

PLC-OPT- 36DC/110DC/3RW - Solid-state relay module



2900392

<https://www.phoenixcontact.com/us/products/2900392>

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 railway applications, consisting of basic terminal block with push-in connection and integrated miniature solid-state relay, range: $0.7 \times U_N$ to $1.25 \times U_N$, temperature range: -25°C to $+70^\circ\text{C}$, 1 N/O contact, input: 36 V DC, output: 12 - 140 V DC/3 A

Your advantages

- Shock resistance in accordance with DIN 50155 (requirements in accordance with EN 61373)
- Temperature range: -25°C ... $+70^\circ\text{C}$
- Input voltage range of $0.7 - 1.25 \times U_N$

Commercial data

| | |
|--------------------------------------|--------------------------------|
| Item number | 2900392 |
| Packing unit | 10 pc |
| Minimum order quantity | 10 pc |
| Note | Made to order (non-returnable) |
| Sales key | C461 |
| Product key | DK62AL |
| GTIN | 4046356508971 |
| Weight per piece (including packing) | 34.96 g |
| Weight per piece (excluding packing) | 31.19 g |
| Customs tariff number | 85364190 |
| Country of origin | DE |

PLC-OPT- 36DC/110DC/3RW - Solid-state relay module



2900392

<https://www.phoenixcontact.com/us/products/2900392>

Technical data

Product properties

| | |
|----------------|--------------------------|
| Product type | Solid-state relay module |
| Product family | PLC-INTERFACE |
| Application | Railway applications |
| Operating mode | 100% operating factor |

Insulation characteristics: Air clearances and creepage distances, input/output

| | |
|----------------------|------------------|
| 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 | 0.43 W |
| Test voltage (Input/output) | 2.5 kV AC (Input/output) |

Air clearances and creepage distances, input/output

| | |
|--------------------------|-------|
| Rated insulation voltage | 160 V |
| Rated surge voltage | 4 kV |

Input data

| | |
|--|---|
| Nominal input voltage U_N | 36 V DC |
| Input voltage range in reference to U_N | 0.7 ... 1.25 ($t < 1 \text{ s} = 0.6 \dots 1.4 \times U_N$) |
| Input voltage range | 25.2 V DC ... 45 V DC |
| Switching threshold "0" signal in reference to U_N | < 0.4 |
| Switching threshold "1" signal in reference to U_N | > 0.6 |
| Typical input current at U_N | 12 mA |
| Typical response time | 400 μs |
| Typical turn-off time | 800 μs |
| Operating voltage display | Yellow LED |
| Protective circuit | Reverse polarity protection; Series polarity protection diode Surge protection |
| Surge voltage protection | > 150 V |
| Transmission frequency | 50 Hz |

Output data

| | |
|-----------------------------|--|
| Contact switching type | 1 N/O contact |
| Design of digital output | electronic |
| Output nominal voltage | 110 V DC |
| Output voltage range | 12 V DC ... 140 V DC ($t < 1 \text{ s} = 1.40 \times U_N$) |
| Limiting continuous current | 3 A (see derating curve) |

PLC-OPT- 36DC/110DC/3RW - Solid-state relay module



2900392

<https://www.phoenixcontact.com/us/products/2900392>

| | |
|--|---|
| Surge voltage protection | > 150 V |
| Voltage drop at max. limiting continuous current | < 150 mV |
| Output circuit | 2-conductor, floating |
| Protective circuit | Reverse polarity protection; Parallel polarity protection diode Surge protection |

Connection data

| | |
|----------------------------------|---|
| Connection method | Push-in connection |
| Stripping length | 10 mm |
| Conductor cross-section rigid | 0.14 mm ² ... 2.5 mm ² |
| Conductor cross-section flexible | 0.14 mm ² ... 2.5 mm ² 0.2 mm ² ... 2.5 mm ² (Single ferrule) 2x 0.5 mm ² ... 1 mm ² (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

| | |
|---|------------------|
| Degree of protection | IP20 |
| Ambient temperature (operation) | -25 °C ... 70 °C |
| Ambient temperature (storage/transport) | -40 °C ... 85 °C |

Approvals

CE

| | |
|-------------|--------------|
| Certificate | CE-compliant |
|-------------|--------------|

UKCA

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

Corrosive gas test

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

Shipbuilding approval

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

PLC-OPT- 36DC/110DC/3RW - Solid-state relay module



2900392

<https://www.phoenixcontact.com/us/products/2900392>

Shipbuilding data

| | |
|-------------|---|
| Temperature | D |
| Humidity | A |
| Vibration | B |
| EMC | B |
| 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

Air clearances and creepage distances, input/output

| | |
|-----------------------|---------------|
| Standards/regulations | IEC 60947-5-1 |
|-----------------------|---------------|

Railway standard

| | |
|-----------------------|----------------------------------|
| Standards/regulations | DIN EN 50155 (in relevant parts) |
| Standards/regulations | DNVGL-CG-0339 |

Mounting

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

PLC-OPT- 36DC/110DC/3RW - Solid-state relay module



2900392

<https://www.phoenixcontact.com/us/products/2900392>

Drawings

Diagram



Circuit diagram



PLC-OPT- 36DC/110DC/3RW - Solid-state relay module



2900392

<https://www.phoenixcontact.com/us/products/2900392>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2900392>



EAC

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



cULus Listed

Approval ID: E140324



cUL Recognized

Approval ID: E238705



UL Recognized

Approval ID: E238705



UL Listed

Approval ID: FILE E 172140



cUL Listed

Approval ID: FILE E 172140



cULus Listed

Approval ID: E140324



cULus Listed

Approval ID: E140324

PLC-OPT- 36DC/110DC/3RW - Solid-state relay module



2900392

<https://www.phoenixcontact.com/us/products/2900392>

Classifications

ECLASS

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

ETIM

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

UNSPSC

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

PLC-OPT- 36DC/110DC/3RW - Solid-state relay module



2900392

<https://www.phoenixcontact.com/us/products/2900392>

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.) | Lead(CAS: 7439-92-1) |
| SCIP | 5baa776c-243d-455b-956a-a6b3d58bf677 |

EF3.1 Climate Change

| | |
|---------|---------------|
| CO2e kg | 1.933 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