

Datasheet

Art.No. R1.188.1990.0

Device for monitoring of safety-related circuits SNO4003K-C
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,
spring-terminals pluggable



Art.No.	R1.188.1990.0
EAN	4046521297426
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 ² - 2,5 mm ² / 2 x 0,14 mm ² - 0,75 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 - 0,5 mm ²
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 ² - 1,5mm ²
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	Tension clamp 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 _{th} , enabling paths	8 A
Max. thermal current I _{th} , signaling paths	5 A
Max. total current I _z of all current path	9 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
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 _{A2}	60 ms
Min. switch-on time	60 ms
Recovery time t _W	200 ms
Release time t _R	60 ms
max. resistivity, per channel	≤ (5 + (1,333 × U _B / U _N - 1) × 200) Ω
Evaluation inputs	1-channel

Supply circuit

Nominal voltage U _N	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 _N = AC 115-120 V, AC 230 V)
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 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

