

Datasheet

Art.No. R1.188.1700.0

Device for monitoring of safety-related circuits SNA4043K AC 115-120V (A)

Base unit also for elevators EN 81-1/2 and heaters EN50156-1 single-channel or two-channel control, automatic reset without reset sw itch monitoring, cross circuit monitoring, 3 enabling current paths, 1 signalling output, AC 115-120 V 50-60Hz, screw-terminals fixe d



Art.No.	R1.188.1700.0
EAN	4046521293732
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 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	0.25 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 _{th} , enabling paths	8 A
Max. thermal current I _{th} , signaling paths	5 A
Max. total current I ₂ of all current path	25 A ²
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	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)	25 mA
max. peak current (safety circuit / reset circuit)	100 mA
Response time tA1	350 ms
Response time tA2	350 ms
Min. switch-on time	100 ms
Recovery time tW	750 ms
Release time tR	10 ms
Permissible test pulse time tTP	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 115-120 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	97.8 V
Max. rated AC voltage for controls, 50 Hz	132 V
Rated control supply voltage at AC 60HZ	97.8 V
Rated control supply voltage at AC 50HZ	132 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

Drawings

A	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	M1	M2	M3	L	G	I	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	M1	M2	M3	L	G	I	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	M1	M2	M3	L	G	I	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	M1	M2	M3	L	G	I	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	M1	M2	M3	L	G	I	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	M1	M2	M3	L	G	I	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	M1	M2	M3	L	G	I	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	M1	M2	M3	L	G	I	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	M1	M2	M3	L	G	I	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	M1	M2	M3	L	G	I	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	M1	M2	M3	L	G	I	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	M1	M2	M3	L	G	I	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	M1	M2	M3	L	G	I	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	M1	M2	M3	L	G	I	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	M1	M2	M3	L	G	I	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	M1	M2	M3	L	G	I	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	M1	M2	M3	L	G	I	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	M1	M2	M3	L	G	I	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	M1	M2	M3	L	G	I	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	M1	M2	M3	L	G	I	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	M1	M2	M3	L	G	I	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	M1	M2	M3	L	G	I	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	M1	M2	M3	L	G	I	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	M1	M2	M3	
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