

Relay Module - RIF-4-RPT-LDP-24DC/2X21 - 2903281

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Pre-assembled relay module with push-in connection, consisting of: relay base, power contact relay, and retaining bracket. Contact type: 2 PDTs. Input voltage: 24 V DC



Key Commercial Data

| | |
|--------------|---------------|
| Packing unit | 5 pc |
| GTIN | |
| GTIN | 4046356732864 |

Technical data

Note

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

Dimensions

| | |
|--------|--------|
| Width | 43 mm |
| Height | 111 mm |
| Depth | 90 mm |

Ambient conditions

| | |
|---|------------------|
| Ambient temperature (operation) | -40 °C ... 60 °C |
| Ambient temperature (storage/transport) | -40 °C ... 85 °C |

Coil side

| | |
|---|-------------|
| Nominal input voltage U_N | 24 V DC |
| Input voltage range in reference to U_N | see diagram |
| Typical input current at U_N | 56 mA |
| Typical response time | 20 ms |
| Typical release time | 20 ms |
| Coil voltage | 24 V DC |

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Technical data

Coil side

| | |
|---|---------------|
| Protective circuit | Damping diode |
| Operating voltage display | Yellow LED |
| Power dissipation for nominal condition | 1.34 W |

Contact side

| | |
|---------------------------------------|--|
| Contact type | 2 PDT |
| Type of switch contact | Single contact |
| 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 | 11 A (see diagram) |
| 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) |
| | 70 W (at 220 V DC) |
| | 2500 VA (for 250 V AC) |
| | 4000 VA (at 440 V AC) |
| Switching capacity | 2 A (at 24 V, DC13) |
| | 0.22 A (at 120 V, DC13) |
| | 0.11 A (at 250 V, DC13) |
| | 3 A (at 120 V, AC15) |
| | 1.5 A (at 240 V, AC15) |
| Single-phase motor load | 800 W |
| 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) |

Connection data

| | |
|----------------------------------|---|
| 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 ... 1.5 mm ² (Ferrule with plastic sleeve) |
| | 0.14 mm ² ... 1 mm ² (Ferrule with plastic sleeve, two conductors on double terminal block) |
| Conductor cross section AWG | 26 ... 16 (solid) |
| | 26 ... 16 (flexible) |

Connection data 2

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Technical data

Connection data 2

| | |
|----------------------------------|---|
| Connection name | Contact side |
| Connection method | Push-in connection |
| Stripping length | 10 mm |
| Conductor cross section solid | 0.14 mm ² ... 2.5 mm ² |
| Conductor cross section flexible | 0.14 mm ² ... 2.5 mm ² |
| | 0.14 mm ² ... 2.5 mm ² (Ferrule with plastic sleeve) |
| | 0.14 mm ² ... 1 mm ² (Ferrule with plastic sleeve, two conductors on double terminal block) |
| Conductor cross section AWG | 26 ... 14 (solid) |
| | 26 ... 14 (flexible) |

General

| | |
|--|---------------------------------------|
| Test voltage relay winding/relay contact | 2.5 kV _{rms} (50 Hz, 1 min.) |
| Test voltage relay contact/relay contact | 2.5 kV _{rms} (50 Hz, 1 min.) |
| Operating mode | 100% operating factor |
| Degree of protection | IP20 (Relay base) |
| | RT I (Relay) |
| Mechanical service life | approx. 10 ⁷ cycles |
| Mounting position | any |
| Assembly instructions | In rows with zero spacing |

Standards and Regulations

| | |
|--|------------------|
| Connection in acc. with standard | CSA |
| Standards/regulations | DIN EN 50178 |
| Rated insulation voltage | 250 V AC |
| Rated surge voltage | 4 kV |
| Insulation | Basic insulation |
| Degree of pollution | 2 |
| Overvoltage category | III |
| Flammability rating according to UL 94 | V2 |

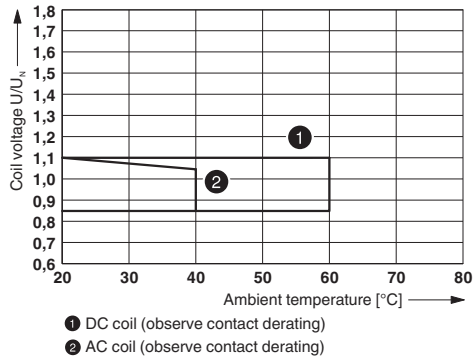
Environmental Product Compliance

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

Drawings

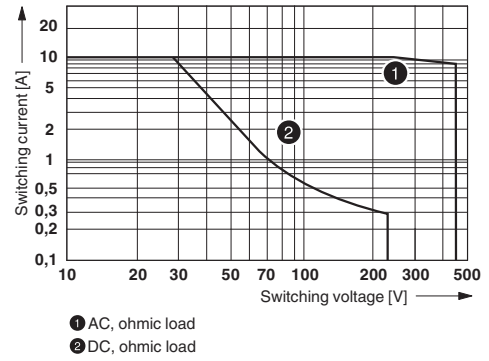
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Diagram



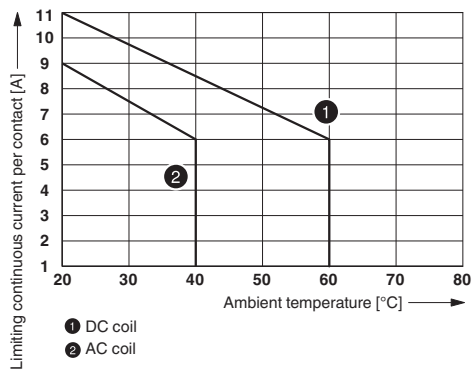
Operating voltage range

Diagram



Interrupting rating

Diagram



Contact derating

Diagram

Electrical service life

Diagram

Service life reduction factor

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Articles in set

Relay base - RIF-4-BPT/3X21 - 2900961



RIF-4... relay base, for high-power relay with 2 or 3 PDTs or 3 N/O contacts, Push-in connection, plug-in option for input/suppressor modules, for mounting on NS 35/7,5

Single relay - REL-PR2- 24DC/2X21 - 2903698



Plug-in high-power relay with power contacts, 2 PDTs, coil voltage: 24 V DC

Plug-in module - RIF-LDP-12-24 DC - 2900939



Plug-in module, for mounting on RIF-1, RIF-2, RIF-3, and RIF-4, with freewheeling diode and yellow LED, polarity: A1+, A2-, input voltage: 12 ... 24 V DC $\pm 20\%$

Retaining bracket - RIF-RH-4 - 2900956



Relay retaining bracket, with holder for marking material, suitable for RIF-4 relay base, for high-power relay

Approvals

Approvals

Approvals






DNV GL / CSA / PRS / LR / EAC

Ex Approvals

Approval details

Relay Module - RIF-4-RPT-LDP-24DC/2X21 - 2903281

Approvals

| | | | |
|--------|---|---|--------------------------|
| DNV GL |  | http://exchange.dnv.com/tari/ | TAA000018V |
| CSA |  | http://www.csagroup.org/services-industries/product-listing/ | 2607057 |
| PRS |  | http://www.prs.pl/ | TE/2108/880590/16 |
| LR |  | http://www.lr.org/en | 15/20011 |
| EAC |  | | RU C- DE.A*30.B.01082 |

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