

## Single relay - REL-IR4/LDP- 24DC/4X21 - 2903677

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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-, input voltage: 24 V DC



### Key Commercial Data

|                                      |          |
|--------------------------------------|----------|
| Packing unit                         | 1 STK    |
| Minimum order quantity               | 10 STK   |
| Weight per Piece (excluding packing) | 34.0 g   |
| Custom tariff number                 | 85364190 |
| Country of origin                    | Poland   |

### 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 $U_N$               | 24 V DC     |
| Input voltage range in reference to $U_N$ | see diagram |
| Typical input current at $U_N$            | 42 mA       |
| Typical response time                     | 13 ms       |
| Typical release time                      | 14 ms       |

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## Technical data

### Coil side

|   |               |
|---|---------------|
| Protective circuit                      | Damping diode |
| Status display                          | Yellow LED    |
| Power dissipation for nominal condition | 1.01 W        |

### Contact side

|  |                           |
|--|---------------------------|
| Contact type   | 4 PDTs                    |
| 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 contact) |
| 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 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)   |
|  | 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 <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  |
| Degree of protection                     | RT I   |
| Mechanical service life                  | Approx. $2 \times 10^7$ cycles                                   |
| Designation                              | Air clearances and creepage distances between the power circuits |
| Standards/regulations                    | IEC 60664  |
| Rated insulation voltage                 | 250 V AC   |
| Degree of pollution                      | 2  |
| Overvoltage category                     | II   |
| Designation                              | Standards/regulations  |

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## Technical data

### General

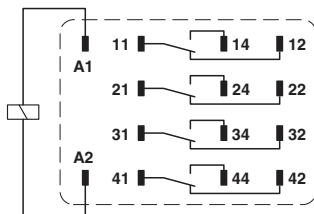
|                       |           |
|-----------------------|-----------|
| Standards/regulations | IEC 61810 |
| Mounting position     | any       |

### Standards and Regulations

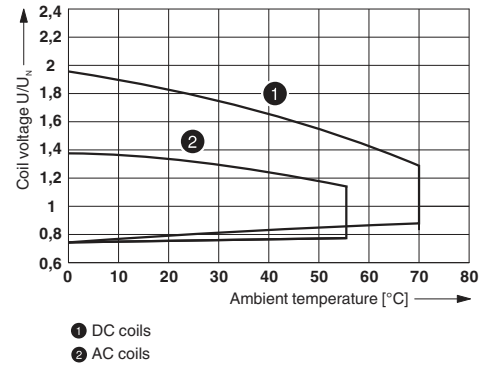
|                                  |  |
|----------------------------------|--|
| Connection in acc. with standard | CSA  |
| Designation                      | Air clearances and creepage distances between the power circuits |
| Standards/regulations            | IEC 60664  |
| Rated insulation voltage         | 250 V AC   |
| Insulation                       | Basic insulation   |
| Degree of pollution              | 2  |
| Overvoltage category             | II   |
| Designation                      | Standards/regulations  |
| Standards/regulations            | IEC 61810  |

## Drawings

Circuit diagram



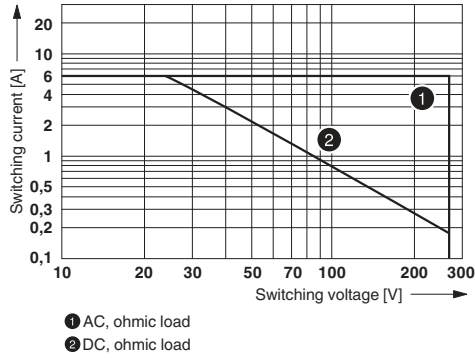
Diagram



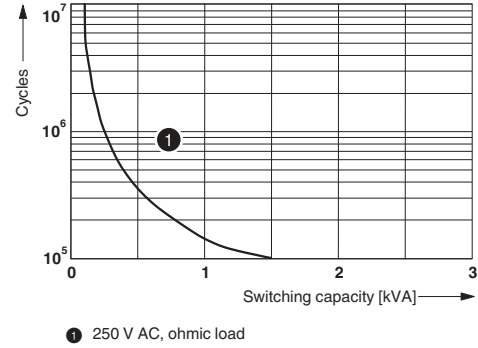
Operating voltage range

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Diagram



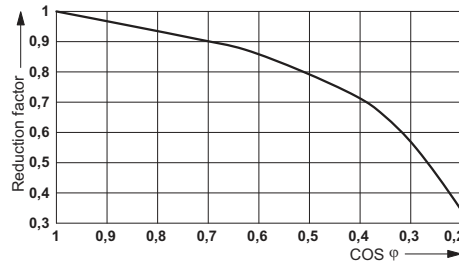
Diagram



Interrupting rating

Electrical service life

Diagram



Service life reduction factor

## Classifications

eCl@ss

|            |          |
|------------|----------|
| eCl@ss 4.0 | 27371104 |
| eCl@ss 4.1 | 27371104 |
| eCl@ss 5.0 | 27371001 |
| eCl@ss 5.1 | 27371001 |
| eCl@ss 6.0 | 27371001 |
| eCl@ss 7.0 | 27371001 |
| eCl@ss 8.0 | 27371601 |
| eCl@ss 9.0 | 27371601 |

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## Classifications

### ETIM

|          |          |
|----------|----------|
| ETIM 3.0 | EC000196 |
| ETIM 4.0 | EC000196 |
| ETIM 5.0 | EC001437 |

### UNSPSC

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

## Approvals

### Approvals

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#### Approvals

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

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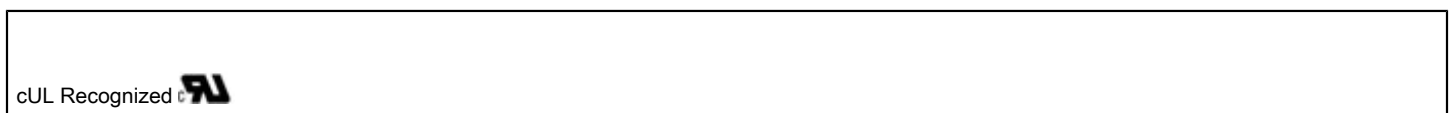
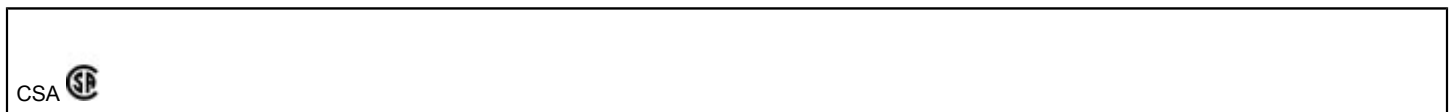
#### Ex Approvals

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#### Approvals submitted

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### Approval details



## Single relay - REL-IR4/LDP- 24DC/4X21 - 2903677

### Approvals

VDE Zeichengenehmigung 

EAC

EAC

cULus Recognized  US

### Accessories

#### Accessories

#### Relay socket

Relay socket - 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