## Data sheet

## Commercial Art.No.: R1.188.0590.0

device for monitoring of safety-related circuits SNE4004K-A AC/DC 24V (A)
output expansion unit, 4 enabling current paths, 3 signalling outputs, AC/DC $24 \mathrm{~V} 50-$ 60 Hz , screw-terminals fixed


| Commercial Art.No. | R1.188.0590.0 |
| :--- | :--- |
| EAN | 4015573808645 |
| Order Unit | 1 |

certificates / approvals

## (CC) <br> c(14) us usted



## Technical data

general

| 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. | $-25^{\circ} \mathrm{C}$ |
| ambient temperature max. | $55^{\circ} \mathrm{C}$ |
| 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. | 0.6 Nm |
| permissible torque max. | 0.6 Nm |
| tightening moment | 0.2 kg |
| weight | EN ISO 13849-1EN 62061 |
| standards | yes |
| suitable for safety functions | yes |
| with muting function | no |
| feedback circuit | 0 |
| start contact | yes |
| stop category acc. to IEC 60204 |  |
| rail mounting possible |  |

## connection data

detachable clamps ye

## safety parameters

| category (ISO 13849-1) | 3 |
| :---: | :---: |
| PL (ISO 13849-1) | level d |
| SIL ${ }_{\text {CL }}$ (IEC 62061) | 2 |
| PFD ${ }_{\text {d }}$ (Low demand mode) | 3.2 E-6 |
| PFH ${ }_{d}$ (High demand mode) | 8.1 E-10 1/h |
| HFT | 1 |
| SSF | 99.5 \% |
| DC | 99 \% |
| MTTF $_{\text {d }}$ | 55 a |
| $\lambda S$ | 2075 FIT |
| $\lambda \mathrm{D}$ | 2075 FIT |
| $\lambda D U$ | 21 FIT |
| 入DD | 2054 FIT |
| $\mathrm{T}_{\mathrm{M}}$ | 20 a |
| proof test intervall (High demand mode) | 20 a |
| proof test intervall (Low demand mode) | 1 a |

application

| model | expansion device |
| :--- | :--- |
| suitable for monitoring of magnetic switches | no |
| suitable for monitoring of emergency-stop circuits | no |
| suitable for monitoring of optoelectronic protection equipment | no |
| suitable for monitoring of position switches | no |
| suitable for monitoring of tactile sensors | no |

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 |
| rated switching voltage, signaling paths DC | 24 V |
| max. thermal current Ith, enabling paths | 6 A |
| max. thermal current lth, signaling paths | 2 A |
| max. total current $\mathrm{I}^{2}$ of all current path | $40 \mathrm{~A}^{2}$ |
| application category AC-15 (NO) | Ue 230 V , 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 < $100 \mathrm{~A}^{2}$ s |
| mechanical life | $10^{7}$ switching cycles |
| outputs, signalling function, undelayed, with contact | 3 |
| outputs, signalling function, delayed, with contact | 0 |
| outputs, safe, undelayed, with contact | 4 |
| outputs, safe, delayed, with contact | 0 |

control circuit

| response time tA1 | 25 ms |
| :--- | :--- | :--- |
| response time tA2 | 25 ms |


| recovery time tW | $>40 \mathrm{~ms}$ |
| :--- | :--- |
| release time tR | $<20 \mathrm{~ms}$ |
| max. resistivity, per channel | $\leq(5+(1.176 \times \mathrm{UB} / \mathrm{UN}-1) \times 100) \Omega$ |

supply circuit

| nominal voltage UN | AC/DC 24 V |
| :--- | :--- |
| rated consumption AC | 3.3 VA |
| rated consumption DC | 1.6 W |
| rated frequency min. | 50 Hz |
| rated frequency max. | 60 Hz |
| operating voltage min. | 20.4 V |
| operating voltage max. | 26.4 V |
| 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 11 |  |
| :--- | :--- |
| ECLASS 8.1 | 27371819 |
| ETIM 9.0 | EC001449 |
| ETIM 8.0 | EC001449 |
| ETIM 7.0 | EC001449 |
| ETIM 6.0 | EC001449 |
| ETIM 5.0 | EC001449 |
| ETIM 4.0 | EC001449 |
| ETIM 3.0 | EC001449 |

product compliance

| ROHS conformity status | compliant/exempted |
| :--- | :--- |
| ROHS exceptions | III-6(c); III-7(c)I |
| REACH-SVHC conformity status | Duty-To-Declare |
| REACH-SVHC substances | Lead |
| REACH-SVHC CAS numbers | $7439-92-1$ |

 R1.188.3910.0 R1.188.3930.0 R1.188.4020.0 R1.188.4100.0 R1.188.4110.0 R1.188.4120.0 81.030.0100.0 81.030 .0101 .0 81.030.0110.0 81.030.0111.0


Weitere Angaben siehe KATALOG oder eKatalog
www. wieland-electric.com eshop.wieland-electric.com
ja/yes $\square$ Stoffverbots- und Deklarationsliste nach WN 5020.010 ist einzuhalten.
Conformity with Wieland document WN 5020.010 e (list of prohibited / declarable hazardous substances) to be declared!

| Freitoleranz nach General tolerance | CAD-Zeichnung, keine manuellen Ânderungen CAD-Drawing, no manual modifications allowed | 1. Verwendung: First Use: | Shee |
| :---: | :---: | :---: | :---: |



