

## Relay Module - PLC-RSC- 24UC/21-21/MS - 2910503

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PLC-INTERFACE, consisting of a relay base and pluggable power contact relay with manual operation, integrated status LED, Screw connection, 2 PDT, Input voltage: 24 V AC/DC

RoHS

### Key Commercial Data

|                                      |                                                                                                         |
|--------------------------------------|---------------------------------------------------------------------------------------------------------|
| Packing unit                         | 10 STK                                                                                                  |
| GTIN                                 | <br>4 055626 486086 |
| GTIN                                 | 4055626486086                                                                                           |
| Weight per Piece (excluding packing) | 67.000 g                                                                                                |
| Custom tariff number                 | 85364190                                                                                                |
| Note                                 | Made to Order (non-returnable)                                                                          |

### 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  | 104 mm |

#### Ambient conditions

|                                         |                  |
|-----------------------------------------|------------------|
| Ambient temperature (operation)         | -20 °C ... 60 °C |
| Ambient temperature (storage/transport) | -20 °C ... 85 °C |

#### Coil side

|                                |                |
|--------------------------------|----------------|
| Nominal input voltage $U_N$    | 24 V AC/DC     |
| Typical input current at $U_N$ | 18 mA          |
| Typical response time          | 3 ms ... 15 ms |

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## Technical data

### Coil side

|                            |                                   |
|----------------------------|-----------------------------------|
| Typical release time range | 3 ms ... 15 ms                    |
| Coil voltage               | 24 V DC                           |
| Protective circuit         | Bridge rectifier Bridge rectifier |
| 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 (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                              | 12 V (10 mA)                                                                                                                                                                                                                                  |
| Min. switching current                                 | 10 mA (12 V)                                                                                                                                                                                                                                  |
| Maximum inrush current                                 | 12 A (20 ms)                                                                                                                                                                                                                                  |
| Limiting continuous current                            | 6 A                                                                                                                                                                                                                                           |
| Interrupting rating (ohmic load) max.                  | 192 W (24 V DC)                                                                                                                                                                                                                               |
|                                                        | 62 W (48 V DC)                                                                                                                                                                                                                                |
|                                                        | 42 W (60 V DC)                                                                                                                                                                                                                                |
|                                                        | 55 W (110 V DC)                                                                                                                                                                                                                               |
|                                                        | 66 W (220 V DC)                                                                                                                                                                                                                               |
|                                                        | 2000 VA (250 V AC)                                                                                                                                                                                                                            |
| Switching capacity in acc. with DIN VDE 0660/IEC 60947 | 1 A (24 V, DC13)                                                                                                                                                                                                                              |
|                                                        | 1.5 A (230 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 mm² ... 2.5 mm² |
| Conductor cross section flexible | 0.14 mm² ... 2.5 mm² |
| 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 mm² ... 2.5 mm² |
| Conductor cross section flexible | 0.14 mm² ... 2.5 mm² |
| Conductor cross section AWG      | 26 ... 14            |

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## Technical data

### 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 II (Relay)              |
|                                          | IP20 (Relay base)          |
| Mechanical service life                  | 5 x 10 <sup>6</sup> cycles |
| UL, USA                                  | UL 508                     |
|                                          | UL 508 Recognized          |
| UL, USA/Canada                           | cUL 508                    |
|                                          | cUL 508 Recognized         |
| Mounting position                        | any                        |
| Assembly instructions                    | In rows with zero spacing  |

### Standards and Regulations

|                                        |                                             |
|----------------------------------------|---------------------------------------------|
| Designation                            | Standards/regulations                       |
| Standards/regulations                  | EN 50178                                    |
| Rated insulation voltage               | 250 V AC                                    |
| Rated surge voltage                    | 6 kV                                        |
| Insulation                             | Safe isolation: Control side / contact side |
| Degree of pollution                    | 2                                           |
| Overvoltage category                   | III                                         |
| Flammability rating according to UL 94 | V0                                          |
| UL, USA                                | UL 508                                      |
|                                        | UL 508 Recognized                           |
| UL, USA/Canada                         | cUL 508                                     |
|                                        | cUL 508 Recognized                          |

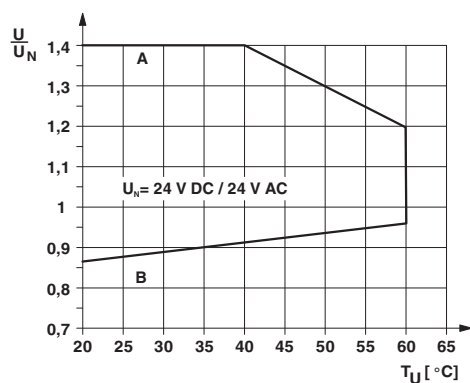
### Environmental Product Compliance

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

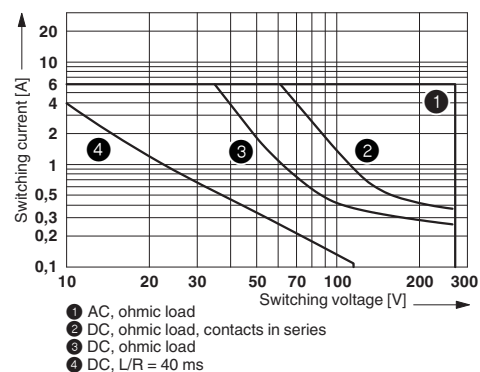
## Drawings

## Relay Module - PLC-RSC- 24UC/21-21/MS - 2910503

Diagram



Diagram



Interrupting rating

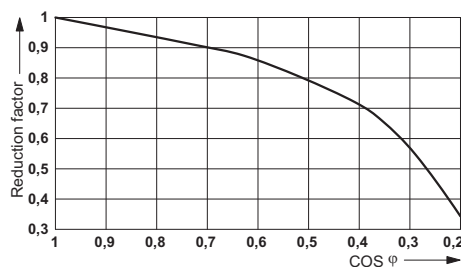
Curve A

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

Curve B

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

Diagram



Service life reduction factor

### Articles in set

Relay base - PLC-BSC- 24UC/21-21/H - 1012004



14 mm PLC basic terminal block without relay, for mounting on DIN rail NS 35/7,5, Screw connection, 2 PDT, Input voltage 24 V AC/DC

## Relay Module - PLC-RSC- 24UC/21-21/MS - 2910503

### Articles in set

Single relay - REL-MR- 24DC/21-21/MS - 2987943



Plug-in miniature relay, with power contact, 2 PDTs, test button, mechanical switch position indicator, status LED, freewheeling diode, polarity A1+, A2, input voltage 24 V DC

### 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

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UL Recognized / UL Listed / cUL Recognized / cUL Listed / EAC / cULus Listed

#### Ex Approvals

#### Approval details

## Relay Module - PLC-RSC- 24UC/21-21/MS - 2910503

### Approvals

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

### Accessories

#### Accessories

#### Bridge

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

## Relay Module - PLC-RSC- 24UC/21-21/MS - 2910503

### Accessories

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



Continuous plug-in bridge, length: 500 mm, color: gray

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



Single plug-in bridge, length: 6 mm, number of positions: 2, color: red

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



Single plug-in bridge, length: 6 mm, number of positions: 2, color: blue

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



Single plug-in bridge, length: 6 mm, number of positions: 2, color: gray

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



Single plug-in bridge, length: 8 mm, number of positions: 2, color: gray

## Relay Module - PLC-RSC- 24UC/21-21/MS - 2910503

### Accessories

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



Single plug-in bridge, length: 14 mm, number of positions: 2, color: black

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### DIN rail

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

DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, in acc. with EN 60715: 2001, material: Stainless steel V2A, uncoated, length: 2000 mm, color: silver

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



DIN rail perforated, Standard profile, width: 35 mm, height: 7.5 mm, in acc. with EN 60715: 2001, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

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



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, in acc. with EN 60715: 2001, material: Copper, uncoated, length: 2000 mm, color: copper-colored

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



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715: 2001, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

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



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715: 2001, material: Copper, uncoated, length: 2000 mm, color: copper-colored

## Relay Module - PLC-RSC- 24UC/21-21/MS - 2910503

### Accessories

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



DIN rail, unperforated, Standard profile 2.3 mm, width: 35 mm, height: 15 mm, in acc. with EN 60715: 2001, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

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



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715: 2001, material: Aluminum, uncoated, length: 2000 mm, color: silver

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



DIN rail perforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715: 2001, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

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



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, in acc. with EN 60715: 2001, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

### Labeled terminal marker

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



Zack marker strip, Strip, white, labeled, can be labeled with: CMS-P1-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 size: 10.15 x 10.5 mm

### Partition plate

## Relay Module - PLC-RSC- 24UC/21-21/MS - 2910503

### Accessories

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

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### 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

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### Screwdriver tools

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

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### Terminal marking

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



Zack marker strip, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, PLOTMARK, mounting type: snap into tall marker groove, for terminal block width: 10.2 mm, lettering field size: 10.15 x 10.5 mm

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Zack marker strip - ZB 10:UNBEDRUCKT - 1053001



Zack marker strip, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, PLOTMARK, mounting type: snap into tall marker groove, for terminal block width: 10.2 mm, lettering field size: 10.5 x 10.15 mm

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### Spare parts

## Relay Module - PLC-RSC- 24UC/21-21/MS - 2910503

### Accessories

Relay base - PLC-BSC- 24UC/21-21/H - 1012004



14 mm PLC basic terminal block without relay, for mounting on DIN rail NS 35/7,5, Screw connection, 2 PDT, Input voltage 24 V AC/DC

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Single relay - REL-MR- 24DC/21-21/MS - 2987943



Plug-in miniature relay, with power contact, 2 PDTs, test button, mechanical switch position indicator, status LED, freewheeling diode, polarity A1+, A2, input voltage 24 V DC