

Solid-state relay module - PLC-OPT- 24DC/24DC/100KHZ-G - 2902974

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Input solid-state relay, with DC voltage output push-pull, transmission frequency: 100 kHz, with light indicator and protective circuit in input and output circuits, input: 24 V DC, output: 14 - 30 V DC/50 mA

The figure shows a version with a screw connection



Key commercial data

| | |
|--------------------------------------|---|
| Packing unit | 1 pc |
| GTIN |  4 046356 702782 |
| Weight per Piece (excluding packing) | 32.86 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

| | |
|--------|--------|
| Width | 6.2 mm |
| Height | 80 mm |
| Depth | 86 mm |

Ambient conditions

| | |
|---|------------------|
| Ambient temperature (operation) | -20 °C ... 60 °C |
| Ambient temperature (storage/transport) | -25 °C ... 75 °C |
| Degree of protection | IP20 |

Input data

| | |
|--|-------------|
| Nominal input voltage U_N | 24 V DC |
| Input voltage range in reference to U_N | 0.8 ... 1.2 |
| Switching threshold "0" signal in reference to U_N | < 0.4 |

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Technical data

Input data

| | |
|--|--------------------------------------|
| Switching threshold "1" signal in reference to U_N | > 0.8 |
| Typical input current at U_N | 8 mA |
| Typical response time | 1 μ s |
| Typical turn-off time | 2 μ s |
| Operating voltage display | LED yellow |
| Type of protection | Protection against polarity reversal |
| | Surge protection |
| Surge voltage protection | > 33 V |
| Transmission frequency | 100 kHz |

Output data

| | |
|--|--|
| Designation | Output data |
| Output voltage range | 14 V DC ... 30 V DC |
| Limiting continuous current | 50 mA |
| Quiescent current | 15 mA |
| Surge voltage protection | > 35 V |
| Voltage drop at max. limiting continuous current | < 2.2 V |
| Output circuit | 3-conductor push-pull, ground referenced |
| Type of protection | Protection against polarity reversal |
| | Surge protection |

Connection data

| | |
|--|----------------------|
| Connection method | Push-in connection |
| Stripping length | 8 mm |
| Conductor cross section solid min. | 0.14 mm ² |
| Conductor cross section solid max. | 2.5 mm ² |
| Conductor cross section stranded min. | 0.14 mm ² |
| Conductor cross section stranded max. | 2.5 mm ² |
| Conductor cross section AWG/kcmil min. | 26 |
| Conductor cross section AWG/kcmil max | 14 |

General

| | |
|--------------------------------|---|
| Test voltage input/output | 2.5 kV _{rms} (50 Hz, 1 min.) |
| Mounting position | any |
| Assembly instructions | In rows with zero spacing |
| Operating mode | 100% operating factor |
| Designation | Air and creepage distances between the power circuits |
| Standards/regulations | DIN EN 50178 |
| Rated surge voltage/insulation | 0.5 kV / basic insulation |
| Rated insulation voltage | 50 V DC |
| Pollution degree | 2 |

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Technical data

General

| | |
|------------------------|----|
| Surge voltage category | II |
|------------------------|----|

Classifications

eCl@ss

| | |
|------------|----------|
| eCl@ss 4.0 | 27371001 |
| eCl@ss 4.1 | 27371001 |
| eCl@ss 5.0 | 27371001 |
| eCl@ss 5.1 | 27371001 |
| eCl@ss 6.0 | 27371001 |
| eCl@ss 7.0 | 27371001 |
| eCl@ss 8.0 | 27371601 |

ETIM

| | |
|----------|----------|
| ETIM 3.0 | EC001504 |
| ETIM 4.0 | EC000196 |
| ETIM 5.0 | EC001437 |

UNSPSC

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

Accessories

Accessories

Bridge

Continuous plug-in bridge - FBST 500-PLC RD - 2966786



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

Solid-state relay module - PLC-OPT- 24DC/24DC/100KHZ-G - 2902974

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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

Solid-state relay module - PLC-OPT- 24DC/24DC/100KHZ-G - 2902974

Accessories

Single plug-in bridge - FBST 8-PLC GY - 2967688



Single plug-in bridge, Length: 8 mm, Number of positions: 2, Color: gray

Mounting rail

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

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

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

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



DIN rail, material: Steel, unperforated, height 15 mm, width 35 mm, length: 2 m

Solid-state relay module - PLC-OPT- 24DC/24DC/100KHZ-G - 2902974

Accessories

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

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

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

Partition plate

Solid-state relay module - PLC-OPT- 24DC/24DC/100KHZ-G - 2902974

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

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

Drawings

Circuit diagram

