

2981512

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1-channel contact extension with TBUS interface, 4 N/O contacts, 1 N/C contact, 1 confirmation current path, adjustable dropout delay of 0.5 ... 30 s, Cat. 3, PL e in accordance with EN ISO 13849, plug-in screw terminal blocks, width: 22.5 mm

Your advantages

- Up to Cat. 3/PL e in accordance with EN ISO 13849-1, SIL 3 in accordance with EN IEC 62061, SIL 3 in accordance with IEC 61508
- Each with 4 enabling, 1 signaling, and 1 confirmation current path, all with dropout delay
- 1-channel control

Commercial data

Item number	2981512
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DN01
Product key	DNA233
Catalog page	Page 233 (C-6-2019)
GTIN	4017918996802
Weight per piece (including packing)	233.86 g
Weight per piece (excluding packing)	169.88 g
Customs tariff number	85371098
Country of origin	DE



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Technical data

Product properties

Product type	Safety relays
Product family	PSRclassic
Application	Extension module
Mechanical service life	approx. 10 ⁷ cycles
Relay type	Electromechanical relay with force-guided contacts in accordance with IEC/EN 61810-3

Electrical properties

Maximum power dissipation for nominal condition	2.02 W
Nominal operating mode	100% operating factor
Air clearances and creepage distances between the power circuits	
Rated insulation voltage	250 V
-	

Input data

General	
Nominal input voltage U _N	24 V DC
Input voltage range in reference to U_N	0.85 1.1
Typical input current at U _N	84 mA
Typical response time	20 ms
Typical release time range	0.5 s 38 s ±20 % (BG rating to max. 30 s)
Recovery time	1 s
Protective circuit	Surge protection; Suppressor diode
	Fuse; PTC resistor
Operating voltage display	Green LED
Status display	Green LED

Output data

Contact switching type	4 delayed enabling current paths
	1 delayed signaling current path
	1 delayed confirmation current path
Contact material	AgSnO ₂
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	15 V AC/DC
Limiting continuous current	6 A (N/O contact)
	3 A (N/C contact)
Maximum inrush current	6 A (N/O contact)
	3 A (N/C contact)



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Inrush current, minimum	25 mA
Sq. Total current	50 A ² ($I_{TH}^2 = I_1^2 + I_2^2 + I_3^2 + I_4^2$)
Interrupting rating (ohmic load) max.	114 W (24 V DC, τ = 0 ms, N/C contact 65/66: 72 W)
	288 W (48 V DC, τ = 0 ms, N/C contact 65/66: 144 W)
	77 W (110 V DC, τ = 0 ms)
	88 W (220 V DC, τ = 0 ms)
	1500 VA (250 V AC, τ = 0 ms, N/C contact 65/66: 750 VA)
Maximum interrupting rating (inductive load)	48 W (24 V DC, τ = 40 ms)
	40 W (48 V DC, τ = 40 ms)
	35 W (110 V DC, τ = 40 ms)
	33 W (220 V DC, τ = 40 ms)
Switching capacity min.	0.4 W
Switching capacity (360/h cycles)	6 A (24 V DC)
	5 A (230 V AC)
Switching capacity (3600/h cycles)	3 A (24 V (DC13))
	3 A (230 V (AC15))
Output fuse	10 A gL/gG NEOZED (N/O contact)
	4 A gL/gG NEOZED (N/C contact)

Connection data

pluggable	yes
Conductor connection	
Connection method	Screw connection
Conductor cross section rigid	0.2 mm ² 2.5 mm ²
Conductor cross section flexible	0.2 mm ² 2.5 mm ²
Conductor cross-section AWG	24 12
Stripping length	7 mm
Screw thread	M3

Dimensions

Width	22.5 mm
Height	99 mm
Depth	114.5 mm

Material specifications

Color (Housing)	yellow (RAL 1018)
Housing material	Polyamide

Characteristics

Safety data	
Stop category	1



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Environmental and real-life conditions

Ambient conditions		
Degree of protection	IP20	
Min. degree of protection of inst. location	IP54	
Ambient temperature (operation)	-20 °C 55 °C	
Ambient temperature (storage/transport)	-40 °C 70 °C	
Maximum altitude	max. 2000 m (Above sea level)	
Max. permissible humidity (storage/transport)	75 % (on average, 85% infrequently, non-condensing)	
Max. permissible relative humidity (operation)	75 % (on average, 85% infrequently, non-condensing)	

Standards and regulations

Air clearances an	d creepage distance	es between the powe	er circuits

	Standards/regulations	IEC 60664-1
Мс	ounting	
	Mounting type	DIN rail mounting
	Mounting position	any



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Classifications

ECLASS

ECLASS-11.0	27371819
ECLASS-12.0	27371819
ECLASS-13.0	27371819

ETIM

	ETIM 9.0	EC001449	
UNSPSC			
	UNSPSC 21.0	39122200	



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Environmental product compliance

REACh SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

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