

Datasheet

Art.No. R1.188.3740.0

Device for monitoring of safety-related circuits

Base unit, single channel control, 2 enabling current paths, AC/DC 24 V 50-60Hz, screw terminals plugable



Art.No.	R1.188.3740.0
EAN	4049088129513
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	0.12 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
Stop category acc. to IEC 60204	
Rail mounting possible	Yes

Connection Data

Detachable clamps	Yes
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Type of electric connection	Screw connection
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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
Contact material	Ag-alloy
Rated switching voltage, enabling paths AC	240 V
Rated switching voltage, enabling paths DC	50 V
Max. thermal current I _{th} , enabling paths	6 A
Max. total current I ₂ of all current path	72 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	0
Outputs, signalling function, delayed, with contact	0
Outputs, safe, undelayed, with contact	2
Outputs, safe, delayed, with contact	0

Control circuit

Nominal output voltage DC	24 V
Input current (safety circuit / reset circuit)	50 mA
max. peak current (safety circuit / reset circuit)	70 mA
Response time tA1	20 ms
Response time tA2	70 ms
Min. switch-on time	30 ms
Recovery time tW	200 ms
Release time tR	70 ms
max. resistivity, per channel	$\leq (5 + (1,333 \times U_B / U_N - 1) \times 200) \Omega$
Evaluation inputs	1-channel

Supply circuit

Nominal voltage U _N	AC/DC 24 V
Rated consumption AC	2 VA
Rated consumption DC	1 W
Rated frequency min.	50 Hz
Rated frequency max.	60 Hz
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	98 mm
Width	22.5 mm
Height	83 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

