

Single relay - REL-IR4/LDP-110DC/4X21AU - 2903673

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

The figure shows version REL-IR4/LDP- 24DC/4X21



Key Commercial Data

| | |
|------------------------|---------------|
| Packing unit | 10 STK |
| Minimum order quantity | 10 STK |
| GTIN | |
| GTIN | 4046356758864 |

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 | 110 V DC |
| 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 |

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Technical data

Coil side

| | |
|---|--------|
| Power dissipation for nominal condition | 0.88 W |
|---|--------|

Contact side

| | |
|---------------------------------------|---|
| Contact type | 4 PDTs |
| Type of switch contact | Single contact |
| Contact material | AgNi, hard gold-plated |
| Note | If the specified maximum values for multi-layer contact relays are exceeded, the gold plating is destroyed. The maximum values of the power contact relay are then valid. This can result in a shorter service life than with a pure power contact. |
| Maximum switching voltage | 30 V AC 36 V DC |
| Minimum switching voltage | 5 V (At 24 mA) |
| Maximum inrush current | 50 mA |
| Limiting continuous current | 50 mA |
| Interrupting rating (ohmic load) max. | 1.2 W (at 24 V DC) |
| Switching capacity min. | 0.12 W |

Contact side (with destroyed gold layer)

| | |
|--|--|
| Contact material | AgNi |
| Note | the following values are applicable if a gold layer is destroyed |
| Maximum switching voltage | 250 V AC/DC |
| Minimum switching voltage | 5 V (At 24 mA) |
| Limiting continuous current | 6 A |
| Maximum inrush current | 16 A (20 ms, N/O contact) |
| Min. switching current | 5 mA (at 24 V) |
| 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) |
| Switching capacity in acc. with DIN VDE 0660/IEC 60947 | 1500 VA (for 250 V AC) 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) |

General

| | |
|--|---------------------------------------|
| Test voltage relay winding/relay contact | 2.5 kV _{rms} (50 Hz, 1 min.) |
| Test voltage PDT/PDT | 2 kV _{rms} (50 Hz, 1 min.) |
| Operating mode | 100% operating factor |

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Technical data

General

| | |
|-------------------------|--------------------------------|
| Degree of protection | RT I |
| Mechanical service life | Approx. 2×10^7 cycles |
| Mounting position | any |

Standards and Regulations

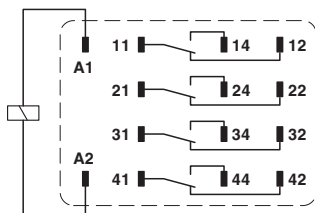
| | |
|----------------------------------|------------------|
| Connection in acc. with standard | CSA |
| Standards/regulations | IEC 60664 |
| | IEC 61810 |
| Rated insulation voltage | 250 V AC |
| Rated surge voltage | 2.5 kV |
| Insulation | Basic insulation |
| Degree of pollution | 2 |
| Overvoltage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

Environmental Product Compliance

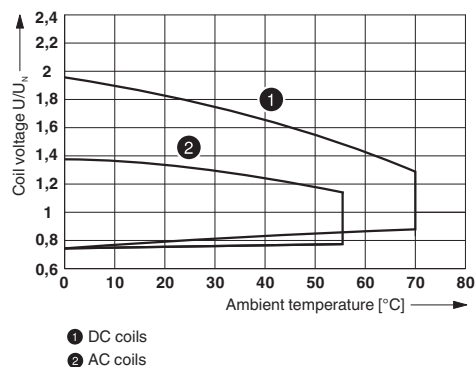
| | |
|------------|---|
| China RoHS | Environmentally Friendly Use Period = 50 |
| | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

Drawings

Circuit diagram



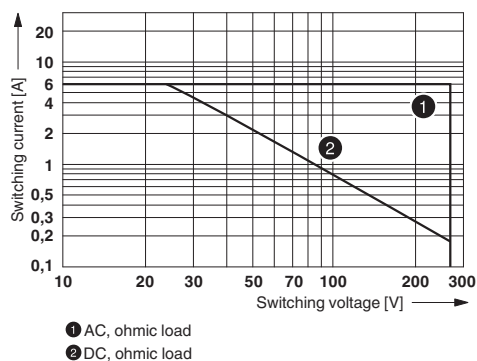
Diagram



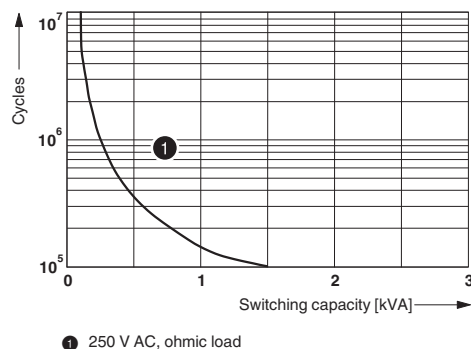
Operating voltage range

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Diagram



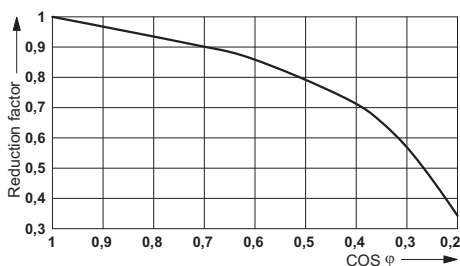
Diagram



Interrupting rating

Electrical service life

Diagram



Service life reduction factor

Approvals

Approvals

Approvals

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

Ex Approvals

Approval details

| | | | |
|-----|--|---|---------|
| CSA | | http://www.csagroup.org/services/testing-and-certification/certified-product-listing/ | 2554095 |
|-----|--|---|---------|

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Approvals

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

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

| | | | |
|------------------------|--|---|----------|
| VDE Zeichengenehmigung | | http://www.vde.com/en/Institute/OnlineService/VDE-approved-products/Pages/Online-Search.aspx | 40040427 |
|------------------------|--|---|----------|

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| EAC | | | RU C- DE.A*30.B.01082 |
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| cULus Recognized | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | |
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