

# Single relay - REL-IR/LDP-110DC/4X21 AU - 2834119

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Pluggable industrial relays with power contacts and additional hard gold plating, 4 PDT, test button, status LED, free-wheeling diode, mechanical switch position indicator, polarity A1+, A2-, coil voltage: 110 V DC

## Your advantages

- With detectable manual operation
- Integrated status LED
- Mechanical switch position indicator
- DC types with integrated freewheeling diode

## Key Commercial Data

|                                      |   |
|--------------------------------------|---|
| Packing unit                         | 10 pc   |
| Minimum order quantity               | 10 pc   |
| GTIN                                 | <br>4 017918 941925 |
| GTIN                                 | 4017918941925   |
| Weight per Piece (excluding packing) | 39.060 g  |
| Custom tariff number                 | 85364900  |
| Country of origin                    | Japan   |

## Technical data

### Dimensions

|        |         |
|--------|---------|
| Width  | 21.5 mm |
| Height | 28 mm   |
| Depth  | 36 mm   |

### Ambient conditions

|   |                  |
|---|------------------|
| Ambient temperature (operation)         | -55 °C ... 70 °C |
| Ambient temperature (storage/transport) | -55 °C ... 70 °C |

### Coil side

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## Technical data

### Coil side

|   |                                      |
|---|--------------------------------------|
| Nominal input voltage $U_N$             | 110 V DC                             |
| Typical input current at $U_N$          | 10 mA                                |
| Typical response time                   | 13 ms                                |
| Typical release time                    | 14 ms                                |
| Coil resistance                         | 11100 $\Omega$ $\pm$ 15 % (at 20 °C) |
| Power dissipation for nominal condition | 1.1 W                                |

### Contact side

|                                       |                        |
|---------------------------------------|------------------------|
| Contact type                          | 4 PDTs                 |
| Type of switch contact                | Single contact         |
| Contact material                      | AgNi, hard gold-plated |
| Maximum switching voltage             | 250 V AC/DC            |
| Minimum switching voltage             | 1 V                    |
| Min. switching current                | 1 mA                   |
| Maximum inrush current                | 12 A (15 ms)           |
| Limiting continuous current           | 5 A                    |
| Interrupting rating (ohmic load) max. | 1250 VA (for 250 V AC) |

### General

|  |                           |
|--|---------------------------|
| Test voltage relay winding/relay contact | 2 kV AC (50 Hz, 1 min.)   |
| Test voltage relay contact/relay contact | 2 kV AC (50 Hz, 1 min.)   |
| Operating mode                           | 100% operating factor     |
| Degree of protection                     | RT I                      |
| Mechanical service life                  | 5x 10 <sup>7</sup> cycles |
| Mounting position                        | any                       |
| Assembly instructions                    | On relay base PR2         |

### Standards and Regulations

|                       |                |
|-----------------------|----------------|
| Standards/regulations | DIN EN 61810-1 |
|                       | VDE 0435-201   |
|                       | EN 50178       |
| Degree of pollution   | 2              |
| Overvoltage category  | II             |

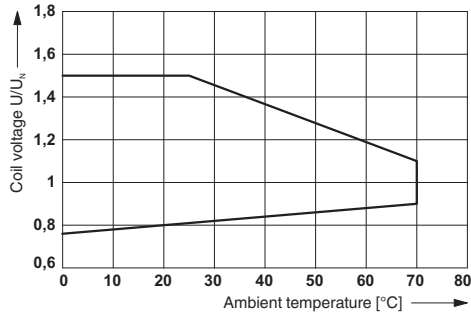
### Environmental Product Compliance

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

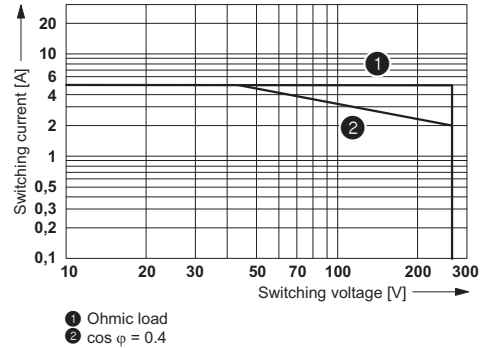
## Drawings

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Diagram



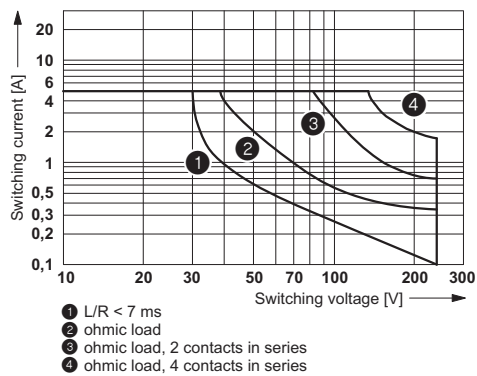
Diagram



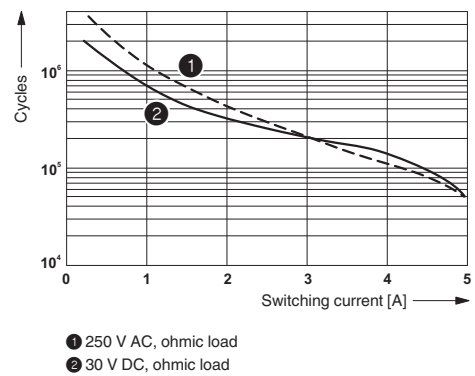
Operating voltage range

AC interrupting rating

Diagram



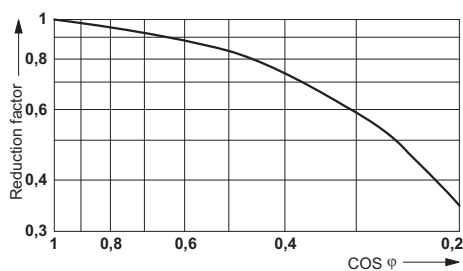
Diagram



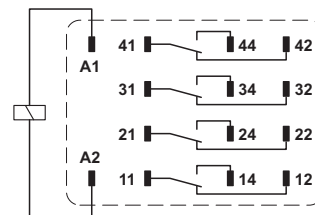
DC interrupting rating

Electrical service life

Diagram



Circuit diagram



Shown without LED and damping diode.

Service life reduction factor

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## Classifications

### eCl@ss

|            |          |
|------------|----------|
| eCl@ss 5.0 | 27371601 |
| 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 |

### UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 30211916 |
| UNSPSC 7.0901 | 39121515 |
| UNSPSC 11     | 39121515 |
| UNSPSC 12.01  | 39121515 |
| UNSPSC 13.2   | 39122334 |

## Approvals

### Approvals

#### Approvals

UL Listed / VDE Gutachten mit Fertigungsüberwachung / cUL Listed / EAC / cULus Listed

#### Ex Approvals

### Approval details

|           |  |   |               |
|-----------|--|---|---------------|
| UL Listed |  | <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 Gutachten mit Fertigungsüberwachung |  | <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> | 40026798 |
|---|--|---|----------|

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## Approvals

|            |  |   |               |
|------------|--|---|---------------|
| cUL Listed |  | <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 |
|------------|--|---|---------------|

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

|              |  |  |  |
|--------------|--|--|--|
| cULus Listed |  |  |  |
|--------------|--|--|--|

## Accessories

### Additional products

Relay base - PR2-BSC2/4X21 - 2833563



Relay base PR2-B, for industrial relay REL-IR with 2 or 4 PDT, 2/2-level version, screw connections, connection facility for input/interference suppression modules, for mounting on NS 35/7.5

Relay base - PR2-BSC3/4X21 - 2833576



Relay base PR2-B, for industrial relay REL-IR with 2 or 4 PDT, 1/3-level version, screw connections, connection facility for input/interference suppression modules, for mounting on NS 35/7.5

Relay base - PR2-BSP3/4X21 - 2833589



Relay base PR2-B, for industrial relay REL-IR with 2 or 4 PDT, 1/3-level version, spring-cage connections, connection facility for input/interference suppression modules, for mounting on NS 35/7.5