## Datasheet

Art.No. R1.188.1860.0

Device for monitoring of safety-related circuits SNA4044K-A AC/DC 24V (A)

Base unit also for elevators EN 81-20/50 and heaters EN50156-1 single- channel or two-channel control, automatic reset without reset switch monitoring, cross circuit monitoring, 4 enabling current paths, AC/DC $24 \mathrm{~V} 50-60 \mathrm{~Hz}$, screwterminals pluggable


| Art.No. | R1.188.1860.0 |
| :--- | :--- |
| EAN | 4046521294029 |
| 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. | $-25^{\circ} \mathrm{C}$ |
| Ambient temperature max. | $65^{\circ} \mathrm{C}$ |
| Wire ranges screw terminals, fine-stranded / solid | $1 \times 0,2 \mathrm{~mm}^{2}-2,5 \mathrm{~mm}^{2} / 2 \times 0,2 \mathrm{~mm}^{2}-1,0 \mathrm{~mm}^{2}$ |
| Wire ranges screw terminals,fine-stranded with ferrules | $1 \times 0,25 \mathrm{~mm}^{2}-2,5 \mathrm{~mm}^{2} / 2 \times 0,25 \mathrm{~mm}^{2}-1,0 \mathrm{~mm}^{2}$ |
| Permissible torque min. | 0.5 Nm |
| Permissible torque max. | 0.6 Nm |
| Tightening moment | 0.6 Nm |
| Weight | 0.21 kg |
| Standards | $\mathrm{EN} \mathrm{ISO} \mathrm{13849-1EN} \mathrm{62061} ,\mathrm{EN} \mathrm{81-1EN} \mathrm{50156-1;} \mathrm{EN} \mathrm{62061;} \mathrm{EN} \mathrm{81-1;} \mathrm{EN}$ |
| Suited for safety functions | $50156-1$ |
| Category according to EN ISO 13849-1 | Yes |
| With muting function | 4 |
| Feedback circuit | No |
| Start contact | Yes |
| Performance level acc. to EN ISO 13849-1 | Yes |
| SIL according to IEC 62061 | Level e |
| Stop category acc. to IEC 60204 | 3 |
| 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 | Normally open contact |
| :--- | :--- |
| Signaling paths | Opener |
| Contact material | Ag-alloy, gold-plated |
| Rated switching voltage, enabling paths AC | 230 V |
| Rated switching voltage, enabling paths DC | 24 V |
| Rated switching voltage, signaling paths AC | 230 V |
| Max. thermal current lth, enabling paths | 8 A |
| Max. total current I ${ }^{2}$ of all current path | $25 \mathrm{~A}^{2}$ |
| Application category AC-15 (NO) | Ue 230V, le 5A |
| Application category DC-13 (NO) | Ue 24V, le 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 | 0 |
| Outputs, signalling function, delayed, with contact | 0 |
| Outputs, safe, undelayed, with contact | 4 |
| Outputs, safe, delayed, with contact | 0 |

## Control circuit

| Nominal output voltage DC | 24 V |
| :--- | :--- |
| Input current (safety circuit / reset circuit) | 25 mA |
| max. peak current (safety circuit / reset circuit) | 100 mA |
| Response time tA1 | 350 ms |
| Response time tA2 | 350 ms |
| Min. switch-on time | 100 ms |
| Recovery time tW | 750 ms |
| Release time tR | 10 ms |
| Permissable test pulse time tTP | 1 ms |
| max. resistivity, per channel | $\leq(5+(1,176 \times$ UB / UN - 1) $\times 100) \Omega$ |
| Type of switch function of the inputs | Normally open contact |
| Evaluation inputs | 2-channel |

## Supply circuit

| Nominal voltage UN | AC/DC 24 V |
| :--- | :--- |
| Rated consumption AC | 2.9 VA |
| Rated consumption DC | 1.6 W |
| Rated frequency min. | 50 Hz |
| Rated frequency max. | 60 Hz |
| Electrical isolation supply circuit - control circuit | No |
| 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 |
| :--- | :--- |
| Rated control supply voltage at AC 60 HZ | 20.4 V |
| Rated control supply voltage at AC 50 HZ | 26.4 V |

Dimensions

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

## Classification

| ECLASS 8.1 | 27371819 |
| :--- | :--- |
| ETIM 6.0 | EC001449 |
| ETIM 5.0 | EC001449 |
| ETIM 4.0 | EC001449 |
| ETIM 3.0 | EC001449 |

