



the sensor people





Figure can vary

Part no.: 547936 MSI-DT30B-02 Safety relay







Contents

- Technical data
- Electrical connection
- · Operation and display



Part no.: 547936 - MSI-DT30B-02 - Safety relay

Technical data

Basic data	
Series	MSI-DT
Functions	
Functions	Cross circuit monitoring
	One- or two-channel operation Start/restart interlock (RES), selectable
	Time-delayed shutdown (STOP1)
Restart	Automatic Manual
	Manda
Characteristic parameters	
SIL	3 , IEC 61508
SILCL	3 , IEC/EN 62061
Performance Level (PL)	e , EN ISO 13849-1
MTTF _d	124 years , EN ISO 13849-1
PFH _D	0.000000018 per hour
PFH _D	1,8E-09 per hour
Mission time T _M	20 years , EN ISO 13849-1
Category	4 , EN ISO 13849
STOP category	0 , IEC/EN 60204-1
B10 _d at DC13 (inductive load)	400,000 number of cycles
B10 _d at AC15 (inductive load)	400,000 number of cycles
Electrical data	
Protective circuit	Short circuit protected
Connection	
Number of connections	1 Piece(s)
Connection 1	
Type of connection	Terminal
Function	Connection to device
Type of terminal	Voltage supply Spring-cage terminal
No. of pins	16 -pin
	10 -μιι
Cable properties Connection cross sections	1 x 0.2 to 2.5 mm², wire
Connection cross sections	1 x 0.2 to 2.5 mm², wire
Mechanical data	
Dimension (W x H x L)	22.5 mm x 111 mm x 114.5 mm
Housing material	Plastic , Unreinforced polyamide PA
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



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Number of LEDs	3 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 US TÜV Rheinland	
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 Voltage supply	
Type of terminal	Spring-cage terminal	
No. of pins	16 -pin	

Terminal	Assignment	
A1	+24V	
S35	Start circuit	
S34	Start circuit	
A2	GND	
S11	Sensor input 1	
S12	Sensor input 1	
S21	Sensor input 2	
S22	Sensor input 2	
13	1 release circuit, undelayed	
14	1 release circuit, undelayed	
23	2 release circuit, undelayed	
24	2 release circuit, undelayed	
37	Release circuit 1, delayed	
38	Release circuit 1, delayed	
47	Release circuit 2, delayed	
48	Release circuit 2, delayed	



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Operation and display

LEDs

Display LED 1	Display LED 2	Display LED 3	Meaning
Green, continuous light	Off	Off	Operational readiness
Green, continuous light	Green, continuous light	Green, continuous light	Device is active. Release circuits are closed.
Green, quickly flashing	Off	Off	Internal error - device defective. Replace the device!
Green, slowly flashing	Off	Off	External error - check the wiring and power supply! In event of manual reset: check the time sequence!
Green, slowly flashing	Green, slowly flashing	Off	Configuration error - repeat the configuration! If this cannot be performed: check the wiring and power supply!
Green, slowly flashing	Green, slowly flashing	Green, slowly flashing	Configuration necessary - positioner for delay time was readjusted. Configure again!