

Technical data sheet

Safety relay

Part no.: 547933

MSI-CM52B-01

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- Technical data
- Electrical connection
- Operation and display



For illustration purposes only



Technical data

Basic data

Series	MSI-CM
Application	Contact extension for safety relays and safety PLCs

Functions

Functions	Feedback path for EDM integration One- or two-channel operation
Restart	Automatic

Characteristic parameters

SIL	3, IEC 61508
SILCL	3, IEC/EN 62061
Performance Level (PL)	e, EN ISO 13849-1
MTTF _d	262 years, EN ISO 13849-1
PFH _D	1E-10 per hour
PFH _{D, nop} = 8766	0.00000000102 per hour
Mission time T _M	20 years, EN ISO 13849-1
Category	4, EN ISO 13849-1
STOP category	0, IEC/EN 60204-1
B10 _d at AC15 (inductive load)	230,000 number of cycles

Electrical data

Protective circuit	Overvoltage protection
Continuous current per current path, max.	6 A

Performance data

Supply voltage U _B	24 V, AC/DC, -15 ... 10 %
Power consumption, max.	1.7 W

Output circuit

Number of outputs, safety-oriented, undelayed, contact-based	5 Piece(s)
Number of outputs, safety-oriented, delayed, contact-based	0 Piece(s)
Number of outputs, signaling function, undelayed, contact-based	1 Piece(s)

Time behavior

Regression delay	20 ms
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Connection

Number of connections	1 Piece(s)
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Connection 1

Function	Connection to device Voltage supply
Type of connection	Terminal
Type of terminal	Screw terminal
No. of pins	16 -pin

Cable properties

Connection cross sections	1 x 0.2 to 2.5 mm ² , wire
	1 x 0.2 to 2.5 mm ² , wire

Mechanical data

Dimension (W x H x L)	22.5 mm x 99 mm x 114.5 mm
Housing material	Plastic
Plastic housing	Unreinforced polyamide PA
Electrical contact material	AgSnO ₂ , gold flashed
Net weight	231 g
Housing color	Gray
Type of fastening	Snap-on mounting
Mechanical life time	100,000,000 actuation cycles

Operation and display

Type of display	LED
Number of LEDs	1 Piece(s)

Environmental data

Ambient temperature, operation	-20 ... 55 °C
Ambient temperature, storage	-40 ... 70 °C

Certifications

Degree of protection	IP 20 (terminals) IP 40 (housing)
Certifications	c UL TÜV Rheinland UL

Classification

Customs tariff number	85371098
ECLASS 5.1.4	27371800
ECLASS 8.0	27371819
ECLASS 9.0	27371819
ECLASS 10.0	27371819
ECLASS 11.0	27371819
ECLASS 12.0	27371819
ECLASS 13.0	27371819
ECLASS 14.0	27371819
ETIM 5.0	EC001449
ETIM 6.0	EC001449
ETIM 7.0	EC001449
ETIM 8.0	EC001449
ETIM 9.0	EC001449

Electrical connection

Connection 1

Function	Connection to device Voltage supply
Type of connection	Terminal
Type of terminal	Screw terminal
No. of pins	16 -pin

Electrical connection

Terminal	Assignment
A1	+24 V
A2	GND
11	External device monitoring circuit (EDM)
12	External device monitoring circuit (EDM)
23	Release circuit
24	Release circuit
71	Signal contact IN
72	Signal contact IN
33	Release circuit
34	Release circuit
43	Release circuit
44	Release circuit
53	Release circuit
54	Release circuit
63	Release circuit
64	Release circuit

Operation and display

LED	Display	Meaning
1	Green, continuous light	Supply voltage on