

PLC-OSC- 24DC/ 48DC/100/C1D2 - Optocoupler



5603261

<https://www.phoenixcontact.com/us/products/5603261>

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PLC-INTERFACE, consisting of DIN rail-mountable basic terminal block with screw connection and plug-in miniature solid-state relay, input: 24 V DC, output: 3 - 48 V DC/100 mA, UL/cUL: approved for use in Ex Zone Class I, Div. 2

Commercial data

| | |
|--------------------------------------|---------------|
| Item number | 5603261 |
| Packing unit | 10 pc |
| Minimum order quantity | 10 pc |
| Sales key | C461 |
| Product key | DK622K |
| GTIN | 4046356687379 |
| Weight per piece (including packing) | 37.63 g |
| Weight per piece (excluding packing) | 37 g |
| Customs tariff number | 85364190 |
| Country of origin | DE |

Technical data

Notes

Utilization restriction

| | |
|----------|---|
| EMC note | EMC: class A product, see manufacturer's declaration in the download area |
|----------|---|

Product properties

| | |
|----------------|--|
| Product type | Solid-state relay module |
| Product family | PLC-INTERFACE |
| Application | Class I, Division 2 potentially explosive areas |
| 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 | 0.2 W |
| Test voltage (Input/output) | 2.5 kV (50 Hz, 1 min., input/output) |

Input data

| | |
|--|--|
| Nominal input voltage U_N | 24 V DC |
| Nominal voltage (plugged-in solid-state relay) | 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 | ≤ 0.4 |
| Switching threshold "1" signal in reference to U_N | ≥ 0.8 |
| Typical input current at U_N | 8.5 mA |
| Typical response time | 20 μ s (at U_N) |
| Typical turn-off time | 300 μ s (at U_N) |
| Operating voltage display | Yellow LED |
| Protective circuit | Reverse polarity protection; Polarity protection diode Freewheeling diode; Freewheeling diode |
| Transmission frequency | 300 Hz |

Output data

| | |
|--------------------------|---------------|
| Contact switching type | 1 N/O contact |
| Design of digital output | electronic |

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| | |
|--|--|
| Output voltage range | 3 V DC ... 48 V DC |
| Limiting continuous current | 100 mA |
| Voltage drop at max. limiting continuous current | ≤ 1 V |
| Output circuit | 2-conductor, floating |
| Protective circuit | Reverse polarity protection; Polarity protection diode Surge protection |

Connection data

| | |
|----------------------------------|---|
| Connection method | Screw connection |
| Stripping length | 8 mm |
| Screw thread | M3 |
| 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 ... 1.5 mm ² (TWIN ferrule) |
| Conductor cross-section AWG | 26 ... 14 |
| Tightening torque | 0.6 Nm ... 0.8 Nm |

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) | -20 °C ... 60 °C |
| Ambient temperature (storage/transport) | -40 °C ... 85 °C |

Approvals

CE

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

UL, USA

| | |
|----------------|-----------------------------------|
| Identification | Class I, Zone 2, AEx nA nC IIC T6 |
|----------------|-----------------------------------|

UL, USA/Canada

| | |
|----------------|------------------------------------|
| Identification | Class I, Div. 2, Groups A, B, C, D |
|----------------|------------------------------------|

UL, Canada

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| | |
|----------------|---------------------------------------|
| Identification | Class I, Zone 2, Ex nA nC IIC Gc T6 X |
|----------------|---------------------------------------|

Corrosive gas test

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

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 |

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Drawings



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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/5603261>



EAC

Approval ID: RU C-DE.A*30.B.01082



cULus Listed

Approval ID: E140324



cULus Listed

Approval ID: E140324



cULus Listed

Approval ID: E140324



cUL Listed

Approval ID: E199827



UL Listed

Approval ID: E199827



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Classifications

ECLASS

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

ETIM

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|-----------|----------|
| 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) |
| SCIP | 1b9e08df-e3b8-44c4-be5b-7861431e0697 |

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