

Relay Module - RIF-1-RPT-LDP-24DC/1X21AU - 2903338


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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: 1 PDT. Input voltage: 24 V DC



Key Commercial Data

| | |
|--------------------------------------|---------------------------------------------------------------------------------------------------------|
| Packing unit | 1 pc |
| Minimum order quantity | 10 pc |
| GTIN |  4 046356 732703 |
| GTIN | 4046356732703 |
| Weight per Piece (excluding packing) | 68.000 g |
| Custom tariff number | 85364110 |
| Country of origin | Germany |

Technical data

Note

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

Dimensions

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

Ambient conditions

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Technical data

Ambient conditions

| | |
|-----------------------------------------|-------------------|
| Ambient temperature (operation) | -40 °C ... 70 °C |
| Ambient temperature (storage/transport) | -40 °C ... 85 °C |
| Degree of protection | IP20 (Relay base) |
| | RT II (Relay) |

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 | 18 mA |
| Typical response time | 8 ms |
| Typical release time | 10 ms |
| Coil voltage | 24 V DC |
| Protective circuit | Damping diode |
| Operating voltage display | Yellow LED |
| Power dissipation for nominal condition | 0.43 W |

Contact side

| | |
|---------------------------------------|------------------------|
| Contact type | 1 PDT |
| Type of switch contact | Single contact |
| 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) |
| Switching capacity | 2 A (at 24 V, AC15) |

Contact side (with destroyed gold layer)

| | |
|---------------------------------------|------------------------------------------------------------------|
| Contact material | AgNi |
| Note | the following values are applicable if a gold layer is destroyed |
| Maximum switching voltage | 250 V AC/DC |
| Minimum switching voltage | 12 V (at 10 mA) |
| Limiting continuous current | 50 A (20 ms, N/O contact) |
| Min. switching current | 10 mA (at 12 V) |
| Interrupting rating (ohmic load) max. | 264 W (at 24 V DC) |
| | 58 W (at 48 V DC) |
| | 48 W (at 60 V DC) |

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Technical data

Contact side (with destroyed gold layer)

| | |
|--------------------|------------------------|
| | 50 W (at 110 V DC) |
| | 80 W (at 220 V DC) |
| | 2750 VA (for 250 V AC) |
| Switching capacity | 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) |

General

| | |
|------------------------------------------|-------------------------------------|
| Test voltage relay winding/relay contact | 4 kV _{rms} (50 Hz, 1 min.) |
| Operating mode | 100% operating factor |
| Mechanical service life | approx. 3x 10 ⁷ cycles |
| Service life, electrical | see diagram |
| Mounting position | any |
| Assembly instructions | In rows with zero spacing |

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

| | |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------|
| 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 |
| 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) |

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Technical data

Connection data 2

| | |
|-----------------------------|----------------------|
| Conductor cross section AWG | 26 ... 16 (solid) |
| | 26 ... 16 (flexible) |

Standards and Regulations

| | |
|----------------------------------------|----------------|
| Standards/regulations | DIN EN 50178 |
| Rated insulation voltage | 250 V AC |
| Rated surge voltage | 6 kV |
| Insulation | safe isolation |
| Pollution degree | 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" |

Articles in set

Relay base - 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- 24DC/21HC AU - 2961545



Plug-in miniature power relay, with multi-layer gold contact for high continuous currents, 1 PDT, input voltage 24 V DC

Relay Module - RIF-1-RPT-LDP-24DC/1X21AU - 2903338

Articles in set

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-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 5.0 | 27371601 |
| 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 | 30211917 |
| UNSPSC 7.0901 | 39121516 |
| UNSPSC 11 | 39121516 |
| UNSPSC 12.01 | 39121516 |
| UNSPSC 13.2 | 39122334 |

Relay Module - RIF-1-RPT-LDP-24DC/1X21AU - 2903338

Approvals

Approvals

Approvals

DNV GL / PRS / LR / EAC

Ex Approvals

Approval details

| | | | |
|--------|--|-----------------------------------------------------------------------------------|-------------------|
| DNV GL | | https://approvalfinder.dnvgl.com/ | TAA000018V |
| PRS | | http://www.prs.pl/ | TE/2108/880590/16 |
| LR | | http://www.lr.org/en | 15/20011 |
| EAC | | | TR_TS_D_00573_c |

Accessories

Accessories

End block

End clamp - CLIPFIX 35 - 3022218



Quick mounting end clamp for NS 35/7,5 DIN rail or NS 35/15 DIN rail, with marking option, width: 9.5 mm, color: gray

Insulating sleeve

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Accessories

Insulating sleeve - MPS-IH WH - 0201663

Insulating sleeve, color: white



Insulating sleeve - MPS-IH RD - 0201676

Insulating sleeve, color: red



Insulating sleeve - MPS-IH BU - 0201689

Insulating sleeve, color: blue



Insulating sleeve - MPS-IH YE - 0201692

Insulating sleeve, color: yellow



Insulating sleeve - MPS-IH GN - 0201702

Insulating sleeve, color: green



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Accessories

Insulating sleeve - MPS-IH GY - 0201728

Insulating sleeve, color: gray



Insulating sleeve - MPS-IH BK - 0201731

Insulating sleeve, color: black



Jumper

Plug-in bridge - FBS 2-6 - 3030336



Plug-in bridge, pitch: 6.2 mm, width: 10.7 mm, number of positions: 2, color: red

Plug-in bridge - FBS 2-6 BU - 3036932



Plug-in bridge, pitch: 6.2 mm, width: 10.7 mm, number of positions: 2, color: blue

Plug-in bridge - FBS 2-6 GY - 3032237



Plug-in bridge, pitch: 6.2 mm, width: 10.7 mm, number of positions: 2, color: gray

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Accessories

Plug-in bridge - FBS 2-8 - 3030284



Plug-in bridge, pitch: 8.2 mm, width: 14.7 mm, number of positions: 2, color: red

Plug-in bridge - FBS 2-8 BU - 3032567



Plug-in bridge, pitch: 8.2 mm, width: 14.7 mm, number of positions: 2, color: blue

Plug-in bridge - FBS 2-8 GY 7042 - 3032541



Bridge for potential distribution

Marker carriers

Marker carriers - STP 5-2 - 0800967



Double marker carrier, snaps onto the double-level spring-cage terminal block STTB 2,5, STTB 4, PTTB 2,5, PTTB 4 can be marked with UC-TM 5, ZB 5 or UC-TMF 5, ZBF 5

Terminal marking

Zack marker strip - ZB 5 :UNBEDRUCKT - 1050004



Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into tall marker groove, for terminal block width: 5.2 mm, lettering field size: 5.1 x 10.5 mm

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Accessories

Zack marker strip - ZB 15:UNBEDRUCKT - 0811972



Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into tall marker groove, for terminal block width: 15.2 mm, lettering field size: 10.5 x 15.1 mm

Marker for terminal blocks - UC-TM 16 - 0819217



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into tall marker groove, for terminal block width: 16 mm, lettering field size: 15.45 x 10.5 mm

Marker for terminal blocks - UC-TMF 16 - 0819262



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into flat marker groove, for terminal block width: 16 mm, lettering field size: 15.45 x 5.1 mm

Test plug terminal block

Test plugs - MPS-MT - 0201744



Test plugs, with solder connection up to 1 mm² conductor cross section, color: gray

Spare parts

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