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# Solid-state relay module - PLC-OPT- 5DC/ 24DC/2/ACT - 2900375

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PLC-INTERFACE, consisting of PLC-BPT...ACT basic terminal block with Push-in connection and plug-in miniature solid-state relay, for mounting on NS 35/7,5 DIN rail, 5 V DC input voltage, other input voltages available on request.

## Why buy this product

☑ Actuator connected directly to relay module

☑ Time savings of up to 60%

☑ Efficient connection to system cabling using V8 adapter

☑ No need for additional modular terminal blocks

☑ 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 pcs |
|---|---|
| GTIN | 4 046356 506861 |
| Weight per Piece (excluding packing) | 31.27 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

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

### Ambient conditions

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## Technical data

### Ambient conditions

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

### Input data

| | |
|---|---|
| Nominal input voltage $U_N$ | 5 V DC |
| Input voltage range in reference to $U_N$ | 0.8 ... 1.2 |
| Switching threshold "0" signal in reference to $U_N$ | $\leq 0.25$ |
| Switching threshold "1" signal in reference to $U_N$ | $\geq 0.8$ |
| Typical input current at $U_N$ | 9.5 mA |
| Typical response time | 20 µs (at $U_N$) |
| Typical turn-off time | 300 µs (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 | Push-in connection |
| Stripping length | 8 mm |
| Conductor cross section solid min. | 0.14 mm² |
| Conductor cross section solid max. | 2.5 mm² |
| Conductor cross section stranded min. | 0.14 mm² |
| Conductor cross section stranded max. | 2.5 mm² |
| 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 |

# Solid-state relay module - PLC-OPT- 5DC/ 24DC/2/ACT - 2900375

## Technical data

### General

| Inflammability class according to UL 94 | V0 |
|---|---|
| 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 |
|---|---|
| UNSPSC 7.0901 | 39121542 |
| UNSPSC 11 | 39121542 |
| UNSPSC 12.01 | 39121542 |
| UNSPSC 13.2 | 39121542 |

## Approvals

### Approvals

Approvals

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

Ex Approvals

Approvals submitted

Solid-state relay module - PLC-OPT- 5DC/ 24DC/2/ACT - 2900375

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## Approvals

Approval details

| UL Recognized |
|---|

| UL Listed |
|---|

| cUL Recognized |
|---|

| cUL Listed |
|---|

| GL |
|---|

| UL Listed |
|---|

| cUL Listed |
|---|

| cULus Recognized |
|---|

| cULus Listed |
|---|

## Accessories

Accessories
Labeled terminal marker

![Phoenix Contact logo]

# Solid-state relay module - PLC-OPT- 5DC/ 24DC/2/ACT - 2900375

## Accessories

### 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

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## 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 - 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 - 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 - 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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# Solid-state relay module - PLC-OPT- 5DC/ 24DC/2/ACT - 2900375

## Accessories

DIN rail - 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

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 - NS 35/ 7,5 UNPERF 2000MM - 0801681

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

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

DIN rail, Width: 35 mm, Height: 7.5 mm, Length: 2000 mm, Color: silver

## Partition plate

# Solid-state relay module - PLC-OPT- 5DC/ 24DC/2/ACT - 2900375

## Accessories

Separating plate - PLC-ATP BK - 2966841

Separating plate, 2 mm thick, required at the start and end of a PLC terminal strip. Furthermore, it is used for: visual separation of groups, safe isolation of different voltages of neighboring PLC relays in acc. with DIN VDE 0106-101, isolation

## 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

## Relay socket

Relay socket - PLC-BPT- 5DC/ 1/ACT - 2900448

6.2 mm PLC actuator basic terminal block with load return line connection (BB), Push-in connection, 5 V DC input voltage, without relay or solid-state relay. Note: if fitted with a PDT relay, only the N/O contact is led out.

## 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

## Single solid-state relay

Miniature solid-state relay - OPT- 5DC/ 24DC/ 2 - 2967989

Plug-in miniature solid-state relay, power solid-state relay, input voltage 5 V DC

# Solid-state relay module - PLC-OPT- 5DC/ 24DC/2/ACT - 2900375

## Accessories

### Terminal marking

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
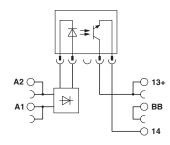
Zack marker strip - ZB 6:UNBEDRUCKT - 1051003

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

Circuit diagram