

Dual-Channel Multi-Purpose Safety Monitoring Relay

- Power requirements—the SR120MP will accept 24 VAC/DC or 110 VAC
- Inputs—the SR120MP provides dual-channel input from a variety of safety devices. The safety devices may be E-stops, interlock switches, or light curtains.
- Outputs—the SR120MP has 3 N/O outputs to route power to the coils of power contactors plus 1 N/C auxiliary output and 4 solid-state outputs for signaling purposes
- External Device Monitoring (EDM) is provided with a N/C loop between S33 and S34 on the SR120MP
- Selectable start modes—monitored manual or automatic start mode is selectable on the SR120MP



Conforms to EN60947-1/5, EN61000-6, EN62061, EN ISO 12100-2, EN ISO 13849-1/2, EN ISO 13850
UL and C-UL listed
CSA and TÜV Rheinland approved

Specifications

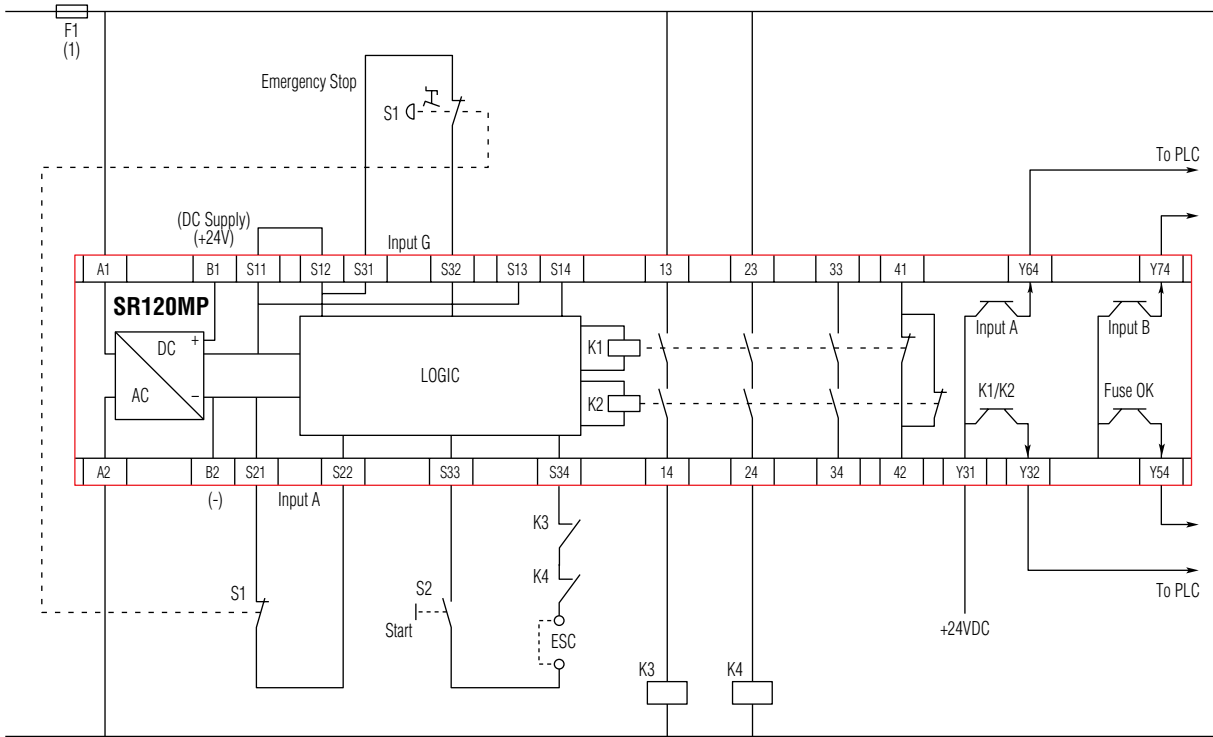
Electrical	All Models	SR120MP01	SR120MP02
Power Supply:	±10%	24 VAC/DC	110 VAC
Power Consumption:		≤5 VA/3 W	≤6 VA
Internal Fuse:	Electronic		
Safety Inputs:	1 N/C or 2 N/C or mat or light curtain		
Relay Outputs:	3 N/O + 1 N/C auxiliary (plus 4 solid-state signaling outputs)		
Max Switched AC:	Inductive AC-15, 1800 VA inrush, 180 VA maintained		
Max Switched DC:	Inductive DC-13, 1.25 A/24 VDC		
Min Switched Current/Voltage:	10 mA/17 V		
Impulse Withstand Voltage:	4000 V		
Max Drop-Out Time:	40 ms		
Max Output Fuse:	4 A slow-acting fuse or 6 A quick-acting fuse		
Start Mode:	Monitored manual or automatic/manual		
External Device Monitoring (EDM):	N/C loop between S33 and S34		
Mechanical			
Mounting:	35 mm (1.38 in.) DIN rail		
Case Material:	Polyamide PA6.6		
Max Wire Size:	0.2 to 1.5 mm ² (24 to 16 AWG)		
Weight:		300 g (10.5 oz.)	400 g (14 oz.)
Color:	Red		
External Switches:	None		
Indication:	Green = Power on, Green = Input A active, Green = Input B active, Green = K1/K2 active		
Mechanical Life:	1 x 10 ⁶ operations		
Environmental			
Enclosure Protection:	IP20 terminals, IP40 (NEMA 1) housing		
Operating Temperature:	-10 to 55°C (14 to 131°F)		
Compliance			
Standards:	EN60947-1/5, EN61000-6, EN62061, EN ISO 12100-2, EN ISO 13849-1/2, EN ISO 13850		
Approvals/Listings:	CE-marked for all applicable directives, UL and C-UL, CSA, TÜV Rheinland		
Reliability Data			
per EN ISO 13849-1:	Cat. 4, PLe, PFHd 7.39E-09		

Specifications are subject to change without notice.

Note:

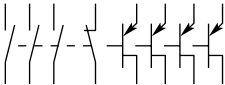
The safety contacts of the STI switches are described as normally closed (N/C)—i.e., with the guard closed, actuator in place, and the machine able to be started.

Application

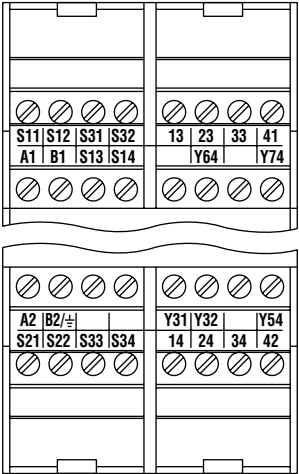


ESC: External Start Conditions

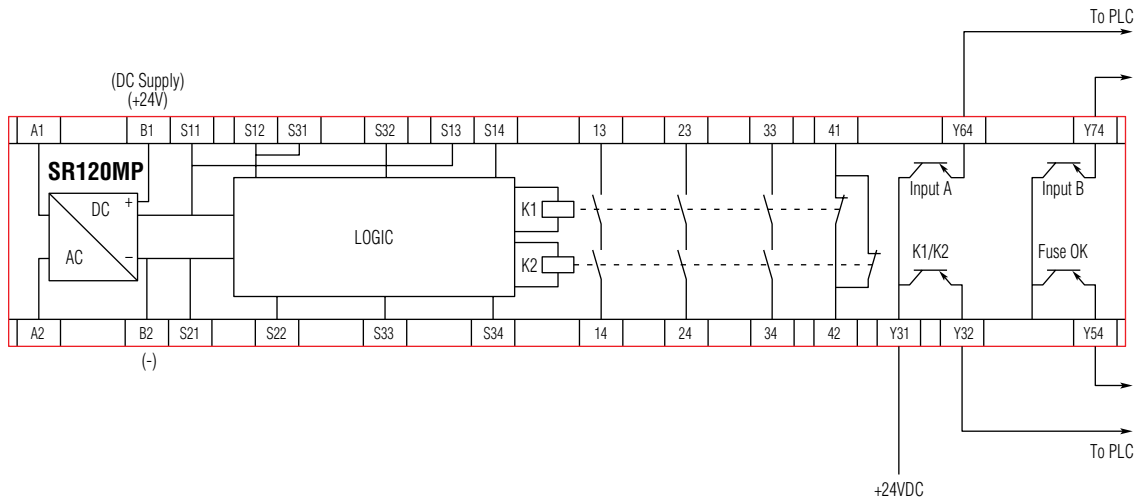
Output Contact Arrangements



Terminal Connections

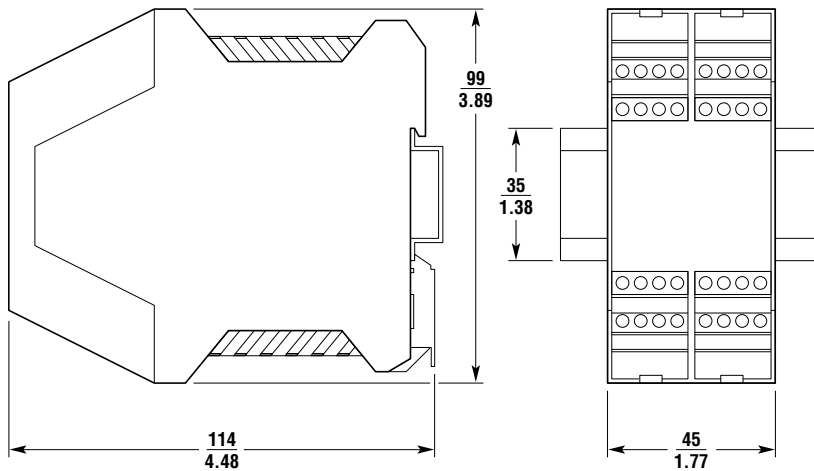


Block Diagram



Dimensions

(mm/in.)



Ordering

Model	Supply	Inputs	Outputs	Auxiliary	Part No.
SR120MP01	24 VAC/DC	2 N/C	3 N/O	1 N/C	44510-1201
SR120MP02	110 VAC	2 N/C	3 N/O	1 N/C	44510-1202

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