

# PLC-OPT-120UC/ 48DC/100/SEN - Solid-state relay module



2900359

<https://www.phoenixcontact.com/us/products/2900359>

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PLC-INTERFACE for input functions, consisting of PLC-BPT.../SEN basic terminal block with push-in connection and plug-in miniature solid-state relay, for mounting on DIN rail NS 35/7,5, 1 N/O contact, input: 120 V AC/110 V DC, output: 3 - 48 V DC/100 mA

## Your advantages

- Efficient connection to system cabling using V8 adapter
- Time savings of up to 60 %
- No need for additional modular terminal blocks
- Relay modules with safe isolation according to DIN EN 50178 between coil and contact
- Space savings of up to 80 %
- Sensor connected directly to relay module
- Functional plug-in bridges

## Commercial data

Item number	2900359
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	C461
Product key	DK62A3
GTIN	4046356506854
Weight per piece (including packing)	34.57 g
Weight per piece (excluding packing)	33.57 g
Customs tariff number	85364900
Country of origin	DE

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## Technical data

### Product properties

Product type	Solid-state relay module
Product family	PLC-INTERFACE
Application	Input function
Operating mode	100% operating factor

### Insulation characteristics: Standards/regulations

Insulation	Basic insulation
Overvoltage category	III
Pollution degree	2

### Data management status

Date of last data management	01.04.2026
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### Electrical properties

Maximum power dissipation for nominal condition	0.42 W
Test voltage (Input/output)	2.5 kV (50 Hz, 1 min., input/output)

### Input data

Nominal input voltage $U_N$	120 V AC
	110 V DC
Nominal voltage (plugged-in solid-state relay)	60 V DC
Input voltage range in reference to $U_N$	0.8 ... 1.1
Input voltage range	96 V AC ... 132 V AC
	99 V DC ... 132 V DC
Switching threshold "0" signal in reference to $U_N$	$\leq 0.3$
Switching threshold "1" signal in reference to $U_N$	$\geq 0.8$
Typical input current at $U_N$	3.5 mA
Typical response time	6 ms (at $U_N$ )
Typical turn-off time	10 ms (at $U_N$ )
Operating voltage display	Yellow LED
Protective circuit	Bridge rectifier; Bridge rectifier
Transmission frequency	10 Hz

### Output data

Contact switching type	1 N/O contact
Design of digital output	electronic
Output voltage range	3 V DC ... 48 V DC
Limiting continuous current	100 mA
Voltage drop at max. limiting continuous current	$\leq 1$ V
Output circuit	2-conductor, floating
Protective circuit	Reverse polarity protection; Polarity protection diode

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	Surge protection
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## 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

### Item dimensions

Width	6.2 mm
Height	80 mm
Depth	94 mm

## Material specifications

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

## Environmental and real-life conditions

### Ambient conditions

Ambient temperature (operation)	-25 °C ... 60 °C
Ambient temperature (storage/transport)	-25 °C ... 70 °C

## Approvals

### CE

Certificate	CE-compliant
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### UKCA

Certificate	UKCA-compliant
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### Shipbuilding approval

Certificate	TAE0000196
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### Corrosive gas test

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

### Shipbuilding data

Temperature	D
Humidity	A
Vibration	B/C
EMC	B

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Enclosure	Required protection according to the Rules shall be provided upon installation on board
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## EMC data

Electromagnetic compatibility	Conformance with EMC directive
Low Voltage Directive	Conformance with Low Voltage Directive

## Standards and regulations

### Standards/regulations

Standards/regulations	IEC 60947-5-1
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## Mounting

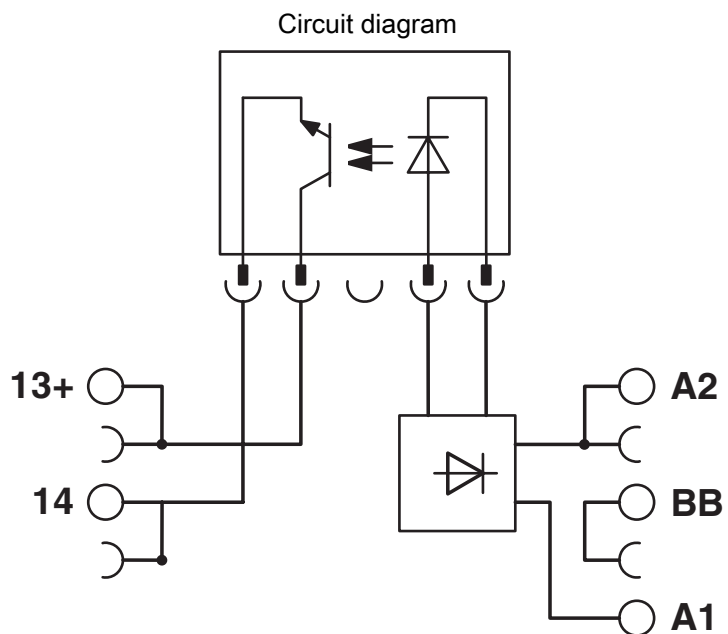
Mounting type	DIN rail mounting
Assembly note	in rows with zero spacing
Mounting position	any

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## Drawings



# PLC-OPT-120UC/ 48DC/100/SEN - Solid-state relay module



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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2900359>



**cULus Listed**

Approval ID: E140324



**cULus Listed**

Approval ID: E140324



**cULus Listed**

Approval ID: E140324

**DNV**

Approval ID: TAE0000196

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## Classifications

### ECLASS

ECLASS-13.0	27371604
ECLASS-15.0	27371604

### ETIM

ETIM 10.0	EC001504
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### UNSPSC

UNSPSC 21.0	39122300
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## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	7(a), 7(c)-I

### China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

### EU REACH SVHC

REACH candidate substance (CAS No.)	Hexahydromethylphthalic anhydride(CAS: n/a)
	Lead(CAS: 7439-92-1)
	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol(CAS: 79-94-7)
SCIP	eb98382f-9739-4740-aa9b-3e85f27d41ed

### EF3.1 Climate Change

CO2e kg	0.773 kg CO2e
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