

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

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-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



COMPLETE RoHS

### Key Commercial Data

|                                      |                                                                                                         |
|--------------------------------------|---------------------------------------------------------------------------------------------------------|
| Packing unit                         | 10 pc                                                                                                   |
| GTIN                                 | <br>4 055626 486086 |
| GTIN                                 | 4055626486086                                                                                           |
| Weight per Piece (excluding packing) | 67.000 g                                                                                                |
| Custom tariff number                 | 85364190                                                                                                |
| Country of origin                    | Germany                                                                                                 |
| 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               |
| Maximum altitude                        | ≤ 2000 m                       |
| Degree of protection                    | RT II (Relay)                  |
|                                         | IP20 (Relay base)              |
|                                         | ≥ IP54 (Installation location) |

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

## Technical data

### 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                    |
| 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                    | 1 A (24 V, DC13)                                                                                                                                                                                                                              |
|                                       | 1.5 A (230 V, AC15)                                                                                                                                                                                                                           |

### 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     |
| Mechanical service life                  | 5x 10 <sup>6</sup> cycles |
| Mounting position                        | any                       |
| Assembly instructions                    | In rows with zero spacing |

### Connection data

|                               |                                              |
|-------------------------------|----------------------------------------------|
| 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/MS - 2910503

### Technical data

#### Connection data

|                                  |                                                               |
|----------------------------------|---------------------------------------------------------------|
| Conductor cross section flexible | 0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>                  |
|                                  | 0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> (Single ferrule)  |
|                                  | 2x 0.5 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> (TWIN ferrule) |
| Conductor cross section AWG      | 26 ... 14                                                     |

#### Connection data 2

|                                  |                                                               |
|----------------------------------|---------------------------------------------------------------|
| 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>                  |
|                                  | 0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> (Single ferrule)  |
|                                  | 2x 0.5 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> (TWIN ferrule) |
| Conductor cross section AWG      | 26 ... 14                                                     |

#### 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 |
| Pollution degree         | 2                                           |
| Overvoltage category     | III                                         |
| UL, USA                  | UL 508                                      |
|                          | UL 508 Recognized                           |
| UL, USA/Canada           | cUL 508                                     |
|                          | cUL 508 Recognized                          |

#### Conformance/approvals

|                |                   |
|----------------|-------------------|
| Designation    | UL, USA           |
| Identification | UL 508            |
|                | UL 508 Recognized |
| Designation    | UL, USA/Canada    |
| Identification | UL 508            |
|                | UL 508 Recognized |

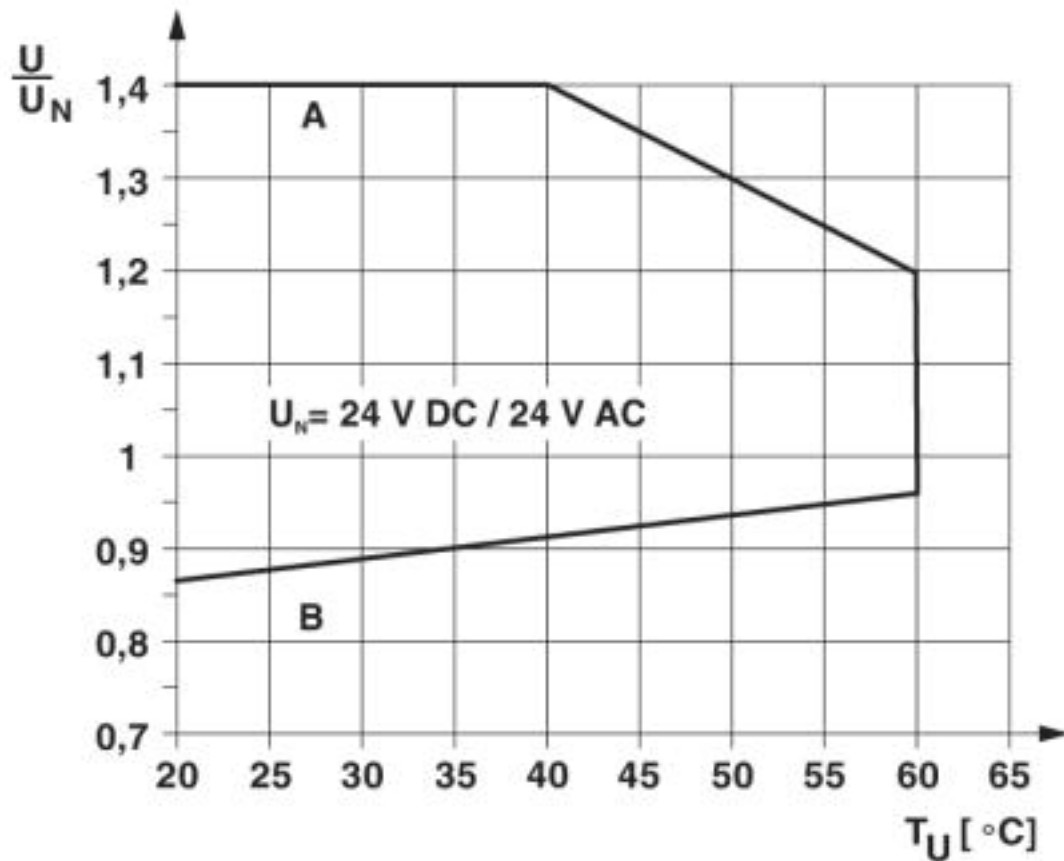
#### Environmental Product Compliance

|            |                                                                                                     |
|------------|-----------------------------------------------------------------------------------------------------|
|            | Lead 7439-92-1                                                                                      |
| China RoHS | Environmentally Friendly Use Period = 50                                                            |
|            | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

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

### Drawings

Diagram



Curve A

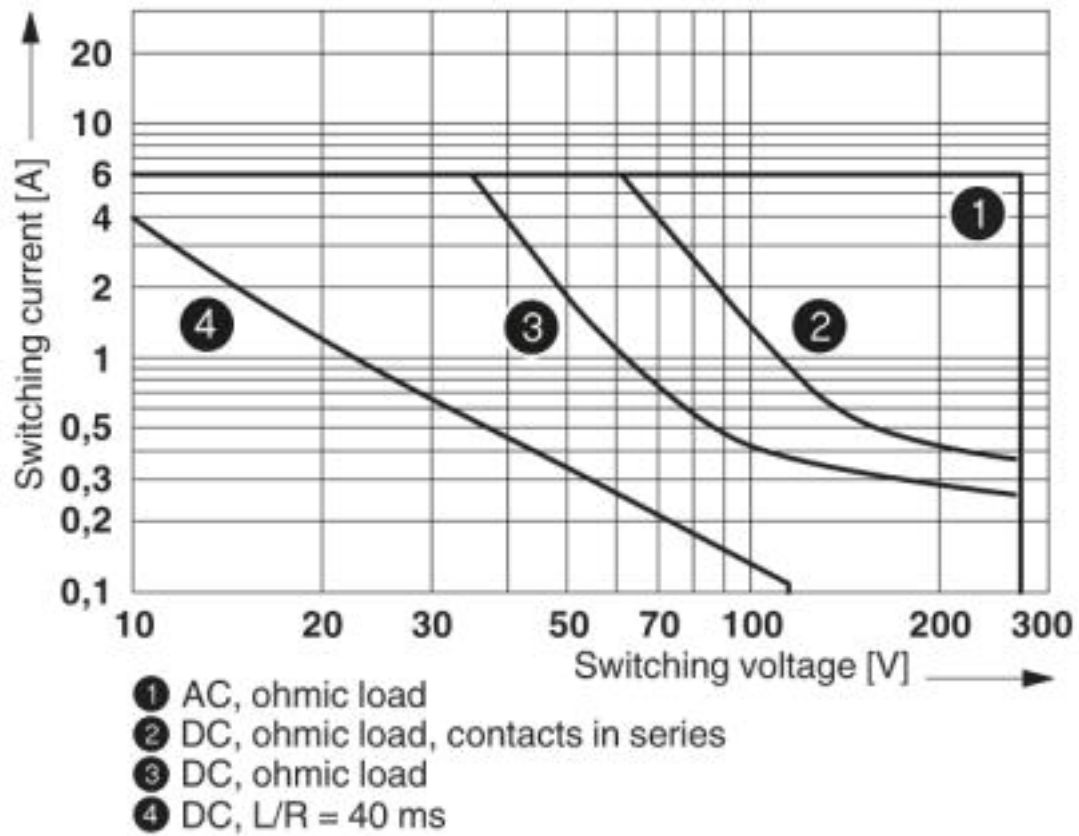
Maximum permissible continuous voltage  $U_{\text{max}}$  with limiting continuous current on the contact side (see relevant technical data)

Curve B

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

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

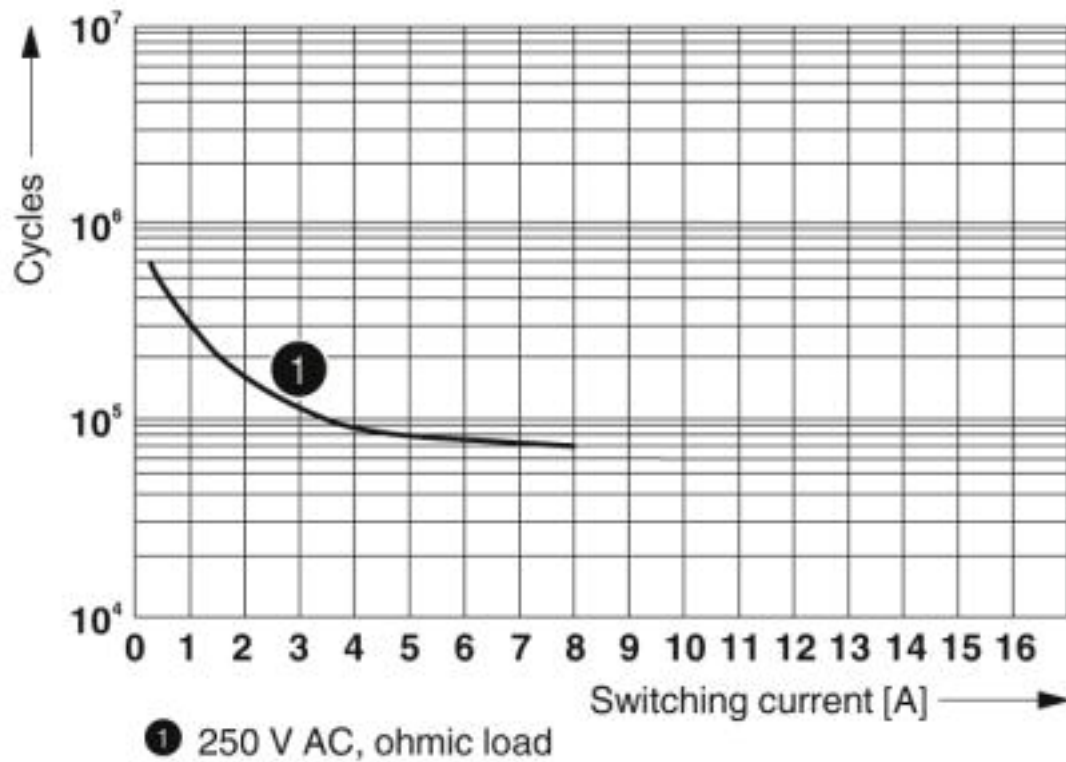
Diagram



Interrupting rating

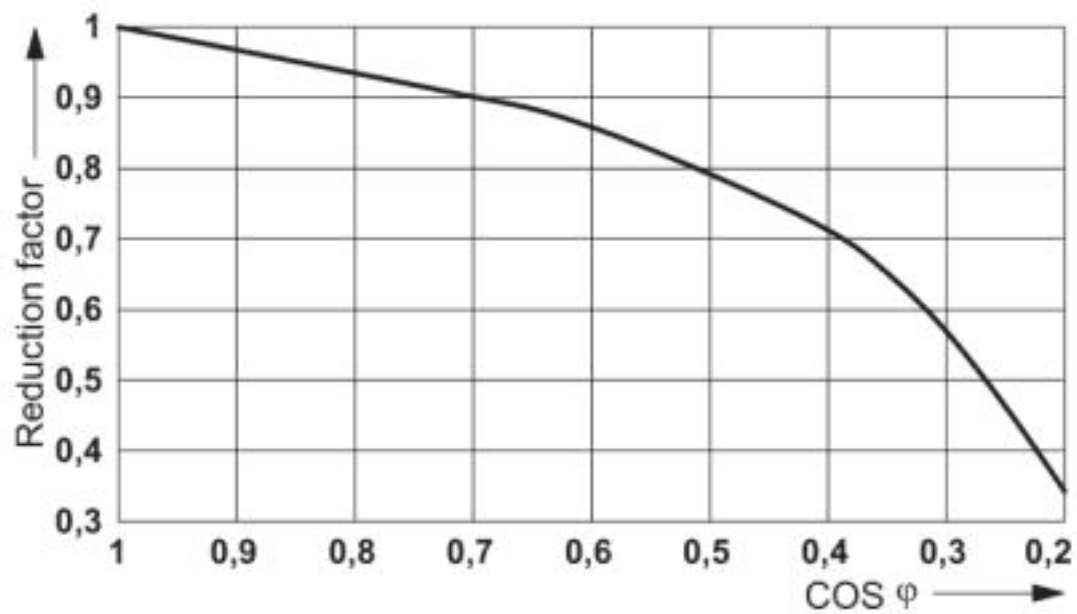
## Relay Module - PLC-RSC- 24UC/21-21/MS - 2910503

Diagram



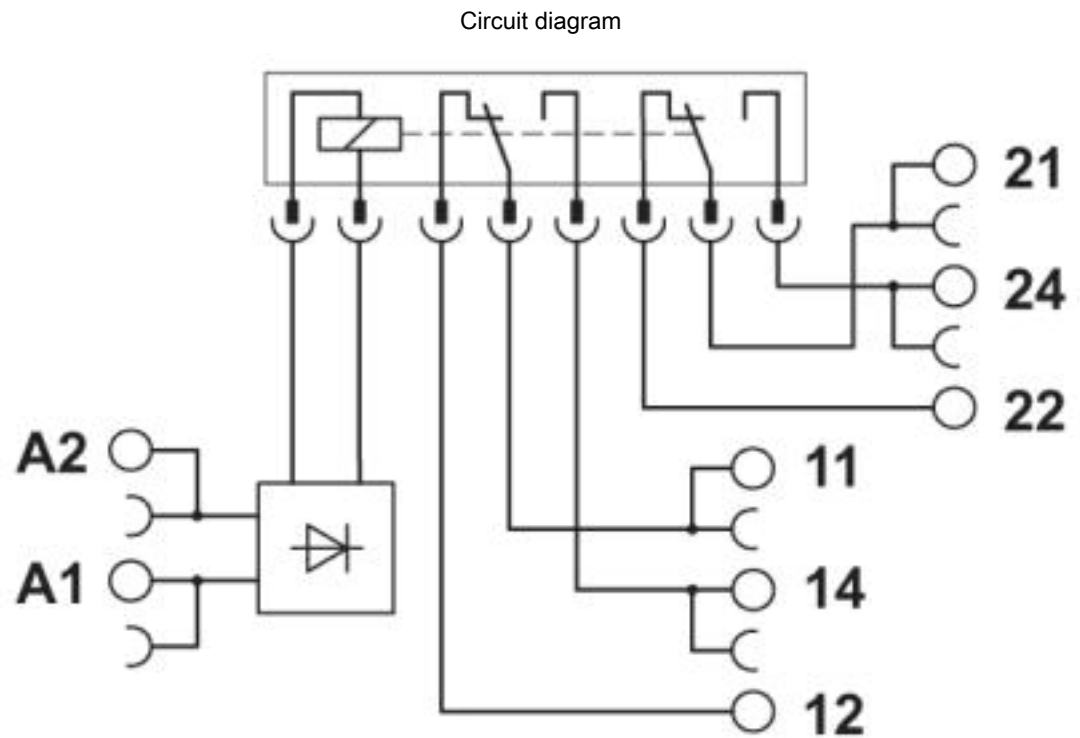
Electrical service life

Diagram



Service life reduction factor

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



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

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 | 27371600 |
| eCl@ss 5.1 | 27371600 |
| eCl@ss 6.0 | 27371600 |
| eCl@ss 7.0 | 27371601 |

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

### Classifications

#### eCl@ss

|            |          |
|------------|----------|
| 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 |
| ETIM 7.0 | EC001437 |

#### UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 30211916 |
| UNSPSC 7.0901 | 39121515 |
| UNSPSC 11     | 39121515 |
| UNSPSC 12.01  | 39121515 |
| UNSPSC 13.2   | 39122334 |
| UNSPSC 18.0   | 39122334 |
| UNSPSC 19.0   | 39122334 |
| UNSPSC 20.0   | 39122334 |
| UNSPSC 21.0   | 39122334 |

### Approvals

#### Approvals

#### Approvals

UL Listed / UL Recognized / cUL Recognized / cUL Listed / DNV GL / EAC / EAC / cULus Recognized / cULus Listed

#### Ex Approvals

#### Approval details

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

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



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

### 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   |
| DNV GL           |    | <a href="https://approvalfinder.dnvgl.com/">https://approvalfinder.dnvgl.com/</a>                                                                     | TAE0000196-02   |
| EAC              |    |                                                                                                                                                       | TR_TS_D_00573_c |
| EAC              |  |                                                                                                                                                       | TR_TS_S_00010_c |
| cULus Recognized |  |                                                                                                                                                       |                 |
| cULus Listed     |  |                                                                                                                                                       |                 |

### 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/21-21/MS - 2910503

### 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/21-21/MS - 2910503

### Accessories

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, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Stainless steel V2A, uncoated, length: 2000 mm, color: silver

---

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



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

---

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



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

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

### Accessories

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



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

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, material: Copper, uncoated, length: 2000 mm, color: copper-colored

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, acc. to EN 60715, 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, 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, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

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

### Accessories

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



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, 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 91 ... 100, mounting type: snap into tall marker groove, for terminal block width: 10.2 mm, lettering field size: 10.15 x 10.5 mm, Number of individual labels: 10

---

### 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

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

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

### Accessories

#### 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, Number of individual labels: 1000

Zack marker strip - ZB 10:UNBEDRUCKT - 1053001



Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into tall marker groove, for terminal block width: 10.2 mm, lettering field size: 10.5 x 10.15 mm, Number of individual labels: 10

### Spare parts

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

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