

Technical data sheet

Safety relay

Part no.: 50133013

MSI-SR-CM32-03

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For illustration purposes only



Technical data

Basic data

Series	MSI-SR-CM32
Application	Extension unit for base devices in safety applications

Functions

Functions	Monitoring of proximity switches
Restart	Automatic

Characteristic parameters

PFH _D	3,5E-10 per hour
Mission time T _M	20 years, EN ISO 13849-1
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 DC	1.2 W
Galvanic isolation between supply and control circuit	No
Output circuit	
Number of outputs, safety-oriented, undelayed, contact-based	3 Piece(s)
Number of outputs, signaling function, undelayed, contact-based	2 Piece(s)
Release current paths	NO
Signaling current paths	NC
Contact material	Ag alloy, gold-plated
Usage category AC-15 (NO contact)	Ue 230V, Ie 3A
Usage category DC-13 (NO contact)	Ue 24V, Ie 2,5A
Short circuit protection (NO contact)	gG class safety fuse 6A, melting integral
Nominal switching voltage, release current paths AC	230 V
Nominal switching voltage, signaling current paths AC	230 V
Max. thermal continuous current I _{th} , release current paths	6 A
Max. thermal continuous current I _{th} , signaling current paths	2 A
Max. total current I ² of all current paths	9 A ²
Mechanical life time	100,000,000 switching cycles
Control circuit	
Input current at the control inputs (safety circuit/reset circuit)	50 mA
Max. peak current at the control inputs (safety circuit/reset circuit)	500 mA
Max. cable resistance, per channel	≤ (5 + (1.6 x U _B / U _N - 1) x 100) Ω
Response time (manual start t _{A1})	40 ms
Test pulse time permitted t _{TP}	1 ms
Release time t _R	20 ms
Recovery time t _w	40 ms

Connection

Number of connections	1 Piece(s)
Connection 1	
Function	Signal IN
	Signal OUT
	Voltage supply
Type of connection	Terminal
Type of terminal	Spring-cage terminal
No. of pins	14 -pin
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

Mechanical data

Dimension (W x H x L)	22.5 mm x 107 mm x 114 mm
Net weight	210 g
Housing color	Gray
Type of fastening	Snap-on mounting

Certifications

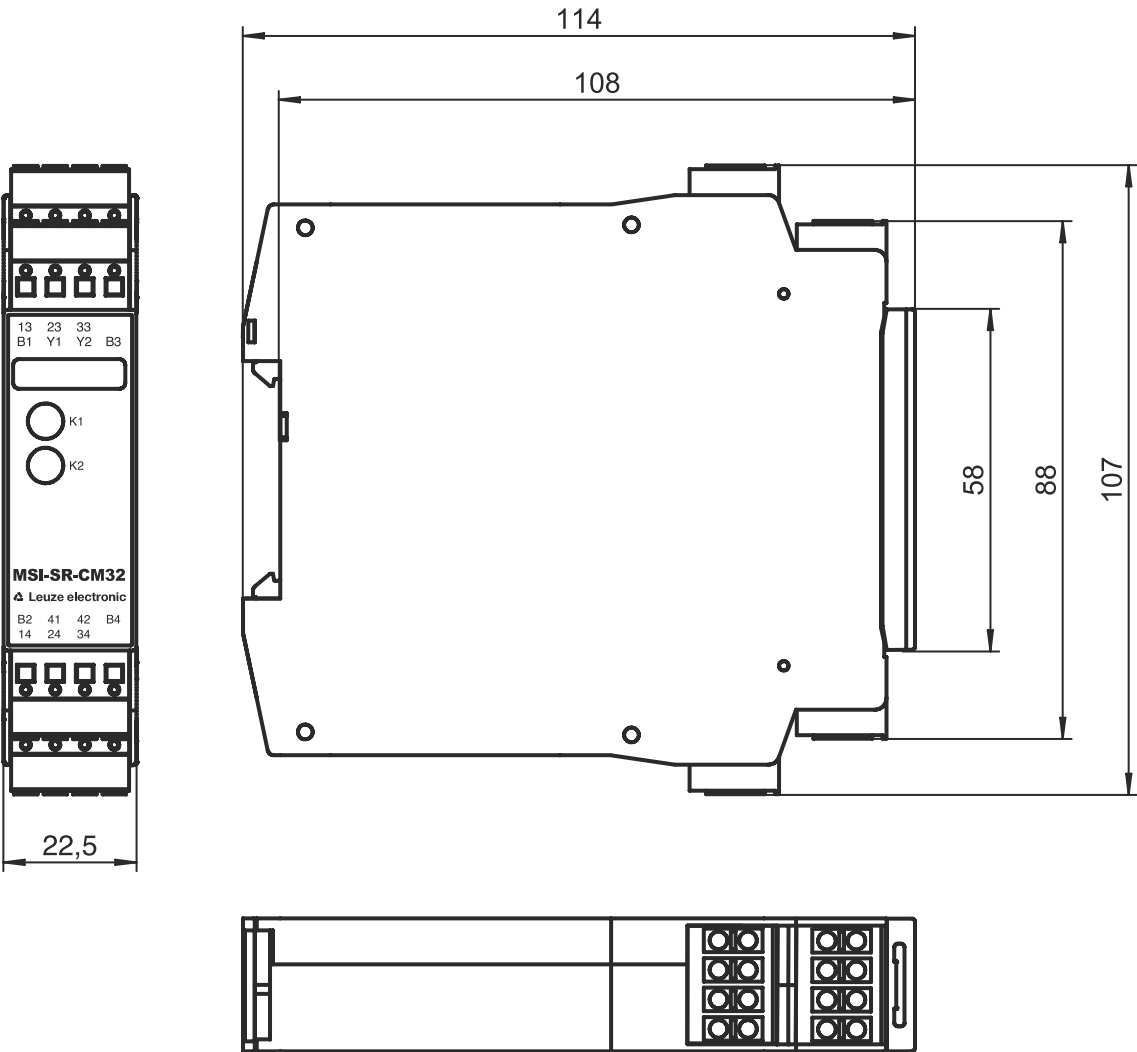
Certifications	c UL US
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Classification

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
ETIM 5.0	EC001449
ETIM 6.0	EC001449
ETIM 7.0	EC001449
ETIM 8.0	EC001449
ETIM 9.0	EC001449

Dimensioned drawings

All dimensions in millimeters



Electrical connection

Connection 1

Function	Signal IN
	Signal OUT
	Voltage supply
Type of connection	Terminal
Type of terminal	Spring-cage terminal
No. of pins	14 -pin

Terminal

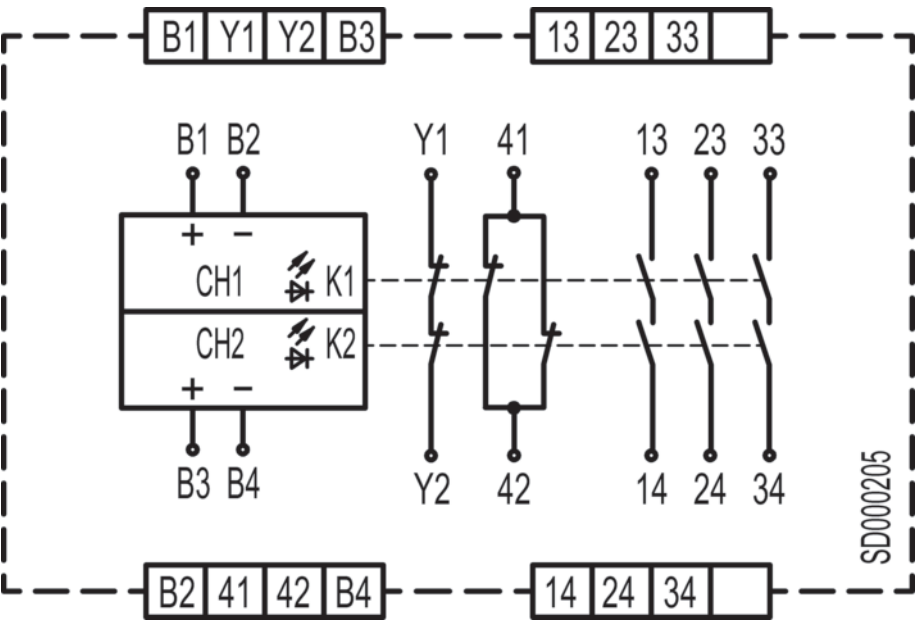
Assignment

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)

Electrical connection

Terminal	Assignment
34	Release current path 3 (NO contact)
41	Signaling current path (NC contact)
42	Signaling current path (NC contact)
B1	Control circuit 1
B2	Control circuit 1
B3	Control circuit 2
B4	Control circuit 2
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.