

## Single relay - REL-OR3/LDP-24DC/3X21 - 2903693

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Plug-in octal relays with power contacts, 3 changeover contacts, test button, freewheeling diode, mechanical switching position indicator, polarity: A1+, A2-, input voltage: 24 V DC



### Key Commercial Data

|                                      |                                                                                                         |
|--------------------------------------|---------------------------------------------------------------------------------------------------------|
| Packing unit                         | 1 pc                                                                                                    |
| Minimum order quantity               | 10 pc                                                                                                   |
| GTIN                                 | <br>4 046356 759069 |
| GTIN                                 | 4046356759069                                                                                           |
| Weight per Piece (excluding packing) | 90.000 g                                                                                                |
| Custom tariff number                 | 85364190                                                                                                |
| Country of origin                    | Poland                                                                                                  |

### Technical data

#### Note

|              |                                                                                                            |
|--------------|------------------------------------------------------------------------------------------------------------|
| Type of note | Notes on operation                                                                                         |
| Note         | The outputs are not suitable for switching different outer conductors.                                     |
| Type of note | Notes on operation                                                                                         |
| Note         | Do not use to separate SELV / PELV circuits from other circuits, because safe isolation is not guaranteed. |

#### Dimensions

|        |         |
|--------|---------|
| Width  | 35 mm   |
| Height | 35 mm   |
| Depth  | 54.4 mm |

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## Technical data

### Ambient conditions

|                                         |                                |
|-----------------------------------------|--------------------------------|
| Ambient temperature (operation)         | -40 °C ... 70 °C               |
| Ambient temperature (storage/transport) | -40 °C ... 85 °C               |
| Maximum altitude                        | ≤ 2000 m                       |
| Degree of protection                    | RT I                           |
|                                         | ≥ IP54 (Installation location) |

### Coil side

|                                         |                         |
|-----------------------------------------|-------------------------|
| Nominal input voltage $U_N$             | 24 V DC                 |
| Typical input current at $U_N$          | 60 mA                   |
| Typical response time                   | 18 ms                   |
| Typical release time                    | 20 ms                   |
| Protective circuit                      | Damping diode           |
| Status display                          | Yellow LED              |
| Coil resistance                         | 430 $\Omega$ $\pm$ 10 % |
| Voltage type for actuation              | DC                      |
| Power dissipation for nominal condition | 1.44 W                  |

### Contact side

|                                       |                                |
|---------------------------------------|--------------------------------|
| Contact type                          | 3 changeover contacts          |
| Type of switch contact                | Single contact                 |
| Contact material                      | AgNi                           |
| Maximum switching voltage             | 250 V DC                       |
|                                       | 440 V AC                       |
| Minimum switching voltage             | 10 V (At 24 mA)                |
| Min. switching current                | 10 mA (at 24 V)                |
| Maximum inrush current                | 30 A (20 ms, N/O contacts)     |
| Limiting continuous current           | 10 A                           |
| Interrupting rating (ohmic load) max. | 240 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)             |
|                                       | 2500 VA (for 250 V AC)         |
| Motor load according to UL 508        | 1/2 HP, 240 V AC (N/O contact) |

### General

|                |                                                                              |
|----------------|------------------------------------------------------------------------------|
| Test voltage   | 2.5 kV <sub>rms</sub> (50 Hz, 1 min., winding/contact)                       |
|                | 2.5 kV <sub>rms</sub> (50 Hz, 1 min., changeover contact/changeover contact) |
| Operating mode | 100% operating factor                                                        |

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### Technical data

#### General

|                         |                                |
|-------------------------|--------------------------------|
| Mechanical service life | approx. $2 \times 10^7$ cycles |
| 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              | 4 kV             |
| Insulation                       | Basic insulation |
| Pollution degree                 | 3                |
| Overvoltage category             | III              |

#### Conformance/approvals

|                |                            |
|----------------|----------------------------|
| Designation    | Corrosive gas test         |
| Identification | ISA-S71.04. G3 Harsh Group |
|                | EN 60068-2-60              |

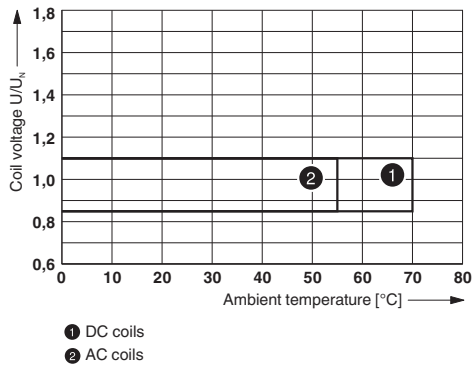
#### Environmental Product Compliance

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

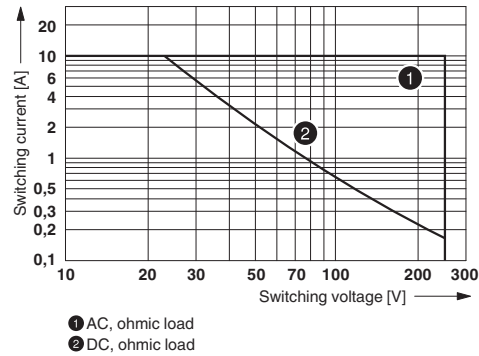
### Drawings

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Diagram

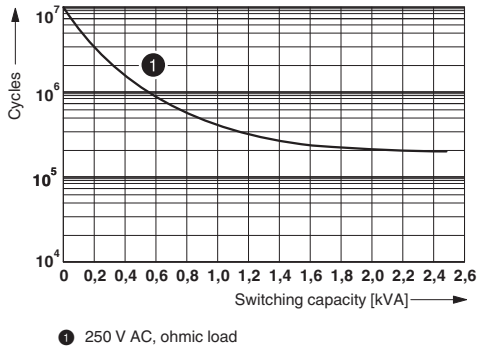


Diagram



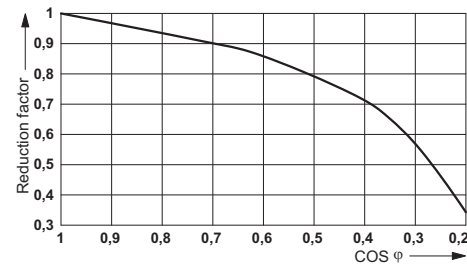
Operating voltage range

Diagram



Interrupting rating

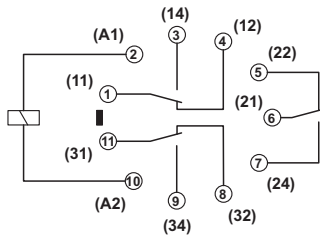
Diagram



Electrical service life

Service life reduction factor

Circuit diagram



Classifications

eCI@ss

eCI@ss 10.0.1

27371601

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### Classifications

#### eCl@ss

|             |          |
|-------------|----------|
| eCl@ss 11.0 | 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 9.0  | 27371601 |

#### ETIM

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

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##### Approvals

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

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##### Ex Approvals

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#### Approval details

## Single relay - REL-OR3/LDP-24DC/3X21 - 2903693

### Approvals

|                        |                                                                                     |                                                                                                                                                                                                           |                 |
|------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| 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   |
| EAC                    |    |                                                                                                                                                                                                           | TR_TS_D_00573_c |
| 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> | 40036588        |
| cULus Recognized       |  |                                                                                                                                                                                                           |                 |

### Accessories

#### Additional products

Relay base - RIF-3-BPT/3X21 - 2900938



Relay base RIF-3..., for octal relays with 3 changeover contacts, Push-in connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5

## Single relay - REL-OR3/LDP-24DC/3X21 - 2903693

### Accessories

Relay base - RIF-3-BSC/3X21 - 2900936



RIF-3... relay base, for octal relay with 3 changeover contacts, screw connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5