

Datasheet

Art.No. R1.188.3840.0

Device for monitoring of safety-related circuits

Base unit also for elevators EN 81-1/2 and heaters EN50156-1 single-channel or two-channel control, automatic or manual reset with monitoring, cross circuit monitoring, synchronous time monitoring 0,5s, 3 enabling current paths, 1 signalling output, AC/DC 115-230 V, screw-terminals pluggable



| | |
|------------|---------------|
| Art.No. | R1.188.3840.0 |
| EAN | 4049088143618 |
| Order unit | 1 pieces |

Approvals



Technical data

General

| | |
|--|--|
| Function display | 3 LED, green |
| Creepage distances and clearances between the circuits | EN 60664-1 |
| Protection degree according to DIN EN 60529 (housing) | IP40 |
| Protection degree according to DIN EN 60529 (terminals) | IP20 |
| Ambient temperature min. | -25 °C |
| Ambient temperature max. | 65 °C |
| Wire ranges screw terminals, fine-stranded / solid | 1 x 0,14 mm ² - 2,5 mm ² / 2 x 0,14 mm ² - 0,75 mm ² |
| Wire ranges screw terminals, fine-stranded with ferrules | 1 x 0,25 mm ² - 2,5 mm ² / 2 x 0,25 mm ² - 0,5 mm ² |
| Permissible torque min. | 0.5 Nm |
| Permissible torque max. | 0.6 Nm |
| Tightening moment | 0.6 Nm |
| Wire range cage clamp terminals | 2 x 0,25mm ² - 1,5mm ² |
| Weight | 0.2 kg |
| Standards | EN ISO 13849-1;EN 62061;EN 81-1;EN 50156-1 |
| Suited for safety functions | Yes |
| Category according to EN ISO 13849-1 | 4 |
| Muting possible | No |
| Feedback circuit | Yes |
| Start contact | Yes |
| Performance level acc. to EN ISO 13849-1 | e |
| Rail mounting possible | Yes |

Connection Data

| | |
|-------------------|-----|
| Detachable clamps | Yes |
|-------------------|-----|

| | |
|-----------------------------|------------------|
| Type of electric connection | Screw connection |
|-----------------------------|------------------|

Application

| | |
|--|--------------|
| Model | Basic device |
| Suitable for monitoring of magnetic switches | Yes |
| Suitable for monitoring of proximity switches | Yes |
| Suitable for monitoring of emergency-stop circuits | Yes |
| Suitable for monitoring of optoelectronic protection equipment | Yes |
| Suitable for monitoring of position switches | Yes |

Output circuit

| | |
|--|----------------------------------|
| Enabling paths | 3 |
| Signaling paths | 1 |
| Contact material | Ag-alloy, gold-plated |
| Max. thermal current I _{th} , enabling paths | 6 A |
| Max. thermal current I _{th} , signaling paths | 2 A |
| Max. total current I ₂ of all current path | 25 A ² |
| Application category AC-15 (NO) | Ue 230V, Ie 3A |
| Application category DC-13 (NO) | Ue 24V, Ie 5A |
| Short-circuit protection (NO), max. fuse insert | 6 A class gG fuse, fuse integral |
| Mechanical life | 10 ⁷ switching cycles |

Control circuit

| | |
|--|---|
| Nominal output voltage DC | 22.5 V |
| Input current (safety circuit / reset circuit) | 25 mA |
| max. peak current (safety circuit / reset circuit) | 100 mA |
| Response time t _{A1} | 250 ms |
| Response time t _{A2} | 250 ms |
| Min. switch-on time | 60 ms |
| Recovery time t _W | 120 ms |
| Release time t _R | 20 ms |
| Synchronous time t _S | 0.5 s |
| Permissible test pulse time t _{TP} | 0.8 ms |
| max. resistivity, per channel | ≤ (5 + (1,176 × U _B / U _N - 1) × 100) Ω |
| Type of switch function of the inputs | Normally open contact |
| Evaluation inputs | 2-channel |

Supply circuit

| | |
|---|--|
| Nominal voltage U _N | AC 115-230 V |
| Rated consumption AC | 4 VA |
| Rated frequency min. | 50 Hz |
| Rated frequency max. | 60 Hz |
| Operating voltage min. | 97 V |
| Operating voltage max. | 253 V |
| Electrical isolation supply circuit - control circuit | yes (at U _N = AC 115-230 V) |

Dimensions

| | |
|--------|---------|
| Depth | 114 mm |
| Width | 22.5 mm |
| Height | 96.5 mm |