

## Data sheet

Commercial Art.No.: R1.188.0910.1

device for monitoring of safety-related circuits SNO4003K-A AC 230V (B)

Base unit, single channel control, automatic-/manual reset with reset switch monitoring, 3 enabling current paths, 1 signalling out put, AC 230 V 50-60Hz, screw-terminals pluggable



Commercial Art.No.	R1.188.0910.1
EAN	4015573809635
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.	55 °C
wire ranges screw terminals, fine-stranded / solid	1 x 0.2 mm <sup>2</sup> - 2.5 mm <sup>2</sup> / 2 x 0.2 mm <sup>2</sup> - 1.0 mm <sup>2</sup>
wire ranges screw terminals, fine-stranded with ferrules	1 x 0.25 mm <sup>2</sup> - 2.5 mm <sup>2</sup> / 2 x 0.25 mm <sup>2</sup> - 1.0 mm <sup>2</sup>
permissible torque min.	0.5 Nm
permissible torque max.	0.6 Nm
tightening moment	0.6 Nm
weight	0.25 kg
standards	EN ISO 13849-1; EN 62061; EN 62061
suitable 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

detachable clamps	yes
type of electric connection	screw connection

**safety parameters**

category (ISO 13849-1)	4
PL (ISO 13849-1)	level e
SIL <sub>CL</sub> (IEC 62061)	3
PFD <sub>d</sub> (Low demand mode)	3.6 E-6
PFH <sub>d</sub> (High demand mode)	8.6 E-10 1/h
HFT	1
SSF	99.5 %
DC	99 %
MTTF <sub>d</sub>	73 a
λS	1570 FIT
λD	1570 FIT
λDU	16 FIT
λDD	1554 FIT
T <sub>M</sub>	20 a
proof test intervall (High demand mode)	20 a
proof test intervall (Low demand mode)	1 a

**application**

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

**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 I <sub>th</sub> , enabling paths	8 A
max. thermal current I <sub>th</sub> , signaling paths	5 A
max. total current I <sup>2</sup> of all current path	9 A <sup>2</sup>
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 <sup>2</sup> s
mechanical life	10 <sup>7</sup> switching cycles
outputs, signalling function, undelayed, with contact	1
outputs, safe, undelayed, with contact	3
outputs, safe, delayed, with contact	0

**control circuit**

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 tA1	60 ms
response time tA2	180 ms
min. switch-on time	60 ms
recovery time tW	> 200 ms
release time tR	< 80 ms
max. resistivity, per channel	$\leq (7.5 + (1.176 \times UB / UN - 1) \times 150) \Omega$
type of switch function of the inputs	normally open contact
evaluation inputs	1-channel

#### supply circuit

nominal voltage UN	AC 230 V
rated consumption AC	2.3 VA
rated frequency min.	50 Hz
rated frequency max.	60 Hz
operating voltage min.	196 V
operating voltage max.	253 V
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
rated control supply voltage at AC 60HZ	196 V
rated control supply voltage at AC 50HZ	253 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

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
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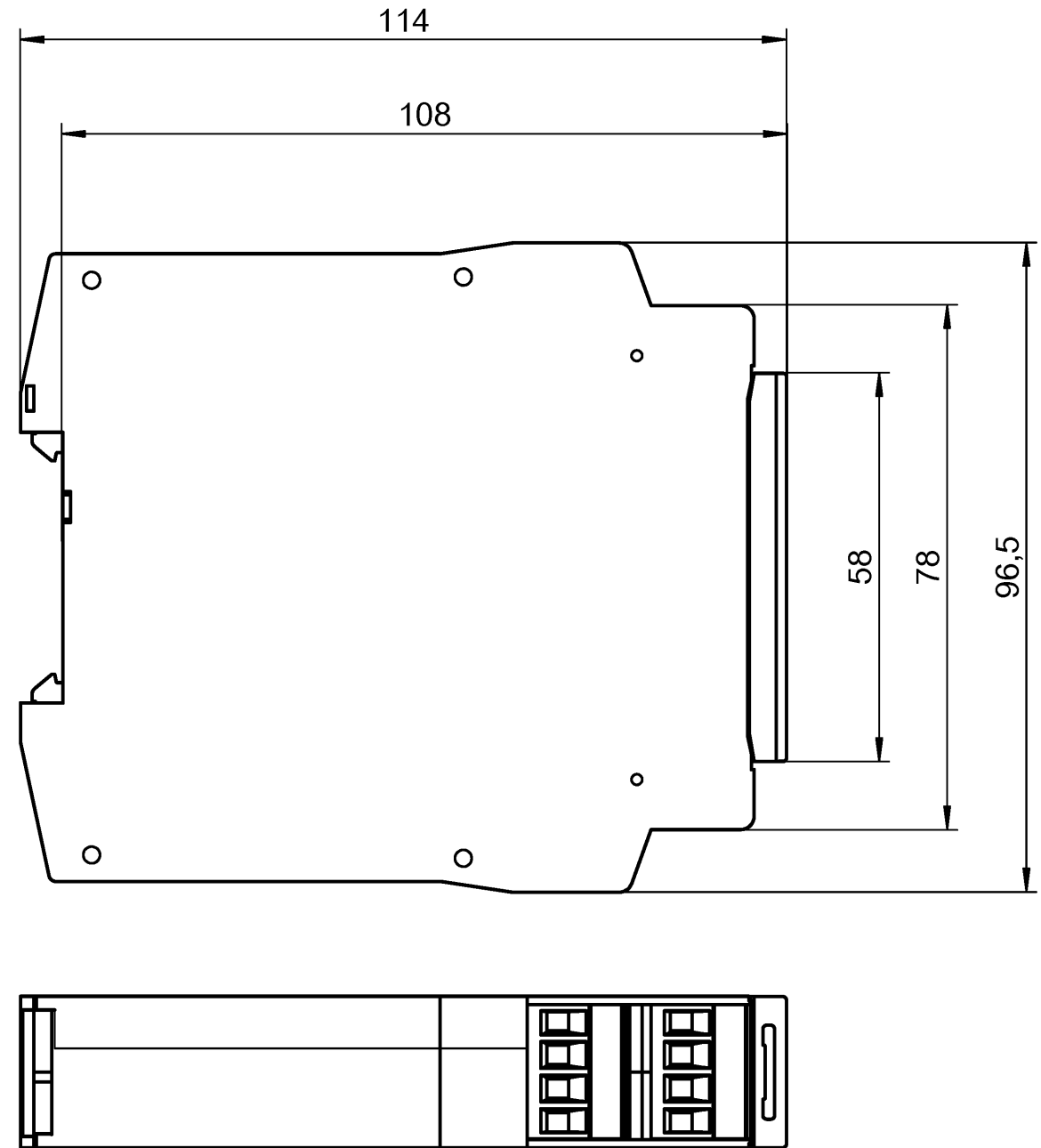
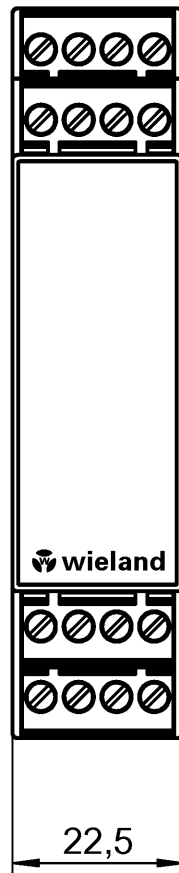
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 Additional data see CATALOG or eCatalog. [eshop.wieland-electric.com](http://eshop.wieland-electric.com)

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Freitoleranz nach General tolerance		CAD-Zeichnung, keine manuellen Änderungen CAD-Drawing, no manual modifications allowed		Zeichnung Nr./ Drawing No. <b>T R1.188.0460.0 01K</b>	
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	www.wieland-electric.com		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				
Änderung/ Revision					

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