


**PSR-SPP- 24DC/FSP/2X1/1X2**

Order No.: 2986957

<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2986957>

Safe coupling relay for SIL3 high and low demand applications, couples digital output signals to the I/O, 2 enabling current paths, 1 alarm contact, module for safe state off applications, integrated test pulse filter, plug-in terminal blocks, width: 17.5 mm



Commercial data	
GTIN (EAN)	 4 046356 520928
sales group	G501
Pack	1 pcs.
Customs tariff	85364190
Catalog page information	Page 219 (NTK-2010)

## Product notes

WEEE/RoHS-compliant since:  
08/24/2009

<http://www.download.phoenixcontact.com>  
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## Technical data

## Input data

Nominal input voltage $U_N$	24 V DC
Input voltage range in reference to $U_N$	0.85 ... 1.1
Typical input current at $U_N$	55 mA

Typical inrush current	max. 100 mA
Typical response time	50 ms
Typical release time	50 ms
Recovery time	1 s

#### Output data

Contact type	2 undelayed enabling current paths, 1 undelayed confirmation path
Contact material	AgCuNi, + 0.2 µm Au
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	15 V AC/DC
Limiting continuous current	5 A (N/O contact) 100 mA (N/C contact)
Maximum inrush current	5 A
Inrush current, minimum	5 mA
Sq. Total current	$50 \text{ A}^2 (I_{TH}^2 = I_1^2 + I_2^2 + \dots + I_N^2)$
Interrupting rating (ohmic load) max.	120 W (24 V DC, $\tau = 0 \text{ ms}$ , N/C contact: 2.4 W) 192 W (48 V DC, $\tau = 0 \text{ ms}$ , N/C contact: 4.8 W) 162 W (60 V DC, $\tau = 0 \text{ ms}$ , N/C contact: 6 W) 66 W (110 V DC, $\tau = 0 \text{ ms}$ , N/C contact: 11 W) 60 W (220 V DC, $\tau = 0 \text{ ms}$ , N/C contact: 22 W) 1250 VA (250 V AC, $\tau = 0 \text{ ms}$ , N/C contact: 25 VA)
Maximum interrupting rating (inductive load)	72 W (24 V DC, $\tau = 40 \text{ ms}$ , N/C contact: 2.4 W) 43 W (48 V DC, $\tau = 40 \text{ ms}$ , N/C contact: 4.8 W) 41 W (60 V DC, $\tau = 40 \text{ ms}$ , N/C contact: 6 W) 35 W (110 V DC, $\tau = 40 \text{ ms}$ , N/C contact: 11 W) 48 W (220 V DC, $\tau = 40 \text{ ms}$ , N/C contact: 22 W)
Switching capacity min.	75 mW
Output fuse	10 A gL/gG (N/O contact) 6 A gL/gG (N/C contact)

#### General data

Width	17.5 mm
Height	112 mm
Depth	114.5 mm
Ambient temperature (operation)	-20 °C ... 55 °C
Ambient temperature (storage/transport)	-40 °C ... 70 °C

Relay type	Electromechanically forcibly guided, dust-proof relay.
Mechanical service life	Approx. $10^7$ cycles
Mounting position	Any
Category in acc. with EN 954-1	4
Stop category	0
Name	Air and creepage distances between the power circuits
Standards/regulations	DIN EN 50178/VDE 0160
Rated surge voltage / insulation	6 kV/safe isolation, reinforced insulation
Rated insulation voltage	250 V
Pollution degree	2
Surge voltage category	III

#### Connection data

Conductor cross section solid min.	0.2 mm <sup>2</sup>
Conductor cross section solid max.	1.5 mm <sup>2</sup>
Conductor cross section stranded min.	0.2 mm <sup>2</sup>
Conductor cross section stranded max.	1.5 mm <sup>2</sup>
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	16
Stripping length	8 mm
Connection method	Spring-cage conn.

#### Certificates / Approvals

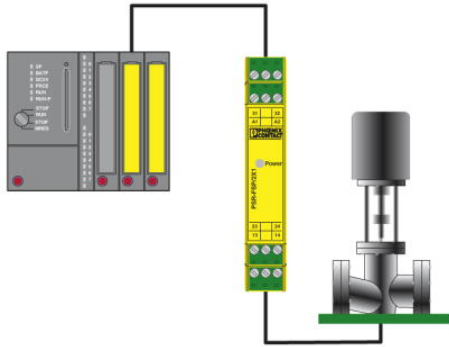


Certification

CUL Listed, TUEV-RH, UL Listed

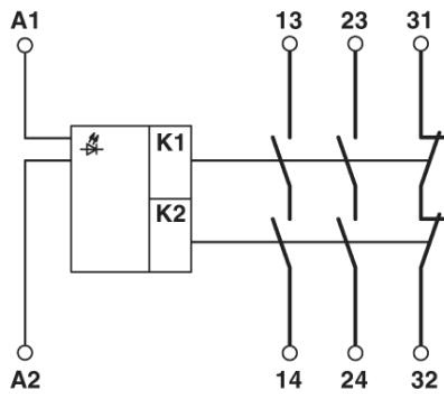
**Diagrams/Drawings**

Application drawing



Example of electrical isolation of a safety PLC output from the field.

Circuit diagram



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