



## Datasheet

Art.No. R1.188.0590.0

Device for monitoring of safety-related circuits SNE4004K-A AC/DC 24V (A)

output expansion unit, 4 enabling current paths, 3 signalling outputs, AC/DC 24 V 50-60Hz, screw-terminals fixed



Art.No.	R1.188.0590.0
EAN	4015573808645
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 0,2 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	0.2 kg
Standards	EN ISO 13849-1EN 62061
Suited for safety functions	Yes
Category according to EN ISO 13849-1	3
With muting function	No
Feedback circuit	Yes
Start contact	No
Performance level acc. to EN ISO 13849-1	d
SIL according to IEC 62061	2
Stop category acc. to IEC 60204	0
Rail mounting possible	Yes





## **Connection Data**

Detachable clamps	Yes
Type of electric connection	Screw connection

# Application

Model	Expansion device
Suitable for monitoring of magnetic 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
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 lth, enabling paths	6 A
Max. thermal current lth, signaling paths	2 A
Max. total current I2 of all current path	40 A²
Application category AC-15 (NO)	Ue 230V, le 5A
Application category DC-13 (NO)	Ue 24V, le 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	3
Outputs, signalling function, delayed, with contact	0
Outputs, safe, undelayed, with contact	4
Outputs, safe, delayed, with contact	0

#### **Control circuit**

Response time tA1	25 ms
Response time tA2	25 ms
Recovery time tW	> 40 ms
Release time tR	20 ms
max. resistivity, per channel	≤ (5 + (1,176 x UB / UN - 1) x 100) Ω





# Supply circuit

Nominal voltage UN	AC/DC 24 V
Rated consumption AC	3.3 VA
Rated consumption DC	1.6 W
Rated frequency min.	50 Hz
Rated frequency max.	60 Hz
Operating voltage min.	20.4 V
Operating voltage max.	26.4 V
Electrical isolation supply circuit - control circuit	No
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 6.0	: EC001449
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





#### Drawings

