

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



2900378

<https://www.phoenixcontact.com/us/products/2900378>

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PLC-INTERFACE with electronic changeover 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 changeover contact, input: 24 V DC, output: 3-48 V DC/500 mA

## Your advantages

- 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 changeover contact output up to 48 V DC/500 mA
- Status indicator

## Commercial data

Item number	2900378
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	C461
Product key	CK6233
Catalog page	Page 409 (C-5-2019)
GTIN	4046356506977
Weight per piece (including packing)	28.89 g
Weight per piece (excluding packing)	29.46 g
Customs tariff number	85364190
Country of origin	DE

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## Technical data

### Product properties

Product type	Solid-state relay module
Product family	PLC-INTERFACE
Application	With integrated solid-state relay
Operating mode	100% operating factor

### Insulation characteristics

Insulation	Basic insulation
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### Insulation characteristics: Standards/regulations

Insulation	Basic insulation
Overvoltage category	III
Pollution degree	2

### Electrical properties

Maximum power dissipation for nominal condition	0.07 W
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### Standards/regulations

Rated insulation voltage	300 V
Rated surge voltage	4 kV

### Input data

Nominal input voltage $U_N$	24 V DC
Input voltage range in reference to $U_N$	0.8 ... 1.2
Input voltage range	19.2 V DC ... 28.8 V DC
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
Protective circuit	Reverse polarity protection; Polarity protection diode
	Surge protection
Transmission frequency	1000 Hz

### Output data

Contact switching type	1 changeover contact
Design of digital output	electronic
Contact connection type	Power contact
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

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Output circuit	2-conductor, floating
Protective circuit	Reverse polarity protection; Polarity protection diode
	Surge protection

## Connection data

Connection method	Push-in connection
Stripping length	10 mm
Conductor cross section rigid	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section flexible	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> (Single ferrule)
	2x 0.5 mm <sup>2</sup> ... 1 mm <sup>2</sup> (TWIN ferrule)
Conductor cross section AWG	26 ... 14

## Dimensions

Width	6.2 mm
Height	80 mm
Depth	95 mm

## Material specifications

Color	gray (RAL 7042)
Flammability rating according to UL 94	V0 (Housing)

## Environmental and real-life conditions

### Ambient conditions

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

## Approvals

### Corrosive gas test

Identification	ISA-S71.04. G3 Harsh Group
	EN 60068-2-60

## Standards and regulations

### Standards/regulations

Standards/regulations	IEC 60664
	EN 50178

## Mounting

Mounting type	DIN rail mounting
Assembly instructions	in rows with zero spacing
Mounting position	any

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## Classifications

### ECLASS

ECLASS-11.0	27371604
ECLASS-13.0	27371604
ECLASS-12.0	27371604

### ETIM

ETIM 9.0	EC001504
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### UNSPSC

UNSPSC 21.0	39122300
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## Environmental product compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

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