

## Datasheet

Art.No. R1.188.0500.1

Device for monitoring of safety-related circuits SNO4003K-A  
AC/DC 24V (B)

Base unit, single channel control, automatic-/ manual reset with reset switch  
monitoring, 3 enabling current paths, 1 signalling out put, AC/DC 24 V 50-60Hz,  
screw-terminals pluggable



Art.No.	R1.188.0500.1
EAN	4015573808348
Order unit	1 pieces

## 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 0,14 mm <sup>2</sup> - 2,5 mm <sup>2</sup> / 2 x 0,14 mm <sup>2</sup> - 0,75 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> - 0,5 mm <sup>2</sup>
Permissible torque min.	0.5 Nm
Permissible torque max.	0.6 Nm
Tightening moment	0.6 Nm
Wire range cage clamp terminals	2 x 0,25mm <sup>2</sup> - 1,5mm <sup>2</sup>
Weight	0.2 kg
Standards	EN ISO 13849-1;EN 62061
Suited for safety functions	Yes
Category according to EN ISO 13849-1	2
Muting possible	No
Feedback circuit	Yes
Start contact	Yes
Performance level acc. to EN ISO 13849-1	d
SIL according to IEC 62061	2
Stop category acc. to IEC 60204	
Rail mounting possible	Yes



## Connection Data

Detachable clamps	Yes
Type of electric connection	Screw connection

## 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
Suitable for monitoring of valves	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, signaling paths AC	230 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 <sub>z</sub> 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
Mechanical life	107 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

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 t <sub>A2</sub>	60 ms
Min. switch-on time	60 ms
Recovery time t <sub>W</sub>	200 ms
Release time t <sub>R</sub>	60 ms
max. resistivity, per channel	≤ (5 + (1,333 x U <sub>B</sub> / U <sub>N</sub> - 1) x 200) Ω
Evaluation inputs	1-channel

## Supply circuit

Nominal voltage U <sub>N</sub>	AC/DC 24 V
Rated consumption DC	1.3 W
Rated frequency min.	50 Hz
Rated frequency max.	60 Hz
Operating voltage min.	0.8 V
Operating voltage max.	1.1 V
Electrical isolation supply circuit - control circuit	yes (at U <sub>N</sub> = AC 115-120 V, AC 230 V)
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 60HZ	20.4 V
Rated control supply voltage at AC 50HZ	26.4 V

### Dimensions

Depth	114 mm
Width	22.5 mm
Height	96.5 mm

### Classification

ECLASS 8.1	27371819: Device for monitoring of safety-related circuits
ETIM 5.0	EC001449: Device for monitoring of safety-related circuits
ETIM 4.0	EC001449: Device for monitoring of safety-related circuits
ETIM 3.0	EC001449: Emergency-stop relay



