

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



2980636

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PLC-INTERFACE with electronic changeover contact, consisting of PLC-BSC.../21 basic terminal block with screw connection and integrated miniature solid-state relay, for mounting on NS 35/7,5 DIN rail, 1 changeover contact, input: 24 V DC, output: 3 V DC ... 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
- Status indicator
- Electronic changeover contact output up to 48 V DC/500 mA
- Option of bridging adjacent modules

Commercial data

| | |
|--------------------------------------|---------------|
| Item number | 2980636 |
| Packing unit | 10 pc |
| Minimum order quantity | 10 pc |
| Sales key | C461 |
| Product key | DK6223 |
| GTIN | 4046356051378 |
| Weight per piece (including packing) | 34.12 g |
| Weight per piece (excluding packing) | 33.47 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: 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 | 0.07 W |
|---|--------|

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 | ≤ 0.4 |
| Switching threshold "1" signal in reference to U_N | ≥ 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) |
| Load current | ≥ 10 mA (Terminal block 12) ≥ 5 mA (Terminal block 14) |

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| | |
|--|--|
| Quiescent current | ≤ 1.5 mA (Terminal block 12) |
| | ≤ 0.05 mA (Terminal block 14) |
| Voltage drop at max. limiting continuous current | < 1.2 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 | 0.45 Nm ... 0.55 Nm (Usually these terminal blocks must be supported during conductor connection (held by one hand, supported on the housing)) |

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) | -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 |
|-----------------------|-----------|

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| | |
|--|----------|
| | EN 50178 |
|--|----------|

Mounting

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

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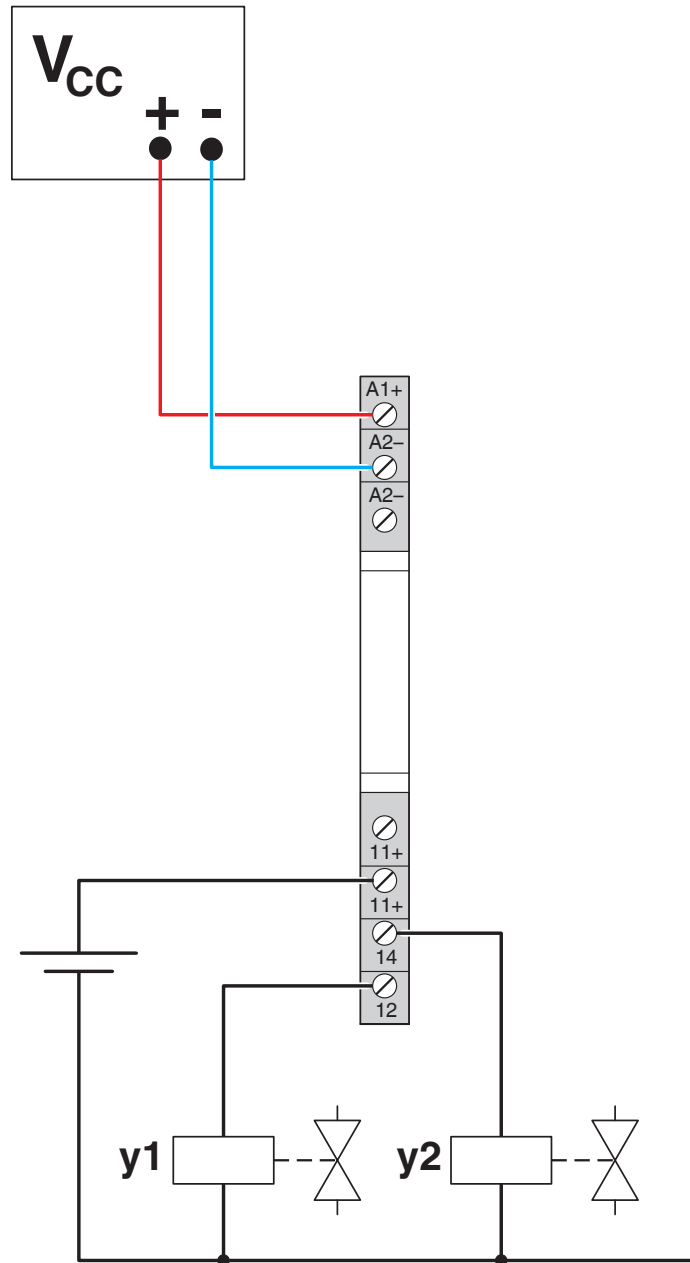


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Drawings

Application drawing



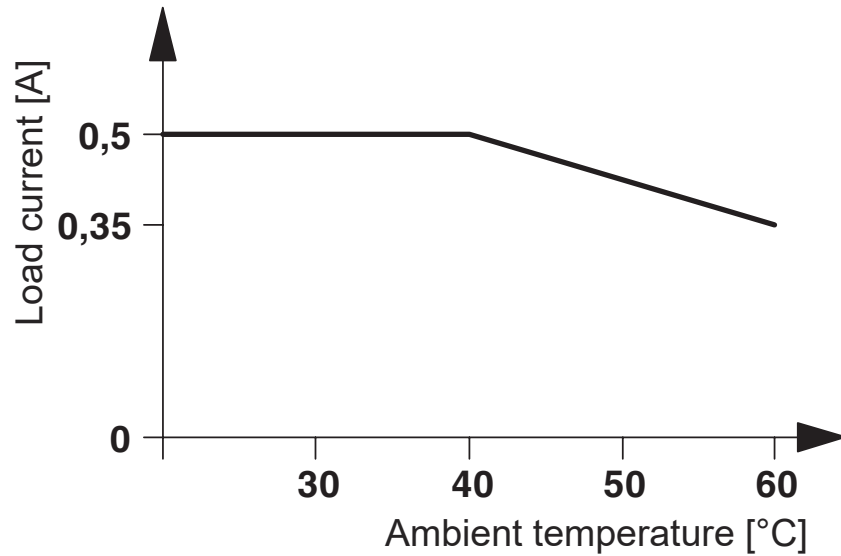
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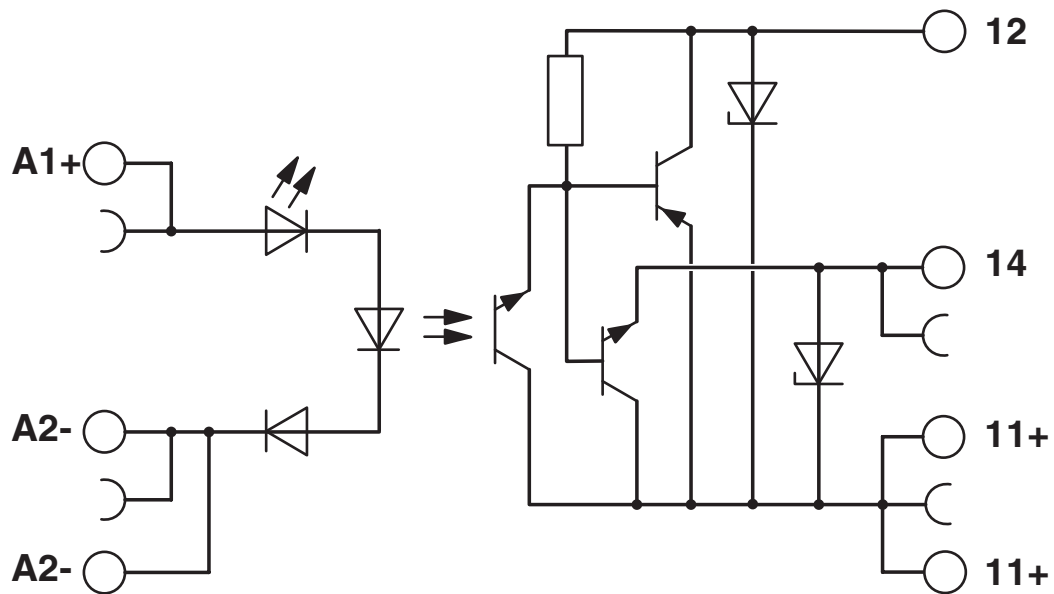
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Diagram



The figure shows the derating curve for PLC-...24DC/48DC/500/W

Circuit diagram



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Approvals

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EAC

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



cULus Listed

Approval ID: E140324



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Classifications

ECLASS

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

ETIM

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

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.) | Lead(CAS: 7439-92-1) |
| SCIP | 0f09da59-40bc-43cd-b727-561effe90045 |

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