

# Single relay - REL-PR3-120AC/3X1 - 2903708

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Plug-in high-power relay with power contacts, 3 N/O contacts, coil voltage: 120 V AC

The figure shows version REL-PR3-24DC/3X1

## Key Commercial Data

|                                      |  |
|--------------------------------------|--|
| Packing unit                         | 1 STK  |
| GTIN                                 | <br>4 046356 759205 |
| Weight per Piece (excluding packing) | 83.8 g   |
| Weight per piece (including packing) | 83.8 g   |
| Country of origin                    | Poland   |

## Technical data

### Dimensions

|        |         |
|--------|---------|
| Width  | 38.6 mm |
| Height | 45.5 mm |
| Depth  | 36.1 mm |

### Ambient conditions

|   |                  |
|---|------------------|
| Ambient temperature (operation)         | -40 °C ... 55 °C |
| Ambient temperature (storage/transport) | -40 °C ... 85 °C |

### Coil side

|   |  |
|---|--|
| Nominal input voltage $U_N$               | 120 V AC                                     |
| Input voltage range in reference to $U_N$ | see diagram                                  |
| Mains frequency                           | 50 Hz<br>60 Hz                               |
| Typical input current at $U_N$            | 23 mA  |
| Typical response time                     | 5 ms ... 25 ms (depending on phase relation) |
| Typical release time range                | 5 ms ... 20 ms (depending on phase relation) |
| Status display                            | Yellow LED                                   |

### Contact side

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## Technical data

### Contact side

|  |  |
|--|--|
| Contact type   | 3 N/O contacts                                 |
| Contact material                                       | AgNi   |
| Maximum switching voltage                              | 440 V AC                                       |
|  | 250 V DC                                       |
| Minimum switching voltage                              | 10 V (At 24 mA)                                |
| Min. switching current                                 | 10 mA (at 24 V)                                |
| Maximum inrush current                                 | 50 A (20 ms, N/O contact)                      |
| Limiting continuous current                            | 16 A   |
| Interrupting rating (ohmic load) max.                  | 384 W (at 24 V DC)                             |
|  | 720 W (at 48 V DC)                             |
|  | 600 W (at 60 V DC)                             |
|  | 660 W (at 110 V DC)                            |
|  | 183 W (at 220 V DC)                            |
|  | 4000 VA (for 250 V AC)                         |
|  | 4000 VA (At 440 V AC)                          |
| Switching capacity in acc. with DIN VDE 0660/IEC 60947 | 1 A (at 24 V, DC13)                            |
|  | 1 A (at 120 V, DC13)                           |
|  | 1 A (at 220 V, DC13)                           |
|  | 1.5 A (at 24 V, AC15)                          |
|  | 1.5 A (at 120 V, AC15)                         |
|  | 1.5 A (at 240 V, AC15)                         |
| 3-phase motor load                                     | 1500 W (at 400 V, AC3)                         |
| Motor load according to UL 508                         | 1/3 HP, 120 V AC (single-phase AC motor)       |
|  | 1/2 HP, 240 V AC (single-phase AC motor)       |
|  | 1/2 HP, 240 V AC (three-phase induction motor) |

### General

|  |  |
|--|--|
| Test voltage relay winding/relay contact | 2.5 kV <sub>rms</sub> (50 Hz, 1 min.)                            |
| Test voltage relay contact/relay contact | 2.5 kV <sub>rms</sub> (50 Hz, 1 min.)                            |
| Test voltage N/O contact/N/O contact     | 2.5 kV <sub>rms</sub> (50 Hz, 1 min.)                            |
| Operating mode                           | 100% operating factor  |
| Degree of protection                     | RT I   |
| Mechanical service life                  | Approx. 10 <sup>7</sup> cycles                                   |
| Designation                              | Air clearances and creepage distances between the power circuits |
| Standards/regulations                    | IEC 60664  |
| Rated insulation voltage                 | 250 V AC   |
| Degree of pollution                      | 3  |
| Overvoltage category                     | III  |
| Designation                              | Standards/regulations  |
| Standards/regulations                    | IEC 61810  |
| Mounting position                        | any  |

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## Technical data

### 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              | 3  |
| Overvoltage category             | III  |
| Designation                      | Standards/regulations  |
| Standards/regulations            | IEC 61810  |

## 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 |

### 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

#### Approvals

CSA / UL Recognized / cUL Recognized / EAC / cULus Recognized

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## Approvals

Ex Approvals

Approvals submitted

## Approval details

CSA

UL Recognized

cUL Recognized

EAC

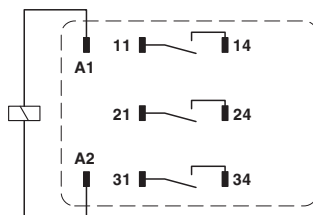
cULus Recognized

## Drawings

### Diagram

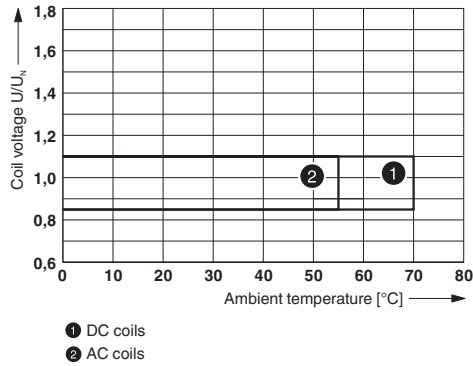
### Circuit diagram

Interrupting rating



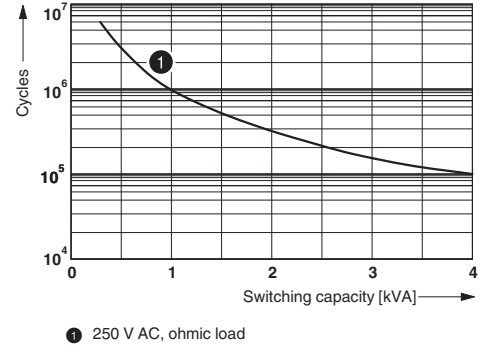
# Single relay - REL-PR3-120AC/3X1 - 2903708

Diagram



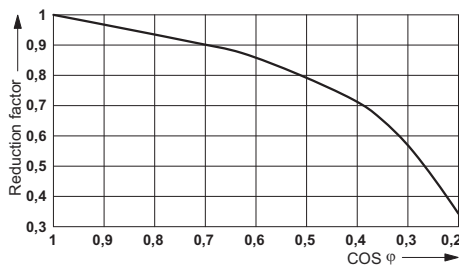
Operating voltage range

Diagram



Electrical service life

Diagram



Service life reduction factor

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