

## Relay Module - PLC-RSC- 24DC/ 1- 1/ACT - 2967109

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 for output functions, consisting of PLC-BSC.../ACT basic terminal block with screw connection and plug-in miniature relay with power contact, for mounting on DIN rail NS 35/7,5, 2 N/O contacts (1-1), input voltage 24 V DC

### Your advantages

- ✓ Actuator connected directly to relay module
- ✓ Efficient connection to system cabling using V8 adapter
- ✓ No need for additional modular terminal blocks
- ✓ Time savings of up to 60 %
- ✓ Relay modules with safe isolation according to DIN EN 50178 between coil and contact
- ✓ Space savings of up to 80 %
- ✓ Functional plug-in bridges



### Key Commercial Data

|              |                                                                                                         |
|--------------|---------------------------------------------------------------------------------------------------------|
| Packing unit | 10 pc                                                                                                   |
| GTIN         | <br>4 017918 156404 |
| GTIN         | 4017918156404                                                                                           |
| Sales Key    | 08                                                                                                      |

### 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 |

#### Ambient conditions

|                                 |                  |
|---------------------------------|------------------|
| Ambient temperature (operation) | -40 °C ... 60 °C |
|---------------------------------|------------------|

# Relay Module - PLC-RSC- 24DC/ 1- 1/ACT - 2967109

## Technical data

### Ambient conditions

|                                         |                   |
|-----------------------------------------|-------------------|
| Ambient temperature (storage/transport) | -40 °C ... 85 °C  |
| Degree of protection                    | RT III (Relay)    |
|                                         | IP20 (Relay base) |

### Coil side

|                                         |                                                       |
|-----------------------------------------|-------------------------------------------------------|
| Nominal input voltage $U_N$             | 24 V DC                                               |
| Typical input current at $U_N$          | 18 mA                                                 |
| Typical response time                   | 8 ms                                                  |
| Typical release time                    | 10 ms                                                 |
| Protective circuit                      | Reverse polarity protection Polarity protection diode |
|                                         | Free-wheeling diode Damping diode                     |
| Operating voltage display               | Yellow LED                                            |
| Power dissipation for nominal condition | 0.43 W                                                |

### Contact side

|                                       |                                                                                                                                                                                                                                               |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Contact type                          | 2 N/O contacts                                                                                                                                                                                                                                |
| 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                                                                                                                                                                                                                                     |
| Min. switching current                | 10 mA                                                                                                                                                                                                                                         |
| Maximum inrush current                | 8 A                                                                                                                                                                                                                                           |
| 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)                                                                                                                                                                                                                             |
|                                       | 40 W (at 110 V DC)                                                                                                                                                                                                                            |
|                                       | 60 W (at 220 V DC)                                                                                                                                                                                                                            |
|                                       | 1500 VA (for 250 V AC)                                                                                                                                                                                                                        |
| Switching capacity                    | 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)                                                                                                                                                                                                                          |

### General

|                                          |                         |
|------------------------------------------|-------------------------|
| Test voltage relay winding/relay contact | 4 kV AC (50 Hz, 1 min.) |
| Operating mode                           | 100% operating factor   |
| Flammability rating according to UL 94   | V0 (Housing)            |
| Mechanical service life                  | $3 \times 10^7$ cycles  |

# Relay Module - PLC-RSC- 24DC/ 1- 1/ACT - 2967109

## Technical data

### General

|                       |                           |
|-----------------------|---------------------------|
| 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>                  |
| 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

|                                  |                       |
|----------------------------------|-----------------------|
| Connection in acc. with standard | CUL                   |
| Designation                      | Standards/regulations |
| Standards/regulations            | IEC 60664             |
|                                  | EN 50178              |
| Insulation                       | Basic insulation      |
| Pollution degree                 | 3                     |
| Overvoltage category             | III                   |

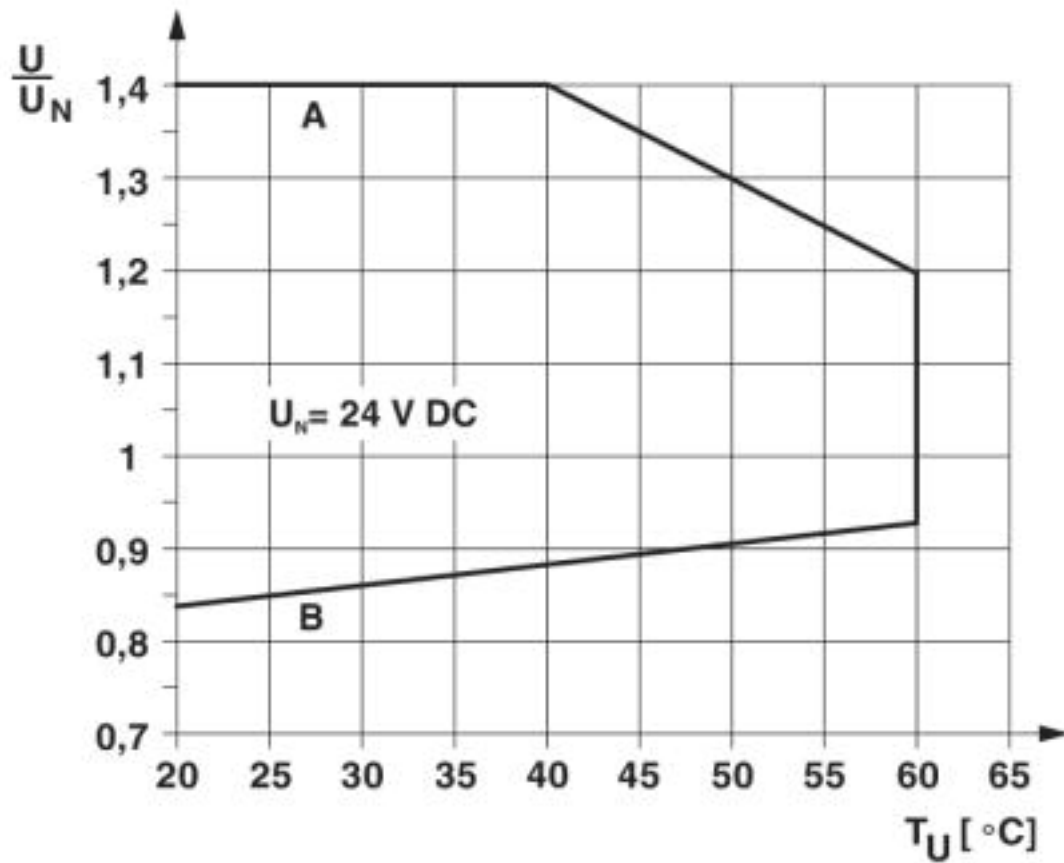
### Environmental Product Compliance

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

## Drawings

## Relay Module - PLC-RSC- 24DC/ 1- 1/ACT - 2967109

Diagram



Curve A

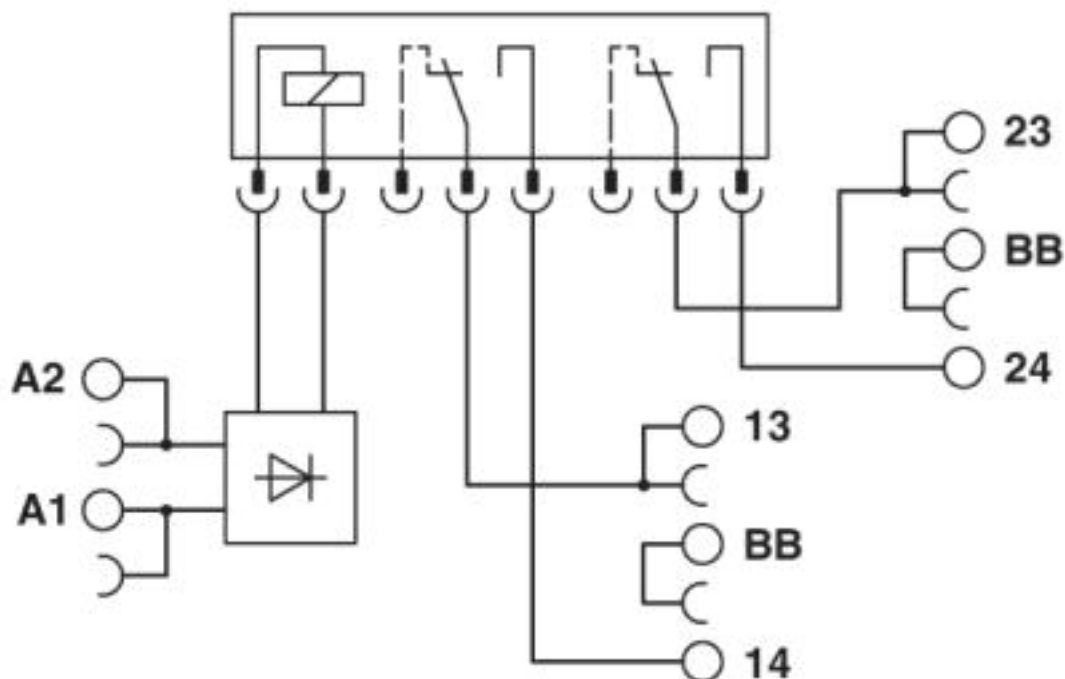
Maximum permissible continuous voltage  $U_{max}$  with limiting continuous current on the contact side (see relevant technical data)

Curve B

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

## Relay Module - PLC-RSC- 24DC/ 1- 1/ACT - 2967109

Circuit diagram



### Classifications

eCl@ss

|               |          |
|---------------|----------|
| eCl@ss 10.0.1 | 27371601 |
| eCl@ss 4.0    | 27371100 |
| eCl@ss 4.1    | 27371100 |
| eCl@ss 5.0    | 27371600 |
| eCl@ss 5.1    | 27371600 |
| eCl@ss 6.0    | 27371600 |
| 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 |
| ETIM 7.0 | EC001437 |

UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 30211916 |
| UNSPSC 7.0901 | 39121515 |

## Relay Module - PLC-RSC- 24DC/ 1- 1/ACT - 2967109

### Classifications

#### UNSPSC

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

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

##### Ex Approvals

#### Approval details

|     |                                                                                     |                                                     |                   |
|-----|-------------------------------------------------------------------------------------|-----------------------------------------------------|-------------------|
| PRS |  | <a href="http://www.prs.pl/">http://www.prs.pl/</a> | TE/2109/880590/16 |
|-----|-------------------------------------------------------------------------------------|-----------------------------------------------------|-------------------|

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

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

## Relay Module - PLC-RSC- 24DC/ 1- 1/ACT - 2967109

### Approvals

|        |                                                                                   |                                                                                   |               |
|--------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------|
| DNV GL |  | <a href="https://approvalfinder.dnvgl.com/">https://approvalfinder.dnvgl.com/</a> | TAE0000196-03 |
|--------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------|

|     |                                                                                   |  |                 |
|-----|-----------------------------------------------------------------------------------|--|-----------------|
| EAC |  |  | TR_TS_D_00573_c |
|-----|-----------------------------------------------------------------------------------|--|-----------------|

|     |                                                                                   |  |                         |
|-----|-----------------------------------------------------------------------------------|--|-------------------------|
| EAC |  |  | RU*C-<br>DE.*08.B.00010 |
|-----|-----------------------------------------------------------------------------------|--|-------------------------|

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

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



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

## Relay Module - PLC-RSC- 24DC/ 1- 1/ACT - 2967109

### Accessories

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

---

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- 24DC/ 1- 1/ACT - 2967109

### Accessories

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



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

---

### Controller board

System connection - PLC-V8L/FLK14/OUT - 2299660



V8 adapter for 8 x PLC-INTERFACE (14 mm), controller: PLC system cabling of output cards, connection 1: Screw connection 1x, connection 2: IDC/FLK pin strip 1x 14-position, connection 3: Plug connection (Can be snapped onto 8x PLC-INTERFACE terminals), number of channels: 8, control logic: positive switching

---

System connection - PLC-V8L/FLK14/OUT/M - 2304306



V8 adapter for 8 x PLC-INTERFACE (14 mm), controller: PLC system cabling of output cards, connection 1: Screw connection 1x, connection 2: IDC/FLK pin strip 1x 14-position, connection 3: Plug connection (Can be snapped onto 8x PLC-INTERFACE terminals), number of channels: 8, control logic: negative switching

---

### 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

## Relay Module - PLC-RSC- 24DC/ 1- 1/ACT - 2967109

### Accessories

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

---

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

# Relay Module - PLC-RSC- 24DC/ 1- 1/ACT - 2967109

## Accessories

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

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

## Relay Module - PLC-RSC- 24DC/ 1- 1/ACT - 2967109

### 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: 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

---

Marker for terminal blocks - UC-TM 12 - 0819194



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into tall marker groove, for terminal block width: 12 mm, lettering field size: 11.45 x 10.5 mm, Number of individual labels: 40

---

Marker for terminal blocks - UCT-TM 12 - 0829144



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: TOPMARK NEO, TOPMARK LASER, BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: snap into tall marker groove, for terminal block width: 12 mm, lettering field size: 10.8 x 9.6 mm, Number of individual labels: 30

---

### Spare parts

## Relay Module - PLC-RSC- 24DC/ 1- 1/ACT - 2967109

### Accessories

Relay base - PLC-BSC- 24DC/ 1- 1/ACT - 2967057



14 mm PLC basic terminal block for output functions with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with load return line connection (BB), 2 N/O contacts (1-1), input voltage 24 V DC

---

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



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

---

Phoenix Contact 2020 © - all rights reserved  
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG  
Flachsmarktstr. 8  
32825 Blomberg  
Germany  
Tel. +49 5235 300  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.com>