

Data sheet

Commercial Art.No.: R1.188.3940.0

expansion device for basic devices in safety applications SNE4024K-C DC 24V

Output expansion unit, 2x2 enabling current paths, 2x1 signalling outputs, DC 24 V, push-in clamp-terminals pluggable



| | |
|--------------------|---------------|
| Commercial Art.No. | R1.188.3940.0 |
| EAN | 4049088167706 |
| Order Unit | 1 |

certificates / approvals



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 °C |
| ambient temperature max. | 65 °C |
| wire range cage clamp terminals | 2 x 0.25mm ² - 1.5mm ² |
| weight | 0.18 kg |
| standards | EN ISO 13849-1EN 62061; EN 62061 |
| suitable for safety functions | yes |
| with muting function | no |
| feedback circuit | yes |
| start contact | no |
| stop category acc. to IEC 60204 | 0 |
| rail mounting possible | yes |

connection data

| | |
|-----------------------------|-------------------------|
| detachable clamps | yes |
| type of electric connection | spring clamp connection |

safety parameters

| | |
|------------------------|---|
| category (ISO 13849-1) | 4 |
|------------------------|---|

| | |
|---|-------------|
| PL (ISO 13849-1) | level e |
| SIL _{CL} (IEC 62061) | 3 |
| PFD _d (Low demand mode) | 3.4 E-6 |
| PFH _d (High demand mode) | 1.5 E-9 1/h |
| HFT | 1 |
| SSF | 99.5 % |
| DC | 99 % |
| MTTF _d | 73 a |
| λS | 1550 FIT |
| λD | 1550 FIT |
| λDU | 15 FIT |
| λDD | 1535 FIT |
| T _M | 20 a |
| proof test intervall (High demand mode) | 20 a |
| proof test intervall (Low demand mode) | 1 a |

application

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|--|------------------|
| model | expansion device |
| suitable for monitoring of magnetic switches | no |
| suitable for monitoring of proximity 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

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|--|---|
| enabling paths | normally open contact |
| contact material | Ag alloy, gold-plated |
| rated switching voltage, enabling paths AC | 230 V |
| rated switching voltage, enabling paths DC | 24 V |
| max. thermal current I _{th} , enabling paths | 6 A |
| max. thermal current I _{th} , signaling paths | 1 A |
| application category AC-15 (NO) | Ue 230V, Ie 3A |
| application category DC-13 (NO) | Ue 24V, Ie 1A |
| short-circuit protection (NO), max. fuse insert | 6 A class gG fuse, fuse integral < 100 A ² s |
| mechanical life | 10 ⁷ switching cycles |
| outputs, signalling function, undelayed, with contact | 2 |
| outputs, safe, undelayed, with contact | 4 |
| outputs, safe, delayed, with contact | 0 |

control circuit

| | |
|--|---------------------------------------|
| max. peak current (safety circuit / reset circuit) | 110 mA |
| response time tA1 | 15 ms |
| response time tA2 | 15 ms |
| min. switch-on time | 40 ms |
| recovery time tW | ≤ 30 ms |
| release time tR | < 15 ms |
| max. resistivity, per channel | ≤ (5 + (1.333 x UB / UN - 1) x 200) Ω |

supply circuit

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|---|---------|
| nominal voltage UN | DC 24 V |
| rated consumption DC | 1.4 W |
| operating voltage min. | 18 V |
| operating voltage max. | 30 V |
| electrical isolation supply circuit - control circuit | no |

dimensions

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|--------|----------|
| depth | 114 mm |
| width | 22.5 mm |
| height | 106.5 mm |

classification

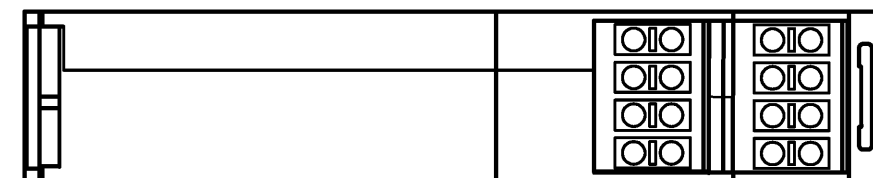
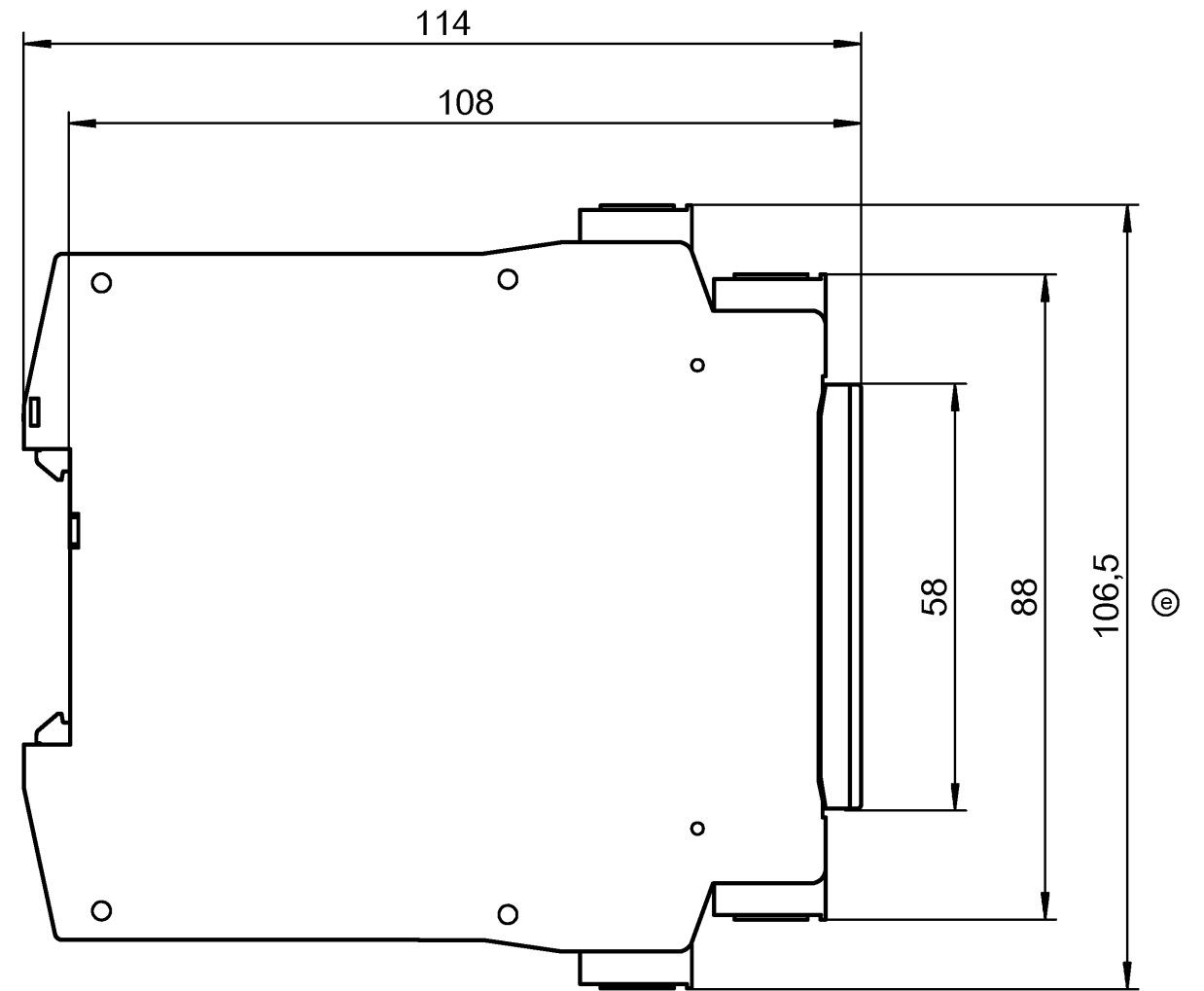
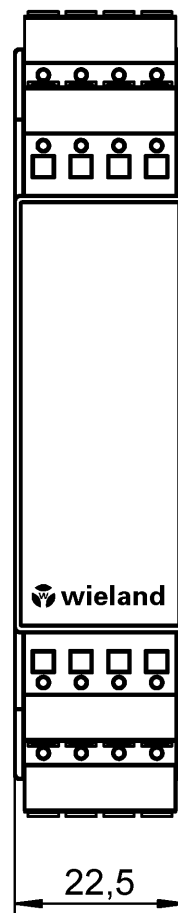
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|------------|----------|
| ECLASS 11 | |
| ECLASS 8.1 | 27371819 |
| ETIM 9.0 | EC001449 |
| ETIM 8.0 | EC001449 |
| ETIM 7.0 | EC001449 |
| ETIM 6.0 | EC001449 |
| ETIM 5.0 | EC001449 |
| ETIM 4.0 | EC001449 |
| ETIM 3.0 | EC001449 |

product compliance

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|------------------------------|-----------|
| ROHS conformity status | compliant |
| REACH-SVHC conformity status | compliant |

| Teile Nr. / Part No. |
|----------------------|
| R1.188.1940.0 |
| R1.188.1950.0 |
| R1.188.1960.0 |
| R1.188.1970.0 |
| R1.188.1980.0 |
| R1.188.1990.0 |
| R1.188.2000.0 |
| R1.188.2010.0 |
| R1.188.2020.0 |
| R1.188.2390.0 |
| R1.188.2410.0 |
| R1.188.2420.0 |
| R1.188.2430.0 |
| R1.188.2440.0 |
| R1.188.2450.0 |
| R1.188.3400.0 |
| R1.188.3410.0 |
| R1.188.3420.0 |
| R1.188.3430.0 |
| R1.188.3490.0 |
| R1.188.3600.0 |

| Teile Nr. / Part No. |
|----------------------|
| R1.188.3610.0 |
| R1.188.3630.0 |
| R1.188.3650.0 |
| R1.188.3670.0 |
| R1.188.3730.0 |
| R1.188.3820.0 |
| R1.188.3850.0 |
| R1.188.3860.0 |
| R1.188.3900.0 |
| R1.188.3920.0 |
| R1.188.3940.0 |
| R1.188.4000.0 |
| R1.188.4010.0 |
| R1.188.4030.0 |
| R1.188.4130.0 |
| R1.188.4140.0 |
| R1.188.4150.0 |
| R1.188.4160.0 |
| R1.188.4210.0 |
| R1.188.5000.0 |



Weitere Angaben siehe KATALOG oder eKatalog.
Additional data see CATALOG or eCatalog.

www.wieland-electric.com
eshop.wieland-electric.com

ja/yes 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 Änderungen CAD-Drawing, no manual modifications allowed | | 1. Verwendung: First Use: | | Blatt: Sheet: | |
| | | Werkstoff/Material | | 2014 | Tag/Date | Name | |
| (f) | 09.08.19 | | | gezeichnet drawn | 06.06. | Koetzner | |
| (e) | 26.08.16 | Maßstab/Scale | | geprüft checked | | | |
| (d) | 22.04.16 | | | Normgepr. Stand. check | | | |
| (c) | 03.07.15 | Datei/File: 036141_F01K.DCD | | Ersatz für/Replacement for: | | | |
| (b) | 30.06.15 | | | Type | Benennung/Title | | |
| (a) | 03.02.15 | | | Maßbildzeichnung/Dimension drawing Standardgehäuse u. -deckel, Baubreite 22,5mm, Federkraftklemme steckbar | | | |
| Index | Datum/Blatt Date/Sheet | www.wieland www.wieland-electric.com | | Standard housing and cover, overall width 22,5mm plug-in spring-clamp terminal | | | |
| Änderung/Revision | | | | | | | |

Zeichnung Nr./Drawing No.
T R1.188.1940.0 01K

Maße in mm/Dimensions are in mm

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M1
M2
M3
L
G
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11.1
12.1
1.1