

# PSR-SPF- 24UC/URM/4X1/2X2

Order No.: 2981457



<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2981457>

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



## Commercial data

|                          |                                                                                                      |
|--------------------------|------------------------------------------------------------------------------------------------------|
| GTIN (EAN)               | <br>4 017918 987794 |
| sales group              | G542                                                                                                 |
| Pack                     | 1 pcs.                                                                                               |
| Customs tariff           | 85044090                                                                                             |
| Catalog page information | Page 21 (IF-2011)                                                                                    |

## Product notes

WEEE/RoHS-compliant since:  
03/30/2006



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

### Input data

|                                           |             |
|-------------------------------------------|-------------|
| Nominal input voltage $U_N$               | 24 V AC/DC  |
| Input voltage range in reference to $U_N$ | 0.8 ... 1.1 |
| Typical input current at $U_N$            | 52 mA       |
| Typical response time                     | 10 ms       |
| Typical release time                      | 10 ms       |

#### Output data

|                                              |                                   |
|----------------------------------------------|-----------------------------------|
| Contact type                                 | 4 N/O, 2 N/C contacts             |
| Contact material                             | AgSnO <sub>2</sub>                |
| Maximum switching voltage                    | 250 V AC/DC                       |
| Minimum switching voltage                    | 15 V AC/DC                        |
| 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                             |
| Output fuse                                  | 10 A gL/gK NEOZED (N/O contact)   |
|                                              | 4 A gL/gK NEOZED (N/C contact)    |

#### General data

|                                         |                                                                                                                            |
|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| Width                                   | 40 mm                                                                                                                      |
| Height                                  | 111 mm                                                                                                                     |
| Depth                                   | 56 mm                                                                                                                      |
| Ambient temperature (operation)         | -20 °C ... 55 °C                                                                                                           |
| Ambient temperature (storage/transport) | -20 °C ... 70 °C                                                                                                           |
| Relay type                              | Electromechanically forcibly guided, dust-proof relay.                                                                     |
| Mechanical service life                 | Approx. $10^7$ cycles                                                                                                      |
| Mounting position                       | Any                                                                                                                        |
| Name                                    | Air and creepage distances between the power circuits                                                                      |
| Standards/regulations                   | DIN EN 50178/VDE 0160                                                                                                      |
|                                         | EN 50205                                                                                                                   |
| Rated surge voltage / insulation        | 4 kV / Basic isolation, (safe isolation, reinforced insulation and 6 kV between input circuit and enabling current paths.) |
| Rated insulation voltage                | 250 V                                                                                                                      |

|                        |     |
|------------------------|-----|
| Pollution degree       | 2   |
| Surge voltage category | III |

**Connection data**

|                                        |                   |
|----------------------------------------|-------------------|
| Conductor cross section solid min.     | 0.2 mm²           |
| Conductor cross section solid max.     | 2.5 mm²           |
| Conductor cross section stranded min.  | 0.2 mm²           |
| Conductor cross section stranded max.  | 2.5 mm²           |
| Conductor cross section AWG/kcmil min. | 24                |
| Conductor cross section AWG/kcmil max  | 12                |
| Stripping length                       | 10 mm             |
| Connection method                      | Spring-cage conn. |

**Certificates / Approvals**

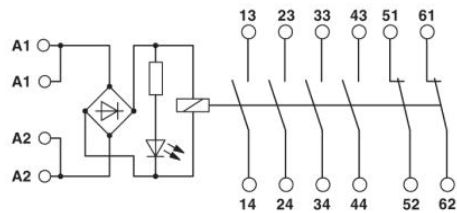


Certification

CUL Listed, GOST, UL Listed

**Diagrams/Drawings**

Circuit diagram



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