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Universal safety relay with forcibly guided contacts, spring-cage connection, 4 N/O contacts, 2 N/C contacts, width: 40 mm



Your advantages

- 1-channel control
- Like all PSR safety relays, equipped with force-guided contacts in accordance with EN 50205

Commercial data

Item number	2981473
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	DN01
Product key	DNA162
GTIN	4017918987817
Weight per piece (including packing)	126 g
Weight per piece (excluding packing)	95.58 g
Customs tariff number	85364900
Country of origin	DE

## Technical data

### Notes

#### Utilization restriction

EMC note	EMC: class A product, see manufacturer's declaration in the download area
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### Product properties

Product type	Coupling relay
Application	Safe switch off
	High demand
	Low demand
Control	1-channel
Mechanical service life	approx. $10^7$ cycles
Relay type	Electromechanical relay with force-guided contacts in accordance with IEC/EN 61810-3

#### Insulation characteristics: Air clearances and creepage distances between the power circuits

Overvoltage category	III
Degree of pollution	2

### Electrical properties

Maximum power dissipation for nominal condition	1.44 W
Nominal operating mode	100% operating factor

#### Air clearances and creepage distances between the power circuits

Rated insulation voltage	250 V
Rated surge voltage/insulation	4 kV / Basic isolation, (safe isolation, reinforced insulation and 6 kV between input circuit and enabling current paths.)

### Input data

#### General

Nominal input voltage $U_N$	120 V AC/DC
Input voltage range in reference to $U_N$	0.8 ... 1.1
Typical input current at $U_N$	12 mA
Typical response time	10 ms
Typical release time	10 ms

### Output data

Contact switching type	4 N/O contacts
	2 N/C contacts
Contact material	AgSnO <sub>2</sub>
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	15 V AC/DC

# PSR-SPF-120UC/URM/4X1/2X2 - Extension module



2981473

<https://www.phoenixcontact.com/us/products/2981473>

Limiting continuous current	6 A (total current on request)
Maximum inrush current	6 A
Inrush current, minimum	25 mA
Interrupting rating (ohmic load) max.	144 W (24 V DC, $\tau = 0$ ms)
	288 W (48 V DC, $\tau = 0$ ms)
	77 W (110 V DC, $\tau = 0$ ms)
	88 W (220 V DC, $\tau = 0$ ms)
	1500 VA (250 V AC, $\tau = 0$ ms)
Maximum interrupting rating (inductive load)	48 W (24 V DC, $\tau = 40$ ms)
	40 W (48 V DC, $\tau = 40$ ms)
	35 W (110 V DC, $\tau = 40$ ms)
	33 W (220 V DC, $\tau = 40$ 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/gK NEOZED (N/O contact)
	4 A gL/gK NEOZED (N/C contact)

## Connection data

### Connection technology

pluggable	no
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### Conductor connection

Connection method	Spring-cage connection
Conductor cross-section, rigid	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross-section, flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross-section AWG	24 ... 12
Stripping length	10 mm

## Dimensions

Width	40 mm
Height	111 mm
Depth	50.1 mm

## Material specifications

Color	green
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## Characteristics

### Safety data

Stop category	0
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## Environmental and real-life conditions

# PSR-SPF-120UC/URM/4X1/2X2 - Extension module



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## 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)	-20 °C ... 70 °C
Maximum altitude	≤
Max. permissible humidity (storage/transport)	75 % (on average, 85% infrequently, non-condensing)
Max. permissible relative humidity (operation)	75 % (on average, 85% infrequently, non-condensing)
Shock	15g
Vibration (operation)	10 Hz ... 150 Hz, 2g

## Standards and regulations

### Air clearances and creepage distances between the power circuits

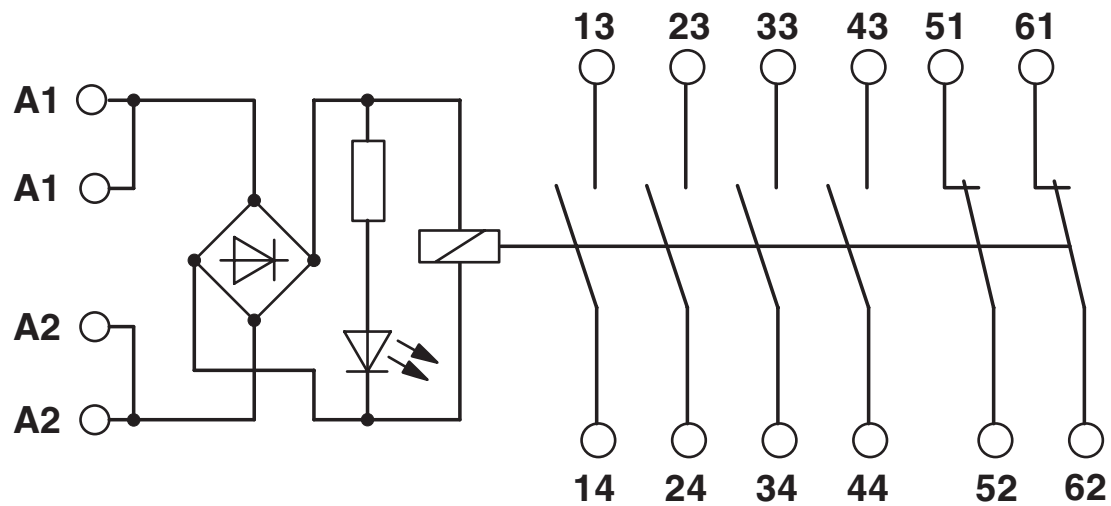
Standards/regulations	DIN EN 50178/VDE 0160
	EN 50205

## Mounting

Mounting type	DIN rail mounting
Mounting position	any

## Drawings

Circuit diagram



Environmental product compliance

China RoHS	
Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits
EU REACH SVHC	
REACH candidate substance (CAS No.)	No substance above 0.1 wt%

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