

# Relay Module - PLC-RSC- 24UC/21-21 - 2967073

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



PLC relay, consisting of base terminal block PLC-BSC.../21 with screw connection and pluggable miniature relay with power contact, for assembly on DIN rail NS 35/7.5, 2 PDT, input voltage 24 V AC/DC

The illustration shows the version PLC-RSC- 24DC/21-21

## Why buy this product

- Slim design
- Efficient connection to system cabling using V8 adapter
- RT III sealed relay
- Safe isolation according to DIN EN 50178 between coil and contact
- Integrated input circuit and interference suppression circuit
- Functional plug-in bridges



## Key Commercial Data

|                                      |               |
|--------------------------------------|---------------|
| Packing unit                         | 10 STK        |
| GTIN                                 |               |
| GTIN                                 | 4017918156381 |
| Weight per Piece (excluding packing) | 68.580 g      |
| Custom tariff number                 | 85364190      |
| Country of origin                    | Germany       |

## Technical data

### Note

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

### Dimensions

|        |       |
|--------|-------|
| Width  | 14 mm |
| Height | 80 mm |
| Depth  | 94 mm |

# Relay Module - PLC-RSC- 24UC/21-21 - 2967073

## Technical data

### Ambient conditions

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

### Coil side

|   |                                   |
|---|-----------------------------------|
| Nominal input voltage $U_N$             | 24 V AC/DC                        |
| Typical input current at $U_N$          | 17.5 mA (at $U_N = 24$ V AC)      |
|   | 17.5 mA (at $U_N = 24$ V DC)      |
| Typical response time                   | 8 ms                              |
| Typical release time                    | 10 ms                             |
| Protective circuit                      | Bridge rectifier Bridge rectifier |
| Operating voltage display               | Yellow LED                        |
| Power dissipation for nominal condition | 0.42 W                            |

### Contact side

|  |   |
|--|---|
| Contact type   | 2 PDT   |
| Type of switch contact                                 | Single contact  |
| Contact material                                       | AgNi  |
| Maximum switching voltage                              | 250 V AC/DC (The separating plate PLC-ATP should be installed for voltages larger than 250 V (L1, L2, L3) between identical terminal blocks in adjacent modules. Potential bridging is then carried out with FBST 8-PLC... or ...FBST 500...) |
| Minimum switching voltage                              | 5 V AC/DC (at 10 mA)  |
| Min. switching current                                 | 10 mA (At 5 V)  |
| Maximum inrush current                                 | 15 A (300 ms)   |
| Limiting continuous current                            | 6 A   |
| Interrupting rating (ohmic load) max.                  | 140 W (at 24 V DC)  |
|  | 85 W (at 48 V DC)   |
|  | 60 W (at 60 V DC)   |
|  | 44 W (at 110 V DC)  |
|  | 60 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 250 V, DC13)  |
|  | 3 A (at 24 V, AC15)   |
|  | 3 A (at 120 V, AC15)  |
|  | 3 A (at 250 V, AC15)  |

### Connection data input side

|                               |  |
|-------------------------------|--|
| Connection name               | Coil side                                    |
| Connection method             | Screw connection                             |
| Stripping length              | 8 mm   |
| Screw thread                  | M3   |
| Conductor cross section solid | 0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> |

# Relay Module - PLC-RSC- 24UC/21-21 - 2967073

## Technical data

### Connection data input side

|                                  |  |
|----------------------------------|--|
| Conductor cross section flexible | 0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> |
| Conductor cross section AWG      | 26 ... 14                                    |

### Connection data output side

|                                  |  |
|----------------------------------|--|
| Connection name                  | Contact side                                 |
| Connection method                | Screw connection                             |
| Stripping length                 | 8 mm   |
| Screw thread                     | M3   |
| Conductor cross section solid    | 0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> |
| Conductor cross section flexible | 0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> |
| Conductor cross section AWG      | 26 ... 14                                    |

### General

|  |                            |
|--|----------------------------|
| Test voltage relay winding/relay contact | 4 kV AC (50 Hz, 1 min.)    |
| Test voltage PDT/PDT                     | 2.5 kV AC (50 Hz, 1 min.)  |
| Operating mode                           | 100% operating factor      |
| Degree of protection                     | RT III (Relay)             |
| Mechanical service life                  | 3 x 10 <sup>7</sup> cycles |
| Flammability rating according to UL 94   | V0                         |
| Mounting position                        | any                        |
| Assembly instructions                    | In rows with zero spacing  |

### Standards and Regulations

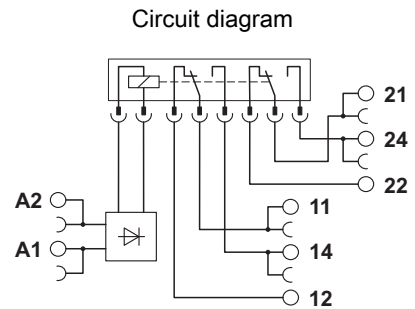
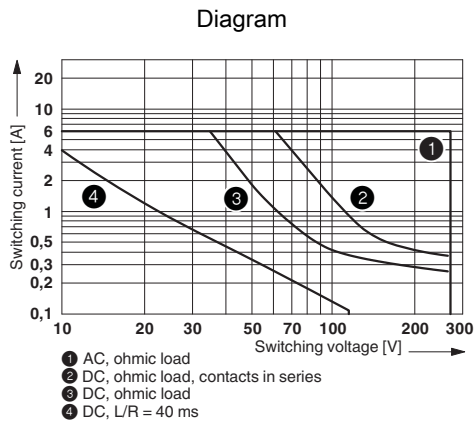
|  |  |
|--|--|
| Connection in acc. with standard       | CUL  |
| Designation                            | Standards/regulations                              |
| Standards/regulations                  | IEC 60664  |
|  | EN 50178   |
|  | IEC 62103  |
| Rated surge voltage/insulation         | 6 kV (safe isolation: control side / contact side) |
| Degree of pollution                    | 2  |
| Overvoltage category                   | III  |
| Flammability rating according to UL 94 | V0   |

### Environmental Product Compliance

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

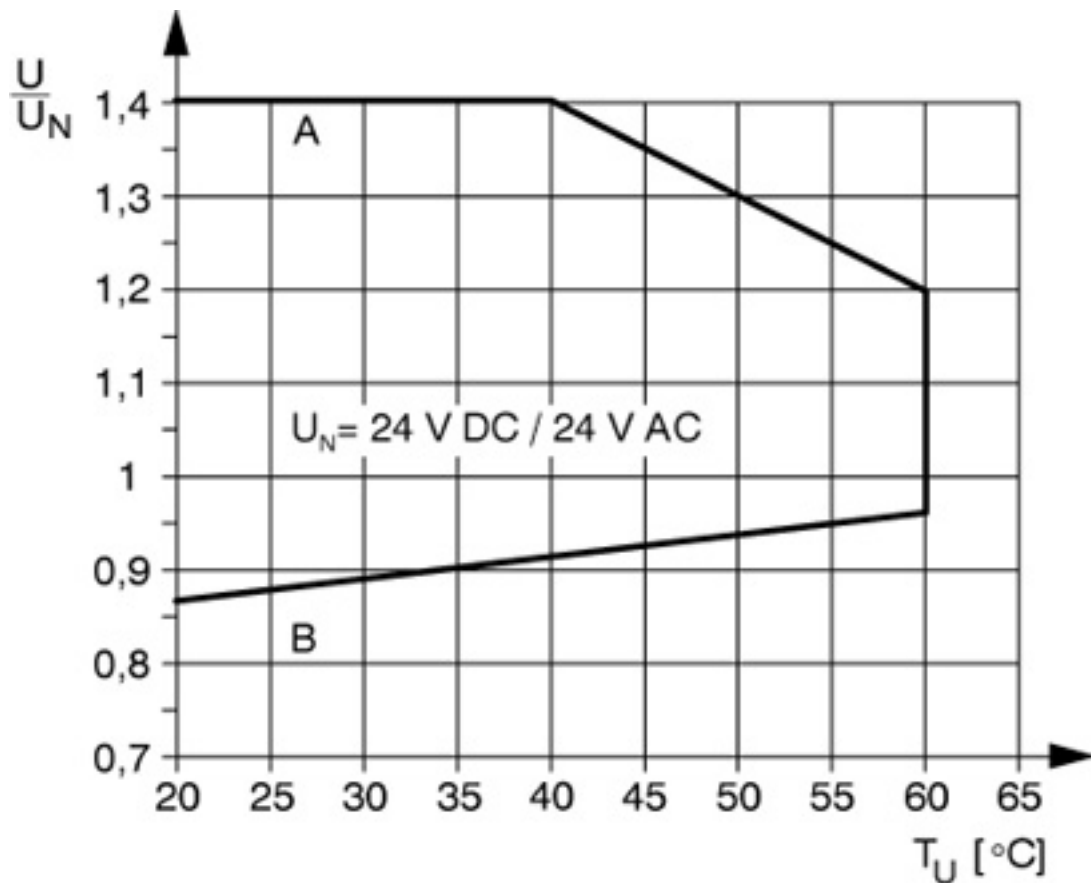
## Drawings

# Relay Module - PLC-RSC- 24UC/21-21 - 2967073



## Interrupting rating

Diagram



Curve A  
Maximum permissible continuous voltage  $U_{max}$  with limiting continuous current on the contact side (see relevant technical data)

Curve B  
Minimum permissible operate voltage  $U_{op}$  after pre-excitation (see relevant technical data)

# Relay Module - PLC-RSC- 24UC/21-21 - 2967073

## Classifications

### eCl@ss

|            |          |
|------------|----------|
| eCl@ss 5.0 | 27371601 |
| eCl@ss 5.1 | 27371601 |
| eCl@ss 6.0 | 27371601 |
| 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 |

### UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 30211916 |
| UNSPSC 7.0901 | 39121515 |
| UNSPSC 11     | 39121515 |
| UNSPSC 12.01  | 39121515 |
| UNSPSC 13.2   | 39122334 |

## Approvals

### Approvals

#### Approvals

UL Recognized / UL Listed / cUL Recognized / cUL Listed / GL / EAC / RC FRT / EAC / PRS / cULus Recognized / cULus Listed

#### Ex Approvals

### Approval details

|               |  |   |               |
|---------------|--|---|---------------|
| UL Recognized |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | FILE E 238705 |
|---------------|--|---|---------------|

|           |  |   |               |
|-----------|--|---|---------------|
| UL Listed |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | FILE E 172140 |
|-----------|--|---|---------------|

# Relay Module - PLC-RSC- 24UC/21-21 - 2967073

## Approvals

|                  |  |   |                     |
|------------------|--|---|---------------------|
| cUL Recognized   |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | FILE E 238705       |
| cUL Listed       |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | FILE E 172140       |
| GL               |  | <a href="http://www.gl-group.com/newbuilding/approvals/index.html">http://www.gl-group.com/newbuilding/approvals/index.html</a>                       | 46016-03 HH         |
| EAC              |  |   | 7500651.22.01.00244 |
| RC FRT           |  | <a href="http://www.rsfgt.ru/en/web/guest/english">http://www.rsfgt.ru/en/web/guest/english</a>   | B.00094             |
| EAC              |  |   | EAC-Zulassung       |
| PRS              |  | <a href="http://www.prs.pl/">http://www.prs.pl/</a>   | TE/2109/880590/16   |
| cULus Recognized |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> |                     |
| cULus Listed     |  |   |                     |

## Accessories

Accessories

Bridge

## Relay Module - PLC-RSC- 24UC/21-21 - 2967073

### Accessories

Continuous plug-in bridge - FBST 500-PLC RD - 2966786



Continuous plug-in bridge, Length: 500 mm, Color: red

---

Continuous plug-in bridge - FBST 500-PLC BU - 2966692



Continuous plug-in bridge, Length: 500 mm, Color: blue

---

Continuous plug-in bridge - FBST 500-PLC GY - 2966838



Continuous plug-in bridge, Length: 500 mm, Color: gray

---

Single plug-in bridge - FBST 6-PLC RD - 2966236



Single plug-in bridge, Length: 6 mm, Number of positions: 2, Color: red

---

Single plug-in bridge - FBST 6-PLC BU - 2966812



Single plug-in bridge, Length: 6 mm, Number of positions: 2, Color: blue

---

## Relay Module - PLC-RSC- 24UC/21-21 - 2967073

### Accessories

Single plug-in bridge - FBST 6-PLC GY - 2966825



Single plug-in bridge, Length: 6 mm, Number of positions: 2, Color: gray

---

Single plug-in bridge - FBST 8-PLC GY - 2967688



Single plug-in bridge, Length: 8 mm, Number of positions: 2, Color: gray

---

Single plug-in bridge - FBST 14-PLC BK - 2967691



Single plug-in bridge, Length: 14 mm, Number of positions: 2, Color: black

---

### DIN rail

DIN rail, unperforated - NS 35/ 7,5 V2A UNPERF 2000MM - 0801377



DIN rail, unperforated, Width: 35 mm, Height: 7.5 mm, Length: 2000 mm, Color: silver

---

DIN rail perforated - NS 35/ 7,5 PERF 2000MM - 0801733



DIN rail, material: steel galvanized and passivated with a thick layer, perforated, height 7.5 mm, width 35 mm, length: 2000 mm

---

## Relay Module - PLC-RSC- 24UC/21-21 - 2967073

### Accessories

DIN rail, unperforated - NS 35/ 7,5 CU UNPERF 2000MM - 0801762



DIN rail, material: Copper, unperforated, height 7.5 mm, width 35 mm, length: 2 m

---

DIN rail, unperforated - NS 35/15 UNPERF 2000MM - 1201714



DIN rail, material: Steel, unperforated, height 15 mm, width 35 mm, length: 2 m

---

DIN rail, unperforated - NS 35/15 CU UNPERF 2000MM - 1201895



DIN rail, material: Copper, unperforated, 1.5 mm thick, height 15 mm, width 35 mm, length: 2 m

---

DIN rail, unperforated - NS 35/15-2,3 UNPERF 2000MM - 1201798



DIN rail, unperforated, Width: 35 mm, Height: 15 mm, Length: 2000 mm, Color: silver

---

DIN rail, unperforated - NS 35/15 AL UNPERF 2000MM - 1201756



DIN rail, deep drawn, high profile, unperforated, 1.5 mm thick, material: aluminum, height 15 mm, width 35 mm, length 2000 mm

---

## Relay Module - PLC-RSC- 24UC/21-21 - 2967073

### Accessories

DIN rail perforated - NS 35/15 PERF 2000MM - 1201730



DIN rail, material: steel galvanized and passivated with a thick layer, perforated, height 15 mm, width 35 mm, length: 2000 mm

DIN rail, unperforated - NS 35/ 7,5 UNPERF 2000MM - 0801681



DIN rail, material: Steel, unperforated, height 7.5 mm, width 35 mm, length: 2 m

### Labeled terminal marker

Zack marker strip - ZB10,LGS:FORTL.ZAHLEN - 1053014



Zack marker strip, Strip, white, labeled, can be labeled with: Plotter, Printed horizontally: Consecutive numbers 1 - 10, 11 - 20, etc. up to 991 - 1000, Mounting type: Snap into tall marker groove, for terminal block width: 10.2 mm, Lettering field: 10.15 x 10.5 mm

### Partition plate

Separating plate - PLC-ATP BK - 2966841



Separating plate, 2 mm thick, required at the start and end of a PLC terminal strip. Furthermore, it is used for: visual separation of groups, safe isolation of different voltages of neighboring PLC relays in acc. with DIN VDE 0106-101, isolation

### Power module

Power terminal block - PLC-ESK GY - 2966508



Power terminal block, for the input of up to four potentials, for mounting on NS 35/7.5

### Screwdriver tools

## Relay Module - PLC-RSC- 24UC/21-21 - 2967073

### Accessories

Screwdriver - SZF 1-0,6X3,5 - 1204517



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip

---

### Terminal marking

Zack marker strip - ZB10/WH-100:UNBEDRUCKT - 5060883



Zack marker strip, Strip, white, unlabeled, can be labeled with: Plotter, Mounting type: Snap into tall marker groove, for terminal block width: 10.2 mm, Lettering field: 10.15 x 10.5 mm

Zack marker strip - ZB 10:UNBEDRUCKT - 1053001



Zack marker strip, Strip, white, unlabeled, can be labeled with: Plotter, Mounting type: Snap into tall marker groove, for terminal block width: 10.2 mm, Lettering field: 10.5 x 10.15 mm

---

### Spare parts

Relay socket - PLC-BSC- 24UC/21-21 - 2967028



14 mm PLC basic terminal block with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 2 PDTs, input voltage 24 V AC/DC

Single relay - REL-MR- 24DC/21-21 - 2961192



Plug-in miniature power relay, with power contact, 2 PDTs, input voltage 24 V DC