



**Part no.: 50132998**  
**MSI-EM-IO84NP-03**  
**Non-safe I/O module**



Figure can vary

## Contents

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## Technical data

<b>Basic data</b>	
Series	MSI-EM
Application	Processing of non-safe signals
Number of safe I/Os	4 IN, 4 OUT, 4 programmable I/O
<b>Functions</b>	
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
<b>Characteristic parameters</b>	
Mission time $T_M$	20 years , EN ISO 13849-1
<b>Electrical data</b>	
<b>Performance data</b>	
Supply voltage $U_B$	24 V , DC , -30 ... 25 %
Power consumption, max.	0.5 W
<b>Output circuit</b>	
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
<b>Control circuit</b>	
Number of inputs	4 Piece(s)
Voltage permitted at the input	30 V
Input current at signal 1	3 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 Signal OUT Voltage supply
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)

**Mechanical data**

Dimension (W x H x L)	22.5 mm x 107 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**

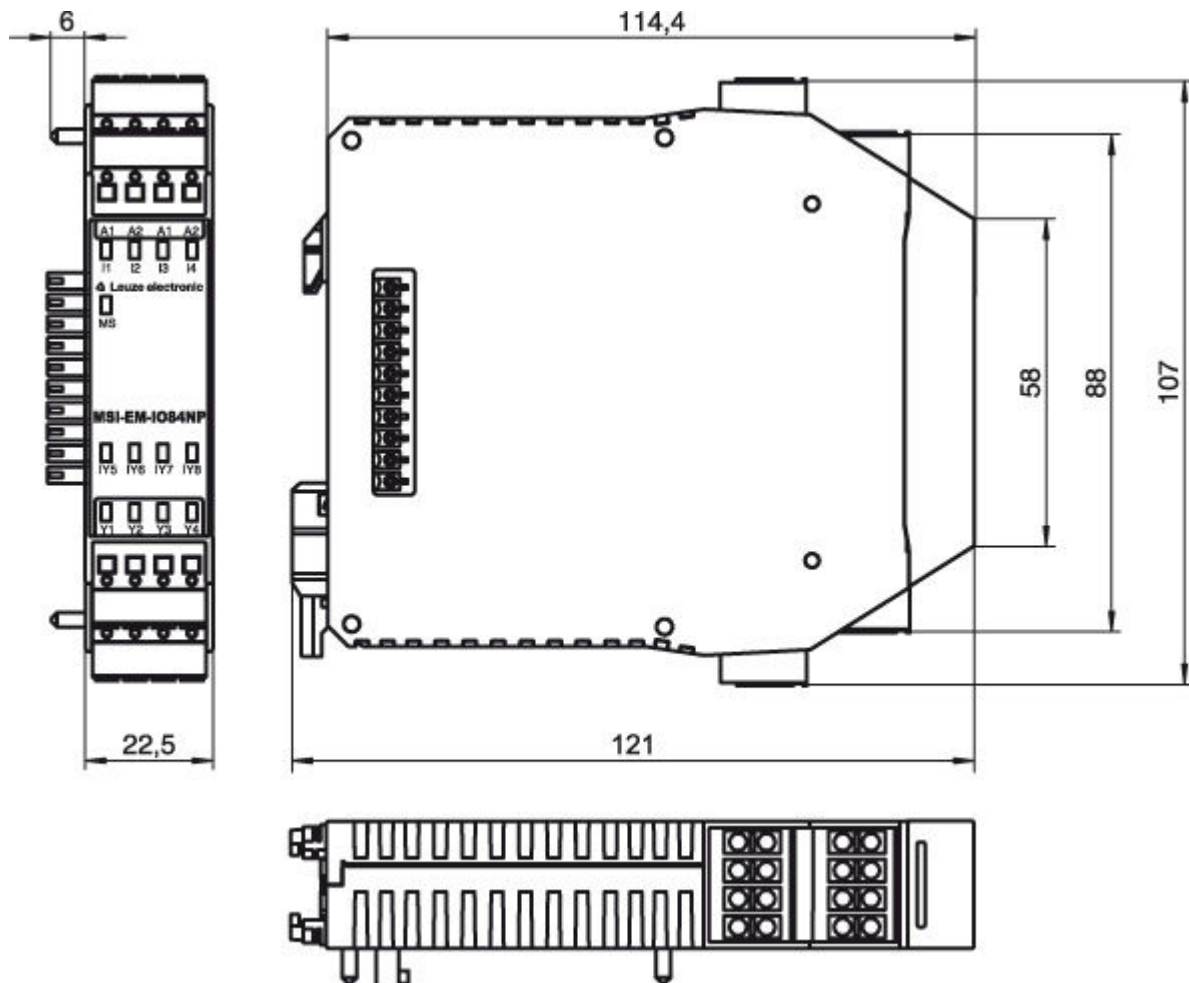
Degree of protection	IP 20 (terminals) IP 40 (housing)
Protection class	III
Certifications	c UL US
Vibration resistance	5 ... 150 Hz
Test procedure for oscillation in accordance with standard	EN 60068-2-6
Shock resistance, single shock	30 g, 11 ms, EN 60068-2-27

**Classification**

Customs tariff number	85371091
eCl@ss 8.0	27242204
eCl@ss 9.0	27242204
ETIM 5.0	EC001419
ETIM 6.0	EC001419

## Dimensioned drawings

All dimensions in millimeters



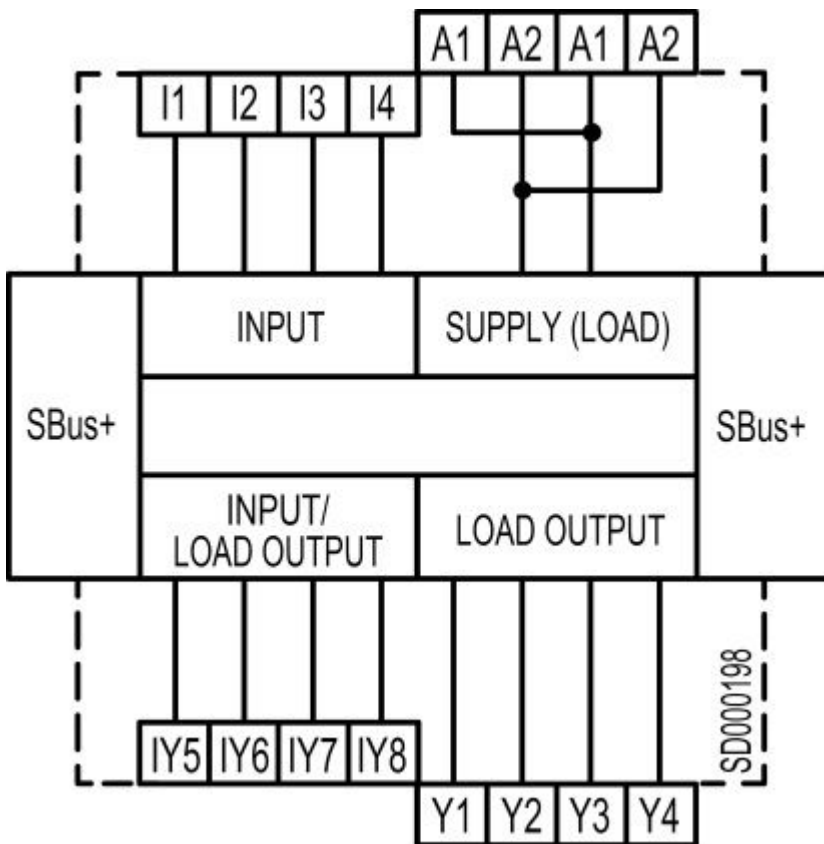
## Electrical connection

Connection 1	
Type of connection	Terminal
Function	Signal IN Signal OUT Voltage supply
Type of terminal	Spring-cage terminal
No. of pins	16 -pin

Terminal	Assignment
A1	+24V
A1	+24V
A2	GND
A2	GND
I1	Input
I2	Input
I3	Input
I4	Input
IY5	Input/output (configurable)
IY6	Input/output (configurable)
IY7	Input/output (configurable)

Terminal	Assignment
IY8	Input/output (configurable)
Y1	Output
Y2	Output
Y3	Output
Y4	Output

## 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.