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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

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The illustration shows the 24 V version.

Pre-assembled relay module with push-in connection, consisting of: relay base with ejector and power contact relay. Contact type: 1 PDT. Input voltage: 12 V DC



## Key commercial data

| Packing unit                         | 1 pc     |
|--------------------------------------|----------|
| Weight per Piece (excluding packing) | 28.0 GRM |
| Custom tariff number                 | 85364110 |
| Country of origin                    | Germany  |

## Technical data

#### **Dimensions**

| Width  | 6.2 mm |
|--------|--------|
| Height | 93 mm  |
| Depth  | 78 mm  |

#### Ambient conditions

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

#### Coil side

| Nominal input voltage U <sub>N</sub>               | 12 V DC       |
|--|---------------|
| Input voltage range in reference to U <sub>N</sub> | (see diagram) |
| Nominal input current at U <sub>IN</sub>           | 16 mA         |
| Typical response time                              | 5 ms          |
| Typical release time                               | 8 ms          |



## Technical data

## Coil side

| Operating voltage display | Yellow LED    |
|---------------------------|---------------|
| Protective circuit        | Damping diode |

## Contact side

| Contact type   | 1 PDT                  |
|--|------------------------|
| Contact material                                       | AgSnO                  |
| Maximum switching voltage                              | 250 V AC/DC            |
| Minimum switching voltage                              | 5 V (at 100 mA)        |
| Min. switching current                                 | 10 mA (at 12 V)        |
| Limiting continuous current                            | 6 A                    |
| Interrupting rating (ohmic load) max.                  | 140 W (at 24 V DC)     |
|  | 20 W (at 48 V DC)      |
|  | 18 W (at 60 V DC)      |
|  | 23 W (at 110 V DC)     |
|  | 40 W (at 220 V DC)     |
|  | 1500 VA (for 250 V AC) |
| Switching capacity in acc. with DIN VDE 0660/IEC 60947 | 1 A (24 V (DC13))      |
|  | 3 A (230 V (AC 15))    |

## Connection data

| Connection method  | Push-in connection |
|--|--------------------|
| Conductor cross section solid min.   | 0.14 mm²           |
| Conductor cross section solid max.   | 1.5 mm²            |
| Conductor cross section stranded min.                                      | 0.14 mm²           |
| Conductor cross section stranded max.                                      | 1.5 mm²            |
| Conductor cross section stranded, with ferrule with plastic sleeve min.    | 0.14 mm²           |
| Conductor cross section stranded, with ferrule with plastic sleeve max.    | 1.5 mm²            |
| Conductor cross section stranded, with ferrule without plastic sleeve min. | 0.14 mm²           |
| Conductor cross section stranded, with ferrule without plastic sleeve max. | 1.5 mm²            |
| Conductor cross section AWG/kcmil min.                                     | 26                 |
| Conductor cross section AWG/kcmil max                                      | 16                 |
| Stripping length   | 8 mm               |

## General

| Test voltage relay winding/relay contact | 4 kV <sub>rms</sub> (50 Hz, 1 min.) |
|--|-------------------------------------|
| Operating mode                           | 100% operating factor               |
| Degree of protection                     | IP20 (Relay socket)                 |
|  | RT III (Relay)                      |
| Mechanical service life                  | Approx. 2 x 10 <sup>7</sup> cycles  |



## Technical data

#### General

| 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

Single relay - REL-MR- 12DC/21 - 2961150



Pluggable miniature relays, with power contact, 1 PDT, input voltage 12 V DC

#### Relay socket - RIF-0-BPT/21 - 2900958



RIF-0... relay base, for miniature power relay with 1 PDT or solid-state relays of the same design, push-in connection, for mounting on NS 35/7,5

## 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 |
|----------|----------|



## Classifications

#### **ETIM**

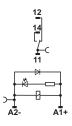
| ETIM 4.0 | EC001456 |
|----------|----------|
| ETIM 5.0 | EC001437 |

## **UNSPSC**

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

## **Drawings**

Circuit diagram

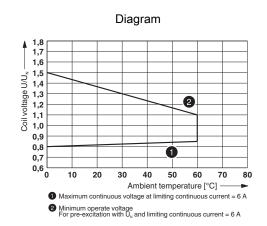


DC coils

Diagram

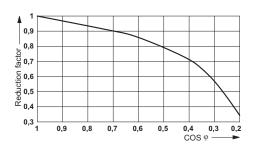
20 10

Switching current [A] 0.5 0.3 0.2



## Operating voltage range

#### Diagram





20

AC, ohmic load DC, ohmic load

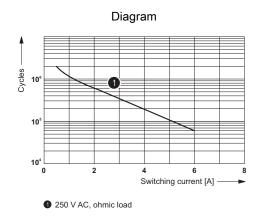
2

50 70 100 2 Switching voltage [V]

200 300

Service life reduction factor





Electrical service life

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