

## Solid-state relay module - PLC-OSC- 48DC/ 24DC/ 2 - 2967002

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PLC-INTERFACE, consisting of PLC-BSC.../21 basic terminal block with screw connection and plug-in miniature solid-state relay, for mounting on DIN rail NS 35/7,5, 1 N/O contact, input: 48 V DC, output: 3 - 33 V DC/3 A

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

### Product Features

- ✓ Slim design
- ✓ Efficient connection to system cabling using V8 adapter
- ✓ RT III sealed solid-state relay
- ✓ Zero voltage switch at AC output
- ✓ High switching power
- ✓ Integrated input circuit
- ✓ Functional plug-in bridges



### Key commercial data

|                                      |                                                                                                         |
|--------------------------------------|---------------------------------------------------------------------------------------------------------|
| Packing unit                         | 1 pc                                                                                                    |
| GTIN                                 | <br>4 017918 165857 |
| Weight per Piece (excluding packing) | 38.0 GRM                                                                                                |
| Custom tariff number                 | 85364190                                                                                                |
| Country of origin                    | Germany                                                                                                 |

### Technical data

#### Note

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

#### Dimensions

# Solid-state relay module - PLC-OSC- 48DC/ 24DC/ 2 - 2967002

## Technical data

### Dimensions

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

### Ambient conditions

|                                         |                  |
|-----------------------------------------|------------------|
| Ambient temperature (operation)         | -25 °C ... 60 °C |
| Ambient temperature (storage/transport) | -25 °C ... 70 °C |

### Input data

|                                                      |                                      |
|------------------------------------------------------|--------------------------------------|
| Nominal input voltage $U_N$                          | 48 V DC                              |
| Input voltage range in reference to $U_N$            | 0.8 ... 1.2                          |
| Switching threshold "0" signal in reference to $U_N$ | $\leq 0.4$                           |
| Switching threshold "1" signal in reference to $U_N$ | $\geq 0.8$                           |
| Typical input current at $U_N$                       | 9 mA                                 |
| Typical response time                                | 30 $\mu$ s (at $U_N$ )               |
| Typical turn-off time                                | 300 $\mu$ s (at $U_N$ )              |
| Operating voltage display                            | Yellow LED                           |
| Type of protection                                   | Protection against polarity reversal |
|                                                      | Free-wheeling diode                  |
| Protective circuit/component                         | Polarity protection diode            |
|                                                      | Damping diode                        |
| Transmission frequency                               | 300 Hz                               |

### Output data

|                                                  |                                      |
|--------------------------------------------------|--------------------------------------|
| Output voltage range                             | 3 V DC ... 33 V DC                   |
| Limiting continuous current                      | 3 A (see derating curve)             |
| Maximum inrush current                           | 15 A (10 ms)                         |
| Voltage drop at max. limiting continuous current | $\leq 200$ mV                        |
| Output circuit                                   | 2-wire, floating                     |
| Type of protection                               | Protection against polarity reversal |
|                                                  | Surge protection                     |
| Protective circuit/component                     | Polarity protection diode            |

### Connection data

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

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### Technical data

#### Connection data

|                                        |                      |
|----------------------------------------|----------------------|
| Conductor cross section stranded min.  | 0.14 mm <sup>2</sup> |
| Conductor cross section stranded max.  | 2.5 mm <sup>2</sup>  |
| Conductor cross section AWG/kcmil min. | 26                   |
| Conductor cross section AWG/kcmil max  | 14                   |

#### General

|                                         |                           |
|-----------------------------------------|---------------------------|
| Test voltage input/output               | 2.5 kV (50 Hz, 1 min.)    |
| Mounting position                       | any                       |
| Assembly instructions                   | In rows with zero spacing |
| Operating mode                          | 100% operating factor     |
| Inflammability class according to UL 94 | V0                        |
| Designation                             | Standards/regulations     |
| Standards/regulations                   | IEC 60664                 |
|                                         | EN 50178                  |
|                                         | IEC 62103                 |
| Rated surge voltage / insulation        | Basic insulation          |
| Pollution degree                        | 2                         |
| Surge voltage category                  | III                       |

### Classifications

#### eCl@ss

|            |          |
|------------|----------|
| eCl@ss 4.0 | 27371102 |
| eCl@ss 4.1 | 27371102 |
| eCl@ss 5.0 | 27371001 |
| eCl@ss 5.1 | 27371001 |
| eCl@ss 6.0 | 27371001 |
| eCl@ss 7.0 | 27371001 |
| eCl@ss 8.0 | 27371001 |

#### ETIM

|          |          |
|----------|----------|
| ETIM 2.0 | EC001504 |
| ETIM 3.0 | EC001504 |
| ETIM 4.0 | EC001504 |
| ETIM 5.0 | EC001504 |

#### UNSPSC

|             |          |
|-------------|----------|
| UNSPSC 6.01 | 30211916 |
|-------------|----------|

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## Classifications

### UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 7.0901 | 39121542 |
| UNSPSC 11     | 39121542 |
| UNSPSC 12.01  | 39121542 |
| UNSPSC 13.2   | 39121542 |

## Approvals

### Approvals

#### Approvals

UL Recognized / UL Listed / cUL Recognized / GOST / cUL Listed / GL / cULus Recognized / cULus Listed

#### Ex Approvals

#### Approvals submitted

### Approval details

UL Recognized 

UL Listed 

cUL Recognized 

GOST 

## Solid-state relay module - PLC-OSC- 48DC/ 24DC/ 2 - 2967002

### Approvals

cUL Listed 

GL

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

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



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

## Solid-state relay module - PLC-OSC- 48DC/ 24DC/ 2 - 2967002

### Accessories

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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

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### Labeled terminal marker

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



Zack marker strip, Strip, white, labeled, can be labeled with: 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

## Solid-state relay module - PLC-OSC- 48DC/ 24DC/ 2 - 2967002

### Accessories

#### Mounting rail

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

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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, material: Steel, unperforated, 2.3 mm thick, height 15 mm, width 35 mm, length: 2 m

## Solid-state relay module - PLC-OSC- 48DC/ 24DC/ 2 - 2967002

### Accessories

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

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



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

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



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

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

### 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

## Solid-state relay module - PLC-OSC- 48DC/ 24DC/ 2 - 2967002

### Accessories

#### 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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#### Relay socket

Relay socket - PLC-BSC- 48DC/21 - 2966090



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 48 V DC

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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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#### Single solid-state relay

Miniature solid-state relay - OPT-24DC/ 24DC/ 2 - 2966595



Plug-in miniature solid-state relay, power solid-state relay, 1 N/O contact, input: 24 V DC, output: 3 - 33 V DC/3 A

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#### Terminal marking

## Solid-state relay module - PLC-OSC- 48DC/ 24DC/ 2 - 2967002

### Accessories

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



Zack marker strip, Strip, white, unlabeled, can be labeled with: Plotter, Mounting type: Snap into tall marker groove, for terminal block width: 6.2 mm, Lettering field: 6.15 x 10.5 mm

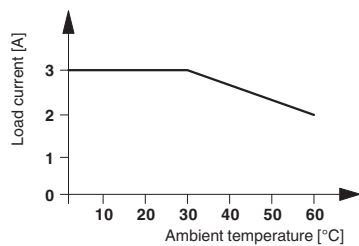
Zack marker strip - ZB 6:UNBEDRUCKT - 1051003



Zack marker strip, Strip, white, unlabeled, can be labeled with: Plotter, Mounting type: Snap into tall marker groove, for terminal block width: 6.2 mm, Lettering field: 6.15 x 10.5 mm

### Drawings

Diagram



Circuit diagram

