

## PSR – Phoenix Safety Relay PSR-URM/2X21

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- Universal safety relay
- Safe isolation (input/output)
- Housing width 17.5 mm (0.689in.)
- DPDT contacts

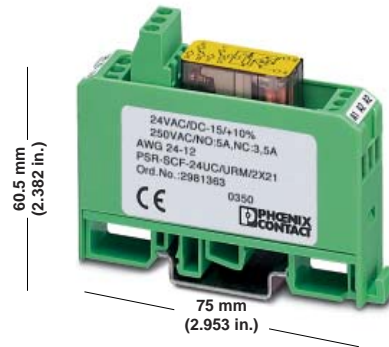
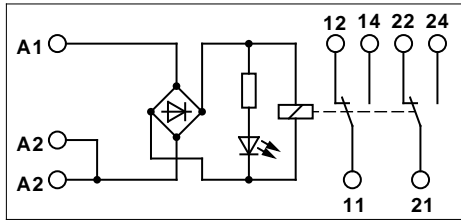
### 1. Short Description

The PSR-SCF-...UC/URM/2X21 safety relay is a universal safety relay with positively driven contacts according to EN 50 205 Class A.

The relay has DPDT contacts with positive drive. If an opening failure occurs at the Form A contact when operating DPDT contacts, the other Form A contact opens when changing to the idle position and the Form B contact remains open.



## 2. Technical Data



### PSR-URM/2X21

with positively driven contacts  
according to EN 50 205 application type A

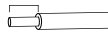
Housing width 17.5 mm (0.689 in.)

listed applied for



M 3

7/10 mm  
(0.28/0.39 in.)



	Solid	Flexible	
	[mm <sup>2</sup> ]		AWG

Connection data: 0.2 - 2.5 0.2 - 2.5 25 - 14  
Stripping length: Screw version 7 mm (0.28 in.)

#### Description

**Universal safety relay,**  
with positively driven contacts

#### Technical Data

##### Input Data

Nominal input voltage  $U_N$   
Permissible range  
Typical current consumption at  $U_N$   
Typical response time at  $U_N$   
Typical release time at  $U_N$

#### Type

**PSR-SCF- 24UC/URM/2X21**  
**PSR-SCF-120UC/URM/2X21**

#### Order No.

Pcs.  
Pkt.

**29 81 36 3** 1  
**29 81 37 6** 1

24 and 120 V AC/DC<sup>1)</sup>  
0.85 - 1.1 x  $U_N$   
30 mA, 9 mA  
10 ms (at  $U_N$ )  
10 ms (at  $U_N$ )

##### Output Data

Contact type  
Contact material  
Maximum switching voltage  
Minimum switching voltage  
Limiting continuous current  
Maximum inrush current  
Minimum switching current  
Maximum shutdown power

DPDT contacts  
Silver nickel (AgNi)  
250 V AC/DC  
15 V AC/DC  
Form A contact: 5 A, Form B contact: 3.5 A  
6 A  
10 mA  
Ohmic load  
 $\tau = 0$  ms  
144 W  
288 W  
88 W  
110 W  
1500 VA  
0.15 W  
10<sup>7</sup> cycles, approximately

24 V DC  
48 V DC  
110 V DC  
220 V DC  
250 V AC

Minimum switching power  
Mechanical life

<sup>1)</sup> 230 V UC on request.

**General Data**

Permissible ambient operating temperature	-20°C to +50°C (-4°F to +122°F)
Nominal operating mode	100% ED
Air and creepage distances between circuits	DIN EN 50 178/VD E0160:1998-04, basic insulation <sup>2)</sup>
Degree of protection	According to VDE 0470 Part 1
- Housing	IP20
- Connection terminal blocks	IP20
- Mounting location	IP54, minimum
Mounting position	Any
Mounting	Can be mounted without spacing
Rated voltage	250 V AC
Impulse voltage withstand level	4 kV <sup>2)</sup>
Degree of pollution	2
Surge Voltage Category	III
Dimensions (W x H x D)	17.5 mm x 60.5 mm x 75 mm (0.689 x 2.382 x 2.953 in.)
Cable cross section	0.2 - 2.5 mm <sup>2</sup> (25 -14 AWG)
Housing material	Polycarbonate

**3. Connection Notes and Safety Instructions**

**Note:** When operating relay modules the operator must meet the requirements for emitted interference for electrical and electronic equipment (EN 61 000-6-4) on the contact side and, if required, take appropriate measures.

**3.1. Safety Instructions**

- The safety relay is a universal safety relay with positively driven contacts according to EN 50 205.
- According to EN 50 205, only 1 Form A contact (N/O)/ 1 Form B contact (N/C) may be used a positively driven contacts.

<sup>2)</sup>Safe isolation, reinforced insulation, and 6 kV between the input circuit and the output contact paths.

**3.2. Connection Notes**

To maintain the UL, use copper cables, which are designed for operating temperatures of 75°C (167°F).

For reliable and safe contacts, strip the connector ends accordingly.

