

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China









Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (http://phoenixcontact.com/download)



Plug-in high-power relay with power contacts, 2 PDTs, coil voltage: 24 V AC

The figure shows version REL-PR2-24DC/2X21



Key Commercial Data

| Packing unit | 1 STK | | |
|--------------|-----------------|--|--|
| GTIN | 4 046356 759113 | | |
| GTIN | 4046356759113 | | |

Technical data

Dimensions

| Width | 38.6 mm |
|--------|---------|
| Height | 45.5 mm |
| Depth | 36.1 mm |

Ambient conditions

| Ambient temperature (operation) | -40 °C 55 °C |
|---|--------------|
| Ambient temperature (storage/transport) | -40 °C 85 °C |

Coil side

| Nominal input voltage U _N | 24 V AC | | |
|--|--|--|--|
| Input voltage range in reference to U _N | see diagram | | |
| Mains frequency | 50 Hz | | |
| | 60 Hz | | |
| Typical input current at U _N | 116 mA | | |
| Typical response time | 5 ms 25 ms (depending on phase relation) | | |
| Typical release time range | 5 ms 20 ms (depending on phase relation) | | |
| Power dissipation for nominal condition | 2.78 W | | |



Technical data

Contact side

| Contact type | 2 PDT | | |
|--|--|--|--|
| Type of switch contact | Single contact | | |
| Contact material | AgNi | | |
| Maximum switching voltage | 440 V AC | | |
| | 250 V DC | | |
| Minimum switching voltage | 10 V (At 24 mA) | | |
| Min. switching current | 10 mA (at 24 V) | | |
| Maximum inrush current | 50 A (20 ms, N/O contact) | | |
| Limiting continuous current | 16 A | | |
| Interrupting rating (ohmic load) max. | 384 W (at 24 V DC) | | |
| | 124 W (at 48 V DC) | | |
| | 108 W (at 60 V DC) | | |
| | 52 W (at 110 V DC) | | |
| | 70 W (at 220 V DC) | | |
| | 4000 VA (for 250 V AC) | | |
| | 4000 VA (At 440 V AC) | | |
| Switching capacity in acc. with DIN VDE 0660/IEC 60947 | 2 A (at 24 V, DC13) | | |
| | 0.22 A (at 120 V, DC13) | | |
| | 0.11 A (at 250 V, DC13) | | |
| | 3 A (at 120 V, AC15) | | |
| | 1.5 A (at 240 V, AC15) | | |
| Single-phase motor load | 800 W (at 230 V, AC3) | | |
| Motor load according to UL 508 | 1/3 HP, 120 V AC (single-phase AC motor) | | |
| | 1/2 HP, 240 V AC (single-phase AC motor) | | |

General

| Test voltage relay winding/relay contact 2.5 kV _{ms} (50 Hz, 1 min.) | | |
|---|---------------------------------------|--|
| Test voltage relay contact/relay contact | 2.5 kV _{rms} (50 Hz, 1 min.) | |
| Test voltage PDT/PDT | 2.5 kV _{rms} (50 Hz, 1 min.) | |
| Operating mode | 100% operating factor | |
| Degree of protection | RTI | |
| Mechanical service life | Approx. 10 ⁷ cycles | |
| Mounting position | any | |

Standards and Regulations

| Connection in acc. with standard | CSA | |
|----------------------------------|------------------|--|
| Standards/regulations | IEC 60664 | |
| | IEC 61810 | |
| Rated insulation voltage | 250 V AC | |
| Rated surge voltage | 4 kV | |
| Insulation | Basic insulation | |



Technical data

Standards and Regulations

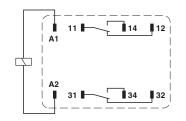
| Degree of pollution | 3 |
|----------------------|-----|
| Overvoltage category | III |

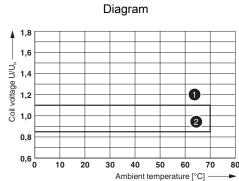
Environmental Product Compliance

| China RoHS | Environmentally Friendly Use Period = 50 | |
|------------|---|--|
| | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" | |

Drawings

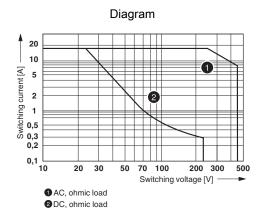
Circuit diagram

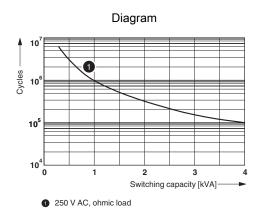




- Maximum continuous voltage at limiting continuous current = 16 A
- Minimum operate voltage For pre-excitation with UN and limiting continuous current = 16 A

Operating voltage range



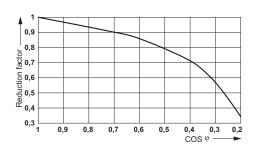


Interrupting rating

Electrical service life



Diagram



Service life reduction factor

| Α | n | n | ro | va | ls |
|-----|--------|--------|-----|----|----|
| , , | \sim | \sim | . ~ | vu | ·· |

Approvals

Approvals

CSA / UL Recognized / cUL Recognized / EAC / cULus Recognized

Ex Approvals

Approval details

CSA http://www.csagroup.org/services/testingand-certification/certified-product-listing/

UL Recognized http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm FILE E 172140

cUL Recognized http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm FILE E 172140

EAC RU C-DE.A*30.B.01082



Approvals

cULus Recognized



http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm

Phoenix Contact 2017 © - all rights reserved http://www.phoenixcontact.com

PHOENIX CONTACT GmbH & Co. KG Flachsmarktstr. 8 32825 Blomberg Germany Tel. +49 5235 300 Fax +49 5235 3 41200

http://www.phoenixcontact.com