



**Part no.: 50132993**  
**MSI-EM-18-03**  
**Safe input module**



Figure can vary

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Part no.: 50132993 – MSI-EM-I8-03 – Safe input module

## Technical data

<b>Basic data</b>	
Series	MSI-EM
Application	Monitoring of safety functions
Number of safe I/Os	8 IN
<b>Functions</b>	
Functions	Extension module for the MSI 400 configurable safety control Extension with 8 safe inputs
<b>Characteristic parameters</b>	
Performance Level (PL)	e , EN ISO 13849-1
PFH <sub>D</sub>	0.00000000568 per hour
PFH <sub>D</sub>	5,68E-09 per hour
Mission time T <sub>M</sub>	20 years , EN ISO 13849-1
Category	4 , EN ISO 13849
<b>Electrical data</b>	
<b>Performance data</b>	
Power consumption, max.	1.4 W
<b>Output circuit</b>	
<b>Control circuit</b>	
Number of inputs	8 Piece(s)
Voltage permitted at the input	30 V
Input current at signal 1	8 mA
<b>Interface</b>	
Type	Internal bus (SBUS+)
<b>Connection</b>	
Number of connections	1 Piece(s)
<b>Connection 1</b>	
Type of connection	Terminal
Function	Signal IN
Type of terminal	Spring-cage terminal
No. of pins	16 -pin
<b>Cable properties</b>	
Connection cross sections	2 x 0.2 to 1.5 mm <sup>2</sup> , wire 2 x 0.2 to 1.5 mm <sup>2</sup> , wire 2 x 0.25 to 1.5 mm <sup>2</sup> , wire with wire-end sleeve (pressed in trapezium shape)
<b>Mechanical data</b>	
Dimension (W x H x L)	22.5 mm x 107 mm x 120.8 mm
Net weight	150 g
Housing color	Gray
Type of fastening	Snap-on mounting
<b>Environmental data</b>	
Ambient temperature, operation	-25 ... 65 °C

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Ambient temperature, storage	-25 ... 70 °C
Relative humidity (non-condensing)	10 ... 95 %

**Certifications**

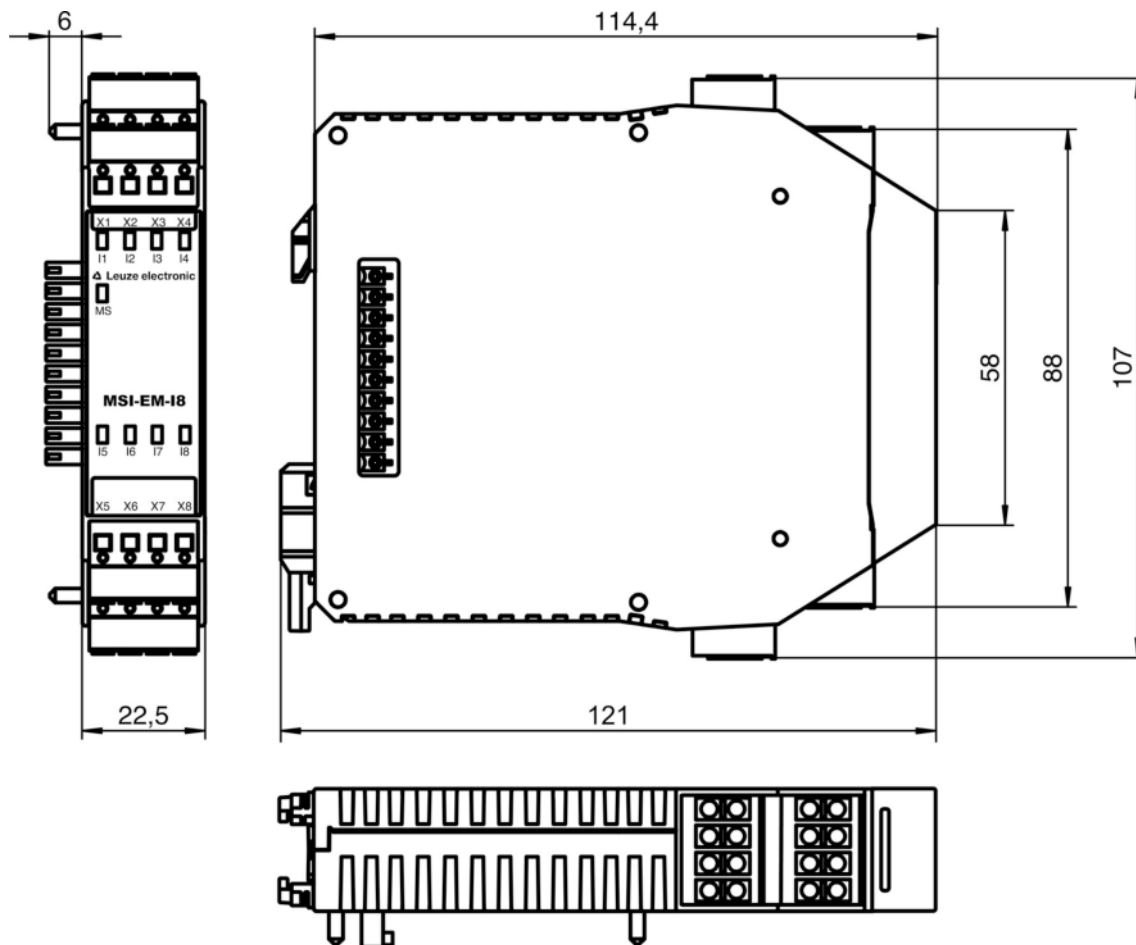
Degree of protection	IP 20 (terminals) IP 40 (housing)
Protection class	III
Certifications	c UL US TÜV Rheinland
Vibration resistance	5 ... 500 Hz
Test procedure for oscillation in accordance with standard	EN 60068-2-6
Shock resistance, single shock	30 g, 11 ms, EN 60068-2-27
Shock resistance, continuous shock	10 g, 16 ms, EN 60068-2-29

**Classification**

Customs tariff number	85364900
eCl@ss 8.0	27242204
eCl@ss 9.0	27242204
ETIM 5.0	EC001419
ETIM 6.0	EC001419

## Dimensioned drawings

All dimensions in millimeters



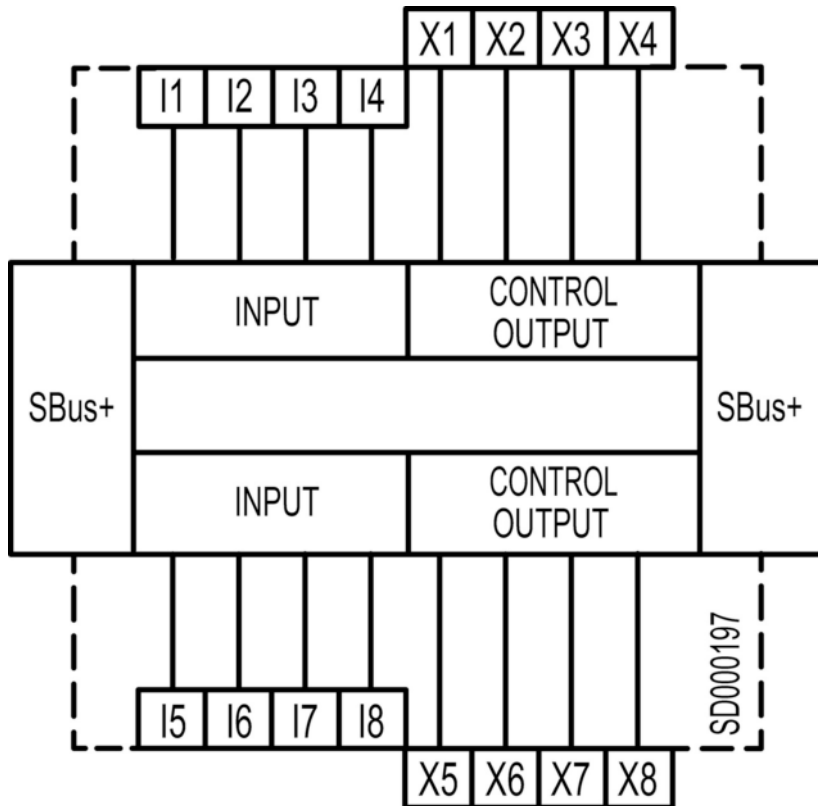
## Electrical connection

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

Terminal	Assignment
X7	Test signal output (test signal 1)
X8	Test signal output (test signal 2)

## Circuit diagrams



## 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.