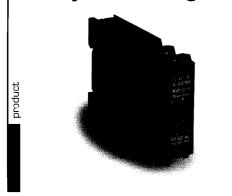
Safety Monitoring Relay







Minotaur MSR126R/T

The Minotaur MSR126R/T is a safety monitoring relay that provides the very basics for safety control systems in a 22.5mm package.

The MSR126R/T is designed for connection to a single channel safety gate, a single channel e-stop or a light curtain that provides crossfault detection. The MSR126.1R/T is designed for connection to a dual channel safety gate or e-stop, as it performs crossfault detection across the inputs.

The MSR126R and MSR126.1R are designed for applications where a monitored manual reset is required. Monitored manual reset requires the use of a manually operated normally open momentary switch to activate the outputs.

The MSR126T and MSR126.1T are designed for applications where automatic/manual reset is required. Automatic/manual reset allows a jumper across the S33-S34 circuit, and therefore does not perform output monitoring.

The outputs are only 2 normally open safety rated outputs. The safety outputs have independent and redundant internal contacts to help ensure the safety function.

features



- Safety category 4
- Stop category 0
- 2 Safety contacts N.O.
- Single/dual channel operation
- · Crossfault monitoring
- Monitored or automatic reset
- E-stop, safety gate or light curtain applications

specifications

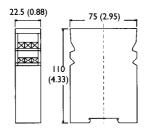
| Standards | IEC60204-1, ISOTR12100 | | |
|----------------------------------|---------------------------------------|--|--|
| Safety Category | Cat. 4 per EN954-1 | | |
| Approvals | CE marked for all applicable | | |
| | directives, BG, and cULus (except | | |
| | 42V AC units) | | |
| Power Supply | 24V AC/DC, 42/115/230V AC | | |
| | (0.8 – 1.1 x rated voltage), 50/60Hz | | |
| Power Consumption | 4VV | | |
| Safety Inputs | I N.C., 2 N.C. or Light Curtain | | |
| Input Simultaneity | Infinite | | |
| Max. Allowable Input Resistance | 90 ohms | | |
| Reset | Auto./Manual or Monitored Manual | | |
| Outputs | 2 N.O. Safety | | |
| Output Rating | B300, AC-15, 5A/250V AC | | |
| . • | N300, DC-13, 3A/24V DC | | |
| Fuses Output (external) | 6A slow blow or 10A quick blow | | |
| Maximum Thermal Current, le | 1 x 6A, 2 x 4A | | |
| Minimum Switched Current/Voltage | 10mA/10V | | |
| Power On Delay | 300ms | | |
| Response Time | 15ms | | |
| Recovery Time | 100ms | | |
| Indication LEDs | Green = Power on | | |
| | Green - KI Closed | | |
| | Green = K2 Closed | | |
| Impulse Withstand Voltage | 2500V | | |
| Operating Temperature | -5°C to +55°C (+23° to +131°F) | | |
| Humidity | 90% RH | | |
| Enclosure Protection | IP40 (NEMA 1), DIN 0470 | | |
| Terminal Protection | IP20, DIN 0470 | | |
| Conductor Size | 0.2-4mm ² (24-12AWG) | | |
| Installation Group | C in accordance with VDE 0110 | | |
| Pollution Degree | 2 | | |
| Mounting | 35mm DIN rail | | |
| Weight 24V DC | 160g (0.353 lbs) | | |
| II0 and 230V AC | 215g (0.474 lbs) | | |
| Electrical Life | | | |
| 220V AC/4A/880VA/cosφ=0.3 | 100,000 operations | | |
| 220V AC/1.7A/375VA/cos@=0.0 | 500,000 operations | | |
| 30V DC/2A/60V | I,000,000 operations | | |
| 10V DC/0.01A/0.1V | · · · · · · · · · · · · · · · · · · · | | |
| Mechanical Life | 2,000,000 operations | | |
| Vibration | 10g 10-55Hz | | |
| Shock | 10g, 16ms 100 shocks | | |

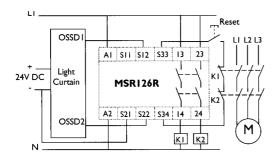


Safety Monitoring Relay

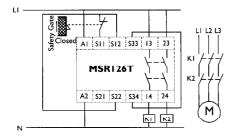
| Safety Outputs | Auxiliary Outputs | Reset | Input | Power Supply | Catalog Number |
|----------------|-------------------|------------------|---|--------------|----------------|
| 2 N.O. N | | Automatic/Manual | Light Curtain or Single Channel (MSR126T) | 24V AC/DC | 440R-N23117 |
| | | | | 115V AC | 440R-N23116 |
| | | | | 230V AC | 440R-N23115 |
| | | | Dual Channel (MSR126.1T) | 24V AC/DC | 440R-N23114 |
| | | | | 115V AC | 440R-N23113 |
| | | | | 230V AC | 440R-N23112 |
| | None | Monitored Manual | Light Curtain or Single Channel (MSR126R) | 24V AC/DC | 440R-N23123 |
| | | | | 115V AC | 440R-N23122 |
| | | | | 230V AC | 440R-N23121 |
| | | | Dual Channel (MSR126.1R) | 24V AC/DC | 440R-N23120 |
| | | | | 115V AC | 440R-N23119 |
| | | | | 230V AC | 440R-N23118 |

dimensions



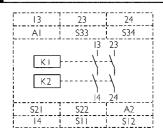


I 15/230V Supply, 24V DC Light Curtain, Monitored Manual Reset, Monitoried Output

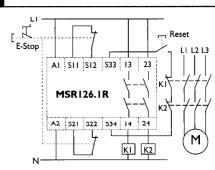


Single Channel Safety Gate Automatic Reset, No Output Monitoring

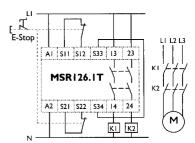
block diagram



typical wiring diagrams



Dual Channel E-Stop Input, Monitored Manual Reset, Monitored Output



Dual Channel E-Stop, Automatic Reset, No Output Monitoring