

MSR6R/T

Description

The MSR6R/T has an internal switch that allows the user to select either 1 N.C. single channel input for use with gate interlock and emergency stop buttons in lower risk applications or 2 N.C. dual channel inputs for higher risk applications.

The MSR6R/T has an internal selector switch that can accommodate automatic/manual or a monitored manual reset function. Automatic/ manual reset can use a jumper or can be used to check operation of the contacts. Monitored manual requires the use of a manually operated normally open momentary switch to activate the outputs.

The MSR6R/T has 3 N.O. safety outputs and 1 N.C. auxiliary output. The safety outputs have independent and redundant internal contacts to help ensure the safety function. The auxiliary contact is a nonsafety output intended to provide an external signal about the status of the safety outputs.



Features

- Category 3 per EN 954-1
- Stop category 0
- Switch selectable input
- Three N.O. safety outputs
- One N.C. auxiliary output
- Switch selectable reset
- 45 mm wide housing

Applications



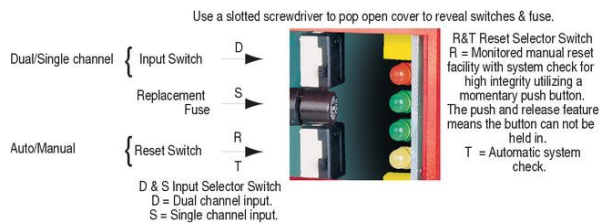
- Contactor monitoring circuit
- Contactor switching circuit
- Supply inclusive of switching circuit
- ☐ Contactor
- Monitored by Minotaur

Specifications

Standards	EN 954-1, ISO13849-1, IEC/EN 60204-1, IEC 60947-5-1, ANSI B11.19, AS4024.1
Category	Cat. 3 per EN 954-1 (ISO 13849-1)
Certifications	CE Marked for all applicable directives, cULus, c-Tick, and TÜV
Power Supply	24V AC/DC, 110V AC 50/60 Hz or 230V AC 50/60 Hz
Power Consumption	<4 VA
Safety Inputs	2 N.C.
Input Simultaneity	0.5 seconds
Input Resistance, Max.	500 Ω
Reset Type	Monitored Man. or Auto./Man.
Safety Outputs	3 N.O. Safety; 1 N.C. Auxiliary
Output Utilization per IEC60947-5-1 (Inductive)*	B300 AC-15; 4 A/250V AC, 4 A/120V AC P300 DC-13; 3 A/24V DC
Thermal Current	4 A (nonswitching)
Fuses, Input	500 mA time lag (internal, replaceable)
Fuses, Output	5 A quick acting (external)
Switching Current @ Voltage, Min.	10 mA/10V
Maximum Drop-Out Time	50 ms
Status Indicators	Red = Power On; Green = K1 Closed; Green = K2 Closed; Amber = Single Channel Mode
Rated Impulse withstand Voltage	2500V
Installation Group	C in accordance with VDE 0110
Pollution Degree	3
Operating Temperature [C (F)]	-10...55° (14...131°)
Relative Humidity	90%
Enclosure Type Rating	IP40, (NEMA 1), DIN 0470
Terminal Protection	IP20, DIN 0470
Conductor Size, Max.	1 x 2.5 mm ² (14 AWG) stranded, 1 x 4 mm ² (12 AWG) solid
Torque Settings—terminal screws	1 N•m (8.85 lb•in)
Material	Red Polycarbonate
Mounting	35 mm DIN Rail
Weight [g (lb)]	510 (1.12)
Electrical Life	220V AC/4A/880VA cosφ = 0.35 - 100,000 operations 220V AC/1.7A/375VA cosφ = 0.6 - 500,000 operations 30V DC/2A/60W - 1,000,000 operations 10V DC/0.01A/0.1W - 2,000,000 operations
Mechanical Life	2,000,000 operations
Vibration	0.75 mm (0.30 in.) peak, 10...55 Hz
Shock	30 g, 11 ms half-sine

* See Output Ratings on **Output Ratings** for details. Consult factory for ratings not shown.

Applications



Product Selection

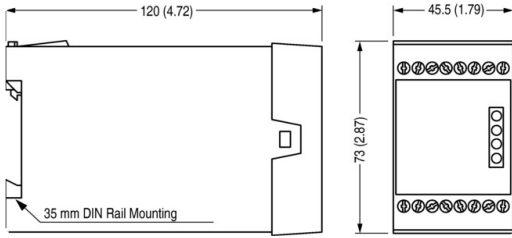
Inputs	Safety Outputs	Auxiliary Outputs	Power Supply	Cat. No.
1 N.C. or 2 N.C.	3 N.O.	1 N.C.	24V AC/DC	440R-C23017
			110V AC	440R-C23018
			230V AC	440R-C23019

Accessories

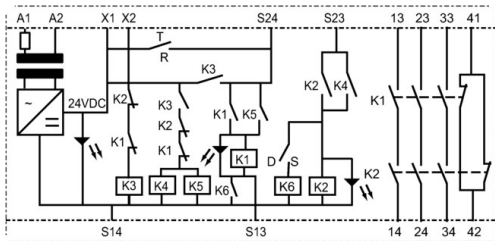
Description	Page Number	Cat. No.
500 mA fuse—Bussmann Cat. No. ETF-500 mA	Accessories	440R-A31562

Approximate Dimensions

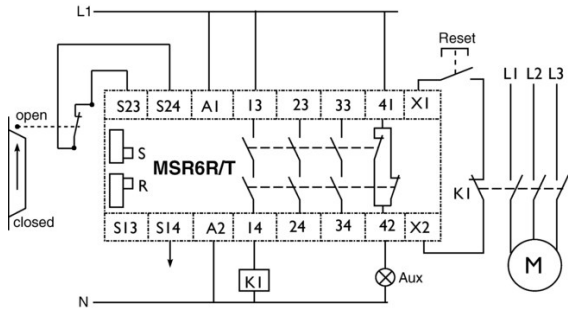
Dimensions are shown in mm (in.). Dimensions are not intended to be used for installation purposes.



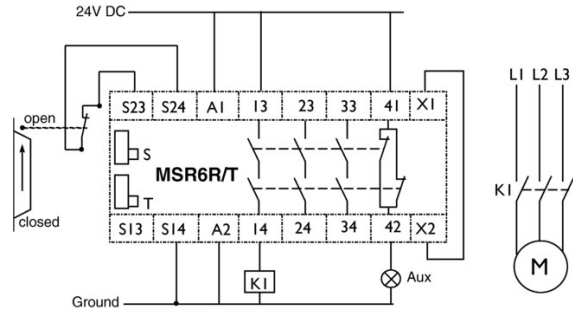
Block Diagram



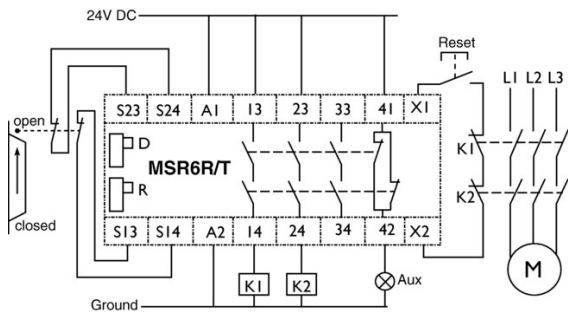
Typical Wiring Diagrams



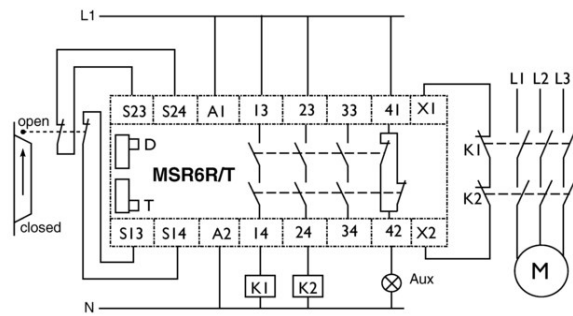
Single-Channel Safety Gate, Monitored Manual Reset, Single-Channel Output, Monitored Output



Single-Channel Safety Gate, Automatic Reset, Single-Channel Output, No Monitored Output



Dual-Channel Safety Gate, Monitored Manual Reset, Dual-Channel Output, Monitored Output



Dual-Channel Safety Gate, Automatic Reset, Dual-Channel Output, Monitored Output