

## Data sheet

Commercial Art.No.: R1.188.3930.0

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

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



Commercial Art.No.	R1.188.3930.0
EAN	4049088166198
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 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	0.18 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	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)	3.4 E-6
PFH <sub>d</sub> (High demand mode)	1.5 E-9 1/h
HFT	1
SSF	99.5 %
DC	99 %
MTTF <sub>d</sub>	73 a
λS	1550 FIT
λD	1550 FIT
λDU	15 FIT
λDD	1535 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	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**

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 <sub>th</sub> , enabling paths	6 A
max. thermal current I <sub>th</sub> , 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 <sup>2</sup> s
mechanical life	10 <sup>7</sup> 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	$\leq (5 + (1.333 \times UB / UN - 1) \times 200) \Omega$
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**supply circuit**

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**

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)
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
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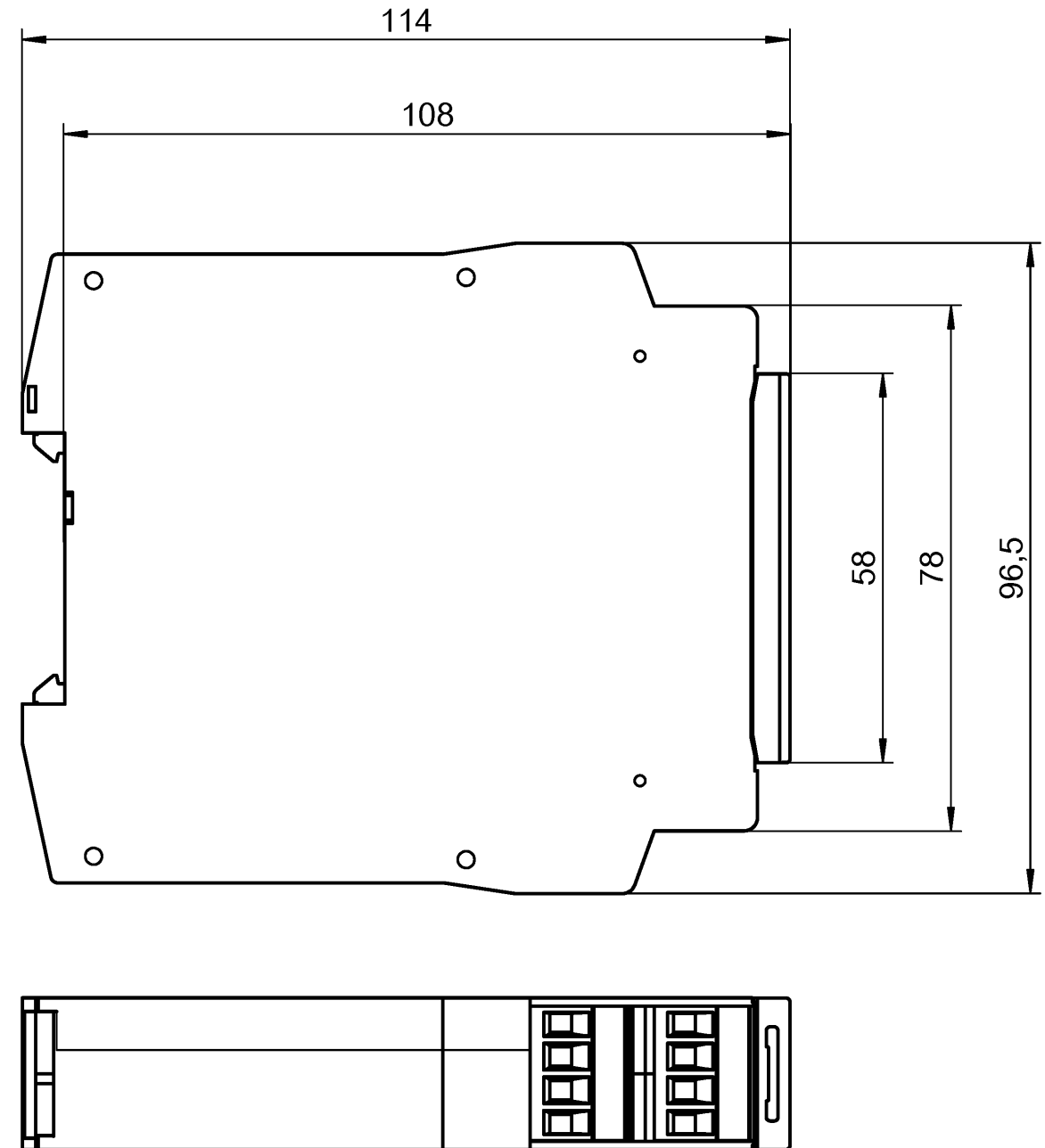
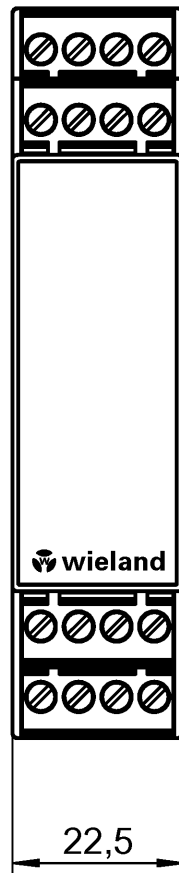
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Freitoleranz nach General tolerance		CAD-Zeichnung, keine manuellen Änderungen CAD-Drawing, no manual modifications allowed		Zeichnung Nr./ Drawing No. <b>T R1.188.0460.0 01K</b>	
Werkstoff/ Material		2014 gezeichnet drawn	Tag/ Date 06.06.	Name Kötzner	
ⓔ	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	Benennung/ Title		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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