

# Relay Module - RIF-0-RSC-24DC/ 1AU - 2903364


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Pre-assembled relay module with screw connection, consisting of: relay base with ejector and multi-layer gold contact relay. Contact type: 1 N/O contact. Input voltage: 24 V DC



## Key Commercial Data

|              |   |
|--------------|---|
| Packing unit | 10 STK  |
| GTIN         | <br>4 046356 731973 |
| GTIN         | 4046356731973   |

## Technical data

### Note

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

### Dimensions

|        |        |
|--------|--------|
| Width  | 6.2 mm |
| Height | 84 mm  |
| Depth  | 68 mm  |

### Coil side

|   |               |
|---|---------------|
| Nominal input voltage $U_N$               | 24 V DC       |
| Input voltage range in reference to $U_N$ | see diagram   |
| Typical input current at $U_N$            | 9 mA          |
| Typical response time                     | 5 ms          |
| Typical release time                      | 8 ms          |
| Coil voltage                              | 24 V DC       |
| Protective circuit                        | Damping diode |
| Operating voltage display                 | Yellow LED    |
| Power dissipation for nominal condition   | 0.22 W        |

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## Technical data

### Contact side

|  |                         |
|--|-------------------------|
| Contact type   | 1 N/O contact           |
| Type of switch contact                                 | Single contact          |
| Contact material                                       | AgSnO, 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 12 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 in acc. with DIN VDE 0660/IEC 60947 | 1 A (24 V (DC13))       |
|  | 3 A (230 V (AC 15))     |

### Contact side (with destroyed gold layer)

|  |  |
|--|--|
| Contact material                                       | AgSnO  |
| 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 100 mA)  |
| Limiting continuous current                            | 6 A  |
| Min. switching current                                 | 10 mA (at 12 V)  |
| 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 | 2 A (at 24 V, DC13)  |
|  | 0.2 A (at 110 V, DC13)   |
|  | 0.1 A (at 220 V, DC13)   |
|  | 3 A (at 24 V, AC15)  |
|  | 3 A (at 120 V, AC15)   |
|  | 3 A (at 230 V, AC15)   |

### Connection data input side

|  |   |
|--|---|
| Connection name  | Coil side   |
| Connection method  | Screw connection  |
| Stripping length   | 7 mm  |
| Conductor cross section solid  | 0.5 mm <sup>2</sup> ... 4 mm <sup>2</sup>                                     |
| Conductor cross-section solid (2 conductors with same cross section) | 0.5 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>                                   |
| Conductor cross section flexible                                     | 0.5 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>                                   |
|  | 0.5 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> (Ferrules without plastic sleeve) |
|  | 0.5 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> (Ferrule with plastic sleeve)     |

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## Technical data

### Connection data input side

|   |  |
|---|--|
| Conductor cross section flexible (2 conductors with same cross section) | 0.5 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>                                  |
|   | 0.5 mm <sup>2</sup> ... 1 mm <sup>2</sup> (TWIN ferrule with plastic sleeve) |
| Conductor cross section AWG   | 20 ... 12 (solid)  |
|   | 20 ... 14 (flexible)   |
| Torque  | 0.5 Nm ... 0.6 Nm  |

### Connection data output side

| Connection name   | Contact side  |
|---|---|
| Connection method   | Screw connection  |
| Stripping length  | 7 mm  |
| Conductor cross section solid   | 0.5 mm <sup>2</sup> ... 4 mm <sup>2</sup>                                     |
| Conductor cross-section solid (2 conductors with same cross section)    | 0.5 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>                                   |
| Conductor cross section flexible  | 0.5 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>                                   |
|   | 0.5 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> (Ferrules without plastic sleeve) |
|   | 0.5 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> (Ferrule with plastic sleeve)     |
| Conductor cross section flexible (2 conductors with same cross section) | 0.5 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>                                   |
|   | 0.5 mm <sup>2</sup> ... 1 mm <sup>2</sup> (TWIN ferrule with plastic sleeve)  |
| Conductor cross section AWG   | 20 ... 12 (solid)   |
|   | 20 ... 14 (flexible)  |
| Torque  | 0.5 Nm ... 0.6 Nm   |

### 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 base)                   |
|  | RT III (Relay)                      |
| Mechanical service life                  | approx. 2x 10 <sup>7</sup> cycles   |
| Mounting position                        | any                                 |
| Assembly instructions                    | In rows with zero spacing           |

### Standards and Regulations

|  |                |
|--|----------------|
| Standards/regulations                  | DIN EN 50178   |
| Rated insulation voltage               | 250 V AC       |
| Rated surge voltage                    | 6 kV           |
| Insulation                             | safe isolation |
| Degree of pollution                    | 2              |
| Overvoltage category                   | III            |
| Flammability rating according to UL 94 | V2             |

### Environmental Product Compliance

|            |  |
|------------|--|
| REACH SVHC | Lead 7439-92-1                           |
| China RoHS | Environmentally Friendly Use Period = 50 |

# Relay Module - RIF-0-RSC-24DC/ 1AU - 2903364

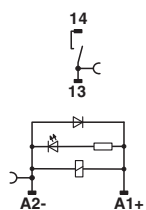
## Technical data

### Environmental Product Compliance

|  |   |
|--|---|
|  | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |
|--|---|

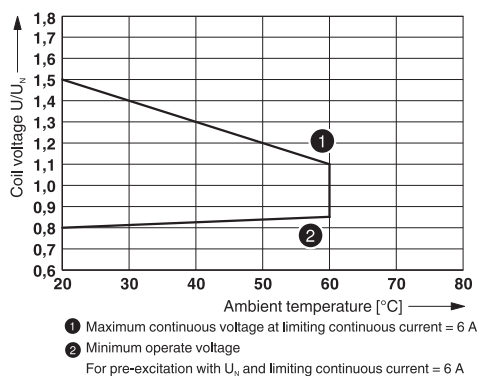
## Drawings

Circuit diagram



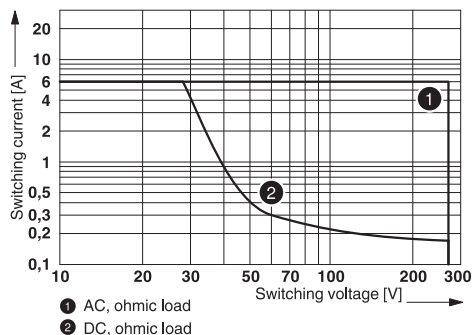
### DC coils

Diagram



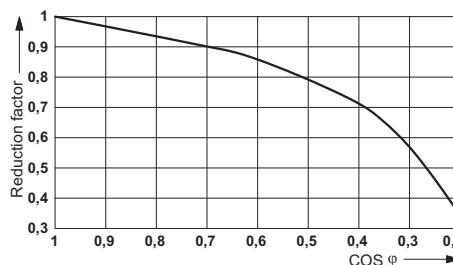
### Operating voltage range

Diagram



### Interrupting rating

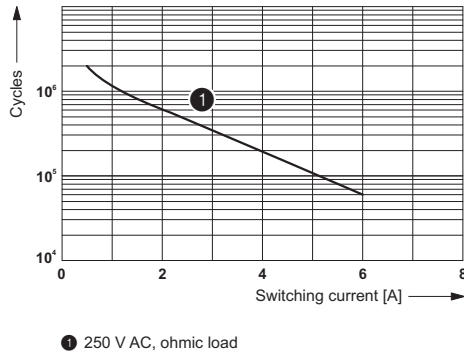
Diagram



### Service life reduction factor

# Relay Module - RIF-0-RSC-24DC/ 1AU - 2903364

Diagram



Electrical service life

## Articles in set

Single relay - REL-MR- 24DC/21AU - 2961121



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

Relay base - RIF-0-BSC/ 1 - 2901872



RIF-0... relay base, for miniature power relay with 1 N/O contact or identical solid-state relays, screw connection, for mounting on NS 35/7,5

## Approvals

Approvals

Approvals

DNV GL / EAC

Ex Approvals

## Approval details

## Relay Module - RIF-0-RSC-24DC/ 1AU - 2903364

### Approvals

EAC



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