Conforms to EN60204-1, EN954-1, EN292, EN60947-5-3, EN61496-1, and EN1088
UL and C-UL listed, CSA and BG approved

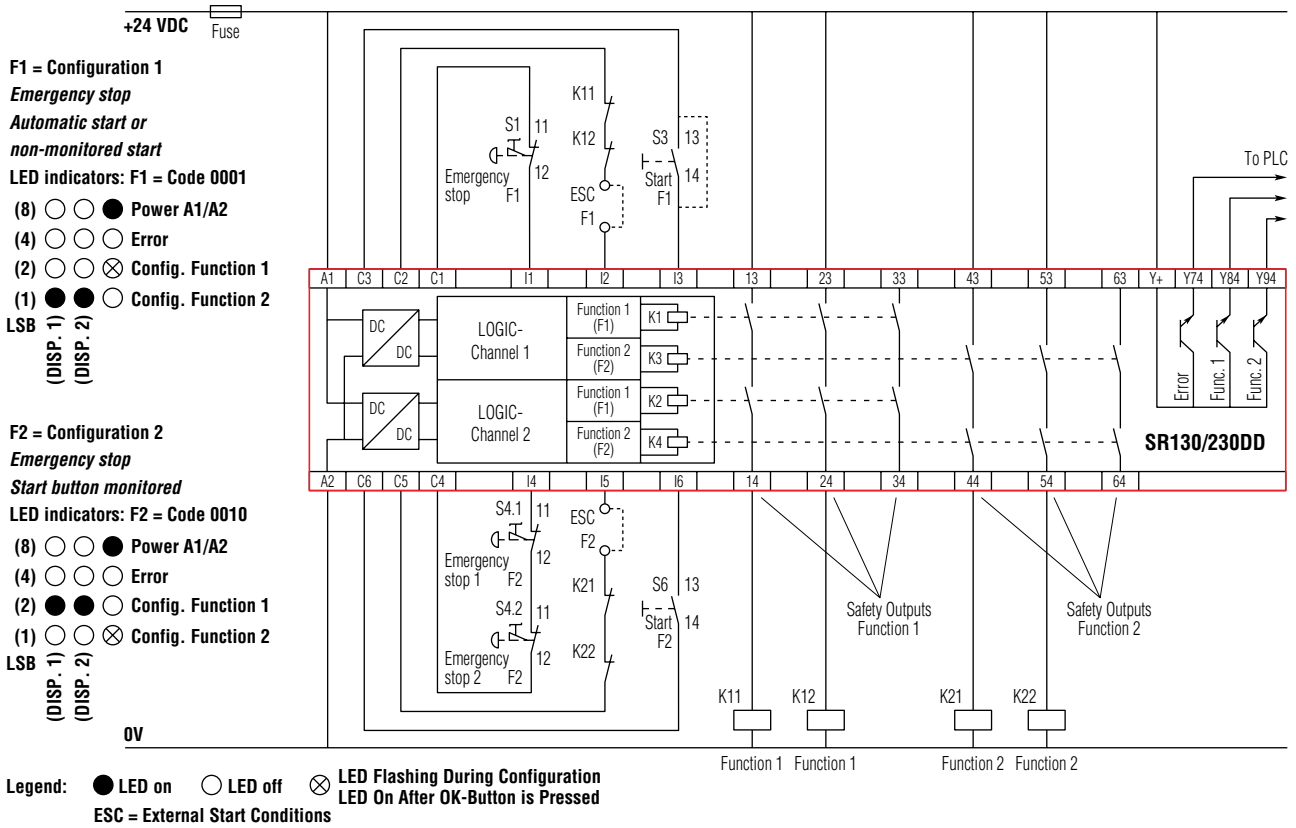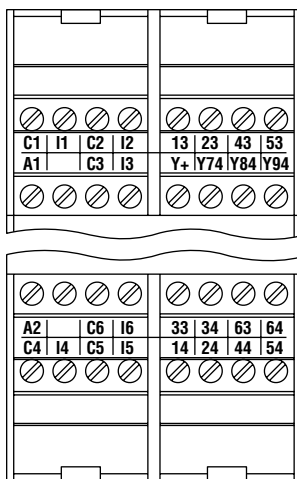# SR130DD

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
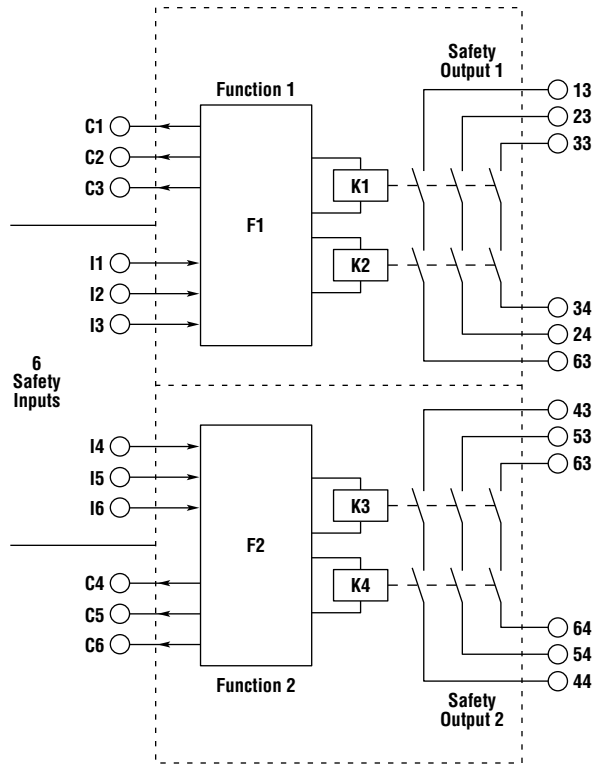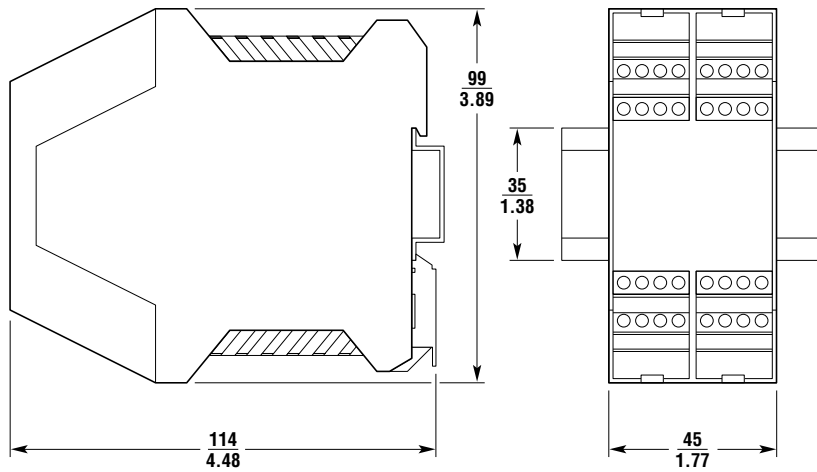
OMRON

■ *Application*

+24 VDC   Fuse

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 (DISP. 1) (DISP. 2)

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 (DISP. 1) (DISP. 2)

0V

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

Terminal Connections

SR130DD

■ Block Diagram

Function 1

C1, C2, C3 — F1 — K1, K2

I1, I2, I3

6 Safety Inputs

Safety Output 1: 13, 23, 33, 34, 24, 63

Function 2

I4, I5, I6 — F2 — K3, K4

C4, C5, C6

Safety Output 2: 43, 53, 63, 64, 54, 44

■ Dimensions — mm/in.

99/3.89

35/1.38

114/4.48

45/1.77

safety monitoring relays

■ 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 x 10⁶ 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