

Data sheet

Art.No.: R1.188.1840.0

Device for monitoring of safety-related circuits SNA4043K-A AC 230V (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, 3 enabling current paths, 1 signalling output, AC 230 V 50-60Hz, screw-terminals pluggable



| | |
|------------|---------------|
| Art.No. | R1.188.1840.0 |
| EAN | 4046521294005 |
| Order Unit | 1 |

Certificates / Approvals



Technical data

General

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|--|---|
| 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 0,2 mm ² - 2,5 mm ² / 2 x 0,2 mm ² - 1,0 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 - 1,0 mm ² |
| Permissible torque min. | 0.5 Nm |
| Permissible torque max. | 0.6 Nm |
| Tightening moment | 0.6 Nm |
| Weight | 0.25 kg |
| Standards | EN ISO 13849-1EN 62061, EN 81-1EN 50156-1; EN 62061; EN 81-1; EN 50156-1 |
| Suited for safety functions | Yes |
| With muting function | No |
| Feedback circuit | Yes |
| Start contact | Yes |
| Stop category acc. to IEC 60204 | 0 |
| 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 | Yes |

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| 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

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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, enabling paths DC | 24 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^2 of all current path | 10 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 < 100 A ² s |
| Mechanical life | 10 ⁷ 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) | 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 |
| Permissible test pulse time tTP | < 1 ms |
| max. resistivity, per channel | $\leq (5 + (1,176 \times U_B / U_N - 1) \times 100) \Omega$ |
| Type of switch function of the inputs | Normally open contact |
| Evaluation inputs | 2-channel |

Supply circuit

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|---|----------|
| Nominal voltage U_N | AC 230 V |
| Rated consumption AC | 2.4 VA |
| Rated frequency min. | 50 Hz |
| Rated frequency max. | 60 Hz |
| Electrical isolation supply circuit - control circuit | Yes |
| Min. rated control supply voltage at AC 50 Hz | 196 V |
| Max. rated AC voltage for controls, 50 Hz | 253 V |
| Min. rated DC voltage for controls | 196 V |
| Rated control supply voltage at AC 60HZ | 196 V |
| Rated control supply voltage at AC 50HZ | 253 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 |
| ETIM 7.0 | EC001449 |
| ETIM 6.0 | EC001449 |
| ETIM 5.0 | EC001449 |
| ETIM 4.0 | EC001449 |
| ETIM 3.0 | EC001449 |

Safety parameters

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|---|-------------|
| Category (ISO 13849-1) | 4 |
| PL (ISO 13849-1) | Level e |
| SIL _{CL} (IEC 62061) | 3 |
| PFD _d (Low demand mode) | 6.7 E-6 |
| PFH _d (High demand mode) | 8.5 E-9 1/h |
| HFT | 1 |
| SSF | 99.5 % |
| DC | 99 % |
| MTTF _d | 132 a |
| T _M | 20 a |
| Proof test intervall (High demand mode) | 20 a |

| Teile Nr. / Part No. |
|----------------------|
| R1.188.0460.0 |
| R1.188.0470.0 |
| R1.188.0480.0 |
| R1.188.0490.0 |
| R1.188.0500.1 |
| R1.188.0530.1 |
| R1.188.0590.0 |
| R1.188.0620.0 |
| R1.188.0640.0 |
| R1.188.0660.0 |
| R1.188.0680.0 |
| R1.188.0700.2 |
| R1.188.0720.2 |
| R1.188.0900.1 |
| R1.188.0910.1 |
| R1.188.0940.1 |
| R1.188.0950.1 |
| R1.188.0990.0 |
| R1.188.1000.0 |
| R1.188.1010.0 |
| R1.188.1050.0 |
| R1.188.1060.0 |
| R1.188.1070.0 |
| R1.188.1120.0 |
| R1.188.1280.0 |
| R1.188.1340.0 |
| R1.188.1440.0 |
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| R1.188.1480.0 |
| R1.188.1810.0 |
| R1.188.1820.0 |
| R1.188.1830.0 |

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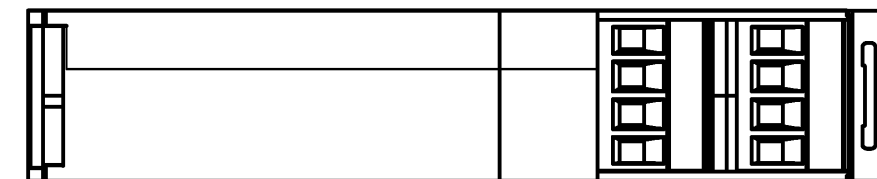
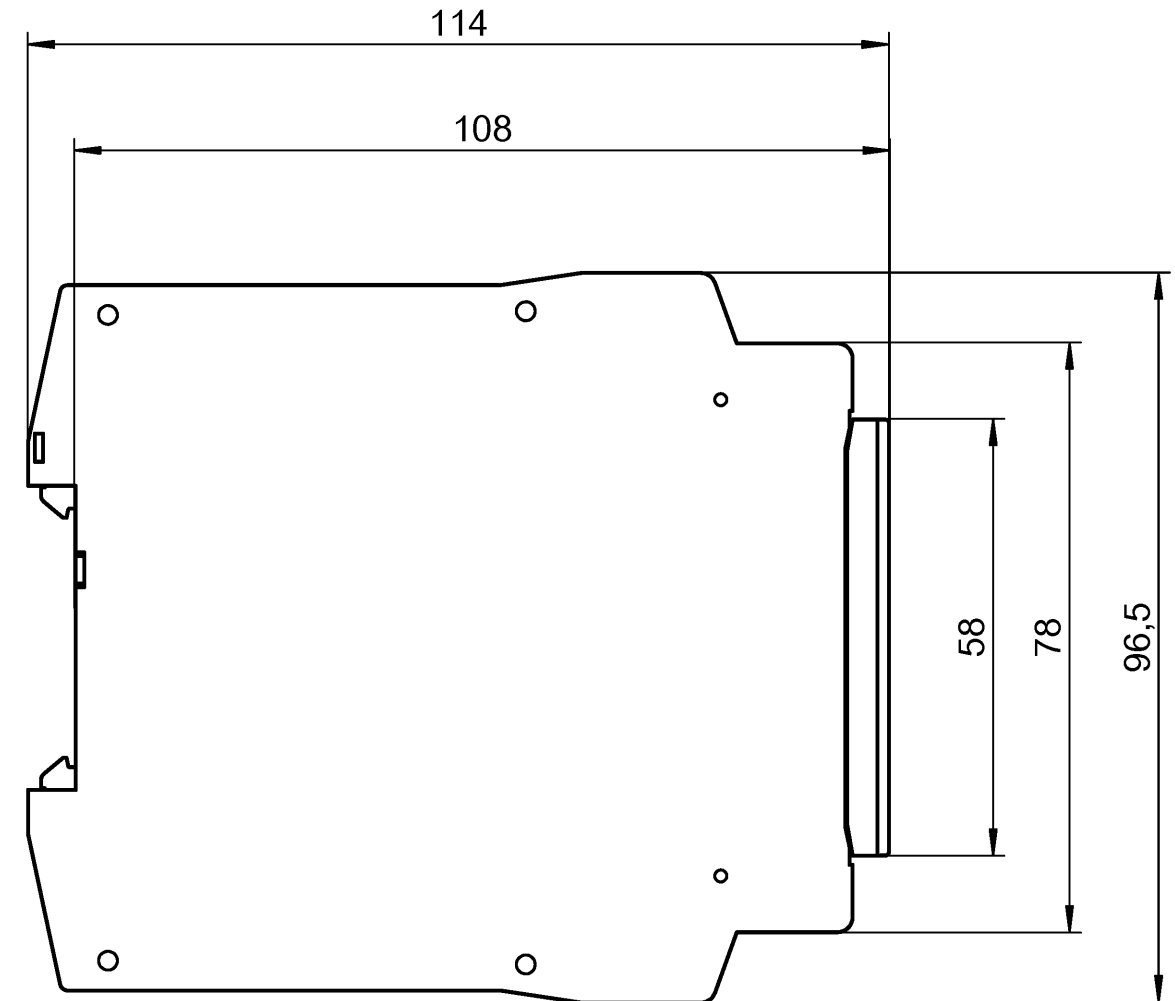
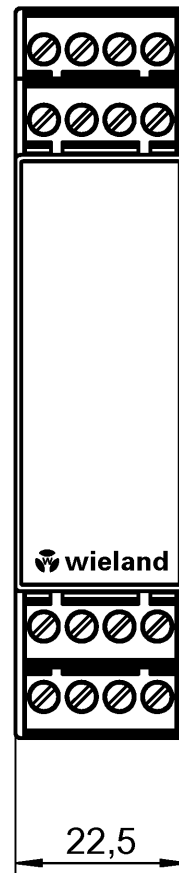
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| R1.188.1840.0 |
| R1.188.1850.0 |
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| R1.188.1890.0 |
| R1.188.1900.0 |
| R1.188.1910.0 |
| R1.188.1920.0 |
| R1.188.1930.0 |
| R1.188.3250.0 |
| R1.188.3290.0 |
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| R1.188.3480.0 |
| R1.188.3580.0 |
| R1.188.3590.0 |
| R1.188.3620.0 |
| R1.188.3640.0 |
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| R1.188.3810.0 |
| R1.188.3830.0 |
| R1.188.3840.0 |
| 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 |

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| ja/yes <input type="checkbox"/> 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! | | 1. Verwendung: First Use: | | Blatt: Sheet: | |
| Freitoleranz nach General tolerance | | CAD-Zeichnung, keine manuellen Änderungen CAD-Drawing, no manual modifications allowed | | Zeichnung Nr./ Drawing No. T R1.188.0460.0 01K | |
| Werkstoff/ Material | | 2014 gezeichnet drawn | Tag/ Date 06.06. | Name Kötzner | |
| Ⓔ | 22.04.16 | Maßstab/Scale | Maße in mm/Dimensions are in mm | | |
| Ⓓ | 17.03.15 | Datei/ File: 030181_E01K.DCD | | | |
| Ⓒ | 03.02.15 | Ersatz für/ Replacement for: | | | |
| Ⓑ | 04.07.14 | Type | | Benennung/ Title | |
| Ⓐ | 25.06.14 | Maßbildzeichnung/dimension drawing Standardgehäuse u. -deckel, Baubreite 22,5mm, Schraubenklemmen steckbar standard housing and cover, overall with 22,5mm plug-in pcb terminal | | | |
| Index | Datum/ Blatt Date/ Sheet | www.wieland-electric.com | | | |
| Änderung/ Revision | | | | | |

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