

## Datasheet

Art.No. R1.188.1760.0

Device for monitoring of safety-related circuits SNA4044K AC 230V (A)

Base unit also for elevators EN 81-1/2 and heaters EN50156-1 single-channel or two-channel control, automatic reset without reset switch monitoring, cross circuit monitoring, 4 enabling current paths, AC 230 V 50-60Hz, screw-terminals fixed



Art.No.	R1.188.1760.0
EAN	4046521293794
Order unit	1 pieces

## Approvals



## Technical data

### General

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 0,14 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	0.25 kg
Standards	EN ISO 13849-1;EN 62061;EN 81-1;EN 50156-1
Suited for safety functions	Yes
Category according to EN ISO 13849-1	4
Muting possible	No
Feedback circuit	Yes
Start contact	Yes
Performance level acc. to EN ISO 13849-1	e
SIL according to IEC 62061	3
Stop category acc. to IEC 60204	
Rail mounting possible	Yes

### Connection Data

Detachable clamps	No
Type of electric connection	Screw connection

### Application

Model	Basic device
Suitable for monitoring of magnetic switches	Yes
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
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	25 A <sup>2</sup>
Application category AC-15 (NO)	Ue 230V, Ie 3A
Application category DC-13 (NO)	Ue 24V, Ie 3A
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	0
Outputs, signalling function, delayed, with contact	0
Outputs, safe, undelayed, with contact	4
Outputs, safe, delayed, with contact	0

### Control circuit

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 t <sub>A1</sub>	350 ms
Response time t <sub>A2</sub>	350 ms
Min. switch-on time	100 ms
Recovery time t <sub>W</sub>	750 ms
Release time t <sub>R</sub>	10 ms
Permissible test pulse time t <sub>TP</sub>	1 ms
max. resistivity, per channel	$\leq (5 + (1,176 \times U_B / U_N - 1) \times 100) \Omega$
Evaluation inputs	2-channel

### Supply circuit

Nominal voltage UN	AC 230 V
Rated consumption AC	2.6 VA
Rated consumption DC	2.3 W
Rated frequency min.	50 Hz
Rated frequency max.	60 Hz
Electrical isolation supply circuit - control circuit	yes (at UN = AC 42-48 V, AC 115-230 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