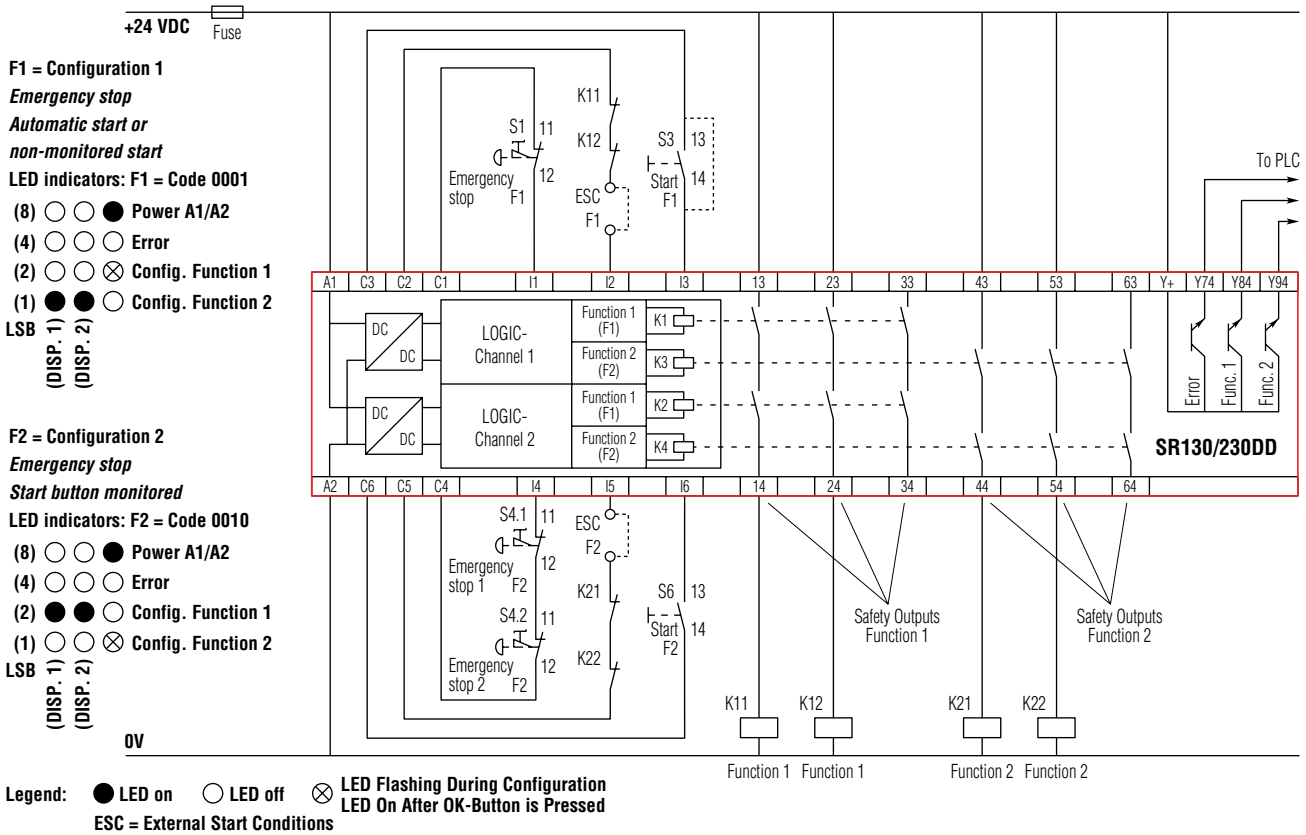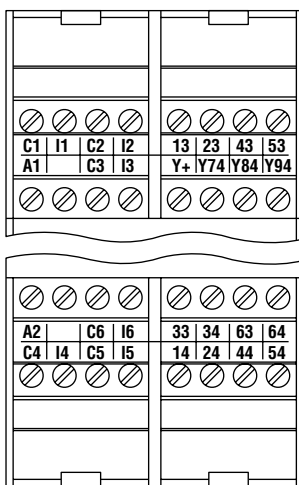# SR130DD

Dual-Channel Dual-Device Safety Monitoring Relay

- Power requirements—the SR130DD will accept 24 VDC

- Inputs—the SR130DD provides dual-channel input from two different independent safety devices. These safety devices may be E-stops, interlock switches or light curtains with dry contact outputs.

- Outputs—the SR130DD has three N/O outputs for each of the safety devices. Three solid state outputs are available for monitoring.

- External Device Monitoring (EDM) is provided with a N/C loop for each set of outputs for the two safety device inputs

- Programmable—the SR130DD is configured to accept the two safety device inputs using the touch pad on the front cover
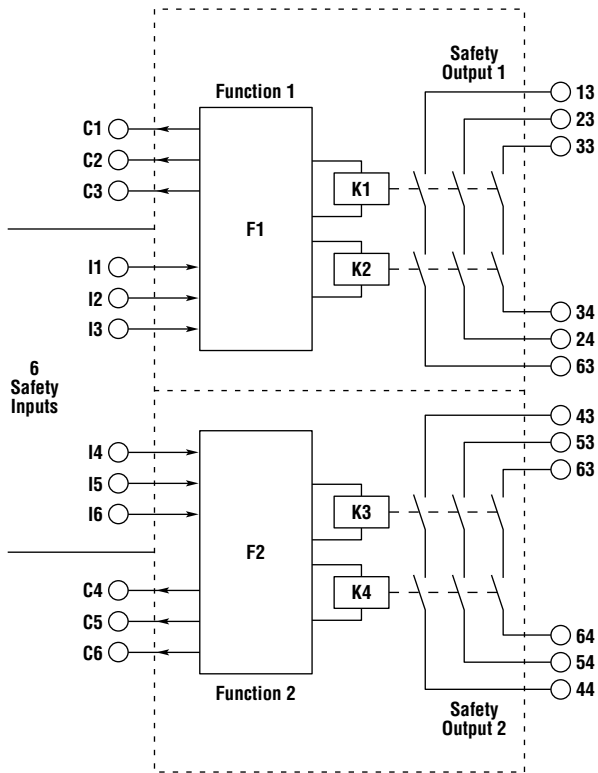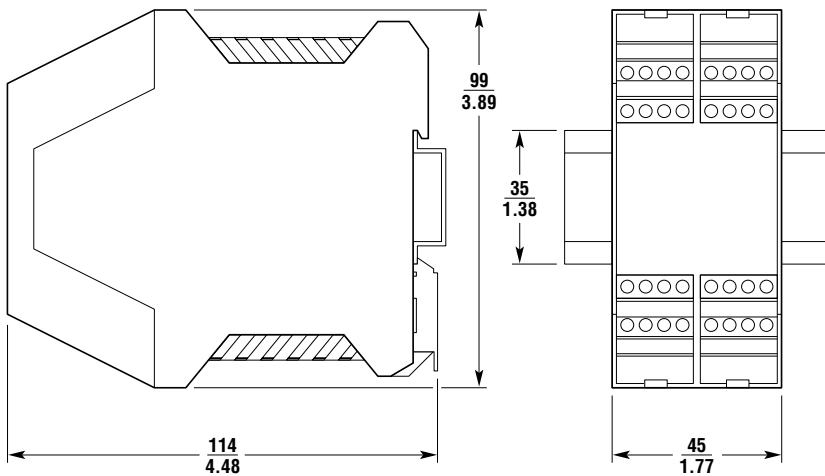
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■ *Application*

F1 = Configuration 1
Emergency stop
Automatic start or
non-monitored start
LED indicators: F1 = Code 0001

(8) ○ ○ ● **Power A1/A2**
(4) ○ ○ ○ **Error**
(2) ○ ○ ⊗ **Config. Function 1**
(1) ● ● ○ **Config. Function 2**
LSB

F2 = Configuration 2
Emergency stop
Start button monitored
LED indicators: F2 = Code 0010

(8) ○ ○ ● **Power A1/A2**
(4) ○ ○ ○ **Error**
(2) ● ● ○ **Config. Function 1**
(1) ○ ○ ⊗ **Config. Function 2**
LSB

Legend: ● **LED on**   ○ **LED off**   ⊗ **LED Flashing During Configuration**
LED On After OK-Button is Pressed
ESC = External Start Conditions

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safety monitoring relays

Terminal Connections

| C1 | I1 | C2 | I2 |
| A1 | | C3 | I3 |

| 13 | 23 | 43 | 53 |
| Y+ | Y74 | Y84 | Y94 |

| A2 | | C6 | I6 |
| C4 | I4 | C5 | I5 |

| 33 | 34 | 63 | 64 |
| 14 | 24 | 44 | 54 |

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SR130DD

■ Block Diagram

■ Dimensions — mm/in.

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■ *Specifications*

Electrical	All Models
Power Supply:	±20%, 24 VDC
Power Consumption:	≤5 W
Internal Fuse:	Electronic
Safety Inputs:	Configured from front panel
Relay Outputs:	6 N/O (2 sets of 3 N/O) (3 solid state for signaling)
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:	30 ms
Max Output Fuse:	4 A slow-acting fuse or 6 A quick-acting fuse
Reset Mode:	Configured from front panel
External Device Monitoring (EDM):	N/C loop for each set of outputs
Mechanical	
Mounting:	35 mm (1.38 in.) DIN rail
Case Material:	Polyamide PA6.6
Max Wire Size:	0.2 to 1.5 mm² (24 to 16 AWG)
Weight:	320 g (11.3 oz.)
Color:	Red
External Switches:	None
Indication:	12 LEDs configured from front panel
Mechanical Life:	1×10^6 operations
Environmental	
Enclosure Protection:	IP20 terminals, IP40 (NEMA 1) housing
Operating Temperature:	-10 to 55°C (14 to 131°F)
Compliance	
Standards:	EN60204-1, EN954-1, EN61496-1 (Type 4), EN60947-5-3, EN1088
Approvals/Listings:	CE-marked for all applicable directives, UL and C-UL, CSA, BG
Safety Category:	Cat. 4 per EN954-1 (SR130DD 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.

■ *Ordering*

Model	Supply	Terminals	Part No.
SR130DD00	24 VDC	Fixed	44510-1300

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