

## Relay Module - PLC-RSC- 24UC/21/MS - 2909650

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PLC-INTERFACE, consisting of PLC-BSC.../21 basic terminal block with screw connection and plug-in miniature relay with power contact and manual operation, 1 changeover contact, 24 V AC/DC input voltage

The figure shows the 24 V DC version

### Why buy this product

☒ Slim design

RoHS

### Key Commercial Data

|                      |                                                                                                         |
|----------------------|---------------------------------------------------------------------------------------------------------|
| Packing unit         | 1                                                                                                       |
| GTIN                 | <br>4 055626 377858 |
| GTIN                 | 4055626377858                                                                                           |
| Custom tariff number | 85364190                                                                                                |

### Technical data

#### Note

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

#### Dimensions

|        |        |
|--------|--------|
| Width  | 6.2 mm |
| Height | 80 mm  |
| Depth  | 94 mm  |

#### Ambient conditions

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

# Relay Module - PLC-RSC- 24UC/21/MS - 2909650

## Technical data

### Coil side

|                                         |                                   |
|-----------------------------------------|-----------------------------------|
| Nominal input voltage $U_N$             | 24 V AC/DC                        |
| Typical input current at $U_N$          | 11 mA (at $U_N = 24$ V AC)        |
|                                         | 8.5 mA (at $U_N = 24$ V DC)       |
| Typical response time                   | 6 ms                              |
| Typical release time                    | 15 ms                             |
| Protective circuit                      | Bridge rectifier Bridge rectifier |
| Operating voltage display               | Yellow LED                        |
| Power dissipation for nominal condition | 0.26 W                            |

### Contact side

|                                                        |                                                                                                                                                                                                                                               |
|--------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Contact type                                           | 1 PDT                                                                                                                                                                                                                                         |
| Type of switch contact                                 | Single contact                                                                                                                                                                                                                                |
| Contact material                                       | AgSnO                                                                                                                                                                                                                                         |
| 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 (at 100 mA)                                                                                                                                                                                                                               |
| Min. switching current                                 | 10 mA (at 12 V)                                                                                                                                                                                                                               |
| Maximum inrush current                                 | 10 A (4 s)                                                                                                                                                                                                                                    |
| Limiting continuous current                            | 6 A                                                                                                                                                                                                                                           |
| 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  | 8 mm             |
| Screw thread      | M3               |

## Relay Module - PLC-RSC- 24UC/21/MS - 2909650

### Technical data

#### Connection data input side

|                                  |                                              |
|----------------------------------|----------------------------------------------|
| 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                                    |

#### 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

|                                          |                                                                                                                                                                                                                         |
|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Note                                     | Separating plate PLC-ATP must 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.... |
| Test voltage relay winding/relay contact | 4 kV AC (50 Hz, 1 min.)                                                                                                                                                                                                 |
| Operating mode                           | 100% operating factor                                                                                                                                                                                                   |
| Degree of protection                     | RT II (flux-proof) (Relay)                                                                                                                                                                                              |
|                                          | IP20 (Relay socket)                                                                                                                                                                                                     |
| Mechanical service life                  | 1 x 10 <sup>7</sup> cycles                                                                                                                                                                                              |
| Mounting position                        | any                                                                                                                                                                                                                     |
| Assembly instructions                    | In rows with zero spacing                                                                                                                                                                                               |

#### Standards and Regulations

|                                        |                       |
|----------------------------------------|-----------------------|
| Designation                            | Standards/regulations |
| Standards/regulations                  | IEC 60664             |
|                                        | EN 50178              |
| Degree of pollution                    | 3                     |
| Overvoltage category                   | III                   |
| Flammability rating according to UL 94 | V0                    |
| Conformance                            | CE-compliant          |

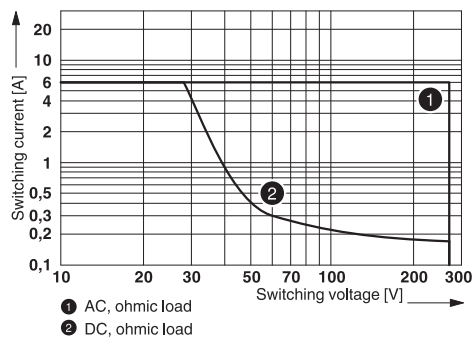
#### Environmental Product Compliance

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

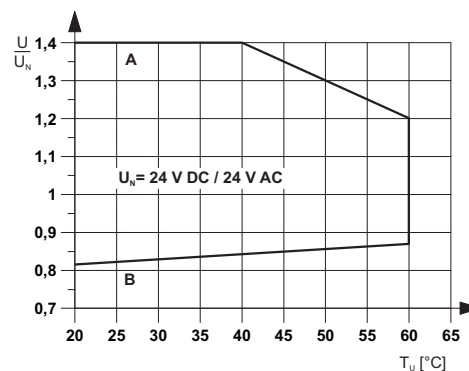
### Drawings

## Relay Module - PLC-RSC- 24UC/21/MS - 2909650

Diagram



Diagram



Interrupting rating

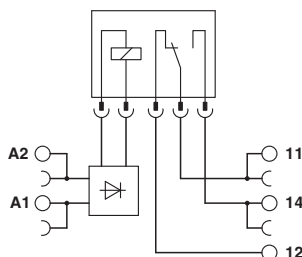
Curve A

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)

Circuit diagram



### Articles in set

Relay socket - PLC-BSC- 24UC/21 - 2966029



6.2 mm PLC basic terminal block with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7.5, 1 PDT, input voltage 24 V AC/DC

## Relay Module - PLC-RSC- 24UC/21/MS - 2909650

### Articles in set

Single relay - REL-MR- 24DC/21/MS - 2909642



Plug-in miniature power relay, with power contact, 1 changeover contact, manual operation, 24 V DC input voltage

### 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 13.2 | 39122334 |
|-------------|----------|

### Accessories

#### Accessories

##### Bridge

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



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

## Relay Module - PLC-RSC- 24UC/21/MS - 2909650

### Accessories

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

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



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

## Relay Module - PLC-RSC- 24UC/21/MS - 2909650

### Accessories

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



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

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### 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

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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

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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

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



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

## Relay Module - PLC-RSC- 24UC/21/MS - 2909650

### Accessories

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

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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

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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

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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

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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

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Labeled terminal marker

## Relay Module - PLC-RSC- 24UC/21/MS - 2909650

### Accessories

Zack marker strip - ZB 6,LGS:FORTL.ZAHLEN - 1051016



Zack marker strip, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, Printed horizontally: Consecutive numbers 1 - 10, 11 - 20, etc. up to 491 - 500, Mounting type: Snap into tall marker groove, for terminal block width: 6.2 mm, Lettering field: 6.15 x 10.5 mm

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### 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

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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

## Relay Module - PLC-RSC- 24UC/21/MS - 2909650

### Accessories

#### Zack marker strip - ZB 6:UNBEDRUCKT - 1051003



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: 6.2 mm, Lettering field: 6.15 x 10.5 mm

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#### Zack marker strip - ZB 6/WH-100:UNBEDRUCKT - 5060935



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: 6.2 mm, Lettering field: 6.15 x 10.5 mm

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#### Marker for terminal blocks - UC-TM 6 - 0818085



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK CLED, BLUEMARK LED, CMS-P1-PLOTTER, PLOTMARK, Mounting type: Snap into tall marker groove, for terminal block width: 6.2 mm, Lettering field: 5.6 x 10.5 mm

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#### Marker for terminal blocks - UCT-TM 6 - 0828736



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: THERMOMARK PRIME, THERMOMARK CARD, BLUEMARK CLED, BLUEMARK LED, TOPMARK LASER, Mounting type: Snap into tall marker groove, for terminal block width: 6.2 mm, Lettering field: 5.6 x 10.5 mm

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### Spare parts

#### Relay socket - PLC-BSC- 24UC/21 - 2966029



6.2 mm PLC basic terminal block with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7.5, 1 PDT, input voltage 24 V AC/DC

## Relay Module - PLC-RSC- 24UC/21/MS - 2909650

### Accessories

Single relay - REL-MR- 24DC/21/MS - 2909642



Plug-in miniature power relay, with power contact, 1 changeover contact, manual operation, 24 V DC input voltage