

## Single relay - REL-IR2/100AC/2X21 - 2907052

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Plug-in industrial relay with power contacts, 2 changeover contacts, test key, mechanical switch position indicator, polarity: bipolar, input voltage: 100 V AC

RoHS

COMPLETE RELAY

### Key Commercial Data

|                                      |                                                                                                         |
|--------------------------------------|---------------------------------------------------------------------------------------------------------|
| Packing unit                         | 10 pc                                                                                                   |
| GTIN                                 | <br>4 055626 175751 |
| GTIN                                 | 4055626175751                                                                                           |
| Weight per Piece (excluding packing) | 34.820 g                                                                                                |
| Custom tariff number                 | 85364900                                                                                                |
| Country of origin                    | Poland                                                                                                  |

### Technical data

#### Dimensions

|        |         |
|--------|---------|
| Width  | 21.2 mm |
| Height | 27.5 mm |
| Depth  | 35.6 mm |

#### Ambient conditions

|                                         |                  |
|-----------------------------------------|------------------|
| Ambient temperature (operation)         | -40 °C ... 55 °C |
| Ambient temperature (storage/transport) | -40 °C ... 85 °C |
| Degree of protection                    | RT I             |

#### Coil side

|                                           |                                              |
|-------------------------------------------|----------------------------------------------|
| Nominal input voltage $U_N$               | 100 V AC                                     |
| Input voltage range in reference to $U_N$ | see diagram                                  |
| Mains frequency                           | 50/60 Hz                                     |
| Typical input current at $U_N$            | 14.8 mA                                      |
| Typical response time                     | 5 ms ... 15 ms (depending on phase relation) |

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## Technical data

### Coil side

|                                         |                                              |
|-----------------------------------------|----------------------------------------------|
| Typical release time range              | 5 ms ... 20 ms (depending on phase relation) |
| Power dissipation for nominal condition | 1.48 W                                       |

### Contact side

|                                       |                           |
|---------------------------------------|---------------------------|
| Contact type                          | 2 PDT                     |
| Type of switch contact                | Single contact            |
| 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                | 30 A (20 ms, N/O contact) |
|                                       | 24 A (4 s, N/O contacts)  |
| Limiting continuous current           | 12 A                      |
| Interrupting rating (ohmic load) max. | 288 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)        |
|                                       | 3000 VA (for 250 V AC)    |
| Switching capacity min.               | 0.12 W                    |
| Switching capacity                    | 2 A (at 24 V, DC13)       |
|                                       | 1.5 A (at 230 V, AC15)    |

### General

|                                          |                                       |
|------------------------------------------|---------------------------------------|
| Test voltage relay winding/relay contact | 2.5 kV <sub>rms</sub> (50 Hz, 1 min.) |
| Test voltage PDT/PDT                     | 2.5 kV <sub>rms</sub> (50 Hz, 1 min.) |
| Operating mode                           | 100% operating factor                 |
| Mechanical service life                  | approx. $2 \times 10^7$ cycles        |
| Mounting position                        | any                                   |

### Connection data

|                   |                 |
|-------------------|-----------------|
| Connection method | Plug connection |
|-------------------|-----------------|

### Standards and Regulations

|                          |                            |
|--------------------------|----------------------------|
| Standards/regulations    | IEC 60664                  |
|                          | IEC 61810                  |
| Rated insulation voltage | 250 V AC                   |
| Rated surge voltage      | 2.5 kV                     |
| Insulation               | Basic insulation           |
| Pollution degree         | 3 (Rated voltage of 230 V) |
|                          | 2 (Rated voltage of 400 V) |
| Overvoltage category     | II                         |

## Single relay - REL-IR2/100AC/2X21 - 2907052

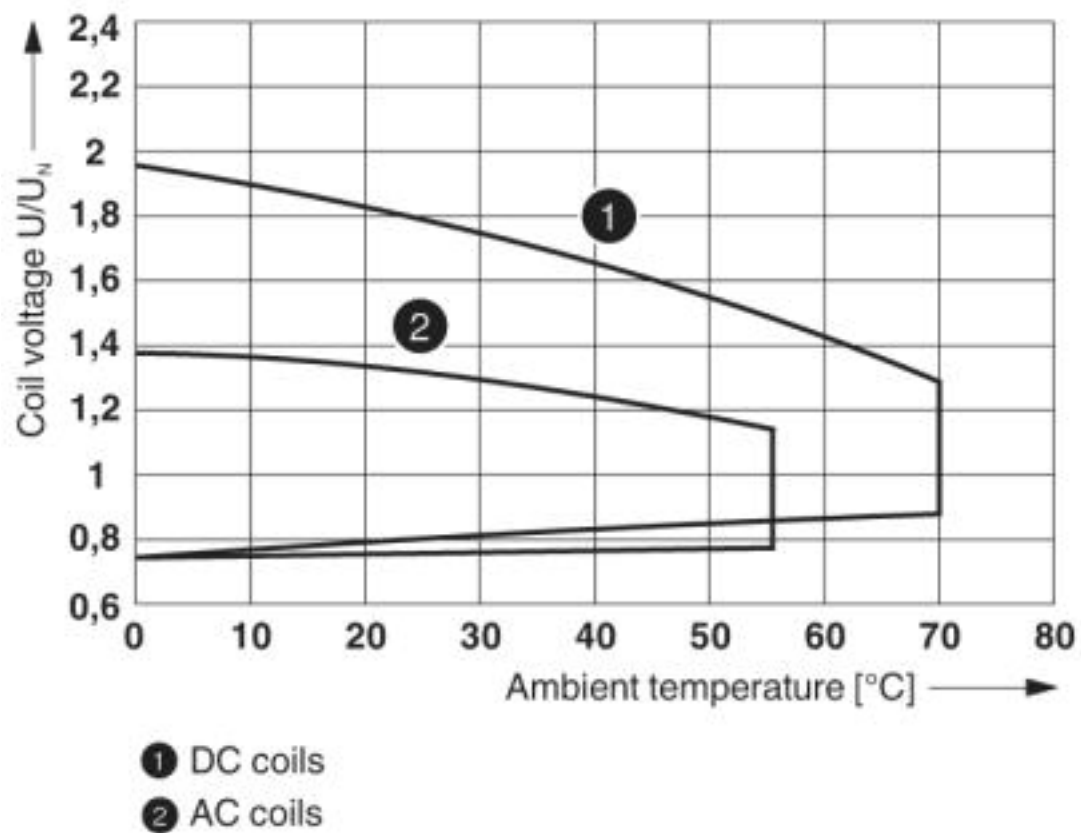
### Technical data

#### Environmental Product Compliance

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

### Drawings

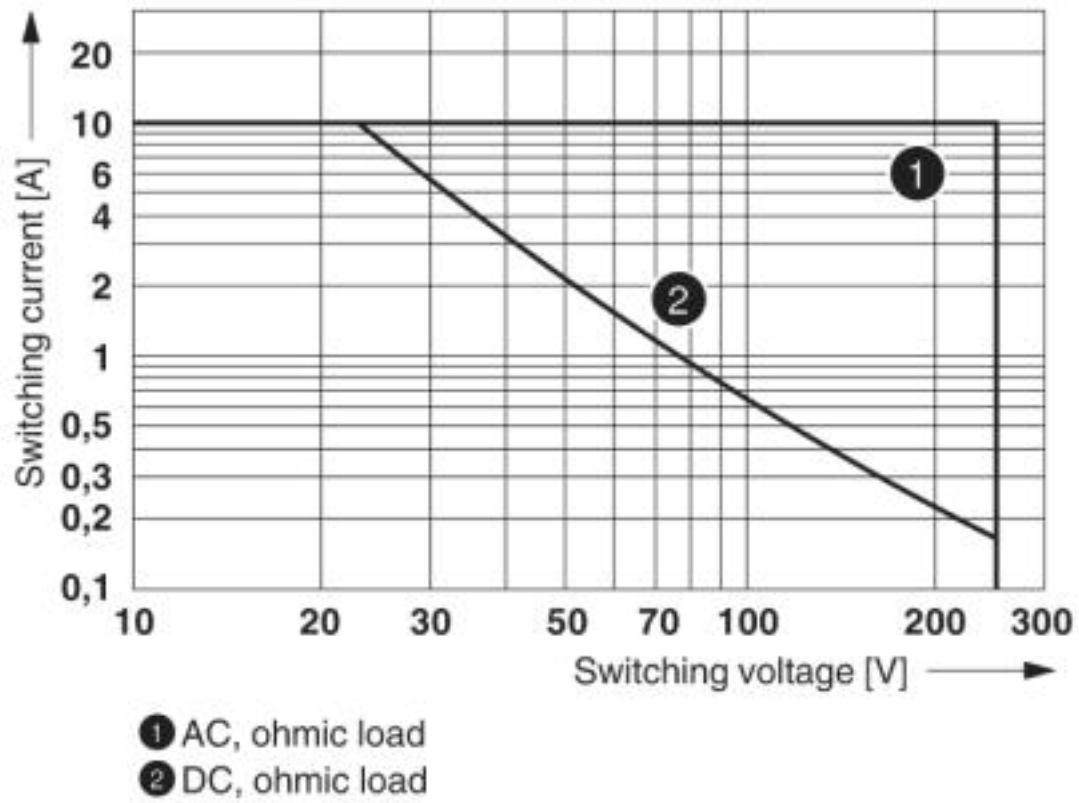
Diagram



Operating voltage range

## Single relay - REL-IR2/100AC/2X21 - 2907052

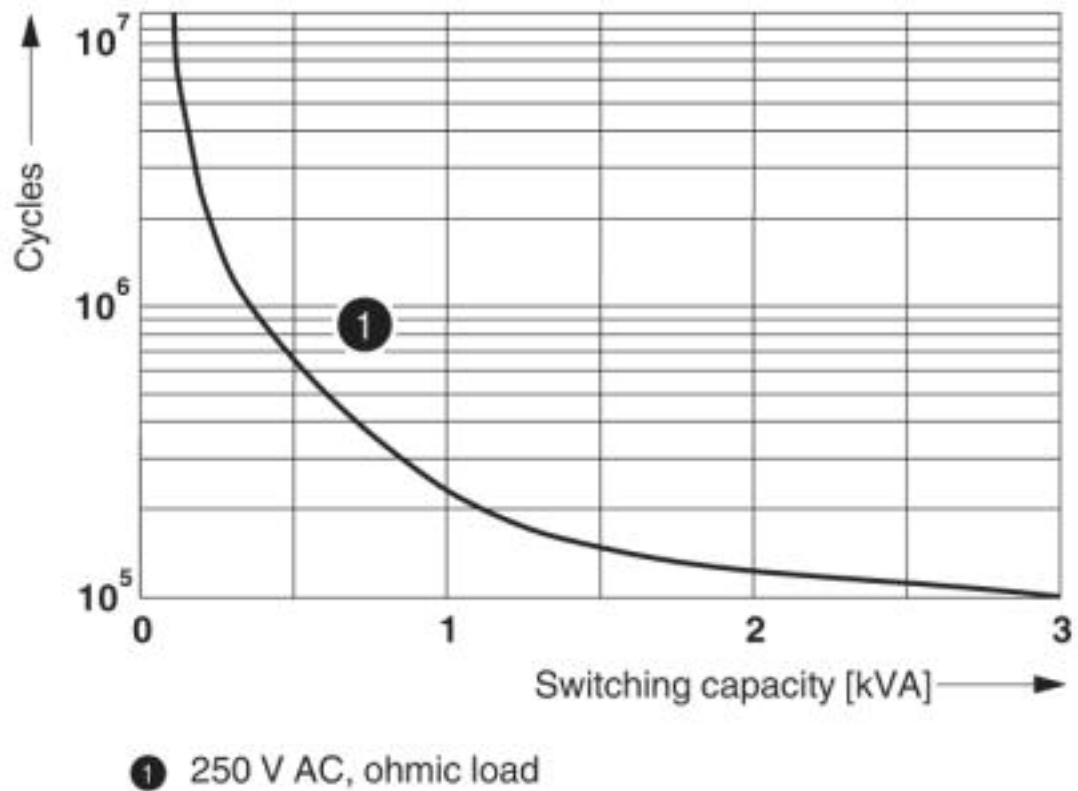
Diagram



Interrupting rating

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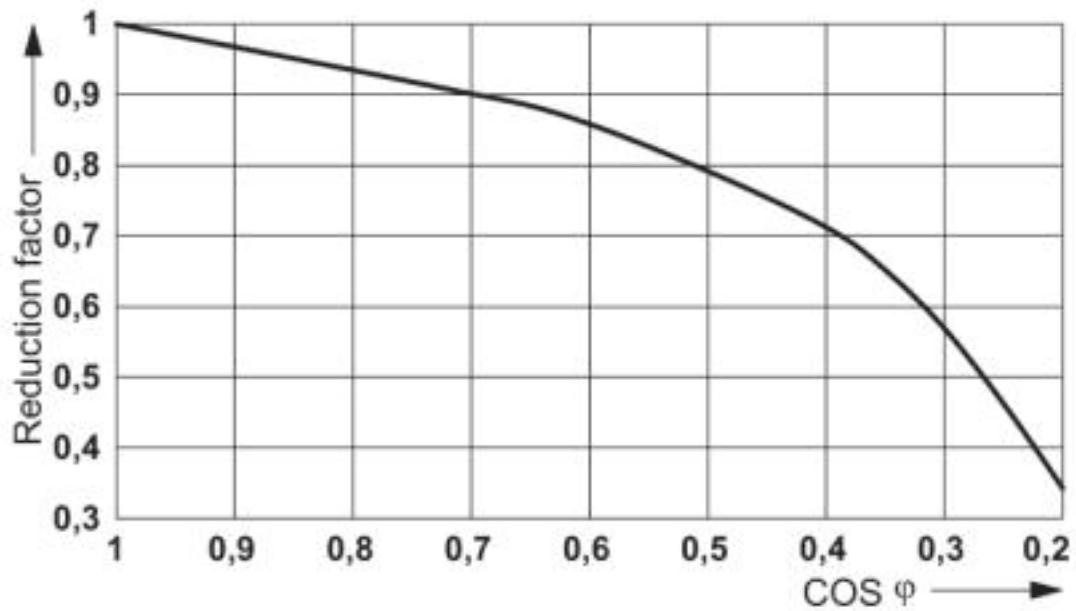
Diagram



Electrical service life

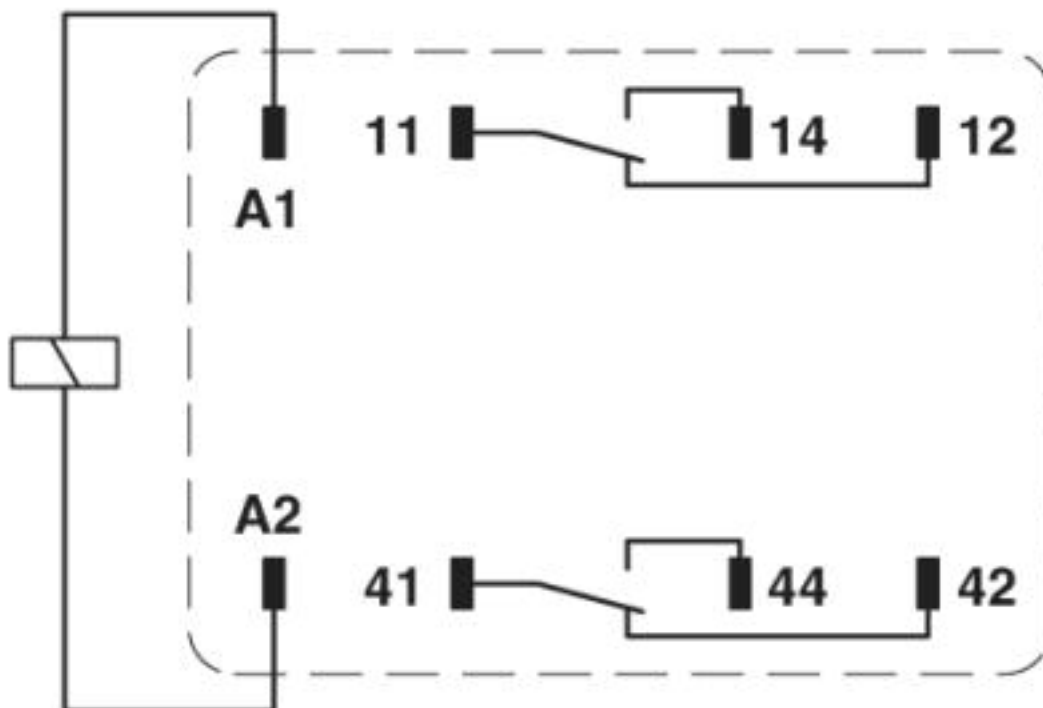
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Diagram



Service life reduction factor

Circuit diagram



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### Classifications

#### eCl@ss

|            |          |
|------------|----------|
| 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 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 |
| 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 / EAC / cULus Recognized

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##### Ex Approvals

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#### Approval details

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### 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 |
| EAC              |  |                                                                                                                                                       | TR_TS_S_00010_c |
| cULus Recognized |  |                                                                                                                                                       |                 |

### Accessories

#### Additional products

Relay base - 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

Relay base - RIF-2-BSC/4X21 - 2900932



RIF-2... relay base, for industrial relay with 2 or 4 changeover contacts, screw connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5

