

REL-IR2/LDP- 48DC/2X21 - Single relay



2903661

<https://www.phoenixcontact.com/us/products/2903661>

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 documentation. Our general terms of use for downloads are valid.



Plug-in industrial relay with power contacts, 2 changeover contacts, test button, status LED, freewheeling diode, mechanical switching position indicator, polarity: A1+, A2-, input voltage: 48 V DC

Commercial data

| | |
|--------------------------------------|---------------------|
| Item number | 2903661 |
| Packing unit | 1 pc |
| Minimum order quantity | 10 pc |
| Sales key | C460 |
| Product key | CK6193 |
| Catalog page | Page 292 (C-7-2013) |
| GTIN | 4046356758147 |
| Weight per piece (including packing) | 36.29 g |
| Weight per piece (excluding packing) | 36.23 g |
| Customs tariff number | 85364190 |
| Country of origin | PL |

REL-IR2/LDP- 48DC/2X21 - Single relay



2903661

<https://www.phoenixcontact.com/us/products/2903661>

Technical data

Product properties

| | |
|-------------------------|--------------------------------|
| Product type | Single relay |
| Operating mode | 100% operating factor |
| Mechanical service life | approx. 2×10^7 cycles |

Insulation characteristics

| | |
|------------|------------------|
| Insulation | Basic insulation |
|------------|------------------|

Insulation characteristics

| | |
|----------------------|--|
| Insulation | Basic insulation |
| Overvoltage category | III |
| Pollution degree | 3 (Rated voltage of 230 V) 2 (Rated voltage of 400 V) |

Electrical properties

| | |
|--|--|
| Service life electrical | see diagram |
| Maximum power dissipation for nominal condition | 1.06 W |
| Test voltage (Winding/contact) | 2.5 kV _{rms} (50 Hz, 1 min., winding/contact) |
| Test voltage (Contact/contact) | 2.5 kV _{rms} (50 Hz, 1 min., contact/contact) |
| Test voltage (Changeover contact/changeover contact) | 2.5 kV _{rms} (50 Hz, 1 min., changeover contact/changeover contact) |
| Rated insulation voltage | 250 V AC |
| Rated surge voltage | 4 kV |

Input data

Coil side

| | |
|---|-------------------------|
| Nominal input voltage U_N | 48 V DC |
| Input voltage range | 37.4 V DC ... 93.6 V DC |
| Input voltage range in reference to U_N | see diagram |
| Drive and function | monostable |
| Drive (polarity) | polarized |
| Typical input current at U_N | 22 mA |
| Typical response time | 13 ms |
| Typical release time | 14 ms |
| Protective circuit | Freewheeling diode |
| Status display | Yellow LED |

Output data

Switching

| | |
|------------------------|-----------------------|
| Contact switching type | 2 changeover contacts |
| Type of switch contact | Single contact |
| Contact material | AgNi |

REL-IR2/LDP- 48DC/2X21 - Single relay



2903661

<https://www.phoenixcontact.com/us/products/2903661>

| | |
|---------------------------------------|----------------------------|
| Maximum switching voltage | 250 V AC/DC |
| Minimum switching voltage | 5 V (At 24 mA) |
| Limiting continuous current | 12 A |
| Maximum inrush current | 30 A (20 ms, N/O contacts) |
| Min. switching current | 5 mA (at 24 V) |
| 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 |
| Motor load according to UL 508 | 1/2 HP, 240 V AC |

Connection data

| | |
|-------------------|--------------------|
| Connection method | Plug-in connection |
|-------------------|--------------------|

Dimensions

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

Environmental and real-life conditions

Ambient conditions

| | |
|---|------------------|
| Degree of protection | RT I |
| Ambient temperature (operation) | -40 °C ... 70 °C |
| Ambient temperature (storage/transport) | -40 °C ... 85 °C |

Approvals

Corrosive gas test

| | |
|----------------|----------------------------|
| Identification | ISA-S71.04. G3 Harsh Group |
| | EN 60068-2-60 |

Standards and regulations

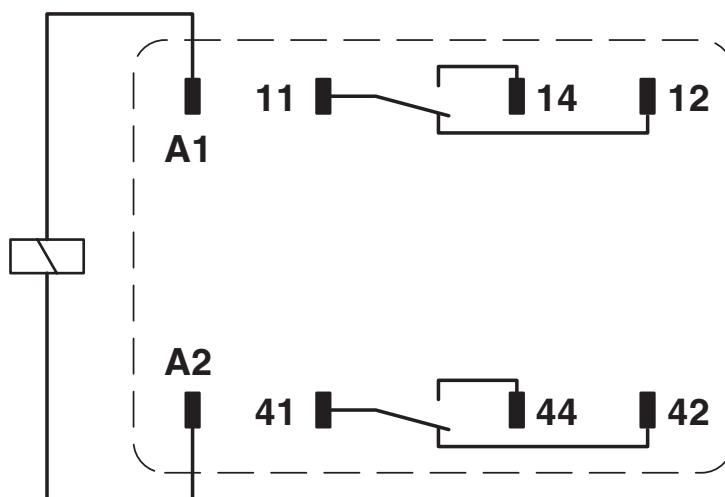
| | |
|-----------------------|-----------|
| Standards/regulations | IEC 60664 |
| | IEC 61810 |

Mounting

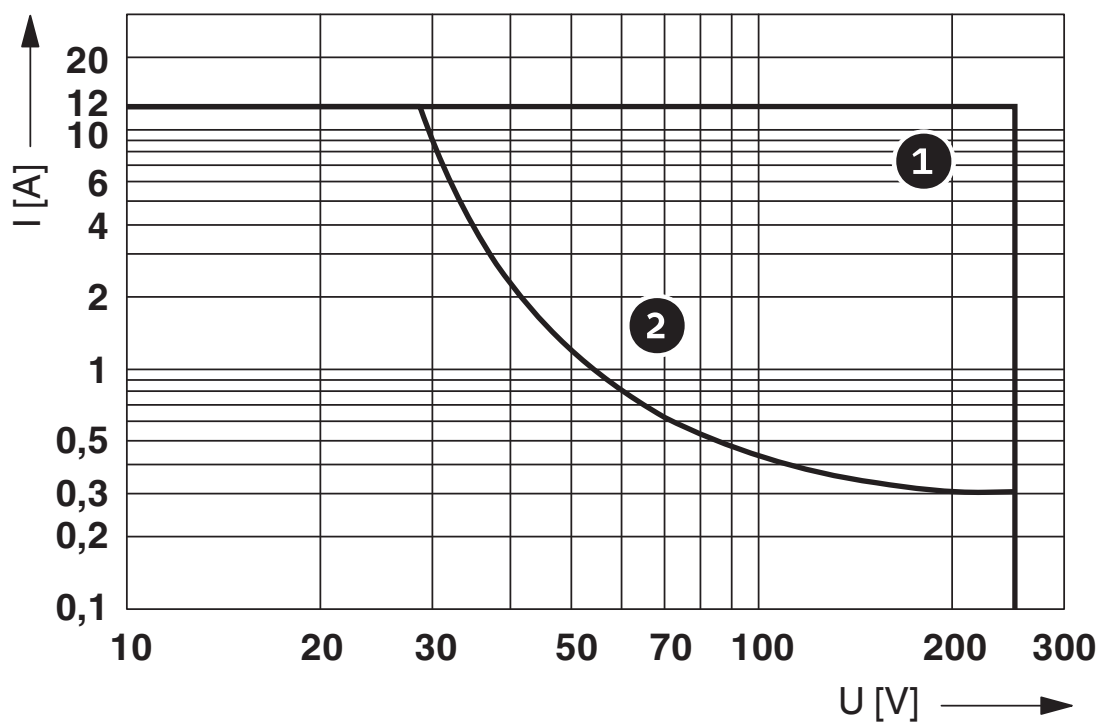
| | |
|-------------------|-----|
| Mounting position | any |
|-------------------|-----|

Drawings

Circuit diagram



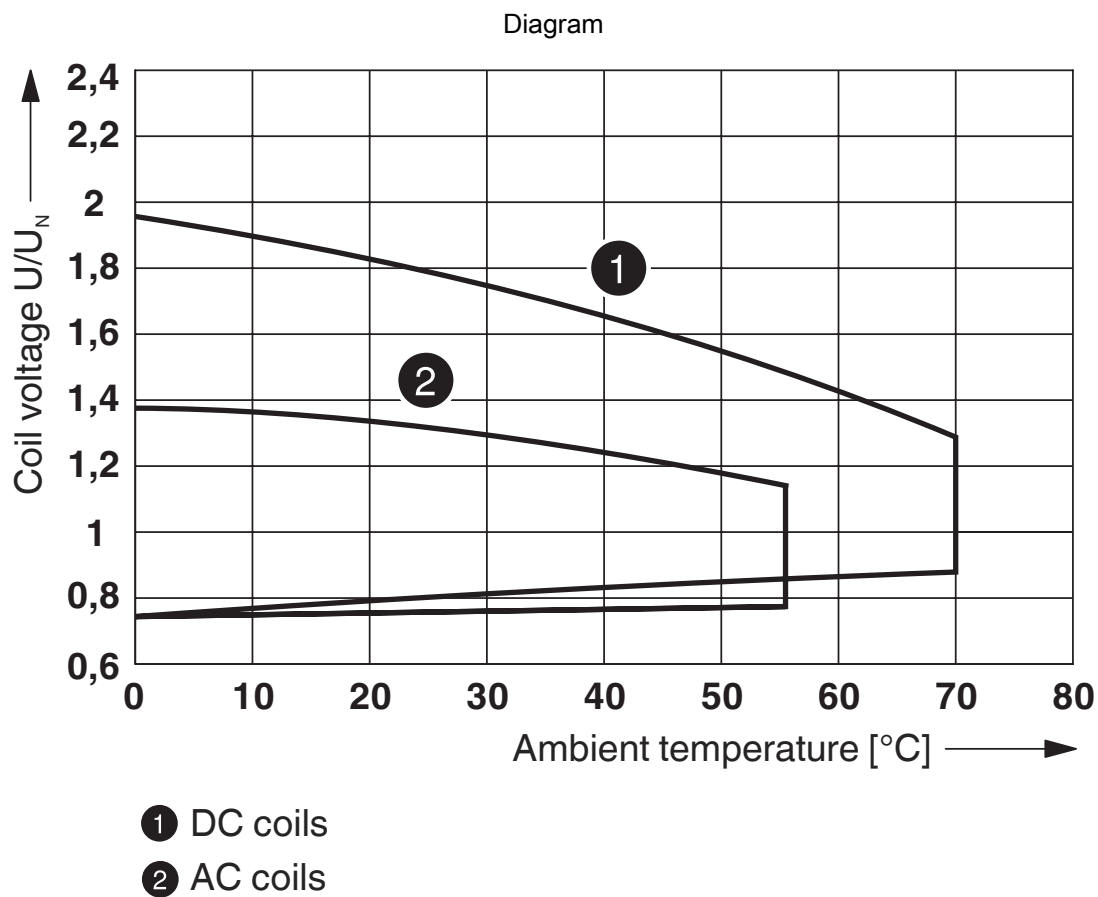
Diagram



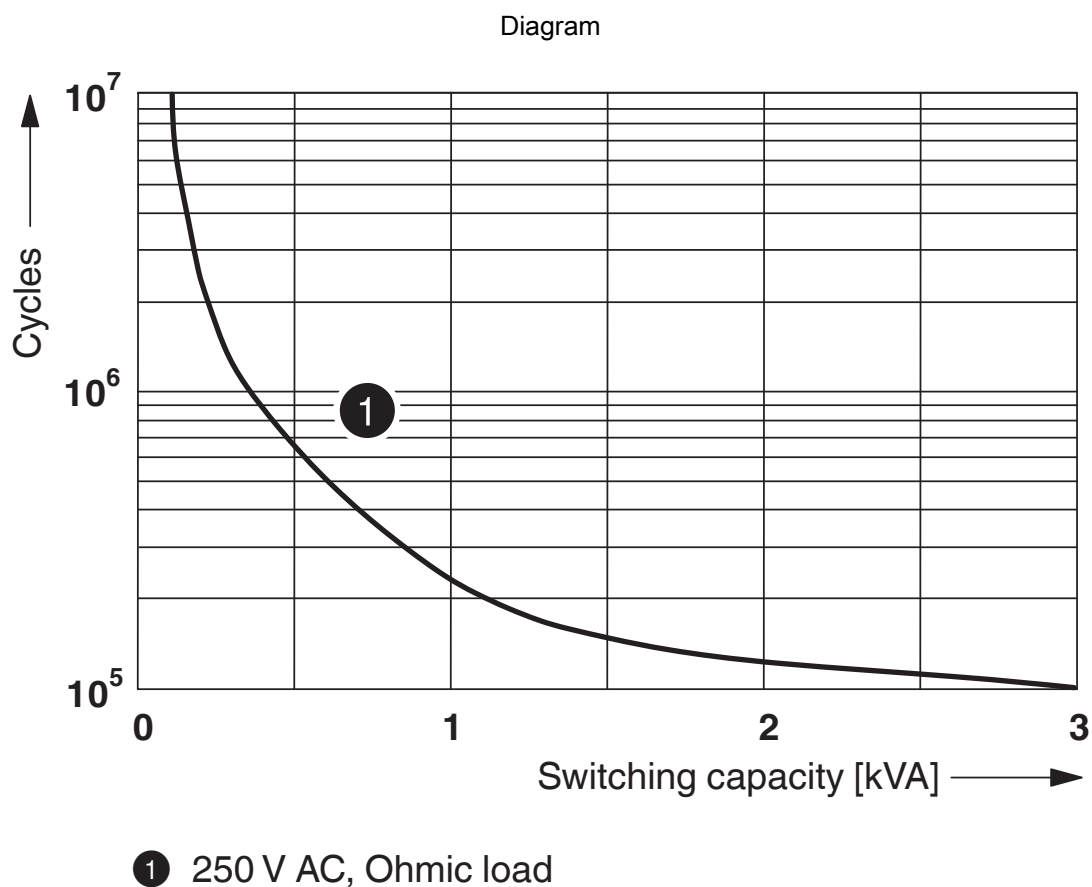
Interrupting rating

Curve 1: AC, ohmic load

Curve 2: DC, ohmic load



Operating voltage range

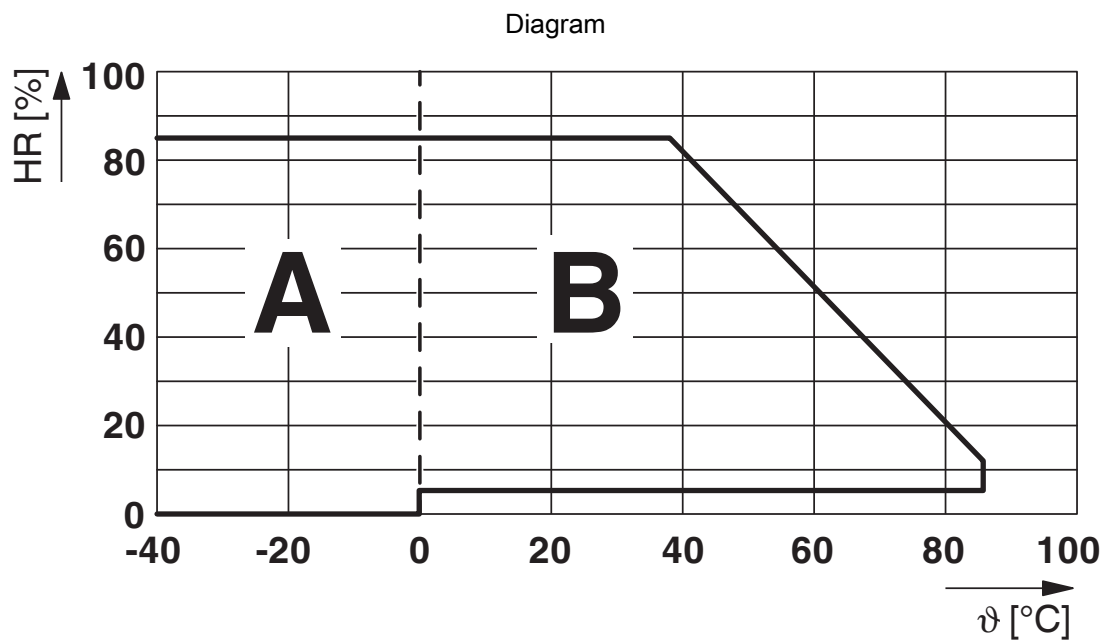


Electrical service life

Diagram



Service life reduction factor



Permissible humidity for operation and storage.

The maximum permissible ambient temperature as specified in the data sheet must be observed.

Area A: Ice buildup at ambient temperatures $\leq 0^{\circ}\text{C}$ must be prevented

Area B: Condensation at ambient temperatures $> 0^{\circ}\text{C}$ must be prevented

On 30 full days that are naturally distributed across an entire year, a humidity level of 95% is permissible at an ambient temperature $\leq 25^{\circ}\text{C}$.

REL-IR2/LDP- 48DC/2X21 - Single relay



2903661

<https://www.phoenixcontact.com/us/products/2903661>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2903661>



CSA

Approval ID: 256725



cUL Recognized

Approval ID: FILE E 172140



UL Recognized

Approval ID: FILE E 172140



EAC

Approval ID: TR_TS_D_00573_c



VDE Zeichengenehmigung

Approval ID: 40040427

cULus Recognized

REL-IR2/LDP- 48DC/2X21 - Single relay



2903661

<https://www.phoenixcontact.com/us/products/2903661>

Classifications

ECLASS

| | |
|-------------|----------|
| ECLASS-11.0 | 27371601 |
| ECLASS-12.0 | 27371601 |
| ECLASS-13.0 | 27371601 |

ETIM

| | |
|----------|----------|
| ETIM 8.0 | EC001437 |
|----------|----------|

UNSPSC

| | |
|-------------|----------|
| UNSPSC 21.0 | 39122300 |
|-------------|----------|

REL-IR2/LDP- 48DC/2X21 - Single relay



2903661

<https://www.phoenixcontact.com/us/products/2903661>

Environmental product compliance

| | |
|------------|---|
| China RoHS | Environmentally friendly use period: unlimited = EFUP-e |
| | No hazardous substances above threshold values |

REL-IR2/LDP- 48DC/2X21 - Single relay



2903661

<https://www.phoenixcontact.com/us/products/2903661>

Mandatory accessories

RIF-2-BPT/4X21 - Relay base

2900934

<https://www.phoenixcontact.com/us/products/2900934>

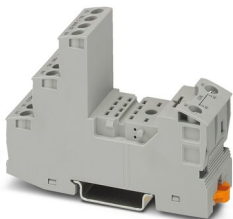


Relay base RIF-2..., for industrial relay with 2 or 4 changeover contacts, Push-in connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5

RIF-2-BSC/4X21 - Relay base

2900932

<https://www.phoenixcontact.com/us/products/2900932>



RIF-2... relay base, for industrial relay with 2 or 4 changeover contacts, screw connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5

Phoenix Contact 2023 © - all rights reserved

<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com