

## Technical data sheet

## Non-safe I/O module

Part no.: 50132997

MSI-EM-IO84NP-01

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- Dimensioned drawings
- Electrical connection
- Circuit diagrams
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For illustration purposes only



## Technical data

### Basic data

Series	MSI-EM
Type	Non-safe I/O module
Application	Processing of non-safe signals

### 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

#### Supply circuit

Nominal voltage $U_N$	24 V
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#### 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

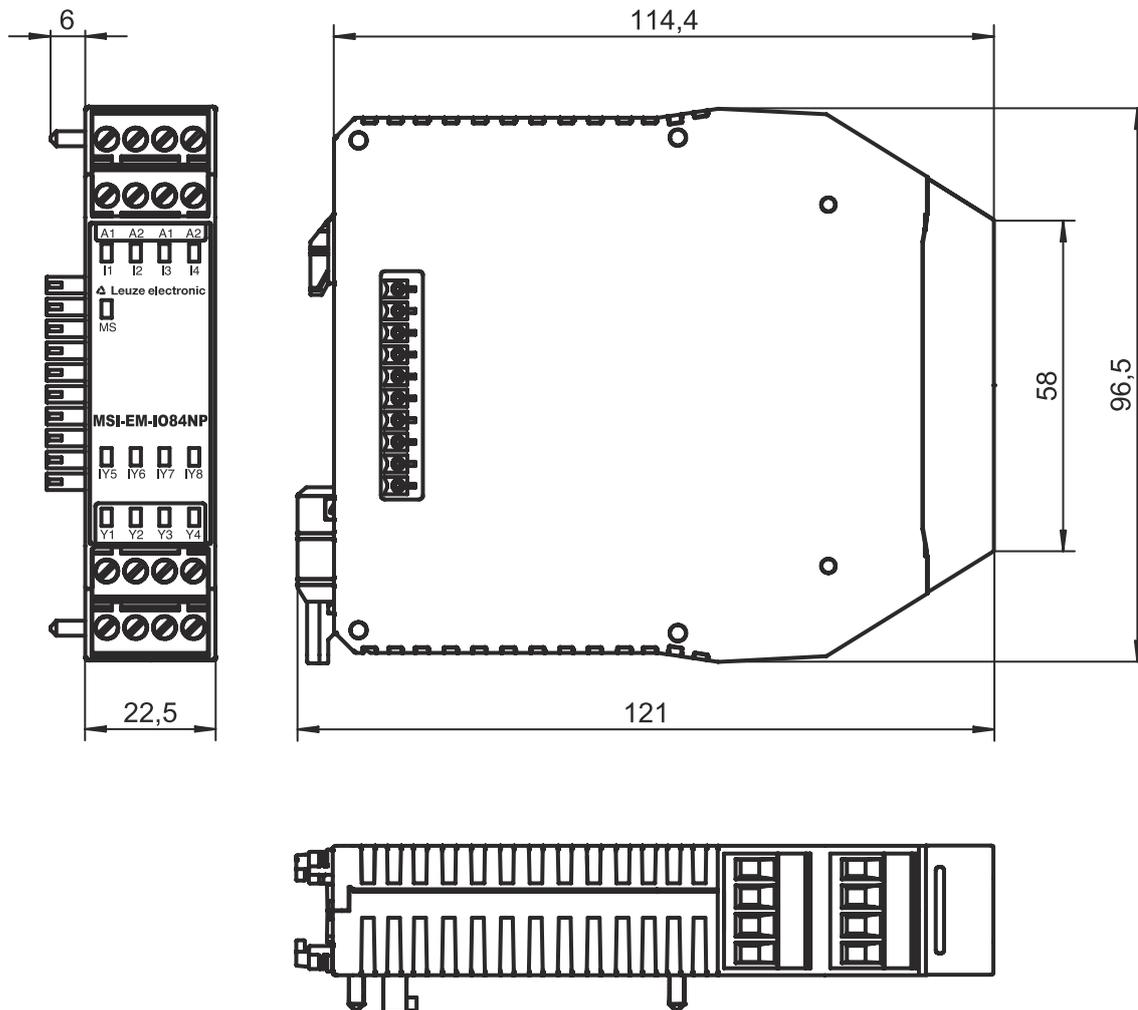
Degree of protection	IP 20 (terminals) IP 40 (housing)
Protection class	III
Approvals	c UL US
Vibration resistance	5 ... 150 Hz
Test procedure for oscillation in accordance with standard	EN 60068-2-6
Shock resistance, single shock	30 g, 11 ms, EN 60068-2-27

### Classification

Customs tariff number	85371091
ECLASS 5.1.4	27242204
ECLASS 8.0	27242204
ECLASS 9.0	27242204
ECLASS 10.0	27242204
ECLASS 11.0	27242204
ECLASS 12.0	27242204
ECLASS 13.0	27242204
ECLASS 14.0	27242204
ECLASS 15.0	27242204
ECLASS 16.0	27242204
ETIM 5.0	EC001419
ETIM 6.0	EC001419
ETIM 7.0	EC001419
ETIM 8.0	EC001419
ETIM 9.0	EC001419
ETIM 10.0	EC001419

# Dimensioned drawings

All dimensions in millimeters



## Electrical connection

### Connection 1

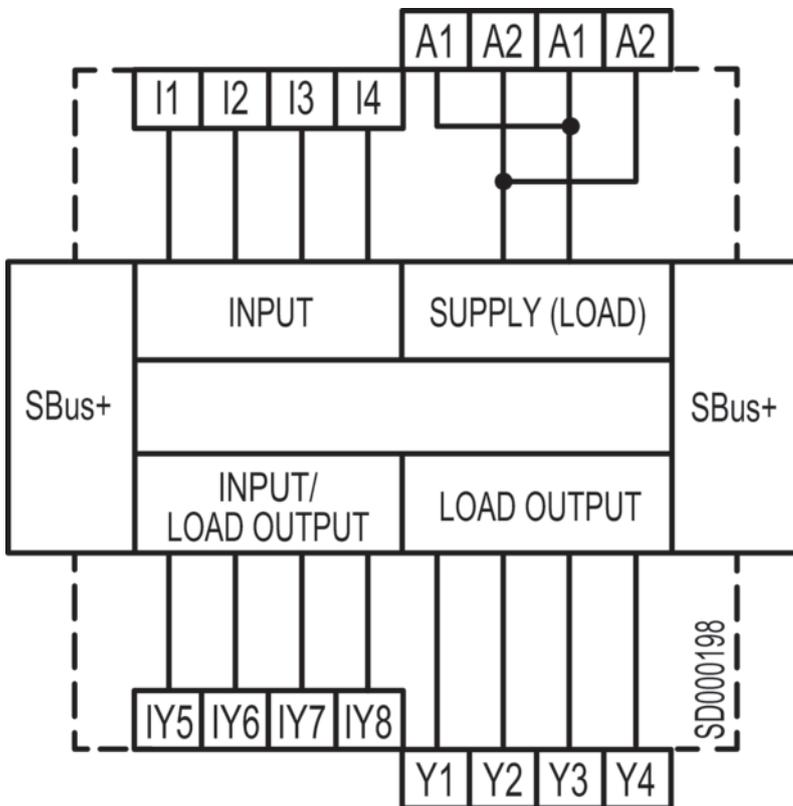
Function	Signal IN Signal OUT Voltage supply
Type of connection	Terminal
Type of terminal	Screw terminal
No. of pins	16 -pin

Terminal	Assignment
A1	+24 V
A1	+24 V
A2	GND
A2	GND
I1	Input
I2	Input

# Electrical connection

Terminal	Assignment
I3	Input
I4	Input
IY5	Input/output (configurable)
IY6	Input/output (configurable)
IY7	Input/output (configurable)
IY8	Input/output (configurable)
Y1	Output
Y2	Output
Y3	Output
Y4	Output

## Circuit diagrams



## Notes

**Observe intended use!**

	<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>
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