

2903294

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Preassembled relay module with Push-in connection, consisting of: relay base, power contact relay, and retaining bracket. Contact switching type: 3 changeover contacts. Input voltage: 24 V DC

## Product description

The pluggable electromechanical and solid-state relays in the RIFLINE complete product range and the base are recognized and approved in accordance with UL 508. The relevant approvals can be called up at the individual components in question.

#### Commercial data

| Item number                          | 2903294             |
|--------------------------------------|---------------------|
| Packing unit                         | 5 pc                |
| Minimum order quantity               | 5 pc                |
| Sales key                            | C465                |
| Product key                          | CK652B              |
| Catalog page                         | Page 347 (C-5-2019) |
| GTIN                                 | 4046356732710       |
| Weight per piece (including packing) | 174 g               |
| Weight per piece (excluding packing) | 173.29 g            |
| Customs tariff number                | 85364110            |
| Country of origin                    | CN                  |



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#### Set consists of

#### RIF-3-BPT/3X21 - Relay base

2900938

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Relay base RIF-3..., for octal relays with 3 changeover contacts, Push-in connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5

#### REL-OR3/LDP-24DC/3X21 - Single relay

2903693

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Plug-in octal relays with power contacts, 3 changeover contacts, test button, freewheeling diode, mechanical switching position indicator, polarity: A1+, A2-, input voltage: 24 V DC



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## RIF-RH-3 - Retaining bracket

2900955

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Relay retaining bracket, with holder for marking material, suitable for RIF-3 relay base, for octal relay



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## Technical data

## Product properties

| Product type            | Relay Module                      |
|-------------------------|-----------------------------------|
| Product family          | RIFLINE complete                  |
| Application             | Universal                         |
| Operating mode          | 100% operating factor             |
| Mechanical service life | approx. 2x 10 <sup>7</sup> cycles |

#### Insulation characteristics

| Insulation | Basic insulation |
|------------|------------------|
|            |                  |

#### Insulation characteristics

| Insulation           | Basic insulation |
|----------------------|------------------|
| Overvoltage category | III              |
| Pollution degree     | 2                |

## Electrical properties

| Maximum power dissipation for nominal condition | 1.44 W   |
|---|--|
| Test voltage (Winding/contact)                  | 2.5 kV <sub>rms</sub> (50 Hz, 1 min., winding/contact) |
| Test voltage (Contact/contact)                  | 2 kV <sub>rms</sub> (50 Hz, 1 min., contact/contact)   |
| Rated insulation voltage                        | 250 V AC   |
| Rated surge voltage                             | 4 kV   |

## Input data

#### Coil side

| Nominal input voltage U <sub>N</sub>      | 24 V DC                     |
|---|-----------------------------|
| Input voltage range                       | 20.4 V DC 26.4 V DC (20 °C) |
| Input voltage range in reference to $U_N$ | see diagram                 |
| Drive and function                        | monostable                  |
| Drive (polarity)                          | polarized                   |
| Typical input current at U <sub>N</sub>   | 60 mA                       |
| Typical response time                     | 18 ms                       |
| Typical release time                      | 20 ms                       |
| Coil voltage                              | 24 V DC                     |
| Protective circuit                        | Freewheeling diode          |
| Operating voltage display                 | Yellow LED                  |

## Output data

#### Switching

| Contact switching type | 3 changeover contacts |
|------------------------|-----------------------|
| Type of switch contact | Single contact        |
| Contact material       | AgNi                  |



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| Maximum switching voltage                      | 250 V AC/DC                     |
|--|---------------------------------|
| Minimum switching voltage                      | 10 V (24 mA)                    |
| Limiting continuous current                    | 8.5 A (see diagram)             |
| Maximum inrush current                         | 30 A (20 ms, N/O contacts)      |
| Min. switching current                         | 10 mA (24 V)                    |
| Interrupting rating (ohmic load) max.          | 204 W (24 V DC)                 |
|  | 124 W (48 V DC)                 |
|  | 108 W (60 V DC)                 |
|  | 52 W (110 V DC)                 |
|  | 48 W (220 V DC)                 |
|  | 2125 VA (250 V AC)              |
| Utilization category CB Scheme (IEC 60947-5-1) | AC15, 1.5 A/240 V (N/O contact) |
|  | DC13, 2 A/240 V (N/O contact)   |

#### Connection data

| Connection method                | Push-in connection  |
|----------------------------------|---|
| Stripping length                 | 8 mm  |
| Conductor cross section rigid    | 0.14 mm² 1.5 mm²  |
| Conductor cross section flexible | 0.14 mm² 1.5 mm²  |
|                                  | 0.14 mm² 1.5 mm² (Ferrule with plastic sleeve)  |
|                                  | 0.14 mm² 1 mm² (Ferrule with plastic sleeve, two conductors on double terminal block) |
| Conductor cross section AWG      | 26 16 (solid)   |
|                                  | 26 16 (flexible)  |

## Dimensions

#### Drill hole

| Diameter | 3.2 mm |
|----------|--------|
| Width    | 40 mm  |
| Height   | 103 mm |
| Depth    | 90 mm  |

## Material specifications

| Color                                  | gray (RAL 7042) |
|--|-----------------|
| Flammability rating according to UL 94 | V2 (Housing)    |

#### Environmental and real-life conditions

#### Ambient conditions

| Degree of protection (Relay base)       | IP20 (Relay base) |
|---|-------------------|
| Degree of protection (Relay)            | RT I (Relay)      |
| Ambient temperature (operation)         | -40 °C 60 °C      |
| Ambient temperature (storage/transport) | -40 °C 85 °C      |

## Approvals



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#### Corrosive gas test

| Identificat               | Identification | ISA-S71.04. G3 Harsh Group |  |
|---------------------------|----------------|----------------------------|--|
|                           |                | EN 60068-2-60              |  |
| Standards and regulations |                |                            |  |
| Standards                 | s/regulations  | IEC 60947-5-1              |  |
| Mounting                  |                |                            |  |

## Mounting

| Mounting type         | DIN rail mounting         |
|-----------------------|---------------------------|
| Assembly instructions | in rows with zero spacing |
| Mounting position     | any                       |

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