

Technical data sheet

Safety relay

Part no.: 547934

MSI-CM52B-02

Contents

- Technical data
- Electrical connection
- Operation and display



Figure can vary



Technical data

Basic data

| | |
|--------|--------|
| Series | MSI-CM |
|--------|--------|

Functions

| | |
|-----------|--|
| Functions | Contact extension for E-stop relays and two-hand control units |
| Restart | Automatic |

Characteristic parameters

| | |
|---|---------------------------|
| SIL | 3, IEC 61508 |
| SILCL | 3, IEC/EN 62061 |
| Performance Level (PL) | e, EN ISO 13849-1 |
| MTTF _d | 262 years, EN ISO 13849-1 |
| PFH _D | 0.000000001 per hour |
| PFH _{D, nop = 8766} | 0.00000000102 per hour |
| Mission time T _M | 20 years, EN ISO 13849-1 |
| Category | 4, EN ISO 13849 |
| STOP category | 0, IEC/EN 60204-1 |
| B10 _d at AC15 (inductive load) | 230,000 number of cycles |

Electrical data

| | |
|--------------------|------------------------|
| Protective circuit | Overvoltage protection |
|--------------------|------------------------|

Connection

| | |
|-----------------------|------------|
| Number of connections | 1 Piece(s) |
|-----------------------|------------|

Connection 1

| | |
|--------------------|--|
| Function | Connection to device Voltage supply |
| Type of connection | Terminal |
| Type of terminal | Spring-cage terminal |
| No. of pins | 16 -pin |

Cable properties

| | |
|---------------------------|--|
| Connection cross sections | 1 x 0.2 to 2.5 mm ² , wire 1 x 0.2 to 2.5 mm ² , wire |
|---------------------------|--|

Mechanical data

| | |
|-----------------------------|-----------------------------------|
| Dimension (W x H x L) | 22.5 mm x 99 mm x 114.5 mm |
| Housing material | Plastic |
| Plastic housing | Unreinforced polyamide PA |
| Electrical contact material | AgSnO ₂ , gold flashed |
| Net weight | 231 g |
| Housing color | Gray |
| Type of fastening | Snap-on mounting |
| Mechanical life time | 100,000,000 actuation cycles |

Operation and display

| | |
|-----------------|------------|
| Type of display | LED |
| Number of LEDs | 1 Piece(s) |

Environmental data

| | |
|--------------------------------|---------------|
| Ambient temperature, operation | -20 ... 55 °C |
| Ambient temperature, storage | -40 ... 70 °C |

Certifications

| | |
|----------------------|--------------------------------------|
| Degree of protection | IP 20 (terminals) IP 40 (housing) |
| Certifications | c UL TÜV Rheinland UL |

Classification

| | |
|-----------------------|----------|
| Customs tariff number | 85371098 |
| eCl@ss 5.1.4 | 27371800 |
| eCl@ss 8.0 | 27371819 |
| eCl@ss 9.0 | 27371819 |
| eCl@ss 10.0 | 27371819 |
| eCl@ss 11.0 | 27371819 |
| ETIM 5.0 | EC001449 |
| ETIM 6.0 | EC001449 |
| ETIM 7.0 | EC001449 |

Electrical connection

Connection 1

| | |
|--------------------|--|
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Pin Pin assignment

| | |
|---|--|
| | A1 |
| 1 | +24V |
| | A2 |
| 2 | GND |
| | 11 |
| 3 | External device monitoring circuit (EDM) |
| | 12 |
| 4 | External device monitoring circuit (EDM) |
| | 23 |
| 5 | Release circuit |

Electrical connection

| Pin | Pin assignment |
|-----|-------------------|
| | 24 |
| 6 | Release circuit |
| | 71 |
| 7 | Signal contact IN |
| | 72 |
| 8 | Signal contact IN |
| | 33 |
| 9 | Release circuit |
| | 34 |
| 10 | Release circuit |
| | 43 |
| 11 | Release circuit |
| | 44 |
| 12 | Release circuit |
| | 53 |
| 13 | Release circuit |
| | 54 |
| 14 | Release circuit |
| | 63 |
| 15 | Release circuit |
| | 64 |
| 16 | Release circuit |

Operation and display

| LED | Display | Meaning |
|-----|-------------------------|-------------------|
| 1 | Green, continuous light | Supply voltage on |