

Technical data sheet

Safe input module

Part no.: 50132993

MSI-EM-I8-03

Contents

- Technical data
- Dimensioned drawings
- Electrical connection
- Circuit diagrams
- Notes



Figure can vary



Technical data

Basic data

Series	MSI-EM
Application	Monitoring of safety functions
Number of safe I/Os	8 IN

Functions

Functions	Extension module for the MSI 400 configurable safety control Extension with 8 safe inputs
-----------	--

Characteristic parameters

SIL	3, IEC 61508
SILCL	3, IEC/EN 62061
Performance Level (PL)	e, EN ISO 13849-1
PFH _D	5,68E-09 per hour
Mission time T _M	20 years, EN ISO 13849-1
Category	4, EN ISO 13849

Electrical data

Performance data

Power consumption, max.	1.4 W
-------------------------	-------

Output circuit

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

Function	Signal IN
Type of connection	Terminal
Type of terminal	Spring-cage terminal
No. of pins	16 -pin

Cable properties

Connection cross sections	2 x 0.2 to 1.5 mm ² , wire 2 x 0.2 to 1.5 mm ² , wire 2 x 0.25 to 1.5 mm ² , wire with wire-end sleeve (pressed in trapezium shape)
---------------------------	--

Mechanical data

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

Environmental data

Ambient temperature, operation	-25 ... 65 °C
Ambient temperature, storage	-25 ... 70 °C
Relative humidity (non-condensing)	10 ... 95 %

Certifications

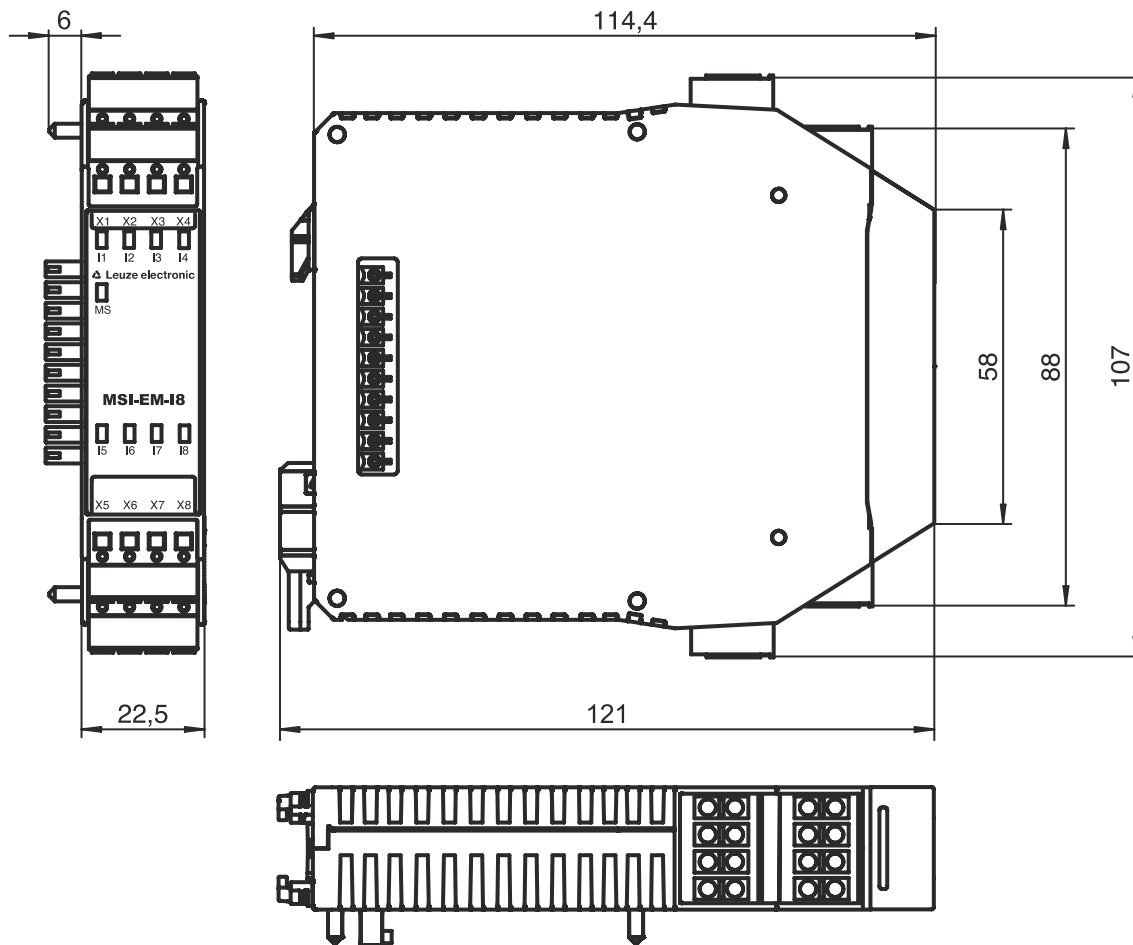
Degree of protection	IP 20 (terminals) IP 40 (housing)
Protection class	III
Certifications	c UL US TÜV Rheinland
Vibration resistance	5 ... 500 Hz
Test procedure for oscillation in accordance with standard	EN 60068-2-6
Shock resistance, single shock	30 g, 11 ms, EN 60068-2-27
Shock resistance, continuous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

Classification

Customs tariff number	85364900
eCl@ss 5.1.4	27242204
eCl@ss 8.0	27242204
eCl@ss 9.0	27242204
eCl@ss 10.0	27242204
eCl@ss 11.0	27242204
ETIM 5.0	EC001419
ETIM 6.0	EC001419
ETIM 7.0	EC001419

Dimensioned drawings

All dimensions in millimeters



Electrical connection

Connection 1

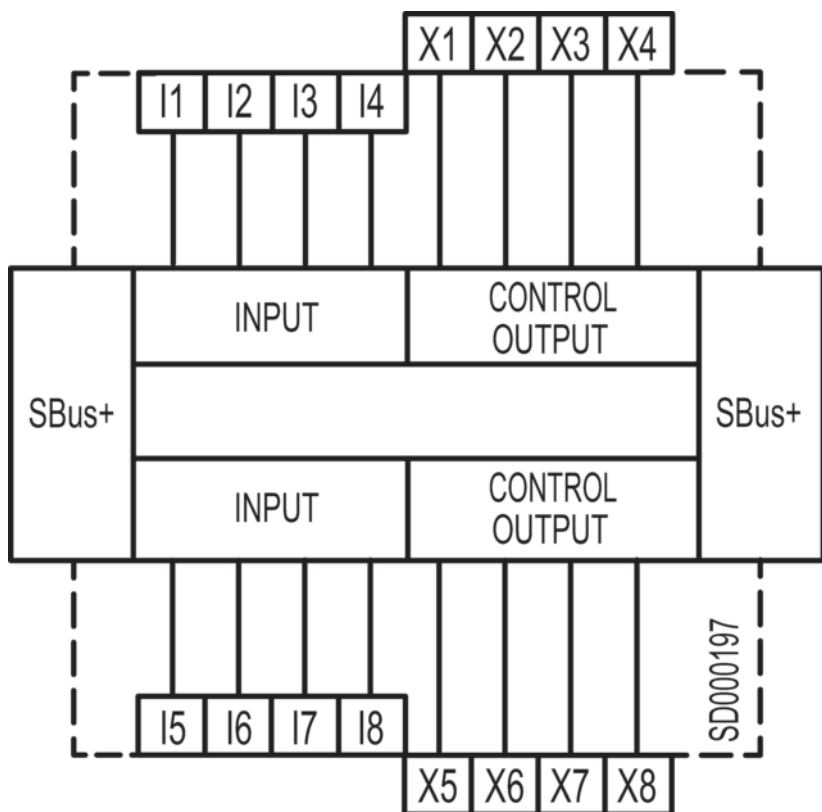
Function	Signal IN
Type of connection	Terminal
Type of terminal	Spring-cage terminal
No. of pins	16 -pin

Pin	Pin assignment
	I1
1	Safe input
	I2
2	Safe input
	I3
3	Safe input
	I4
4	Safe input
	I5
5	Safe input
	I6

Electrical connection

Pin	Pin assignment
6	Safe input I7
7	Safe input I8
8	Safe input X1
9	Test signal output (test signal 1) X2
10	Test signal output (test signal 2) X3
11	Test signal output (test signal 1) X4
12	Test signal output (test signal 2) X5
13	Test signal output (test signal 1) X6
14	Test signal output (test signal 2) X7
15	Test signal output (test signal 1) X8
16	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.