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Solid-state relay module - PLC-OPT- 24DC/300DC/1 - 2900383

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PLC-INTERFACE, integrated solid-state relay, with push-in connection, for mounting on NS 35/7,5 DIN rails, input: 24 V DC, output: 12 - 300 V DC/1 A

The illustration shows the version
PLC-OSC-24DC/300DC/1

Product Features

- ☑ Wear-free switching with no contact bounce
- ☑ Resistant to vibrations and shocks
- ☑ Protective circuit in input and output
- ☑ Option of bridging adjacent modules
- ☑ Status indicator
- ☑ DC voltage outputs of up to 300 V DC/1 A or up to 24 V DC/10 A
- ☑ Electronic PDT output of up to 48 V DC/500 mA

Key commercial data

Packing unit	1 pc
Weight per Piece (excluding packing)	31.72 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

PHŒNIX CONTACT

Solid-state relay module - PLC-OPT- 24DC/300DC/1 - 2900383

Technical data

Dimensions

Depth	86 mm

Ambient conditions

Ambient temperature (operation)	-25 °C ... 60 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C

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
Switching threshold "1" signal in reference to U_N	≥ 0.8
Typical input current at U_N	8 mA
Typical response time	0.3 ms
Typical turn-off time	0.7 ms
Operating voltage display	Yellow LED
Type of protection	Protection against polarity reversal
	Surge protection
Protective circuit/component	Polarity protection diode
	Varistor
Transmission frequency	50 Hz

Output data

Designation	Output data
Output voltage range	12 V DC ... 300 V DC (Partition plate PLC-ATP must be installed for voltages larger than 250 V (L1, L2, L3) between identical terminal points in adjacent modules. Potential bridging is then carried out with FBST 8-PLC... or ...FBST 500...)
Limiting continuous current	1 A (see derating curve)
Voltage drop at max. limiting continuous current	< 500 mV
Type of protection	Protection against polarity reversal
	Surge protection
Protective circuit/component	Polarity protection diode
	Varistor

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

Solid-state relay module - PLC-OPT- 24DC/300DC/1 - 2900383

Technical data

Connection data

Conductor cross section stranded max.	2.5 mm²
Conductor cross section AWG/kcmil min.	26
Conductor cross section AWG/kcmil max	14

General

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	4 kV / basic insulation
Rated insulation voltage	300 V
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	EC000196
ETIM 5.0	EC000196

UNSPSC

UNSPSC 6.01	30211916
UNSPSC 7.0901	39121542

Solid-state relay module - PLC-OPT- 24DC/300DC/1 - 2900383

Classifications

UNSPSC

UNSPSC 11	39121542
UNSPSC 12.01	39121542
UNSPSC 13.2	39121542

Approvals

Approvals

Approvals

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

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Ex Approvals

Approvals submitted

Approval details

GL

UL Listed (UL)

cUL Listed c(UL)

UL Recognized 🅁🅄

cUL Recognized c🅁🅄

Solid-state relay module - PLC-OPT- 24DC/300DC/1 - 2900383

Approvals

cUL Listed

cULus Recognized

cULus Listed

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Accessories

Accessories

Bridge

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

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

PHŒNIX CONTACT

Solid-state relay module - PLC-OPT- 24DC/300DC/1 - 2900383

Accessories

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/300DC/1 - 2900383

Accessories

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

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

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-V8/FLK14/OUT - 2295554

V8-OUTPUT adapter for eight 6.2 mm PLC interfaces (1 PDT, etc./see "Supplementary Products"). 14-pos. flat-ribbon cable connection for the PLC system cabling, control logic: Plus switching

System connection - PLC-V8/FLK14/OUT/M - 2304102

V8-OUTPUT adapter for eight 6.2 mm PLC interfaces (1 PDT, etc./see "Supplementary Products"). 14-pos. flat-ribbon cable connection for the PLC system cabling, control logic: Minus switching

System connection - PLC-V8/D15S/OUT - 2296058

V8-OUTPUT adapter for eight 6.2 mm PLC interfaces (1 PDT, etc./see "Additional Products"). 15-pin D-SUB male connector, control logic: Positive switching

Solid-state relay module - PLC-OPT- 24DC/300DC/1 - 2900383

Accessories

System connection - PLC-V8/D15B/OUT - 2296061

V8-OUTPUT adapter for eight 6.2 mm PLC interfaces (1 PDT, etc./see "Additional Products"). 15-pin D-SUB female connector, control logic: Positive switching

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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

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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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Solid-state relay module - PLC-OPT- 24DC/300DC/1 - 2900383

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/300DC/1 - 2900383

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
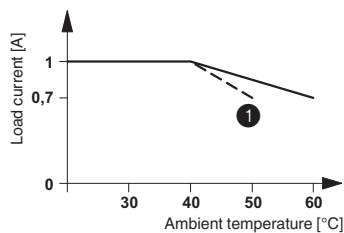
Screwdriver tools

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
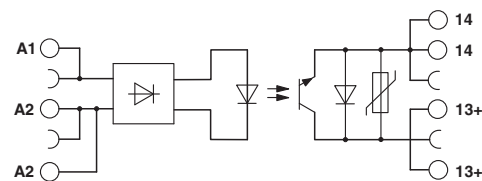
Drawings

Diagram

Circuit diagram

❶ For input voltages of 220 V DC and 230 V DC

The illustration shows the derating curve for PLC-...300DC/1