

# Single relay - REL-IR2/LDP- 60DC/2X21 - 2903662

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 industrial relay with power contacts, 2 PDTs, test key, status LED, freewheeling diode, mechanical switch position indicator, polarity: A1+, A2-, input voltage: 60 V DC

The figure shows version REL-IR2/LDP- 24DC/2X21



## Key Commercial Data

|                        |               |
|------------------------|---------------|
| Packing unit           | 10 STK        |
| Minimum order quantity | 10 STK        |
| GTIN                   |               |
| GTIN                   | 4046356758154 |

## Technical data

### Dimensions

|        |         |
|--------|---------|
| Width  | 21.2 mm |
| Height | 35.6 mm |
| Depth  | 27.5 mm |

### Ambient conditions

|   |                  |
|---|------------------|
| Ambient temperature (operation)         | -40 °C ... 70 °C |
| Ambient temperature (storage/transport) | -40 °C ... 85 °C |

### Coil side

|   |               |
|---|---------------|
| Nominal input voltage $U_N$               | 60 V DC       |
| Input voltage range in reference to $U_N$ | see diagram   |
| Typical input current at $U_N$            | 18 mA         |
| Typical response time                     | 13 ms         |
| Typical release time                      | 14 ms         |
| Protective circuit                        | Damping diode |
| Status display                            | Yellow LED    |

# Single relay - REL-IR2/LDP- 60DC/2X21 - 2903662

## Technical data

### Coil side

|   |        |
|---|--------|
| Power dissipation for nominal condition | 1.08 W |
|---|--------|

### Contact side

|  |                           |
|--|---------------------------|
| Contact type   | 2 PDT                     |
| Type of switch contact                                 | Single contact            |
| Contact material                                       | AgNi                      |
| Maximum switching voltage                              | 250 V AC/DC               |
| Minimum switching voltage                              | 5 V (At 24 mA)            |
| Min. switching current                                 | 5 mA (at 24 V)            |
| Maximum inrush current                                 | 30 A (20 ms, N/O contact) |
| Limiting continuous current                            | 12 A                      |
| Interrupting rating (ohmic load) max.                  | 288 W (at 24 V DC)        |
|  | 124 W (at 48 V DC)        |
|  | 108 W (at 60 V DC)        |
|  | 52 W (at 110 V DC)        |
|  | 48 W (at 220 V DC)        |
|  | 3000 VA (for 250 V AC)    |
| Switching capacity min.                                | 0.12 W                    |
| 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)    |

### General

|  |                                       |
|--|---------------------------------------|
| Test voltage relay winding/relay contact | 2.5 kV <sub>rms</sub> (50 Hz, 1 min.) |
| Test voltage relay contact/relay contact | 2.5 kV <sub>rms</sub> (50 Hz, 1 min.) |
| Test voltage PDT/PDT                     | 2.5 kV <sub>rms</sub> (50 Hz, 1 min.) |
| Operating mode                           | 100% operating factor                 |
| Degree of protection                     | RT I                                  |
| Mechanical service life                  | Approx. 2x 10 <sup>7</sup> 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 |
| Degree of pollution              | 3                |
| Overvoltage category             | III              |

# Single relay - REL-IR2/LDP- 60DC/2X21 - 2903662

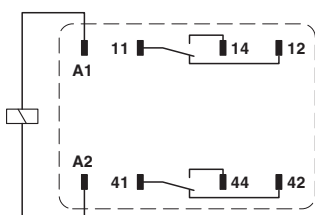
## Technical data

### Environmental Product Compliance

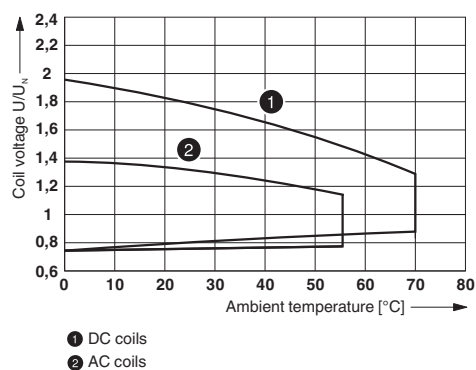
|            |   |
|------------|---|
| China RoHS | Environmentally Friendly Use Period = 50  |
|            | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

## Drawings

Circuit diagram

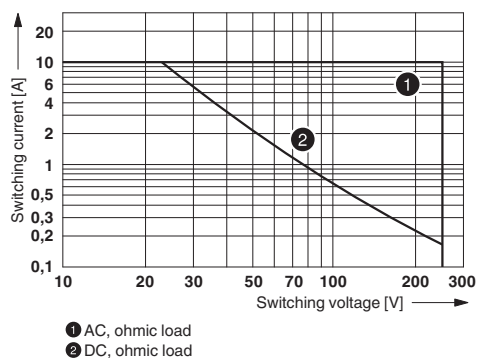


Diagram



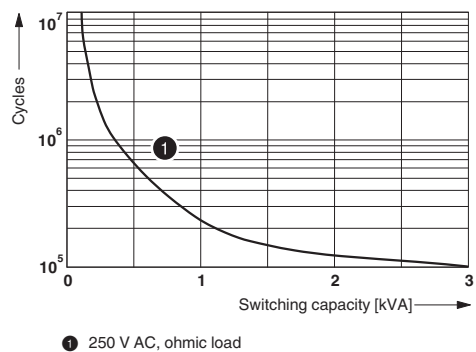
Operating voltage range

Diagram



Interrupting rating

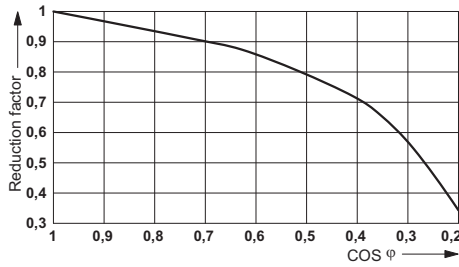
Diagram



Electrical service life

# Single relay - REL-IR2/LDP- 60DC/2X21 - 2903662

Diagram



Service life reduction factor

## Approvals

Approvals

---

Approvals

CSA / UL Recognized / cUL Recognized / VDE Zeichengenehmigung / EAC / cULus Recognized

---

Ex Approvals

---

## Approval details

|                        |  |   |               |
|------------------------|--|---|---------------|
| CSA                    |  | <a href="http://www.csagroup.org/services/testing-and-certification/certified-product-listing/">http://www.csagroup.org/services/testing-and-certification/certified-product-listing/</a>               | 2554095       |
| UL Recognized          |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>   | FILE E 172140 |
| cUL Recognized         |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>   | FILE E 172140 |
| VDE Zeichengenehmigung |  | <a href="http://www.vde.com/en/Institute/OnlineService/VDE-approved-products/Pages/Online-Search.aspx">http://www.vde.com/en/Institute/OnlineService/VDE-approved-products/Pages/Online-Search.aspx</a> | 40040427      |

## Single relay - REL-IR2/LDP- 60DC/2X21 - 2903662

### Approvals

|     |   |                          |
|-----|---|--------------------------|
| EAC |  | RU C-<br>DE.A*30.B.01082 |
|-----|---|--------------------------|

|                  |   |   |
|------------------|---|---|
| cULus Recognized |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> |
|------------------|---|---|

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>