



Part no.: 50132993
MSI-EM-18-03
Safety relay



Figure can vary

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- Electrical connection
- Circuit diagrams
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Part no.: 50132993 – MSI-EM-I8-03 – Safety relay

Technical data

Basic data	
Series	MSI-EM
Characteristic parameters	
SIL	3, IEC 61508
SILCL	3, IEC/EN 62061
Performance Level (PL)	e, EN ISO 13849-1
PFH _D	0.00000000568 per hour
Category	4, EN ISO 13849
Electrical data	
Performance data	
Power consumption, max.	1.4 W
Control circuit	
Number of inputs	8 Piece(s)
Voltage permitted at the input	30 V
Input current at signal 1	8 mA
Interface	
Type	Internal bus (SBUS+)
Connection	
Number of connections	1 Piece(s)
Connection 1	
Type of connection	Terminal
Function	Signal IN
Type of terminal	Spring-cage terminal
No. of pins	16 -pin
Cable properties	
Connection cross sections	2 x 0.25 to 1.5 mm ² , wire with wire-end sleeve (pressed in trapezium shape), 2 x 0.2 to 1.5 mm ² , wire, 2 x 0.2 to 1.5 mm ² , wire
Mechanical data	
Width	22.5 mm x 107 mm x 120.8 mm
Net weight	150 g
Housing color	Gray
Type of fastening	Snap-on mounting
Environmental data	
Ambient temperature, operation	-25 ... 65 °C
Ambient temperature, storage	-25 ... 70 °C
Relative humidity (non-condensing)	10 ... 95 %
Certifications	
Degree of protection	IP 20 (terminals), IP 40 (housing)
Protection class	III
Certifications	c UL US, TÜV Rheinland
Vibration resistance	5 ... 500 Hz

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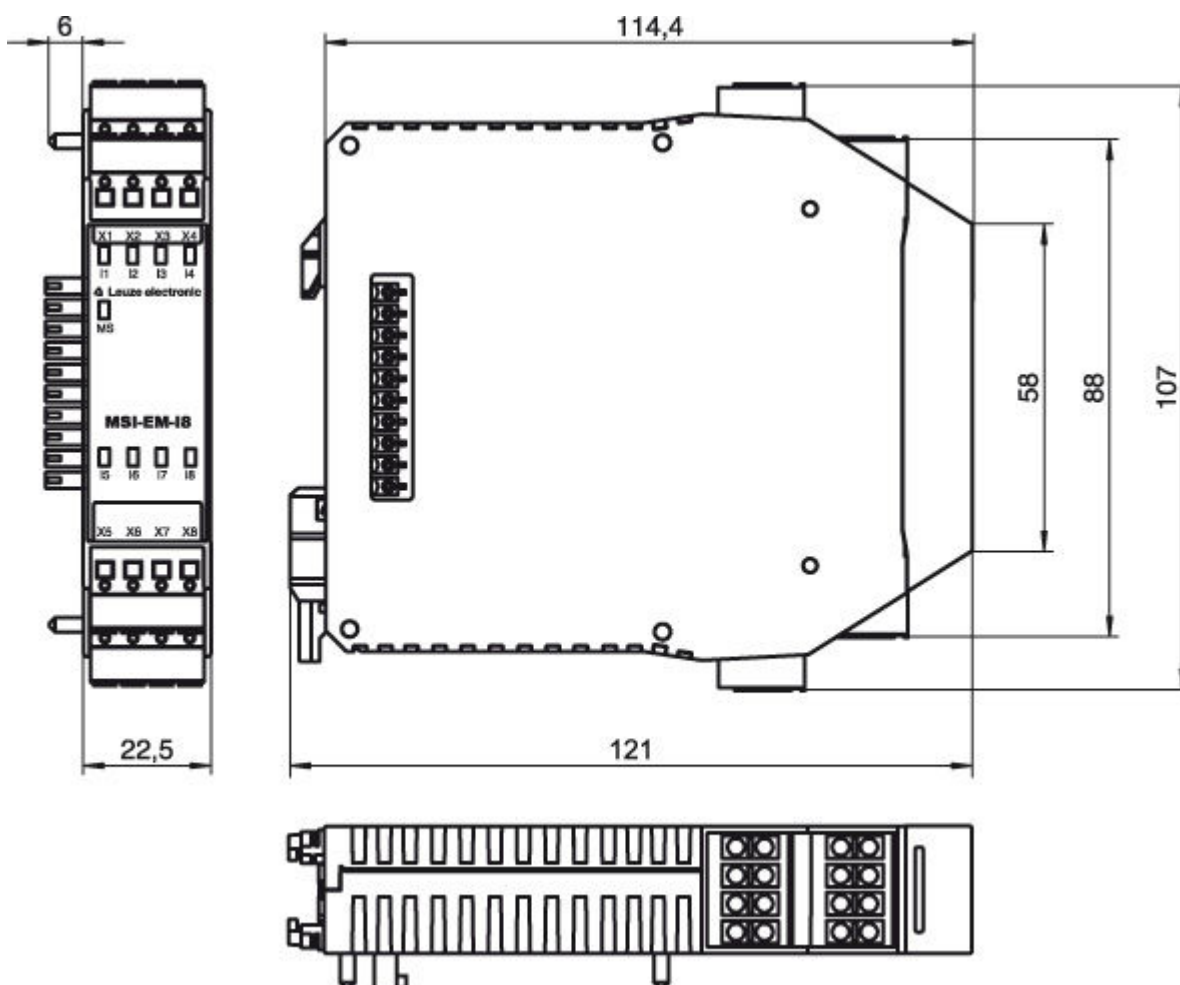
Test procedure for oscillation in accordance with standard	EN 60068-2-6
Shock resistance, single shock	30 g, 11 ms, EN 60068-2-27
Shock resistance, continuous shock	10 g, 16 ms, EN 60068-2-29

Classification

eCl@ss 8.0	27242204
eCl@ss 9.0	27242204
ETIM 5.0	EC001419

Dimensioned drawings

All dimensions in millimeters



Electrical connection

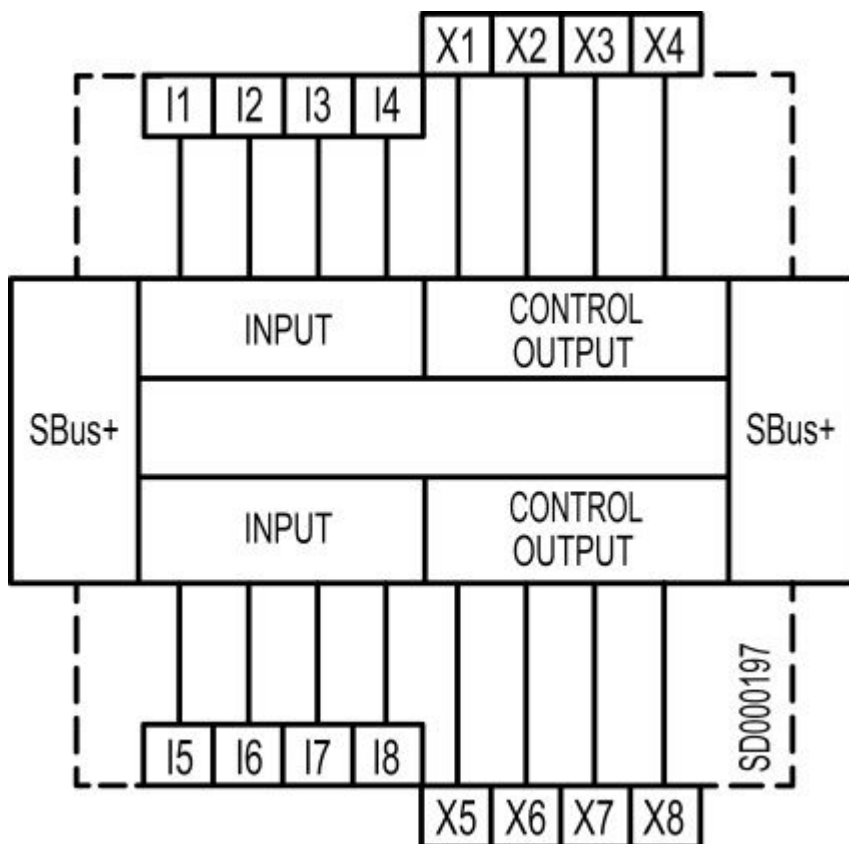
Connection 1	
Type of connection	Terminal
Function	Signal IN
Type of terminal	Spring-cage terminal

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Connection 1	
No. of pins	16 -pin

Terminal	Assignment
I1	Safe input
I2	Safe input
I3	Safe input
I4	Safe input
I5	Safe input
I6	Safe input
I7	Safe input
I8	Safe input
X1	Test signal output (test signal 1)
X2	Test signal output (test signal 2)
X3	Test signal output (test signal 1)
X4	Test signal output (test signal 2)
X5	Test signal output (test signal 1)
X6	Test signal output (test signal 2)
X7	Test signal output (test signal 1)
X8	Test signal output (test signal 2)

Circuit diagrams



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Notes

Observe intended use!

- The product may only be put into operation by competent persons.
- Only use the product in accordance with its intended use.