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Especialistas en Automatización

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Relay Module - RIF-1-RPT-LV-24AC/2X21AU - 2903329

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Pre-assembled relay module with push-in connection, consisting of: relay base, multi-layer contact relay, plug-in display/suppressor module, and retaining bracket. Contact type: 2 PDTs. Input voltage: 24 V AC

The figure shows the 24 V DC version

Key Commercial Data

| | |
|--------------|---------------------|
| Packing unit | 10 STK |
| GTIN | 4 046356 732338 |

Technical data

Note

| | |
|-------------------------|---|
| Utilization restriction | EMC: class A product, see manufacturer's declaration in the download area |
|-------------------------|---|

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 | 24 V AC |
| Input voltage range in reference to U_N | see diagram |
| Typical input current at U_N | 33 mA |
| Typical response time | 3 ms ... 12 ms |
| Typical release time range | 3 ms ... 20 ms |
| Coil voltage | 24 V AC |
| Protective circuit | Varistor |
| Operating voltage display | Yellow LED |

Contact side

Relay Module - RIF-1-RPT-LV-24AC/2X21AU - 2903329

Technical data

Contact side

| | |
|--|--|
| Contact type | 2 PDT |
| Contact material | AgNi, hard gold-plated |
| Maximum switching voltage | 30 V AC |
| | 36 V DC |
| Minimum switching voltage | 100 mV (at 10 mA) |
| Min. switching current | 1 mA (at 24 V) |
| Maximum inrush current | 50 mA |
| Limiting continuous current | 50 mA |
| Interrupting rating (ohmic load) max. | 1.2 W (at 24 V DC) |
| Note | the following values are applicable if a gold layer is destroyed |
| Maximum switching voltage | 250 V AC/DC |
| Minimum switching voltage | 5 V (at 10 mA) |
| Limiting continuous current | 12 A (20 ms, N/O contact) |
| Min. switching current | 10 mA (At 5 V) |
| Interrupting rating (ohmic load) max. | 192 W (at 24 V DC) |
| | 96 W (at 48 V DC) |
| | 60 W (at 60 V DC) |
| | 44 W (at 110 V DC) |
| | 57 W (at 220 V DC) |
| | 2000 VA (for 250 V AC) |
| Switching capacity in acc. with DIN VDE 0660/IEC 60947 | 2 A (at 24 V, DC13) |
| | 0.2 A (at 110 V, DC13) |
| | 0.2 A (at 250 V, DC13) |
| | 2 A (at 24 V, AC15) |
| | 2 A (at 120 V, AC15) |
| | 2 A (at 250 V, AC15) |

Connection data input side

| | |
|----------------------------------|--|
| Connection name | Coil side |
| Connection method | Push-in connection |
| Stripping length | 8 mm |
| Conductor cross section solid | 0.14 mm ² ... 1.5 mm ² |
| Conductor cross section flexible | 0.14 mm ² ... 1.5 mm ² |
| | 0.14 mm ² ... 1 mm ² (Ferrule with plastic sleeve) |
| | 0.14 mm ² ... 1.5 mm ² (Ferrules without plastic sleeve) |
| Conductor cross section AWG | 26 ... 16 |

Connection data output side

| | |
|-------------------------------|--|
| Connection name | Contact side |
| Connection method | Push-in connection |
| Stripping length | 8 mm |
| Conductor cross section solid | 0.14 mm ² ... 1.5 mm ² |

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Technical data

Connection data output side

| | |
|----------------------------------|--|
| Conductor cross section flexible | 0.14 mm ² ... 1.5 mm ² |
| | 0.14 mm ² ... 1 mm ² (Ferrule with plastic sleeve) |
| | 0.14 mm ² ... 1.5 mm ² (Ferrules without plastic sleeve) |
| Conductor cross section AWG | 26 ... 16 |

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.) |
| Test voltage PDT/PDT | 2.5 kV _{rms} (50 Hz, 1 min.) |
| Operating mode | 100% operating factor |
| Degree of protection | IP20 (Relay socket) |
| | RT III (Relay) |
| Mechanical service life | Approx. 10 ⁷ cycles |
| Standards/regulations | DIN EN 50178 |
| | IEC 62103 |
| Degree of pollution | 2 |
| Overvoltage category | III |
| Mounting position | any |
| Assembly instructions | In rows with zero spacing |

Standards and Regulations

| | |
|-----------------------|---|
| Standards/regulations | DIN EN 50178 |
| | IEC 62103 |
| Insulation | Safe isolation, basic insulation, and 4 kV rated surge voltage between all changeover contacts. |
| Degree of pollution | 2 |
| Overvoltage category | III |

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

Relay Module - RIF-1-RPT-LV-24AC/2X21AU - 2903329

Articles in set

Single relay - REL-MR- 24AC/21-21AU - 2961464



Plug-in miniature power relay, with multi-layer gold contact, 2 PDTs, input voltage 24 V AC

Plug-in module - RIF-LV-12-24 UC - 2900942



Plug-in module, for mounting on RIF-1, RIF-2, RIF-3, and RIF-4, with varistor and yellow LED, input voltage: 12 - 24 V AC/DC $\pm 20\%$

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 | 27371601 |
| eCl@ss 9.0 | 27371601 |

ETIM

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

UNSPSC

| | |
|---------------|----------|
| UNSPSC 6.01 | 30211917 |
| UNSPSC 7.0901 | 39121516 |

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Classifications

UNSPSC

| | |
|--------------|----------|
| UNSPSC 11 | 39121516 |
| UNSPSC 12.01 | 39121516 |
| UNSPSC 13.2 | 39121516 |

Approvals

Approvals

Approvals

EAC / GL / LR

Ex Approvals

Approvals submitted

Approval details

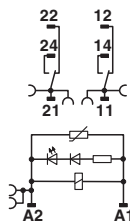
EAC

GL

LR

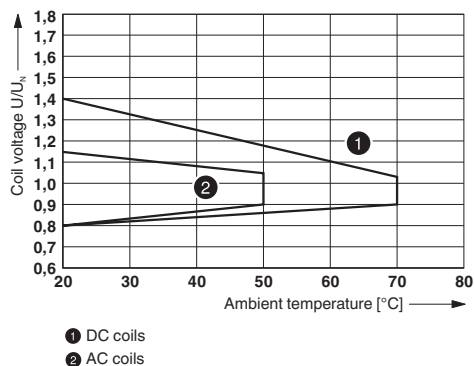
Drawings

Circuit diagram



AC coils

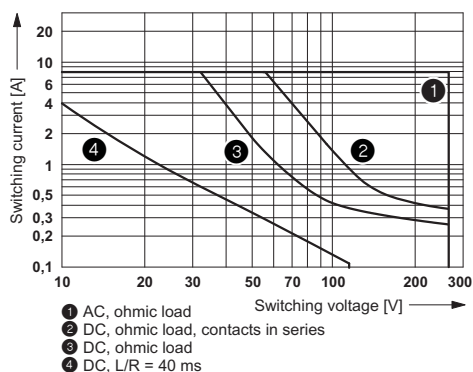
Diagram



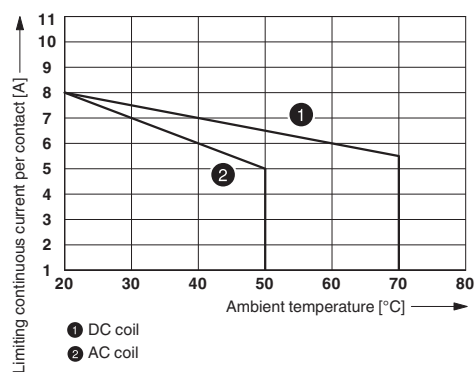
Operating voltage range

Relay Module - RIF-1-RPT-LV-24AC/2X21AU - 2903329

Diagram



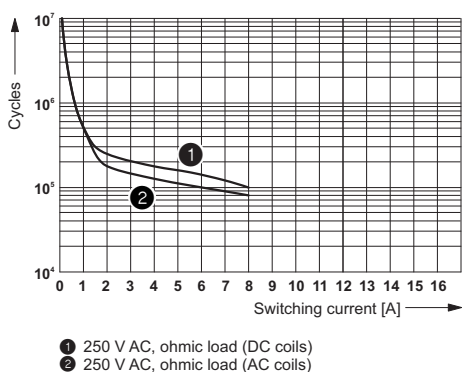
Diagram



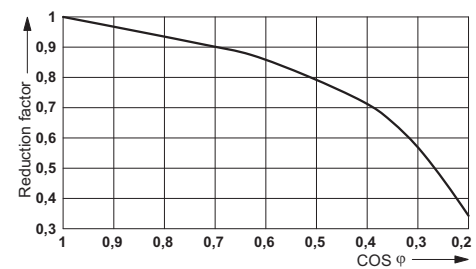
Interrupting rating

Contact derating

Diagram



Diagram



Electrical service life

Service life reduction factor

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