



Part no.: 50133027
MSI-SR-CM43-03
Safety relay



Figure can vary

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Part no.: 50133027 – MSI-SR-CM43-03 – Safety relay

Technical data

Basic data	
Series	MSI-SR-CM43
Application	Extension unit for safety relays
Functions	
Functions	Monitoring of proximity switches
Restart	Automatic
Characteristic parameters	
SIL	2 , IEC 61508
SILCL	2 , IEC/EN 62061
Performance Level (PL)	d , EN ISO 13849-1
MTTF _d	55 years , EN ISO 13849-1
PFH _D	8,1E-10 per hour
Mission time T _M	20 years , EN ISO 13849-1
Category	3 , EN ISO 13849
B10 _d at DC13 (inductive load)	300,000 number of cycles , (5 A, 230 V), 700,000 (1 A, 230 V)
B10 _d at AC15 (inductive load)	200,000 number of cycles , (5 A, 230 V), 380,000 (1 A, 230 V)
Electrical data	
Supply circuit	
Nominal voltage U _N	24 V DC
Nominal frequency	50 ... 60 Hz
Operating voltage	0.85 ... 1.1 x U _N
Rated power AC	3.3 V·A
Rated power DC	1.5 W
Output circuit	
Number of outputs, safety-oriented, undelayed, contact-based	4 Piece(s)
Number of outputs, signaling function, undelayed, 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 ² of all current paths	25 A ²
Mechanical life time	100,000,000 switching cycles
Control circuit	
Max. cable resistance, per channel	≤ (5 + (1.176 x U _B / U _N - 1) x 100) Ω
Connection	
Number of connections	1 Piece(s)
Connection 1	
Type of connection	Terminal
Function	Signal IN Signal OUT Voltage supply
Type of terminal	Spring-cage terminal
No. of pins	16 -pin

Part no.: 50133027 – MSI-SR-CM43-03 – Safety relay**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
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Mechanical data

Dimension (W x H x L)	22.5 mm x 106.5 mm x 114 mm
Net weight	200 g
Housing color	Gray
Type of fastening	Snap-on mounting

Certifications

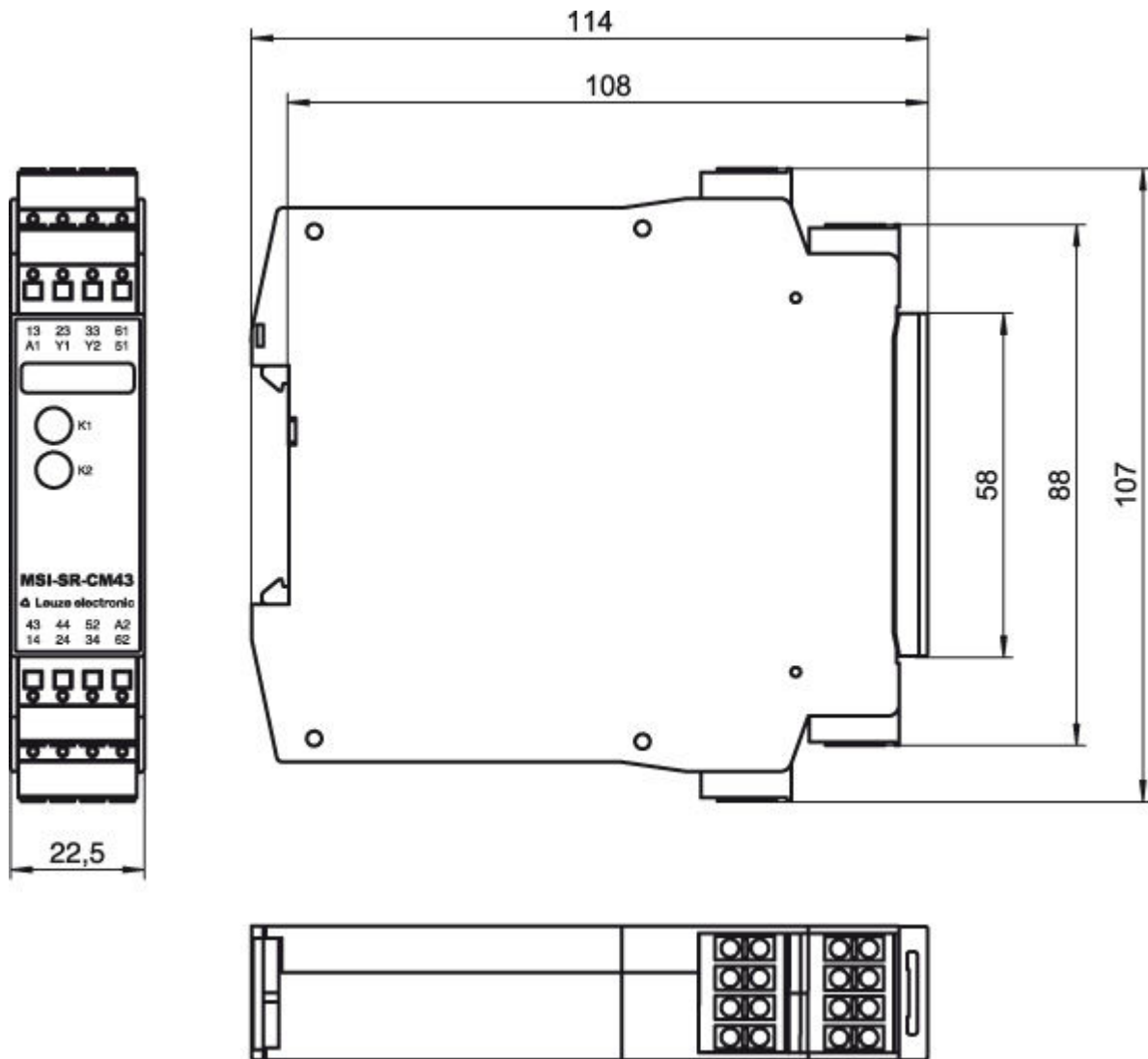
Certifications	c UL US TÜV Rheinland
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Classification

Customs tariff number	85364900
eCl@ss 8.0	27371819
eCl@ss 9.0	27371819
ETIM 5.0	EC001449
ETIM 6.0	EC001449

Dimensioned drawings

All dimensions in millimeters



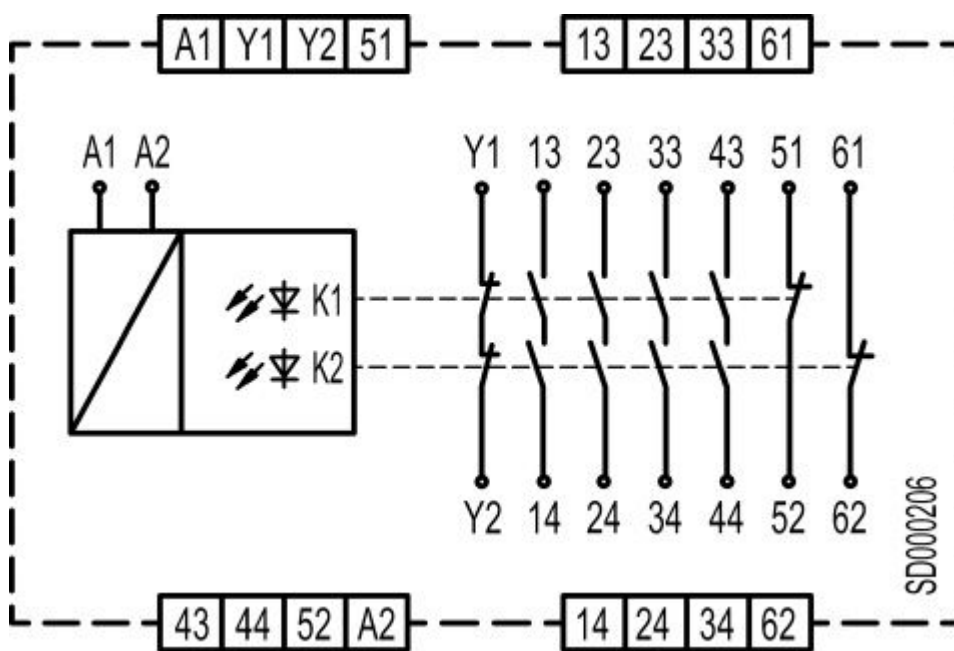
Electrical connection

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
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)
43	Release current path 4 (NO contact)
44	Release current path 4 (NO contact)

Terminal	Assignment
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	+24V
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.