

## Technical data sheet

### Safety relay

Part no.: 50133026

MSI-SR-CM43-01

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For illustration purposes only



## Technical data

### Basic data

Series	MSI-SR-CM43
Application	Extension unit for safety relays

### Functions

Functions	Monitoring of proximity switches
Restart	Automatic

### Characteristic parameters

SILCL	3, IEC/EN 62061
Performance Level (PL)	e, EN ISO 13849-1
MTTF <sub>d</sub>	55 years, EN ISO 13849-1
PFH <sub>d</sub>	8,1E-10 per hour
Mission time T <sub>M</sub>	20 years, EN ISO 13849-1
Category	4, EN ISO 13849-1
B10 <sub>a</sub> at DC13 (inductive load)	300,000 number of cycles, (5 A, 230 V), 700,000 (1 A, 230 V)
B10 <sub>a</sub> at AC15 (inductive load)	200,000 number of cycles, (5 A, 230 V), 380,000 (1 A, 230 V)
Note	Depending on the base device, see operating instructions for details.

### Electrical data

<b>Performance data</b>	
Supply voltage U <sub>B</sub>	24 V, DC, -20 ... 20 %
<b>Supply circuit</b>	
Nominal frequency	50 ... 60 Hz
Operating voltage	0.85 ... 1.1 x U <sub>N</sub>
Rated power AC	3.3 V·A
Rated power DC	1.5 W
<b>Output circuit</b>	
Number of outputs, safety-oriented, non-delayed, contact-based	4 Piece(s)
Number of outputs, signaling function, non-delayed, contact-based	3 Piece(s)
Contact material	Ag alloy, gold-plated
Usage category AC-15 (NO contact)	Ue 230V, Ie 5A
Usage category DC-13 (NO contact)	Ue 24V, Ie 5A
Short circuit protection (NO contact)	gG class safety fuse 6A, melting integral
Max. total current I <sup>2</sup> of all current paths	25 A <sup>2</sup>
Mechanical life time	100,000,000 switching cycles
<b>Control circuit</b>	
Max. cable resistance, per channel	≤ (5 + (1.176 x U <sub>B</sub> / U <sub>N</sub> - 1) x 100) Ω

### Connection

Number of connections	1 Piece(s)
<b>Connection 1</b>	
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 114 mm
Net weight	200 g
Housing color	Gray
Type of fastening	Snap-on mounting

### Environmental data

Ambient temperature, operation	-25 ... 55 °C
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### Certifications

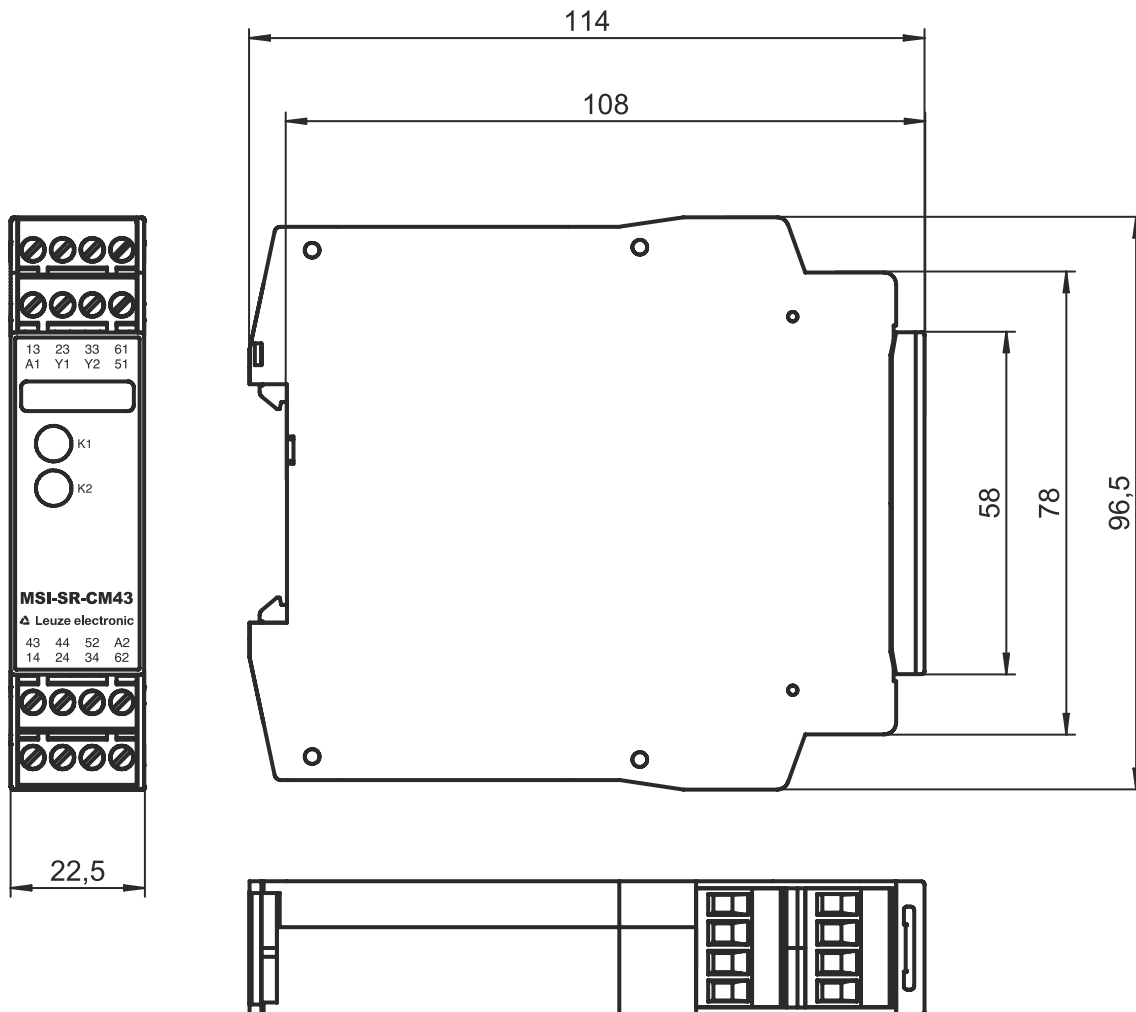
Approvals	c UL US TÜV Rheinland
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### Classification

Customs tariff number	85364190
ECLASS 5.1.4	27371800
ECLASS 8.0	27371819
ECLASS 9.0	27371819
ECLASS 10.0	27371819
ECLASS 11.0	27371819
ECLASS 12.0	27371819
ECLASS 13.0	27371819
ECLASS 14.0	27371819
ECLASS 15.0	27371819
ECLASS 16.0	27371819
ETIM 5.0	EC001449
ETIM 6.0	EC001449
ETIM 7.0	EC001449
ETIM 8.0	EC001449
ETIM 9.0	EC001449
ETIM 10.0	EC001449
UNSPSC 26.08	32151800

# Dimensioned drawings

All dimensions in millimeters



## Electrical connection

### Connection 1

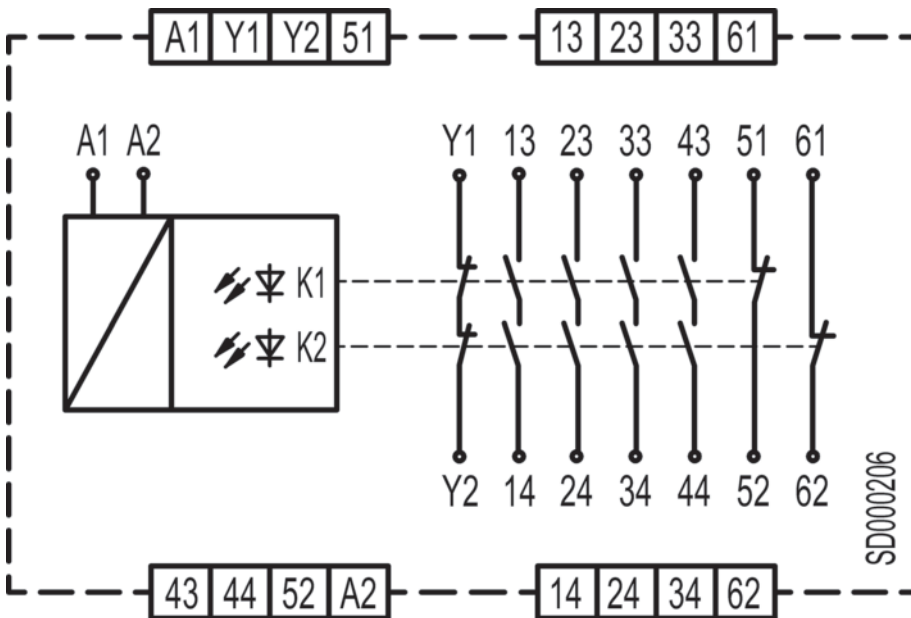
<b>Function</b>	Signal IN Signal OUT Voltage supply
<b>Type of connection</b>	Terminal
<b>Type of terminal</b>	Screw terminal
<b>No. of pins</b>	16 -pin

Terminal	Assignment
13	Release current path 1 (NO contact)
14	Release current path 1 (NO contact)
23	Release current path 2 (NO contact)
24	Release current path 2 (NO contact)
33	Release current path 3 (NO contact)
34	Release current path 3 (NO contact)


## Electrical connection

Terminal	Assignment
43	Release current path 4 (NO contact)
44	Release current path 4 (NO contact)
51	Signaling current path 1 (NC contact)
52	Signaling current path 1 (NC contact)
61	Signaling current path 2 (NC contact)
62	Signaling current path 2 (NC contact)
A1	+24 V
A2	GND
Y1	Feedback path (NC contact) for the coupling to the base device
Y2	Feedback path (NC contact) for the coupling to the base device

## 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.