



**Part no.: 547954**  
**MSI-RM2B-01**  
**Safety relay**



Figure can vary



## Contents

- Technical data
- Electrical connection
- Operation and display

Part no.: 547954 – MSI-RM2B-01 – Safety relay

## Technical data

<b>Basic data</b>	
Series	MSI-RM2B
<b>Functions</b>	
Functions	Signal conversion of electronic safety outputs on potential-free relay contacts
Restart	Automatic
<b>Characteristic parameters</b>	
Mission time $T_M$	20 years , EN ISO 13849-1
Category	Up to 4 (depending on the category of the upstream protective device) , EN ISO 13849
B10 <sub>d</sub> at DC1 (ohmic load)	10,000,000 number of cycles , (2 A, 24 V)
B10 <sub>d</sub> at AC1 (ohmic load)	1,300,000 number of cycles , (0.5 A, 230 V)
B10 <sub>d</sub> at DC13 (inductive load)	10,000,000 number of cycles , (2 A, 24 V)
B10 <sub>d</sub> at AC15 (inductive load)	1,300,000 number of cycles , (0.5 A, 230 V)
B10 <sub>d</sub> , low load	1,860,000 number of cycles
<b>Electrical data</b>	
Protective circuit	Fuse on switching output, upstream
Continuous current per current path, max.	3 A
External contact fuse protection per current path	5 A quick-action, or 3.15 A delay-action
Permissible input line resistance, max.	50 $\Omega$
<b>Performance data</b>	
Supply voltage $U_B$	24 V , DC , -20 ... 20 %
<b>Outputs</b>	
Number of safety-related switching outputs (OSSDs)	2 Piece(s)
<b>Safety-related switching outputs</b>	
Type	Safety-related switching output OSSD
Voltage type	AC/DC
<b>Safety-related switching output 1</b>	
Switching element	Relay , NO
<b>Safety-related switching output 2</b>	
Switching element	Relay , NO
<b>Timing</b>	
Pickup delay	20 ms
Regression delay	10 ms
<b>Connection</b>	
Number of connections	1 Piece(s)
<b>Connection 1</b>	
Type of connection	Terminal
Function	Connection to device
Type of terminal	Screw terminal
No. of pins	12 -pin
<b>Cable properties</b>	
Connection cross sections	0.2 to 2.5 mm <sup>2</sup>

## Part no.: 547954 – MSI-RM2B-01 – Safety relay

### Mechanical data

Dimension (W x H x L)	17.5 mm x 99 mm x 114.1 mm
Housing material	Plastic , PA 66
Electrical contact material	AgNi10 + 5 mm Au
Net weight	120 g
Housing color	Gray
Type of fastening	Snap-on mounting
Mechanical life time	10,000,000 actuation cycles

### Operation and display

Type of display	LED
Number of LEDs	2 Piece(s)

### Environmental data

Ambient temperature, operation	0 ... 50 °C
Ambient temperature, storage	-25 ... 70 °C

### Certifications

Degree of protection	IP 20
Protection class	II
Certifications	c UL US TÜV NRTL US

### Classification

Customs tariff number	85371098
eCl@ss 8.0	27371819
eCl@ss 9.0	27371819
ETIM 5.0	EC001449
ETIM 6.0	EC001449

## Electrical connection

Connection 1	
Type of connection	Terminal
Function	Connection to device
Type of terminal	Screw terminal
No. of pins	12 -pin

Terminal	Assignment
22	Relay contact 2 IN, NC
24	Relay contact 2 IN, NO
11	Relay contact 1 OUT
Y1	External device monitoring circuit (EDM)
n.c.	n.c.
Y2	External device monitoring circuit (EDM)
A2	0 V
B1	Sensor input channel 1, 24V

Part no.: 547954 – MSI-RM2B-01 – Safety relay

Terminal	Assignment
B3	Sensor input channel 2, 24V
14	Relay contact 1 IN, NO
21	Relay contact 2 OUT
12	Relay contact 1 IN, NC

## Operation and display

### LEDs

LED	Display	Meaning
1	Green, continuous light	Relay K1 picked up
2	Green, continuous light	Relay K2 picked up