

## Solid-state relay module - PLC-OPT- 24DC/ 48DC/500/W - 2900378

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



PLC-INTERFACE with electronic PDT contact, consisting of PLC-BPT.../21 basic terminal block with push-in connection and integrated miniature solid-state relay, for mounting on DIN rail NS 35/7,5, 1 PDT, input: 24 V DC, output: 3 - 48 V DC/500 mA

The figure shows a version with a screw connection

### 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
- 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
- Status indicator



### Key commercial data

Packing unit	1 pc
Weight per Piece (excluding packing)	30.19 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

# Solid-state relay module - PLC-OPT- 24DC/ 48DC/500/W - 2900378

## 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 $U_N$	$\leq 0.4$
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	Push-in connection
Stripping length	8 mm
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

## Solid-state relay module - PLC-OPT- 24DC/ 48DC/500/W - 2900378

### 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	EC000196
ETIM 5.0	EC000196

#### 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-OPT- 24DC/ 48DC/500/W - 2900378

## Approvals

Approvals

---

Approvals

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

---

Ex Approvals

---

Approvals submitted

---

## Approval details

UL Listed 

cUL Listed 

UL Recognized 

cUL Recognized 

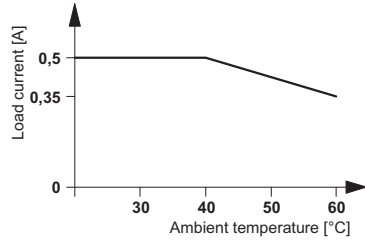
cULus Recognized 

cULus Listed 

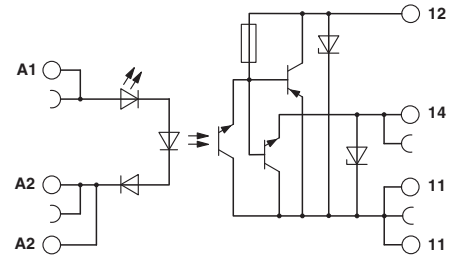
## Drawings

## Solid-state relay module - PLC-OPT- 24DC/ 48DC/500/W - 2900378

Diagram



Circuit diagram



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