

Solid-state relay module - PLC-OSP- 5DC/ 24DC/ 2/ACT - 2980157

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

Your advantages

- ✓ 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 | 1 pc |
| GTIN |  4 017918 727505 |
| GTIN | 4017918727505 |
| Weight per Piece (excluding packing) | 29.590 g |
| 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

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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 | 5 V DC |
| Input voltage range in reference to U_N | 0.8 ... 1.2 |
| Input voltage range | 4 V DC ... 6 V DC |
| Switching threshold "0" signal in reference to U_N | ≤ 0.25 |
| Switching threshold "1" signal in reference to U_N | ≥ 0.8 |
| Typical input current at U_N | 9.5 mA |
| Typical response time | 20 μ s (at U_N) |
| Typical turn-off time | 300 μ s (at U_N) |
| Operating voltage display | Yellow LED |
| Type of protection | Reverse polarity protection |
| | Free-wheeling diode |
| Protective circuit/component | Polarity protection diode |
| | Damping diode |
| Transmission frequency | 300 Hz |
| Power dissipation for nominal condition | 0.05 W |

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 | ≤ 200 mV |
| Output circuit | 2-wire, floating |
| Type of protection | Reverse polarity protection |
| | Surge protection |
| Protective circuit/component | Polarity protection diode |

Connection data, input side

| | |
|-------------------|------------------------|
| Connection name | Input side |
| Connection method | Spring-cage connection |
| Stripping length | 8 mm |

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Technical data

Connection data, input side

| | |
|----------------------------------|----------------------|
| Conductor cross section solid | 0.14 mm² ... 2.5 mm² |
| Conductor cross section flexible | 0.14 mm² ... 2.5 mm² |
| Conductor cross section AWG | 26 ... 14 |

Connection data, output side

| | |
|----------------------------------|------------------------|
| Connection name | Output side |
| Connection method | Spring-cage connection |
| Stripping length | 8 mm |
| Conductor cross section solid | 0.14 mm² ... 2.5 mm² |
| Conductor cross section flexible | 0.14 mm² ... 2.5 mm² |
| Conductor cross section AWG | 26 ... 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 |
| Flammability rating according to UL 94 | V0 |
| Designation | Standards/regulations |
| Standards/regulations | IEC 60664 |
| | EN 50178 |
| Degree of pollution | 2 |
| Overvoltage category | III |

Standards and Regulations

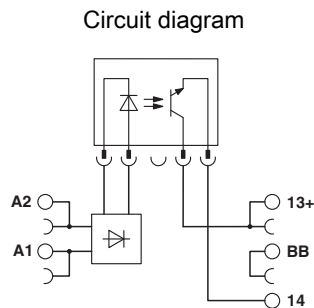
| | |
|--|-----------------------|
| Connection in acc. with standard | CUL |
| Designation | Standards/regulations |
| Standards/regulations | IEC 60664 |
| | EN 50178 |
| Insulation | Basic insulation |
| Degree of pollution | 2 |
| Overvoltage category | III |
| Flammability rating according to UL 94 | V0 |

Environmental Product Compliance

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

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Drawings



Classifications

eCl@ss

| | |
|------------|----------|
| eCl@ss 5.0 | 27371001 |
| eCl@ss 5.1 | 27371000 |
| eCl@ss 6.0 | 27371600 |
| eCl@ss 7.0 | 27371604 |
| eCl@ss 8.0 | 27371604 |
| eCl@ss 9.0 | 27371604 |

ETIM

| | |
|----------|----------|
| ETIM 2.0 | EC001504 |
| ETIM 3.0 | EC001504 |
| ETIM 4.0 | EC001504 |
| ETIM 5.0 | EC001504 |
| ETIM 6.0 | EC001504 |

UNSPSC

| | |
|---------------|----------|
| UNSPSC 6.01 | 30211916 |
| UNSPSC 7.0901 | 39121542 |
| UNSPSC 11 | 39121542 |
| UNSPSC 12.01 | 39121542 |
| UNSPSC 13.2 | 39122326 |

Approvals

Approvals

Approvals





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

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Approvals

Ex Approvals

Approval details

| | | | |
|------------------|---|---|--------------------------|
| PRS |  | http://www.prs.pl/ | TE/2109/880590/16 |
| GL |  | http://exchange.dnv.com/tari/ | 46016-03 HH |
| UL Listed |  | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 172140 |
| UL Recognized |  | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 238705 |
| cUL Recognized |  | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 238705 |
| cUL Listed |  | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 172140 |
| EAC |  | | RU C- DE.A*30.B.01082 |
| cULus Recognized |  | | |

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Approvals

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

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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Accessories

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

DIN rail

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

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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

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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

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

Labeled terminal marker

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 size: 6.15 x 10.5 mm

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

Solid-state relay module - PLC-OSP- 5DC/ 24DC/ 2/ACT - 2980157

Accessories

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 base - PLC-BSP- 5DC/ 1/ACT - 2980254



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

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, 1 N/O contact, input voltage: 5 V DC

Terminal marking

Solid-state relay module - PLC-OSP- 5DC/ 24DC/ 2/ACT - 2980157

Accessories

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



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: 6.2 mm, lettering field size: 6.15 x 10.5 mm

Zack marker strip - ZB 6:UNBEDRUCKT - 1051003



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: 6.2 mm, lettering field size: 6.15 x 10.5 mm

Marker for terminal blocks - UC-TM 6 - 0818085



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: 6.2 mm, lettering field size: 5.6 x 10.5 mm

Marker for terminal blocks - UCT-TM 6 - 0828736



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: 6.2 mm, lettering field size: 5.6 x 10.5 mm

Spare parts

Relay base - PLC-BSP- 5DC/ 1/ACT - 2980254



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

Solid-state relay module - PLC-OSP- 5DC/ 24DC/ 2/ACT - 2980157

Accessories

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



Plug-in miniature solid-state relay, power solid-state relay, 1 N/O contact, input voltage: 5 V DC

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