

# Safety Monitoring Relays

# SR223SMT

## Safety Module Timer Unit

- Power requirements—the SR223SMT will accept 24 VAC/DC or 115 VAC
- Delayed outputs—the SR223SMT has 1 N/O on-delay output, plus 2 N/C off-delay outputs (selectable from 1 second to 31 seconds) to provide delayed unlocking of solenoid locking switches; the delay time begins when power is applied to the SR223SMT
- Monitoring outputs—the SR223SMT has 2 solid-state signaling outputs
- External Device Monitoring (EDM) is provided with a N/C loop between Y1 and Y2 on the SR223SMT
- Diagnostic LEDs provide status indication of supply power, safety outputs, feedback loop, and time delay



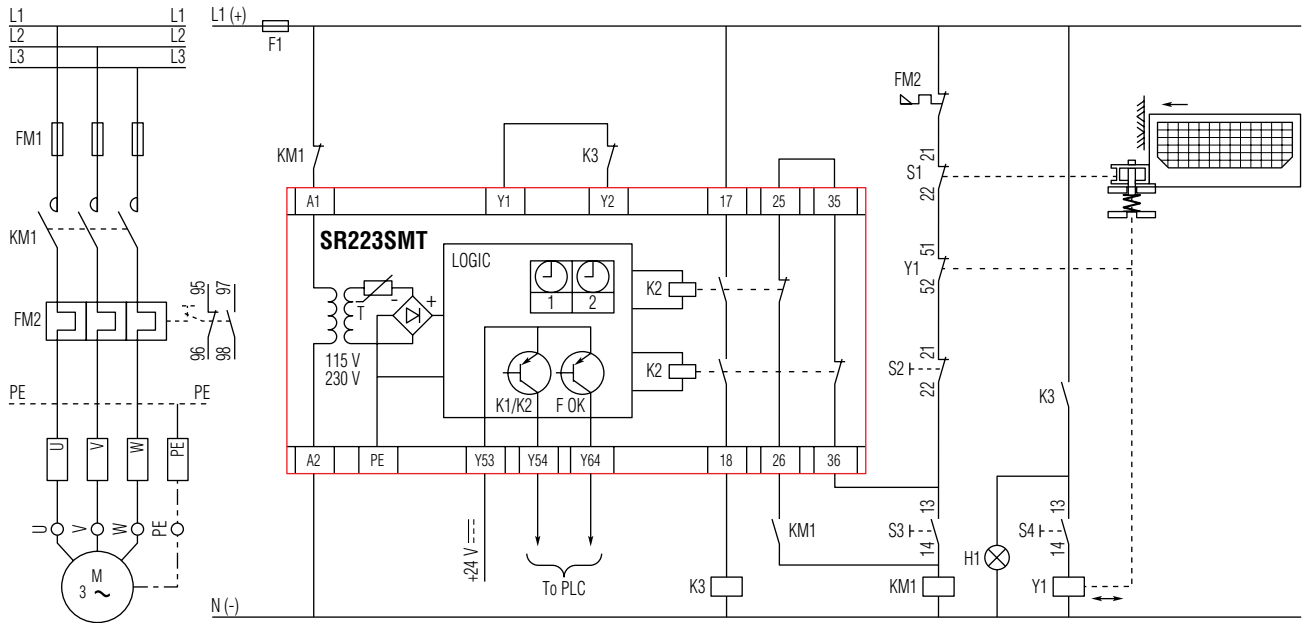
Conforms to EN60947-1/5, EN61000-6, EN62061, EN ISO 12100-2, EN ISO 13849-1/2  
UL and C-UL listed  
CSA and TÜV Rheinland approved

## Specifications

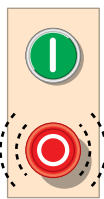
Electrical	All Models	SR223SMT01	SR223SMT02
Power Supply:	±10%	24 VAC/DC	115 VAC
Power Consumption:		≤ 4.3 VA/2.3 W	≤ 6.5 VA
Internal Fuse:	Electronic		
Safety Inputs:	None		
Relay Outputs:	1 N/O + 2 N/C switched at preset time delay (1-31 sec.)		
Auxiliary Outputs:	2 solid state for signaling		
Max. Switched AC:	Inductive AC-15, 1800 VA inrush, 180 VA maintained		
Max. Switched DC:	Inductive DC-13, 1.5 A/24 V		
Min Switched Current/Voltage:	10 mA/17 V (provided that the contact has never been used with higher loads)		
Impulse Withstand Voltage:	4000 V		
Max Drop-Out Time:	n/a		
Max Output Fuse:	4 A slow-acting or 6 A fast-acting		
Reset Mode:	Time function is reset only by interrupting the supply voltage		
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:	2 x 1.5 mm (16 AWG) stranded		
Weight:	AC version: 360 g (12.7 oz.); DC version: 250 g (8.8 oz.)		
Color:	Red with black body		
External Adjustment:	Time delay via 2 potentiometers		
Indication:	Green: Power on, Green: Outputs activated Green: Feedback closed, Green: Timer activated		
<b>Environmental</b>			
Enclosure Protection:	IP20 terminals, IP40 (NEMA 1) housing		
Operating Temperature:	-10 to 55°C (14 to 131°F)		
<b>Compliance</b>			
Standards:	EN60947-1/5, EN61000-6, EN62061, EN ISO 12100-2, EN ISO 13849-1/2/8		
Approvals/Listings:	CE-marked for all applicable directives, UL and C-UL, CSA, TÜV Rheinland		
<b>Reliability Data</b>			
per EN ISO 13849-1:	Cat. 3, PLd, PFHd 1.30E-07		

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



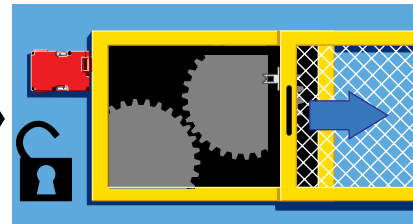
## Operation



**Stop signal**  
to SR223SMT  
**Power** is applied  
to SR223SMT

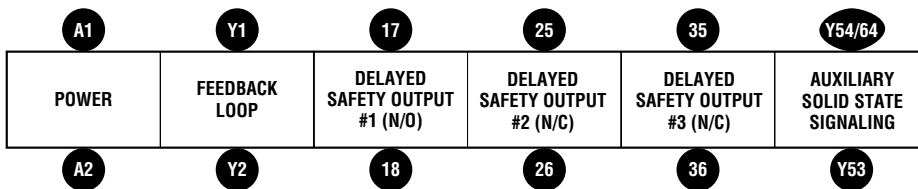


**SR223SMT times** down to a  
preset time then signals guard  
locking switch to unlock

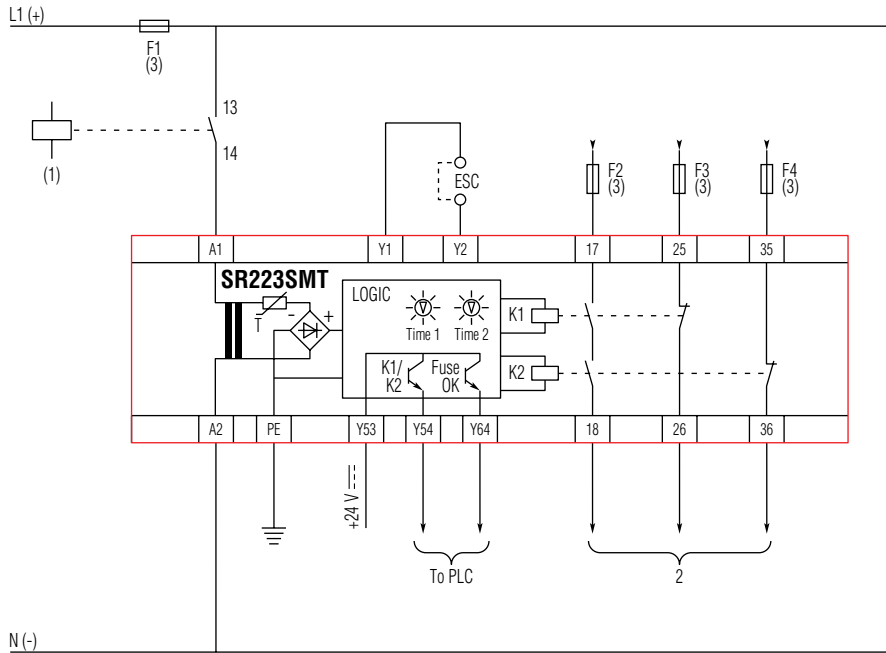


**Guard locking switch** unlocks guard  
allowing safe access to machine

## Terminal Connections



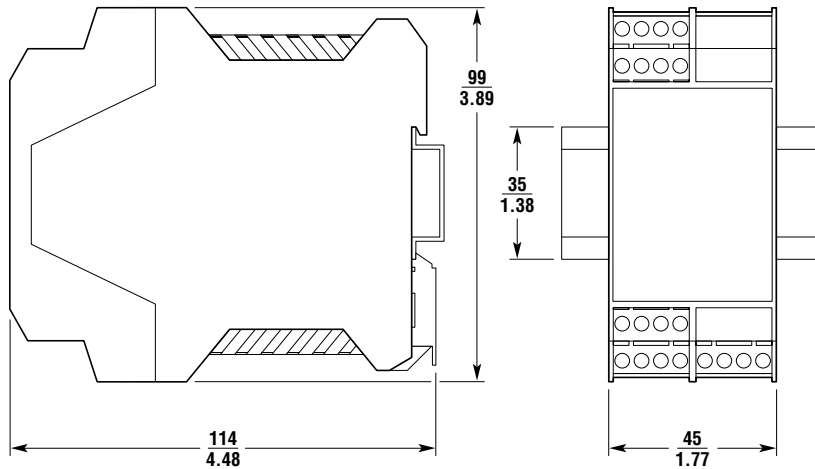
## Block Diagram



- (1) Controlling signal
- (2) Floating relay outputs with time delay on energization
- (3) See Technical Data for maximum fuse sizes

## Dimensions

(mm/in.)



## Ordering

Model	Supply	Delayed Outputs	Auxiliary	Part No.
SR223SMT01	24 VAC/DC	1 N/O + 2 N/C	2 Solid State	44510-2231
SR223SMT02	115 VAC	1 N/O + 2 N/C	2 Solid State	44510-2232

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