

# Relay Module - RIF-2-RSC-LDP-125DC/2X21 - 2903324

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Pre-assembled relay module with screw connection, consisting of: relay base, power contact relay, and retaining bracket. Contact type: 2 changeover contacts. Input voltage: 125 V DC



## Key Commercial Data

|              |               |
|--------------|---------------|
| Packing unit | 10 STK        |
| GTIN         |               |
| GTIN         | 4046356732345 |

## Technical data

### Note

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

### Dimensions

|        |       |
|--------|-------|
| Width  | 27 mm |
| Height | 89 mm |
| Depth  | 75 mm |

### Ambient conditions

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

### Coil side

|   |             |
|---|-------------|
| Nominal input voltage $U_N$               | 125 V DC    |
| Input voltage range in reference to $U_N$ | see diagram |
| Typical input current at $U_N$            | 7.5 mA      |
| Typical response time                     | 13 ms       |
| Typical release time                      | 14 ms       |
| Coil voltage                              | 125 V DC    |

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## Technical data

### Coil side

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

### Contact side

|  |                           |
|--|---------------------------|
| Contact type   | 2 PDT                     |
| Type of switch contact                                 | Single contact            |
| Contact material                                       | AgNi                      |
| Maximum switching voltage                              | 250 V AC/DC               |
| Minimum switching voltage                              | 5 V (At 24 mA)            |
| Min. switching current                                 | 5 mA (at 24 V)            |
| Maximum inrush current                                 | 30 A (20 ms, N/O contact) |
| Limiting continuous current                            | 10 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)        |
|  | 48 W (at 220 V DC)        |
|  | 2500 VA (for 250 V AC)    |
| Switching capacity in acc. with DIN VDE 0660/IEC 60947 | 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)    |

### Connection data input side

|   |  |
|---|--|
| Connection name   | Input side   |
| Connection method   | Screw connection   |
| Stripping length  | 8 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> ... 2.5 mm <sup>2</sup>                                    |
| Conductor cross section flexible  | 0.5 mm <sup>2</sup> ... 4 mm <sup>2</sup>                                      |
|   | 0.5 mm <sup>2</sup> ... 4 mm <sup>2</sup> (Ferrule with plastic sleeve)        |
| Conductor cross section flexible (2 conductors with same cross section) | 0.5 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>                                    |
|   | 0.5 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> (TWIN ferrule with plastic sleeve) |
| Conductor cross section AWG   | 20 ... 10 (solid)  |
|   | 20 ... 12 (flexible)   |
| Torque  | 0.5 Nm ... 0.6 Nm  |

### Connection data output side

|                   |                  |
|-------------------|------------------|
| Connection name   | Contact side     |
| Connection method | Screw connection |
| Stripping length  | 8 mm             |

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## Technical data

### Connection data output side

|   |  |
|---|--|
| 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> ... 2.5 mm <sup>2</sup>                                    |
| Conductor cross section flexible  | 0.5 mm <sup>2</sup> ... 4 mm <sup>2</sup>                                      |
|   | 0.5 mm <sup>2</sup> ... 4 mm <sup>2</sup> (Ferrule with plastic sleeve)        |
| Conductor cross section flexible (2 conductors with same cross section) | 0.5 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>                                    |
|   | 0.5 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> (TWIN ferrule with plastic sleeve) |
| Conductor cross section AWG   | 20 ... 10 (solid)  |
|   | 20 ... 12 (flexible)   |
| Torque  | 0.5 Nm ... 0.6 Nm  |

### General

|  |                                       |
|--|---------------------------------------|
| Test voltage relay winding/relay contact | 2.5 kV <sub>rms</sub> (50 Hz, 1 min.) |
| Test voltage PDT/PDT                     | 2.5 kV <sub>rms</sub> (50 Hz, 1 min.) |
| Operating mode                           | 100% operating factor                 |
| Degree of protection                     | IP20 (Relay base)                     |
|  | RT I (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                    | 4 kV             |
| Insulation                             | Basic insulation |
| Degree of pollution                    | 2                |
| Overvoltage category                   | III              |
| Flammability rating according to UL 94 | V2               |

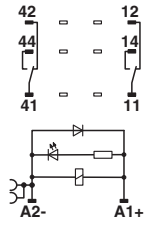
### Environmental Product Compliance

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

## Drawings

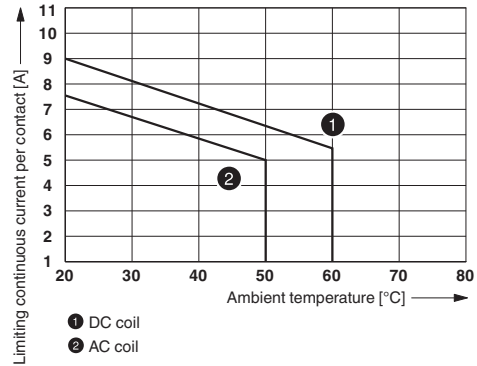
# Relay Module - RIF-2-RSC-LDP-125DC/2X21 - 2903324

Circuit diagram



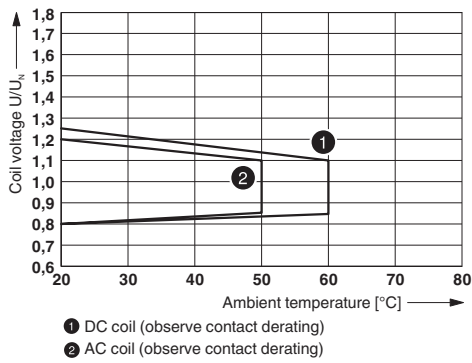
DC coils

Diagram

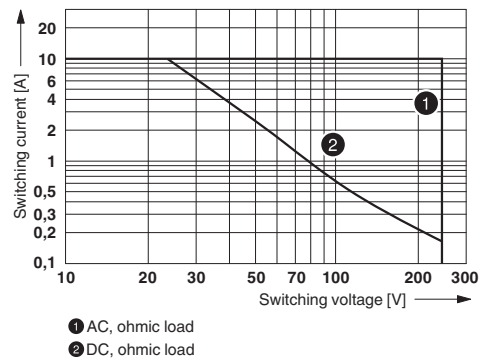


Contact derating

Diagram

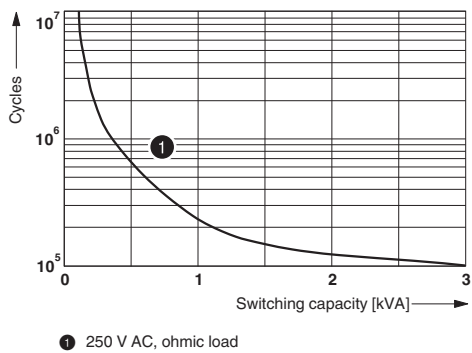


Diagram



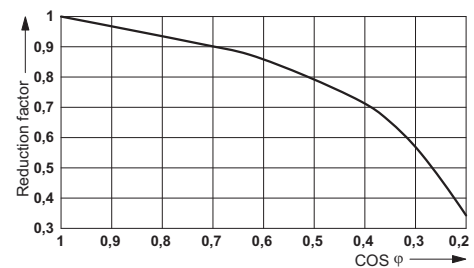
Operating voltage range

Diagram



Interrupting rating

Diagram



Electrical service life

Service life reduction factor

# Relay Module - RIF-2-RSC-LDP-125DC/2X21 - 2903324

## Articles in set

Relay base - RIF-2-BSC/4X21 - 2900932



RIF-2... relay base, for industrial relay with 2 or 4 changeover contacts, screw connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5

Single relay - REL-IR2/LDP-125DC/2X21 - 2903664



Plug-in industrial relay with power contacts, 2 PDTs, test button, status LED, freewheeling diode, mechanical switch position indicator, polarity: A1+, A2-, input voltage: 125 V DC

Retaining bracket - RIF-RH-2 - 2900954



Relay retaining bracket, with ejector function and holder for marking material, suitable for RIF-2 relay base, for industrial relay

## Approvals

Approvals

Approvals

DNV GL / EAC

Ex Approvals

## Approval details

|        |   |            |
|--------|---|------------|
| DNV GL | <a href="http://exchange.dnv.com/tari/">http://exchange.dnv.com/tari/</a> | TAA000018V |
|--------|---|------------|

|     |  |                          |
|-----|--|--------------------------|
| EAC |  | RU C-<br>DE.A*30.B.01082 |
|-----|--|--------------------------|

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