

## Technical data sheet

## Non-safe I/O module

Part no.: 50132997

MSI-EM-IO84NP-01

### Contents

- Technical data
- Dimensioned drawings
- Electrical connection
- Circuit diagrams
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Figure can vary



## Technical data

### Basic data

Series	MSI-EM
Application	Processing of non-safe signals
Number of safe I/Os	4 IN, 4 OUT, 4 programmable I/O

### Functions

Functions	Extension with 4 non-safe inputs, 4 non-safe outputs and 4 non-safe freely programmable I/Os (OSSDs) Non-safe extension module for the MSI 400 configurable safety control
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### Characteristic parameters

Mission time $T_M$	20 years, EN ISO 13849-1
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### Electrical data

#### Performance data

Supply voltage $U_B$	24 V, DC, -30 ... 25 %
Power consumption, max.	0.5 W

#### Output circuit

Number of outputs	4 Piece(s)
Number of configurable inputs/ outputs	4 Piece(s)
Type of digital output	Transistor
Short circuit protection, outputs	Yes
Min. voltage permitted at the output	16.2 V
Max. voltage permitted at the output	30 V
Total output current, max.	4 A
Nominal output current per output, max.	0.5 A

#### Control circuit

Number of inputs	4 Piece(s)
Voltage permitted at the input	30 V
Input current at signal 1	3 mA

### Interface

Type	Internal bus (SBUS+)
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### Connection

Number of connections	1 Piece(s)
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#### Connection 1

Function	Signal IN Signal OUT 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 <sup>2</sup> , wire 1 x 0.2 to 2.5 mm <sup>2</sup> , wire 1 x 0.25 to 2.5 mm <sup>2</sup> , wire with wire-end sleeve 2 x 0.2 to 1.0 mm <sup>2</sup> , wire 2 x 0.2 to 1.0 mm <sup>2</sup> , wire 2 x 0.25 to 1.0 mm <sup>2</sup> , wire with wire-end sleeve
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### Mechanical data

Dimension (W x H x L)	22.5 mm x 96.5 mm x 120.8 mm
Net weight	180 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

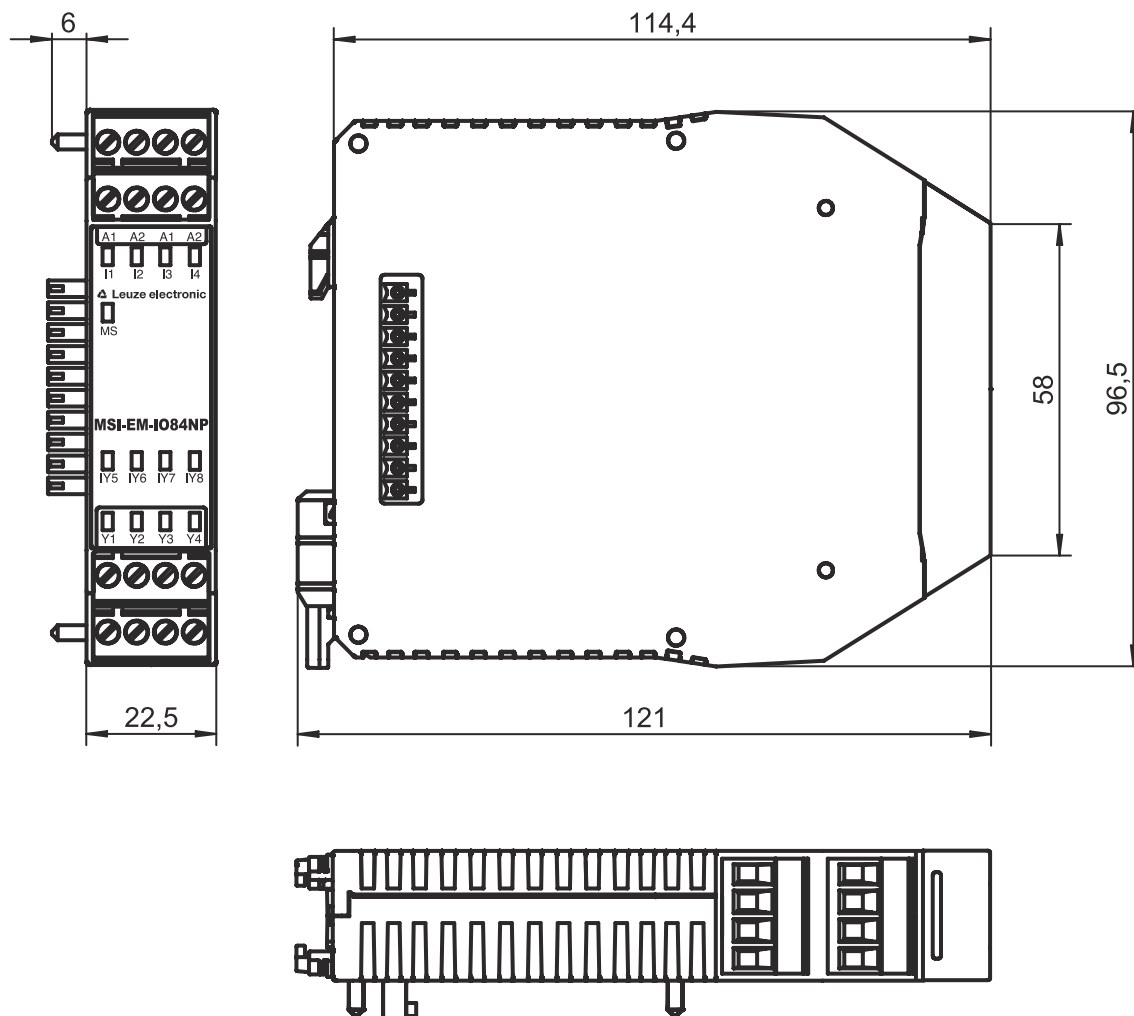
Degree of protection	IP 20 (terminals) IP 40 (housing)
Protection class	III
Certifications	c UL US
Vibration resistance	5 ... 150 Hz
Test procedure for oscillation in accordance with standard	EN 60068-2-6
Shock resistance, single shock	30 g, 11 ms, EN 60068-2-27

### Classification

Customs tariff number	85371091
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

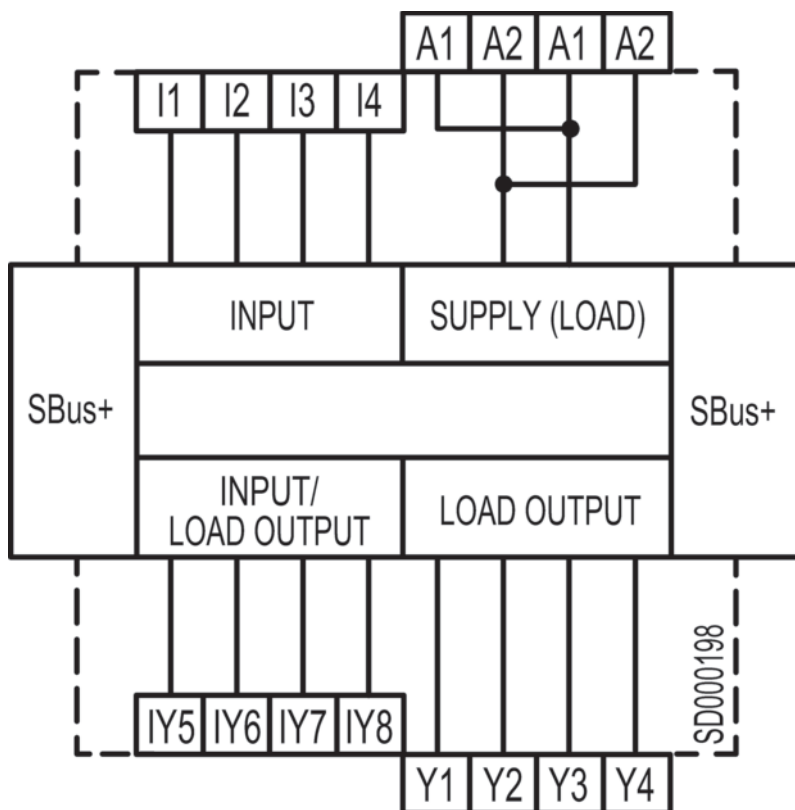
Function	Signal IN
	Signal OUT
	Voltage supply
Type of connection	Terminal
Type of terminal	Screw terminal
No. of pins	16 -pin

Pin	Pin assignment
	A1
1	+24V
	A1
2	+24V
	A2
3	GND



## Electrical connection

Pin	Pin assignment
	A2
4	GND
	I1
5	Input
	I2
6	Input
	I3
7	Input
	I4
8	Input
	IY5
9	Input/output (configurable)
	IY6
10	Input/output (configurable)
	IY7
11	Input/output (configurable)
	IY8
12	Input/output (configurable)
	Y1
13	Output
	Y2
14	Output
	Y3
15	Output
	Y4
16	Output

# Circuit diagrams



## Notes

	<b>Observe intended use!</b>
	<ul style="list-style-type: none"> <li>⚡ The product may only be put into operation by competent persons.</li> <li>⚡ Only use the product in accordance with its intended use.</li> </ul>