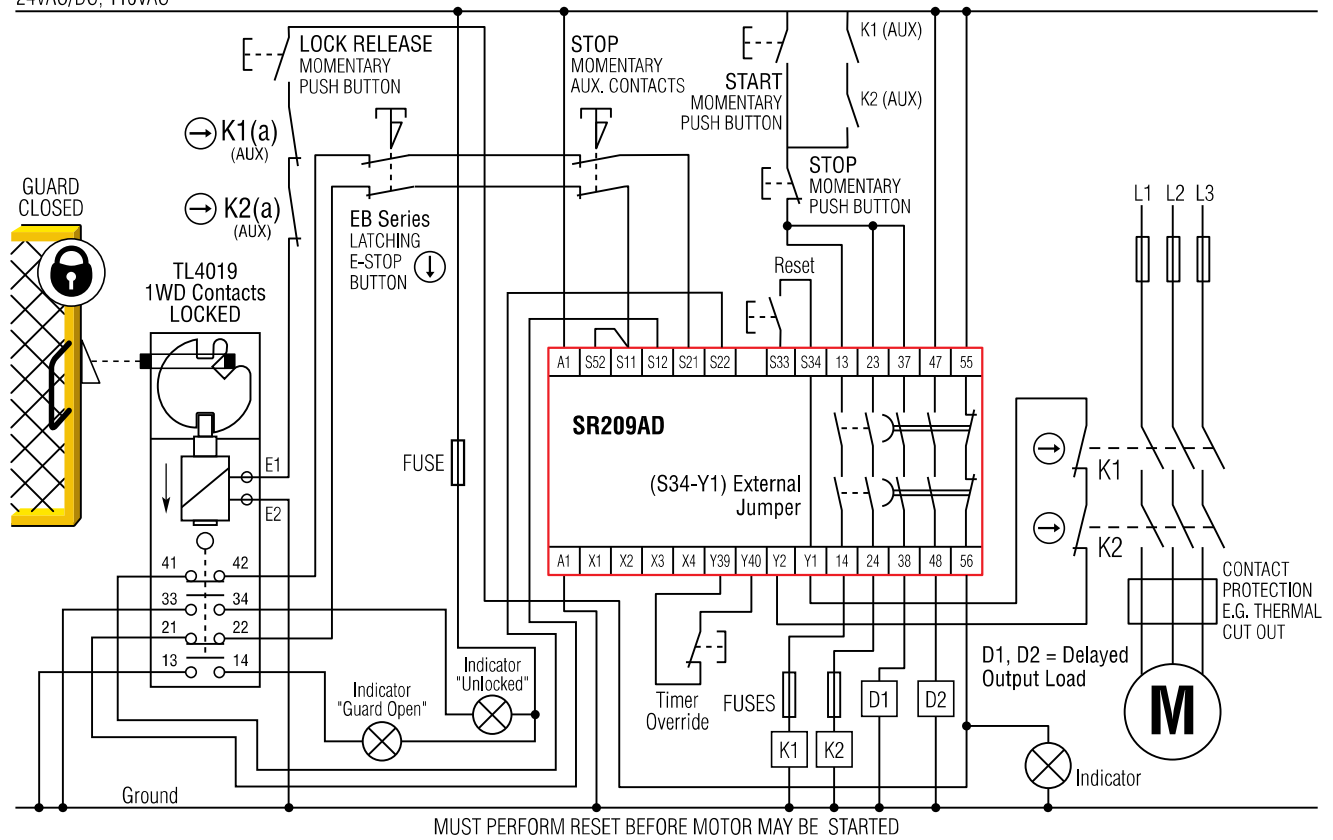
Specifications are subject to change without notice.

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.

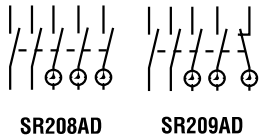
\*1. Do NOT perform a reset during timing delay, as this will cause the relay performance to be unpredictable (sometimes lockout, sometimes not)

## Application

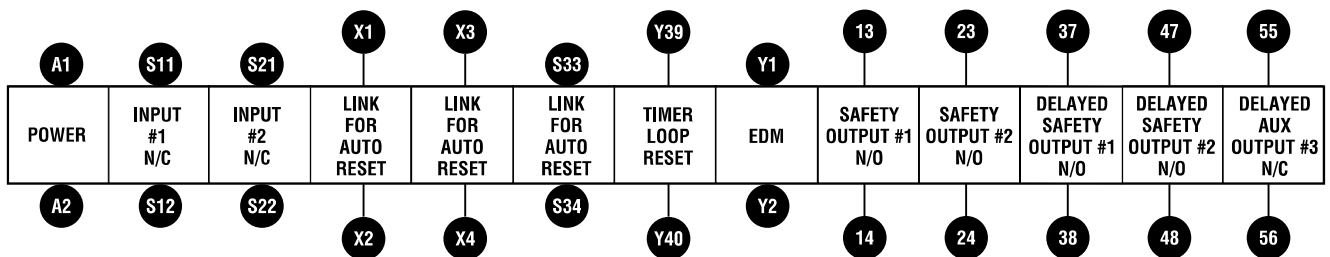
24VAC/DC, 110VAC



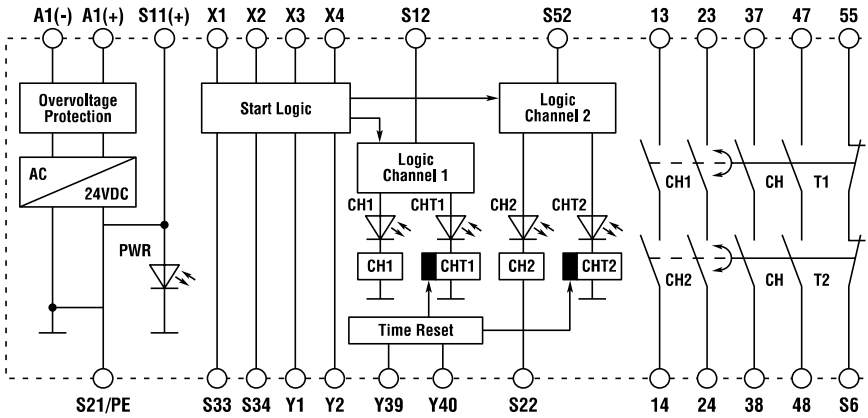
## Output Contact Arrangements



## Terminal Connections (SR209AD)

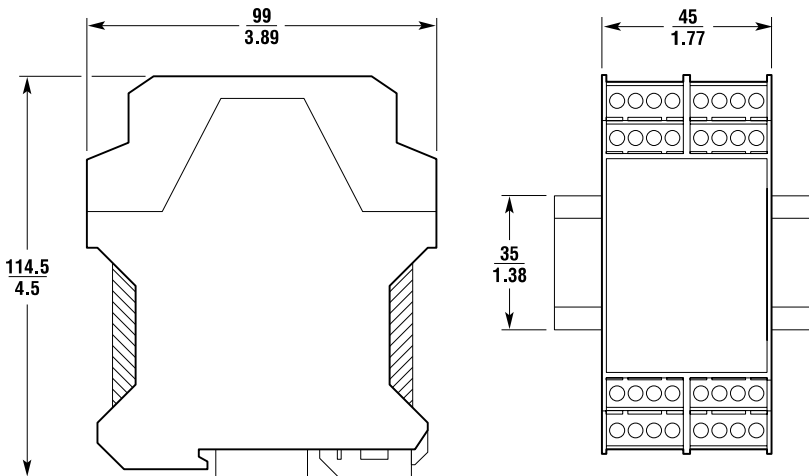


### Block Diagram (SR209AD)



### Dimensions

(mm/in.)



### Ordering

Model	Supply	Inputs	Immediate Outputs	Delayed Outputs	Part No.
SR208AD01	24 VAC/DC	2 N/C	2 N/O	3 N/O	44510-2081
SR208AD02	115 VAC	2 N/C	2 N/O	3 N/O	44510-2082
SR209AD01	24 VAC/DC	2 N/C	2 N/O	2 N/O + 1 N/C Aux.	44510-2091
SR209AD02	115 VAC	2 N/C	2 N/O	2 N/O + 1 N/C Aux.	44510-2092

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