

## Solid-state relay module - PLC-OSC- 24DC/ 48DC/500/W - 2980636

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PLC electronic PDT, integrated optocoupler, with screw connection, for mounting on DIN rail NS 35/7.5, input: 24 V DC, output: 3 - 48 V DC/500 mA

### Product Features

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



### Key commercial data

Packing unit	1 pc
Weight per Piece (excluding packing)	35.31 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
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#### Dimensions

Width	6.2 mm
Height	80 mm
Depth	86 mm

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## Technical data

### 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 $U_N$	$\leq 0.4$
Switching threshold "1" signal in reference to $U_N$	$\geq 0.8$
Typical input current at $U_N$	3 mA
Typical response time	0.03 ms
Typical turn-off time	0.15 ms
Operating voltage display	Yellow LED
Type of protection	Protection against polarity reversal
	Surge protection
Protective circuit/component	Polarity protection diode
Transmission frequency	1000 Hz

### Output data

Output voltage range	3 V DC ... 48 V DC
Limiting continuous current	500 mA (see derating curve)
Min. load current	1 mA
Voltage drop at max. limiting continuous current	< 1.2 V
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>
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

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### Technical data

#### 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	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

# Solid-state relay module - PLC-OSC- 24DC/ 48DC/500/W - 2980636

## Approvals

### Approvals

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#### Approvals

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

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#### Ex Approvals


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#### Approvals submitted


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### Approval details

UL Listed 

cUL Listed 

UL Recognized 

cUL Recognized 

cUL Listed 

cULus Recognized  US

# Solid-state relay module - PLC-OSC- 24DC/ 48DC/500/W - 2980636

## Approvals

cULus Listed

cULus Listed

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

## Solid-state relay module - PLC-OSC- 24DC/ 48DC/500/W - 2980636

### Accessories

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



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

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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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### Controller board

## Solid-state relay module - PLC-OSC- 24DC/ 48DC/500/W - 2980636

### Accessories

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

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

### 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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### Accessories

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

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## Solid-state relay module - PLC-OSC- 24DC/ 48DC/500/W - 2980636

### 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

### 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

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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## Accessories

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### Screwdriver tools

Screwdriver - SZF 1-0,6X3,5 - 1204517

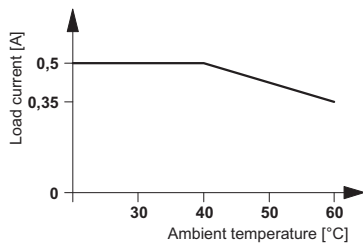


Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip

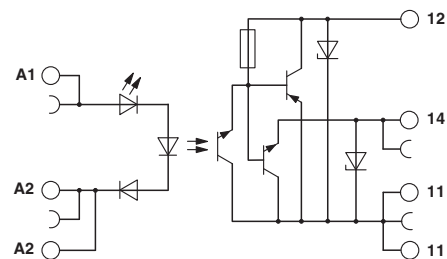
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## Drawings

Diagram



Circuit diagram



The illustration shows the derating curve for PLC-...24DC/48DC/500/W

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