

Relay Module - RIF-1-RPT-LV-230AC/1X21 - 2903339

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Pre-assembled relay module with push-in connection, consisting of: relay base, power contact relay, plug-in display/suppressor module, and retaining bracket. Contact type: 1 PDT. Input voltage: 230 V AC

The figure shows the 24 V DC version



Key commercial data

| | |
|--------------------------------------|----------|
| Packing unit | 1 pc |
| Weight per Piece (excluding packing) | 68.0 GRM |
| Custom tariff number | 85364900 |
| Country of origin | Germany |

Technical data

Dimensions

| | |
|--------|-------|
| Width | 16 mm |
| Height | 93 mm |
| Depth | 75 mm |

Ambient conditions

| | |
|---|------------------|
| Ambient temperature (operation) | -40 °C ... 50 °C |
| Ambient temperature (storage/transport) | -40 °C ... 85 °C |

Coil side

| | |
|---|----------------|
| Nominal input voltage U_N | 230 V AC |
| Input voltage range in reference to U_N | (see diagram) |
| Nominal input current at U_{IN} | 6 mA |
| Typical response time | 3 ms ... 12 ms |
| Typical release time range | 3 ms ... 20 ms |
| Operating voltage display | Yellow LED |

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Technical data

Coil side

| | |
|--------------------|----------|
| Protective circuit | Varistor |
|--------------------|----------|

Contact side

| | |
|--|---------------------------|
| Contact type | 1 PDT |
| Contact material | AgNi |
| Maximum switching voltage | 250 V AC/DC |
| Minimum switching voltage | 12 V (at 10 mA) |
| Maximum inrush current | 25 A (20 ms, N/O contact) |
| Min. switching current | 10 mA (at 12 V) |
| Limiting continuous current | 10 A (see diagram) |
| Interrupting rating (ohmic load) max. | 240 W (at 24 V DC) |
| | 58 W (at 48 V DC) |
| | 48 W (at 60 V DC) |
| | 50 W (at 110 V DC) |
| | 80 W (at 220 V DC) |
| | 2500 VA (for 250 V AC) |
| Switching capacity in acc. with DIN VDE 0660/IEC 60947 | 2 A (24 V (DC13)) |
| | 6 A (230 V (AC 15)) |

Connection data

| | |
|--|----------------------|
| Connection method | Push-in connection |
| Conductor cross section solid min. | 0.14 mm ² |
| Conductor cross section solid max. | 1.5 mm ² |
| Conductor cross section stranded min. | 0.14 mm ² |
| Conductor cross section stranded max. | 1.5 mm ² |
| Conductor cross section stranded, with ferrule with plastic sleeve min. | 0.14 mm ² |
| Conductor cross section stranded, with ferrule with plastic sleeve max. | 1.5 mm ² |
| Conductor cross section stranded, with ferrule without plastic sleeve min. | 0.14 mm ² |
| Conductor cross section stranded, with ferrule without plastic sleeve max. | 1.5 mm ² |
| Conductor cross section AWG/kcmil min. | 26 |
| Conductor cross section AWG/kcmil max | 16 |
| Stripping length | 8 mm |

General

| | |
|--|---|
| Type of note | Notes on operation |
| Note | FBS 2-6... plug-in bridge for the input side (A2) and FBS-2-8... plug-in bridge for the output side (11/21) |
| Test voltage relay winding/relay contact | 4 kV _{rms} (50 Hz, 1 min.) |
| Operating mode | 100% operating factor |

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Technical data

General

| | |
|--------------------------|---------------------------|
| Degree of protection | IP20 (Relay socket) |
| | RT III (Relay) |
| Mechanical service life | Approx. 10^7 cycles |
| Standards/regulations | DIN EN 50178 |
| | IEC 62103 |
| Rated insulation voltage | 250 V AC |
| Pollution degree | 2 |
| Surge voltage category | III |
| Mounting position | any |
| Assembly instructions | In rows with zero spacing |

Articles in set

Relay socket - RIF-1-BPT/2X21 - 2900931



RIF-1... relay base, for miniature power relay with 1 or 2 PDTs or solid-state relays of the same design, push-in connection, plug-in option for input/suppressor modules, for mounting on NS 35/7,5

Single relay - REL-MR-230AC/21HC - 2961422



Pluggable miniature relays, with power contact for high continuous current, 1 PDT, input voltage 230 V AC

Plug-in module - RIF-LV-120-230 AC/110 DC - 2900944



Plug-in module, for mounting on RIF-1, RIF-2, RIF-3, and RIF-4, with varistor and yellow LED, input voltage: 120 - 230 V AC/110 V DC $\pm 20\%$

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Articles in set

Retaining bracket - RIF-RH-1 - 2900953



Relay retaining bracket, with ejector function and holder for marking material, suitable for RIF-1 relay base, for 16 mm tall miniature power relay and solid-state relay

Classifications

eCl@ss

| | |
|------------|----------|
| eCl@ss 4.0 | 27371102 |
| eCl@ss 4.1 | 27371102 |
| eCl@ss 5.0 | 27371603 |
| eCl@ss 5.1 | 27371603 |
| eCl@ss 6.0 | 27371603 |
| eCl@ss 7.0 | 27371603 |
| eCl@ss 8.0 | 27371603 |

ETIM

| | |
|----------|----------|
| ETIM 3.0 | EC001456 |
| ETIM 4.0 | EC001456 |
| ETIM 5.0 | EC001437 |

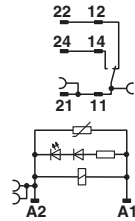
UNSPSC

| | |
|---------------|----------|
| UNSPSC 6.01 | 30211917 |
| UNSPSC 7.0901 | 39121516 |
| UNSPSC 11 | 39121516 |
| UNSPSC 12.01 | 39121516 |
| UNSPSC 13.2 | 39121516 |

Drawings

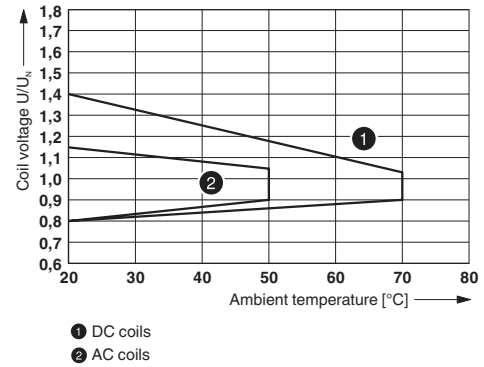
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Circuit diagram



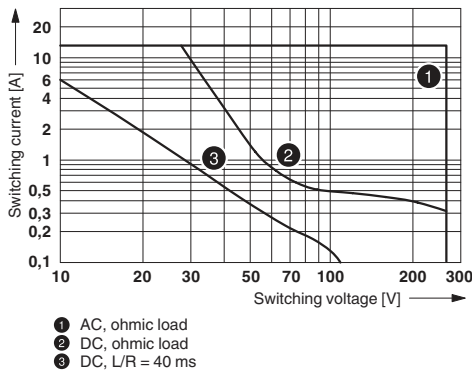
AC coils

Diagram



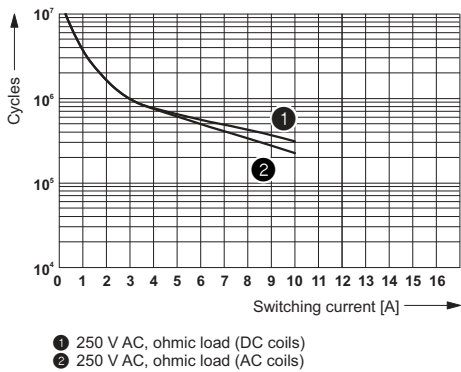
Operating voltage range

Diagram



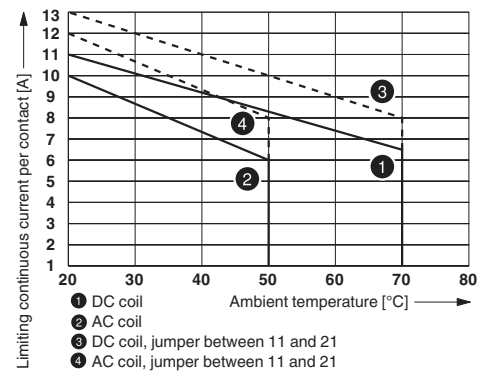
Interrupting rating

Diagram



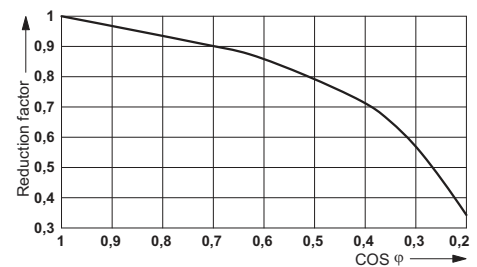
Electrical service life

Diagram



Contact derating

Diagram



Service life reduction factor

