

# PSR-SPP- 24DC/SIM4 - Safety relays

2981949

<https://www.phoenixcontact.com/us/products/2981949>

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Interface module for connecting several safety sensors or switches with N/C / N/O contacts to the PSR-SDC4 safety relay, plug-in Push-in terminal blocks

The figure shows a version with a screw connection

## Your advantages

- 4 two-channel N/O or N/C contact inputs
- Up to Cat. 3/PL d in accordance with EN ISO 13849-1, SIL 2 in accordance with IEC 61508 (in conjunction with the PSR-SDC4 master)
- 4 PLC diagnostic outputs for evaluating the switching state of the safety sensors
- 4 LEDs as status indicators for the relevant sensor/switch
- PSR-TBUS connection

## Commercial data

Item number	2981949
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DN01
Product key	DNA221
GTIN	4046356325998
Weight per piece (including packing)	175 g
Weight per piece (excluding packing)	99.99 g
Customs tariff number	85364190
Country of origin	DE

## Technical data

### Notes

#### Note on application

Note on application	Only for industrial use
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### Product properties

Product type	Interface module
Product family	PSRclassic

#### Insulation characteristics

Overtoltage category	III
Degree of pollution	2

### Electrical properties

Max. permissible current	100 mA (per signal output)
Max. permissible total current	100 mA (alarm outputs)
Nominal operating mode	100% operating factor
Rated insulation voltage	50 V DC
Rated surge voltage	0.8 kV

### Input data

Nominal input voltage $U_N$	24 V DC (from PSR)
Input voltage range in reference to $U_N$	0.85 ... 1.1
Nominal input voltage $U_N$	24 V DC (from PSR)

### Connection data

#### Connection technology

pluggable	yes
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#### Conductor connection

Connection method	Push-in connection
Conductor cross-section rigid	0.2 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross-section flexible	0.2 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross-section, flexible, with ferrule, with plastic sleeve	0.25 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> (only together with CRIMPFOX 6)
Conductor cross-section, flexible, with ferrule, without plastic sleeve	0.25 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> (only together with CRIMPFOX 6)
Conductor cross-section AWG	24 ... 16
Stripping length	8 mm

### Signaling

Status display	LED (green)
Status display present	yes

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## Dimensions

Width	22.5 mm
Height	117 mm
Depth	106 mm

## Material specifications

Color	yellow (RAL 1018)
Housing material	PA

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-20 °C ... 55 °C
Ambient temperature (storage/transport)	-40 °C ... 70 °C
Maximum altitude	max. 2000 m (Above sea level)

## Mounting

Mounting type	DIN rail mounting
Assembly note	in rows with zero spacing
Mounting position	any

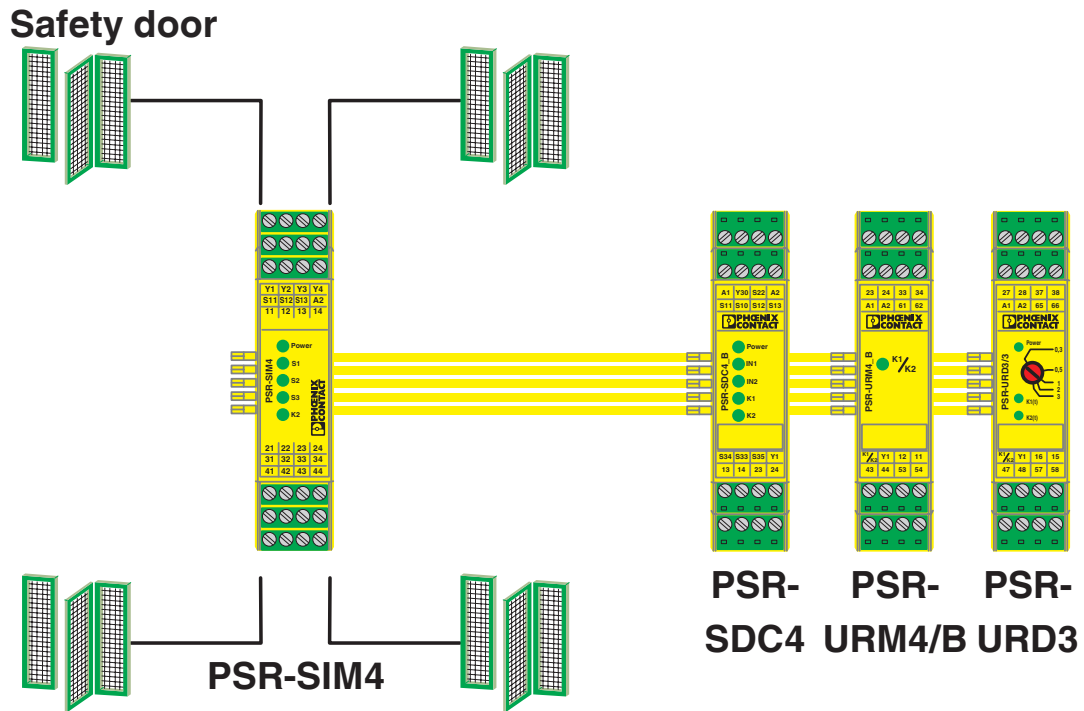
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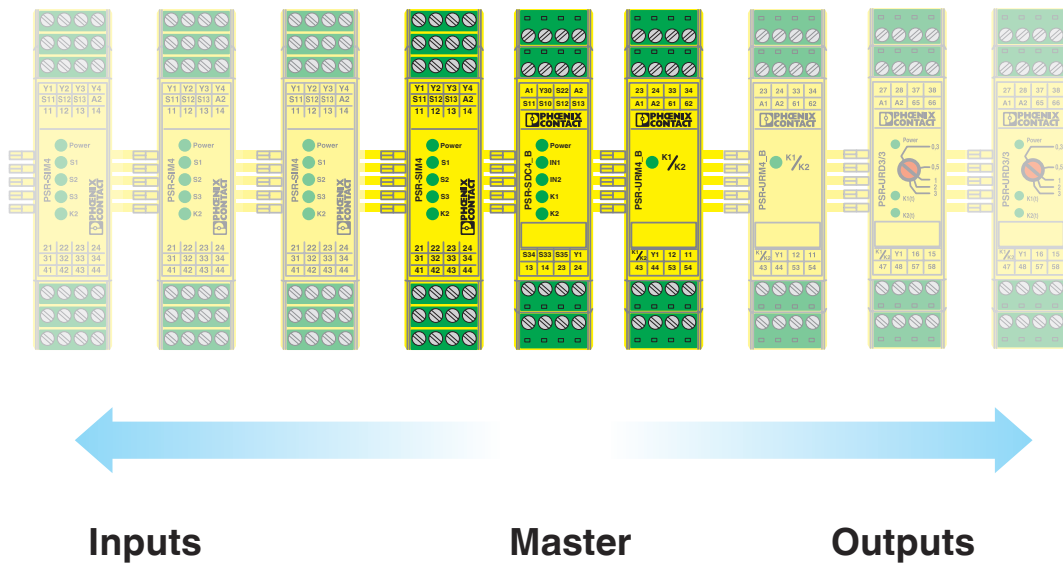
## Drawings

Application drawing



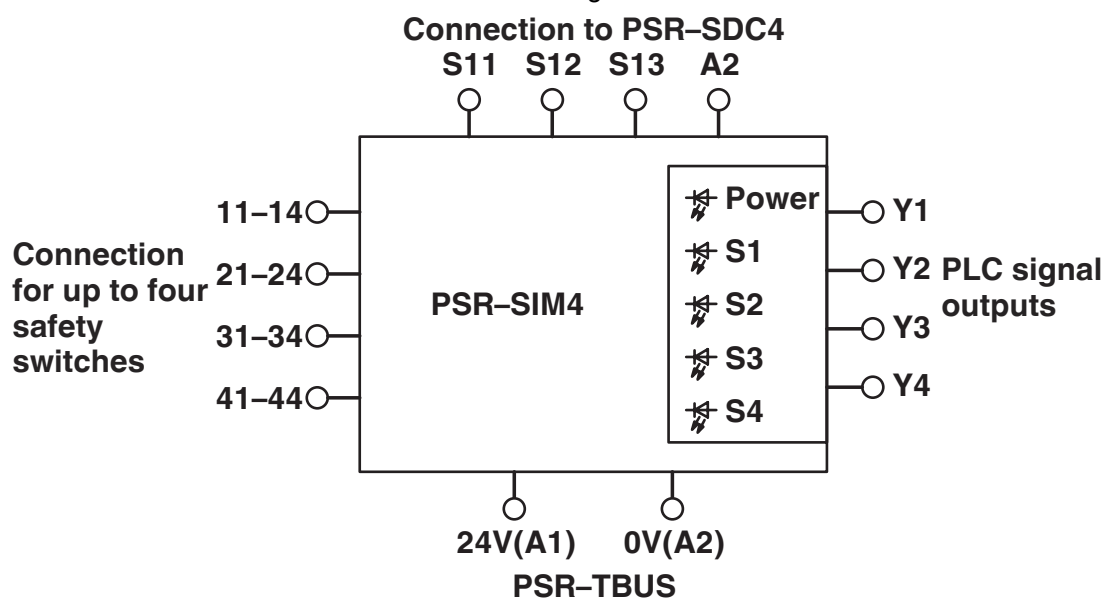
Up to 4 safety door switches can be connected to one PSR-SIM4.

## Application drawing



Additional inputs are aligned on the left of the PSR-SDC4, outputs are to its right.

## Circuit diagram



Block diagram

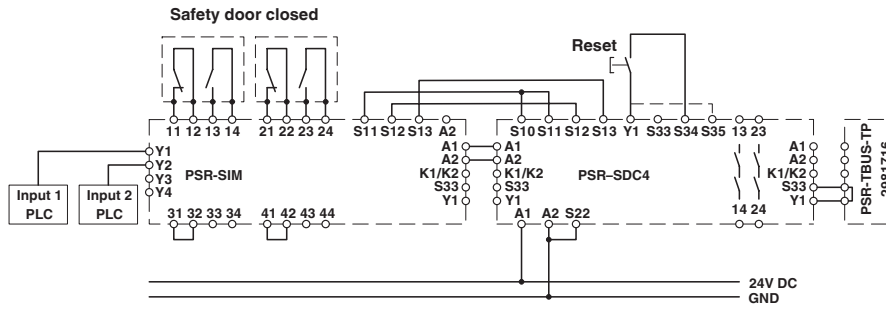
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## Circuit diagram



## Contact extension

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## Approvals

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**cULus Listed**

Approval ID: E140324

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## Classifications

### ECLASS

ECLASS-13.0	27371819
ECLASS-15.0	27371819

### ETIM

ETIM 10.0	EC001449
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### UNSPSC

UNSPSC 21.0	39122200
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## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	7(a), 7(c)-I

### China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

### EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	02fe4f76-9c2e-4db0-bebb-7a77c349bc39

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