

Datasheet

Art.No. R1.188.0500.1

Device for monitoring of safety-related circuits SNO4003K-A
AC/DC 24V (B)

Base unit, single channel control, automatic-/ manual reset with reset switch
monitoring, 3 enabling current paths, 1 signalling out put, AC/DC 24 V 50-60Hz,
screw-terminals pluggable



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| Art.No. | R1.188.0500.1 |
| EAN | 4015573808348 |
| Order unit | 1 pieces |

Approvals



Technical data

General

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|--|--|
| Function display | 2 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. | 55 °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 |
| Suited for safety functions | Yes |
| Category according to EN ISO 13849-1 | 2 |
| Muting possible | No |
| Feedback circuit | Yes |
| Start contact | Yes |
| Performance level acc. to EN ISO 13849-1 | d |
| SIL according to IEC 62061 | 2 |
| Stop category acc. to IEC 60204 | |
| Rail mounting possible | Yes |

Connection Data

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|-----------------------------|------------------|
| Detachable clamps | Yes |
| Type of electric connection | Screw connection |

Application

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|--|--------------|
| Model | Basic device |
| Suitable for monitoring of magnetic switches | No |
| Suitable for monitoring of proximity switches | Yes |
| Suitable for monitoring of emergency-stop circuits | Yes |
| Suitable for monitoring of optoelectronic protection equipment | No |
| Suitable for monitoring of position switches | Yes |
| Suitable for monitoring of valves | No |

Output circuit

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|--|----------------------------------|
| Enabling paths | Normally open contact |
| Signaling paths | Opener |
| Contact material | Ag-alloy, gold-plated |
| Rated switching voltage, enabling paths AC | 230 V |
| Rated switching voltage, signaling paths AC | 230 V |
| Max. thermal current I _{th} , enabling paths | 8 A |
| Max. thermal current I _{th} , signaling paths | 5 A |
| Max. total current I _z of all current path | 9 A ² |
| Application category AC-15 (NO) | Ue 230V, Ie 5A |
| 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 | 107 switching cycles |
| Outputs, signalling function, undelayed, with contact | 1 |
| Outputs, signalling function, delayed, with contact | 0 |
| Outputs, safe, undelayed, with contact | 3 |
| Outputs, safe, delayed, with contact | 0 |

Control circuit

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| Nominal output voltage DC | 24 V |
| Input current (safety circuit / reset circuit) | 90 mA |
| max. peak current (safety circuit / reset circuit) | 1500 mA |
| Response time t _{A2} | 60 ms |
| Min. switch-on time | 60 ms |
| Recovery time t _W | 200 ms |
| Release time t _R | 60 ms |
| max. resistivity, per channel | ≤ (5 + (1,333 × U _B / U _N - 1) × 200) Ω |
| Evaluation inputs | 1-channel |

Supply circuit

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| Nominal voltage U _N | AC/DC 24 V |
| Rated consumption DC | 1.3 W |
| Rated frequency min. | 50 Hz |
| Rated frequency max. | 60 Hz |
| Operating voltage min. | 0.8 V |
| Operating voltage max. | 1.1 V |
| Electrical isolation supply circuit - control circuit | yes (at U _N = AC 115-120 V, AC 230 V) |
| Min. rated control supply voltage at AC 50 Hz | 20.4 V |
| Max. rated AC voltage for controls, 50 Hz | 26.4 V |
| Min. rated DC voltage for controls | 20.4 V |
| Max. rated DC voltage for controls | 26.4 V |
| Min. rated control supply voltage at DC | 20.4 V |

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| Rated control supply voltage at AC 60HZ | 20.4 V |
| Rated control supply voltage at AC 50HZ | 26.4 V |

Dimensions

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

Classification

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| ECLASS 8.1 | 27371819: Device for monitoring of safety-related circuits |
| ETIM 5.0 | EC001449: Device for monitoring of safety-related circuits |
| ETIM 4.0 | EC001449: Device for monitoring of safety-related circuits |
| ETIM 3.0 | EC001449: Emergency-stop relay |

Drawings

