

## Single relay - REL-IR4/LDP-110DC/4X21 - 2903680

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Plug-in industrial relay with power contacts, 4 PDTs, test key, status LED, freewheeling diode, mechanical switch position indicator, polarity: A1+, A2-, coil voltage: 110 V DC



COMPLETE

### Key Commercial Data

|                                      |   |
|--------------------------------------|---|
| Packing unit                         | 1 pc  |
| Minimum order quantity               | 10 pc   |
| GTIN                                 | <br>4 046356 758932 |
| GTIN                                 | 4046356758932   |
| Weight per Piece (excluding packing) | 34.000 g  |
| Custom tariff number                 | 85364900  |
| Country of origin                    | Poland  |

### Technical data

#### Dimensions

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

#### Ambient conditions

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

#### Coil side

|                             |          |
|-----------------------------|----------|
| Nominal input voltage $U_N$ | 110 V DC |
|-----------------------------|----------|

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## Technical data

### Coil side

|   |               |
|---|---------------|
| Input voltage range in reference to $U_N$ | see diagram   |
| Typical input current at $U_N$            | 8 mA          |
| Typical response time                     | 13 ms         |
| Typical release time                      | 14 ms         |
| Protective circuit                        | Damping diode |
| Status display                            | Yellow LED    |
| Power dissipation for nominal condition   | 0.88 W        |

### Contact side

|                                       |                            |
|---------------------------------------|----------------------------|
| Contact type                          | 4 PDTs                     |
| 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                | 16 A (20 ms, N/O contacts) |
| Limiting continuous current           | 6 A                        |
| Interrupting rating (ohmic load) max. | 144 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)         |
|                                       | 1500 VA (for 250 V AC)     |
| Switching capacity min.               | 0.12 W                     |
| Switching capacity                    | 2 A (at 24 V, DC13)        |
|                                       | 0.22 A (at 120 V, DC13)    |
|                                       | 0.11 A (at 250 V, DC13)    |
|                                       | 1.5 A (at 24 V, AC15)      |
|                                       | 1.5 A (at 120 V, AC15)     |
|                                       | 1 A (at 240 V, AC15)       |
| Motor load according to UL 508        | 1/3 HP, 240 V AC           |

### General

|  |                                       |
|--|---------------------------------------|
| Test voltage relay winding/relay contact | 2.5 kV <sub>rms</sub> (50 Hz, 1 min.) |
| Test voltage PDT/PDT                     | 2 kV <sub>rms</sub> (50 Hz, 1 min.)   |
| Operating mode                           | 100% operating factor                 |
| Mechanical service life                  | approx. $2 \times 10^7$ cycles        |
| Service life, electrical                 | see diagram                           |

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## Technical data

### General

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

### Connection data

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

### Standards and Regulations

|                                  |                  |
|----------------------------------|------------------|
| Connection in acc. with standard | CSA              |
| Standards/regulations            | IEC 60664        |
|                                  | IEC 61810        |
| Rated insulation voltage         | 250 V AC         |
| Rated surge voltage              | 2.5 kV           |
| Insulation                       | Basic insulation |
| Pollution degree                 | 2                |
| Overvoltage category             | II               |

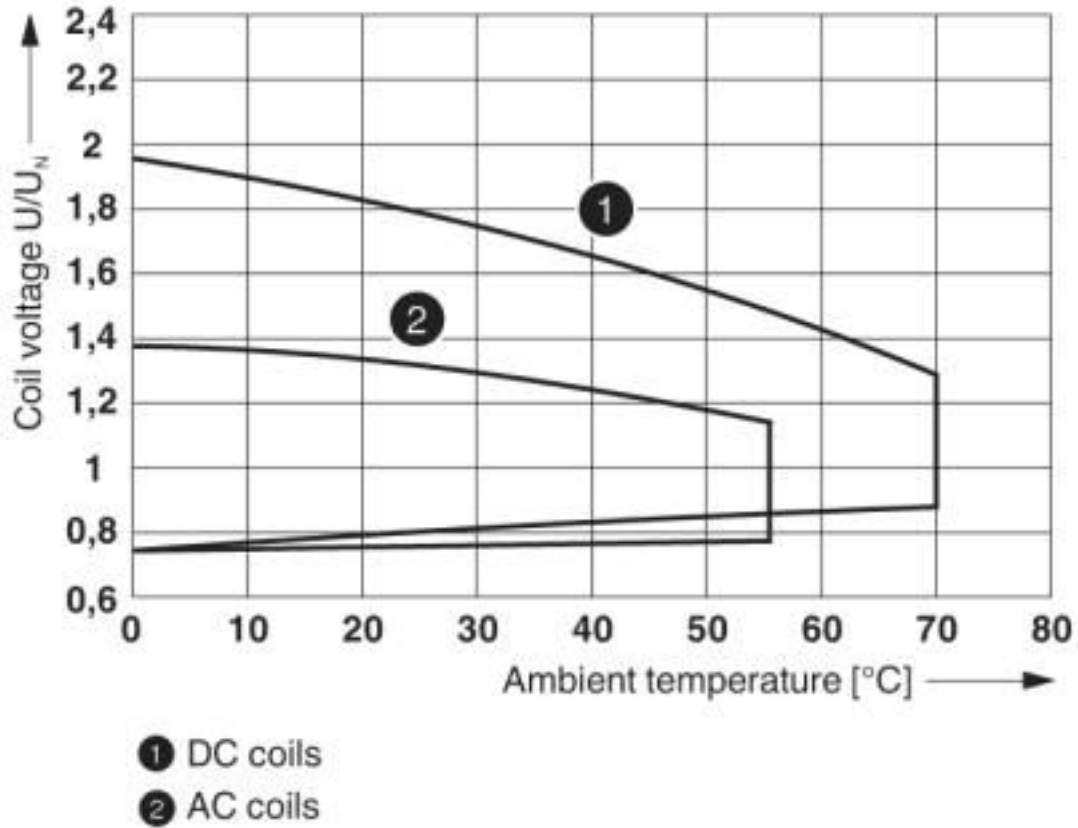
### Environmental Product Compliance

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

## Drawings

# Single relay - REL-IR4/LDP-110DC/4X21 - 2903680

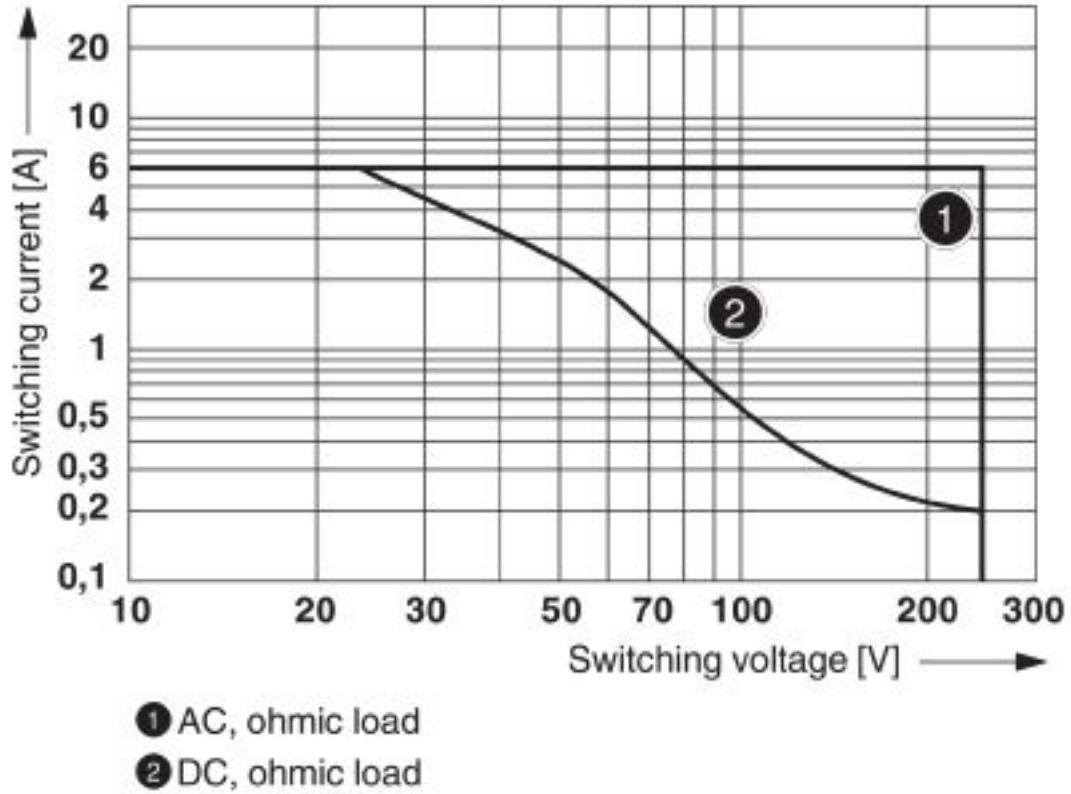
Diagram



Operating voltage range

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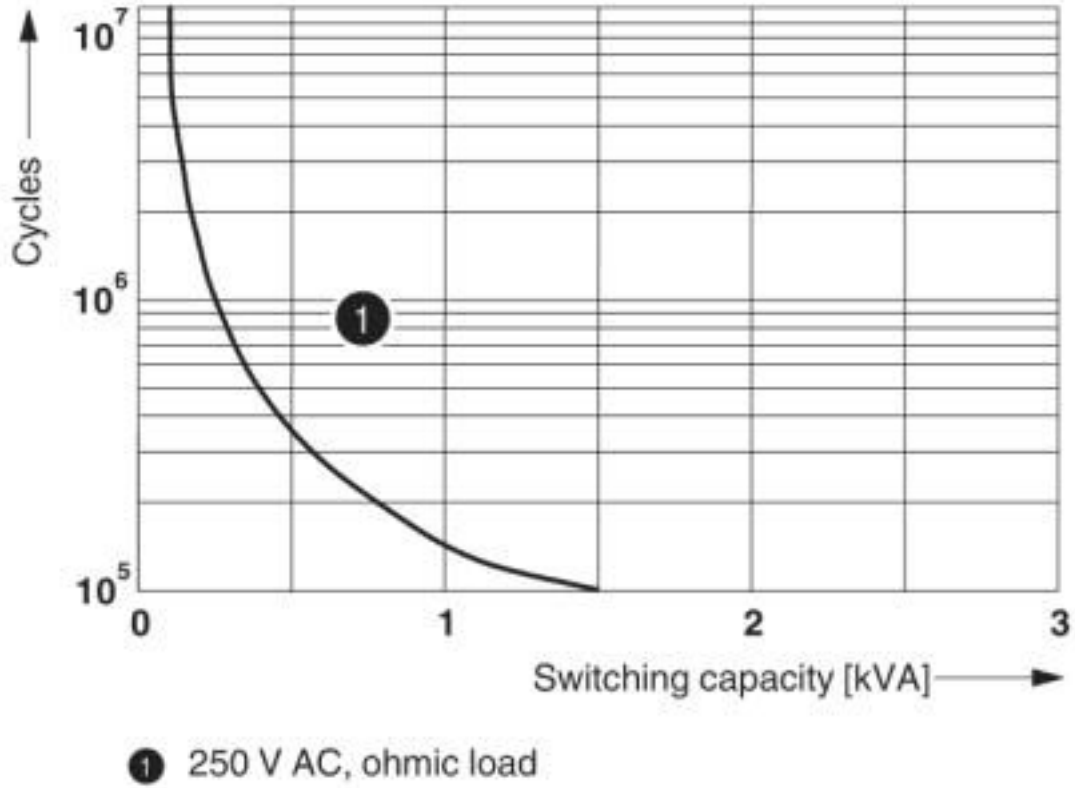
Diagram



Interrupting rating

# Single relay - REL-IR4/LDP-110DC/4X21 - 2903680

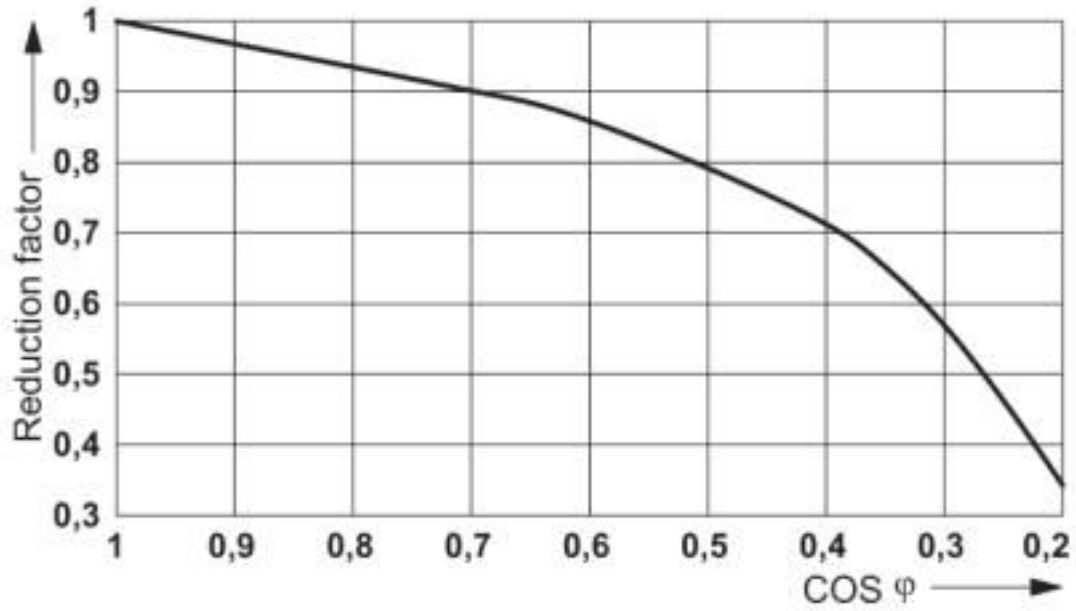
Diagram



Electrical service life

## Single relay - REL-IR4/LDP-110DC/4X21 - 2903680

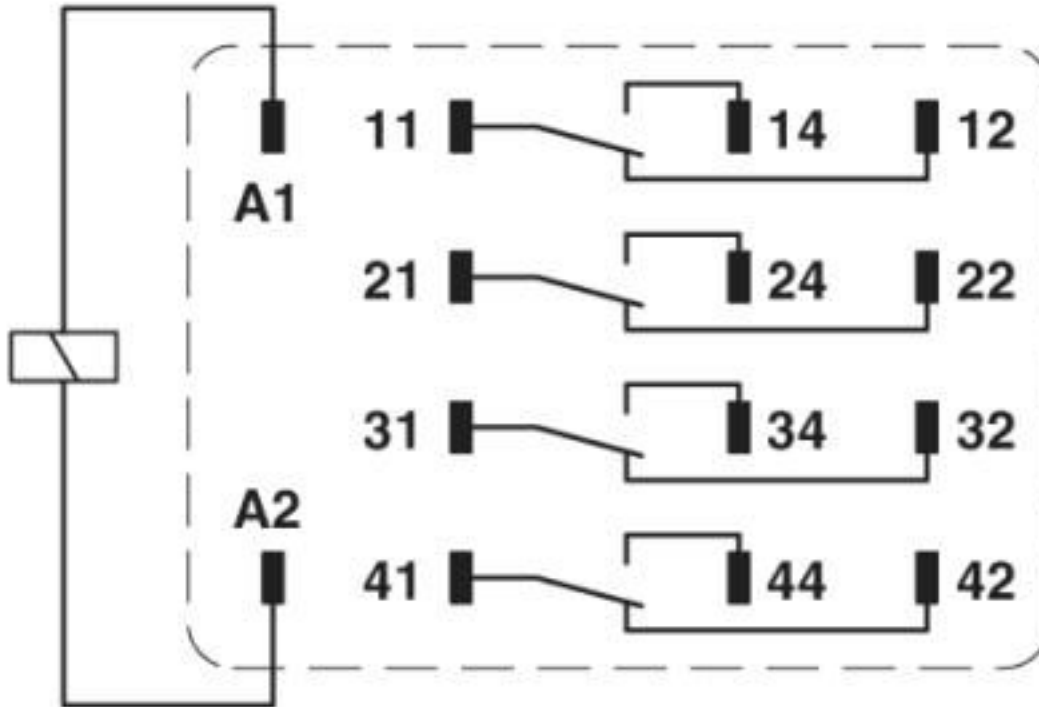
Diagram



Service life reduction factor

# Single relay - REL-IR4/LDP-110DC/4X21 - 2903680

Circuit diagram



## Classifications

eCl@ss

|               |          |
|---------------|----------|
| eCl@ss 10.0.1 | 27371601 |
| eCl@ss 4.0    | 27371100 |
| eCl@ss 4.1    | 27371100 |
| eCl@ss 5.0    | 27371600 |
| eCl@ss 5.1    | 27371600 |
| eCl@ss 6.0    | 27371600 |
| eCl@ss 7.0    | 27371601 |
| eCl@ss 8.0    | 27371601 |
| eCl@ss 9.0    | 27371601 |

ETIM

|          |          |
|----------|----------|
| ETIM 2.0 | EC001437 |
| ETIM 3.0 | EC001437 |
| ETIM 4.0 | EC001437 |
| ETIM 5.0 | EC001437 |
| ETIM 6.0 | EC001437 |



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## Classifications

### ETIM

|          |          |
|----------|----------|
| ETIM 7.0 | EC001437 |
|----------|----------|

### UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 30211916 |
| UNSPSC 7.0901 | 39121515 |
| UNSPSC 11     | 39121515 |
| UNSPSC 12.01  | 39121515 |
| UNSPSC 13.2   | 39122334 |
| UNSPSC 18.0   | 39122334 |
| UNSPSC 19.0   | 39122334 |
| UNSPSC 20.0   | 39122334 |
| UNSPSC 21.0   | 39122334 |

## Approvals

### Approvals


#### Approvals


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

#### Ex Approvals

### Approval details

|     |   |   |         |
|-----|---|---|---------|
| CSA |  | <a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/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 |
|----------------|---|---|---------------|

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### Approvals

|                        |  |   |                     |
|------------------------|--|---|---------------------|
| VDE Zeichengenehmigung |  | <a href="http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx">http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx</a> | 4004027             |
| EAC                    |  |   | TR_TS_D_00573_c     |
| EAC                    |  |   | RU*C-DE.*08.B.00010 |
| cULus Recognized       |  |   |                     |

### Accessories

#### Additional products

Relay base - RIF-2-BPT/4X21 - 2900934



RIF-2... relay base, for industrial relay with 2 or 4 PDTs, push-in connection, plug-in option for input/suppressor modules, for mounting on NS 35/7,5

Relay base - RIF-2-BSC/4X21 - 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