

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



2900359

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

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 documentation. Our general terms of use for downloads are valid.



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            |

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



2900359

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

## 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 |
|------------------------------|------------|

### 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 |

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



2900359

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

|  |                  |
|--|------------------|
|  | 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

### 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 |
|-------------|--------------|

### UKCA

|             |                |
|-------------|----------------|
| Certificate | UKCA-compliant |
|-------------|----------------|

### Shipbuilding approval

|             |            |
|-------------|------------|
| Certificate | TAE0000196 |
|-------------|------------|

### 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   |

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



2900359

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

|           |   |
|-----------|---|
| Enclosure | Required protection according to the Rules shall be provided upon installation on board |
|-----------|---|

## 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 |
|-----------------------|---------------|

## Mounting

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

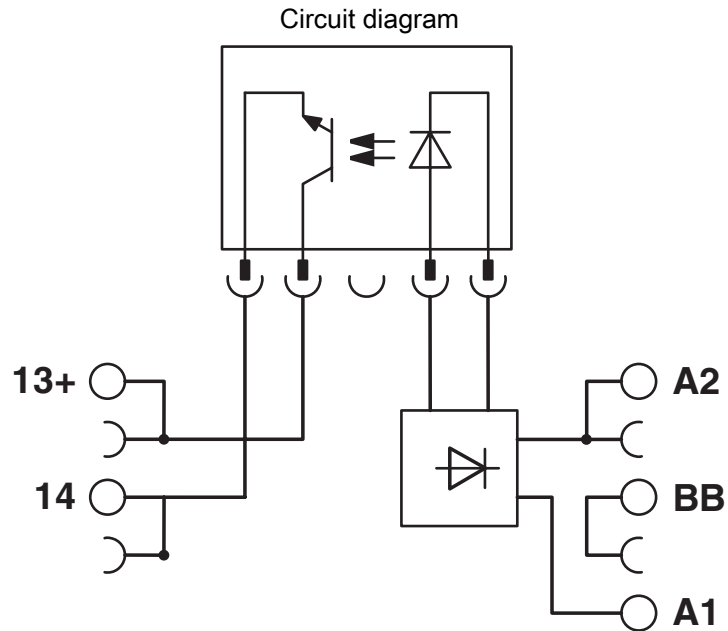
# PLC-OPT-120UC/ 48DC/100/SEN - Solid-state relay module



2900359

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

## Drawings



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



2900359

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

## Approvals

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



**EAC**

Approval ID: RU\*C-DE.\*08.B.00010



**cULus Listed**

Approval ID: E140324



**cULus Listed**

Approval ID: E140324



**cULus Listed**

Approval ID: E140324

**DNV**

Approval ID: TAE0000196

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



2900359

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

## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-13.0 | 27371604 |
| ECLASS-15.0 | 27371604 |

### ETIM

|           |          |
|-----------|----------|
| ETIM 10.0 | EC001504 |
|-----------|----------|

### UNSPSC

|             |          |
|-------------|----------|
| UNSPSC 21.0 | 39122300 |
|-------------|----------|

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



2900359

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

## 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 |
|---------|---------------|

Phoenix Contact 2026 © - all rights reserved

<https://www.phoenixcontact.com>

Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)