

2980047

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PLC-INTERFACE, consisting of PLC-BSC.../21 basic terminal block with screw connection and plug-in miniature solid-state relay, for mounting on NS 35/7,5, 1 N/O contact, input: 125 V DC, output: 3 - 48 V DC/100 mA

### Your advantages

- · Slim design
- · Efficient connection to system cabling using V8 adapter
- · RT III sealed solid-state relay
- · Functional plug-in bridges
- · Integrated input circuit
- · High switching power
- · Zero voltage switch at AC output

### Commercial data

| Item number                          | 2980047       |
|--------------------------------------|---------------|
| Packing unit                         | 10 pc         |
| Minimum order quantity               | 10 pc         |
| Sales key                            | C461          |
| Product key                          | DK6223        |
| GTIN                                 | 4017918619060 |
| Weight per piece (including packing) | 38.43 g       |
| Weight per piece (excluding packing) | 32.2 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                                       | Universal                |  |
| 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                      | 15.09.2025               |  |
|   |                          |  |

### Electrical properties

| Maximum power dissipation for nominal condition | 0.38 W                               |
|---|--------------------------------------|
| Test voltage (Input/output)                     | 2.5 kV (50 Hz, 1 min., input/output) |

### Input data

| Nominal input voltage U <sub>N</sub>                                | 125 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   | 100 V DC 137.5 V DC       |
| Switching threshold "0" signal in reference to $\boldsymbol{U}_{N}$ | ≤ 0.4                     |
| Switching threshold "1" signal in reference to $\boldsymbol{U}_{N}$ | ≥ 0.8                     |
| Typical input current at U <sub>N</sub>                             | 3 mA                      |
| Typical response time   | 1 ms (at U <sub>N</sub> ) |
| Typical turn-off time   | 3 ms (at U <sub>N</sub> ) |
| Status display  | LED (yellow)              |
| Transmission frequency  | 50 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 | ≤1 V   |
| Output circuit                                   | 2-conductor, floating                                  |
| Protective circuit                               | Reverse polarity protection; Polarity protection diode |
|  | Surge protection                                       |

### Connection data

| Connection method | Screw connection |
|-------------------|------------------|
|                   |                  |



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| Stripping length   | 8 mm  |
|--|---|
| Screw thread   | M3  |
| Conductor cross-section rigid                              | 0.14 mm² 2.5 mm²  |
| Conductor cross-section flexible                           | 0.14 mm² 2.5 mm²  |
|  | 0.2 mm <sup>2</sup> 2.5 mm <sup>2</sup> (Single ferrule)                                |
|  | 2x 0.5 mm <sup>2</sup> 1.5 mm <sup>2</sup> (TWIN ferrule)                               |
| Conductor cross-section AWG                                | 26 14   |
| Tightening torque  | 0.6 Nm 0.8 Nm   |
| 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  |
|  | -25 °C 70 °C  |
| Ambient temperature (storage/transport)                    | -23 C 10 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  | В   |
|  |   |
| Enclosure  | Required protection according to the Rules shall be provided upon installation on board |

EMC data



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Mounting position

|          | Electromagnetic compatibility | Conformance with EMC directive         |
|----------|-------------------------------|--|
|          | Low Voltage Directive         | Conformance with Low Voltage Directive |
| St       | andards and regulations       |  |
|          | Standards/regulations         |  |
|          | Standards/regulations         | IEC 60947-5-1                          |
| Mounting |                               |  |
|          | Mounting type                 | DIN rail mounting                      |
|          | Assembly note                 | in rows with zero spacing              |

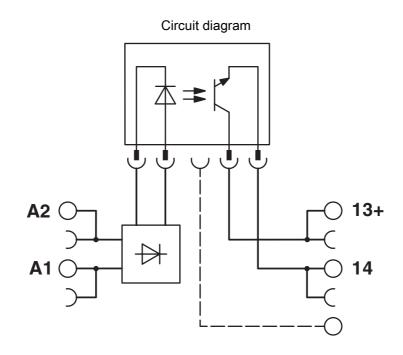
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## Drawings





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### **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/2980047



EAC

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



**DNV GL** 

Approval ID: TAE0000196



**cULus Listed**Approval ID: E140324



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## Classifications

### **ECLASS**

|      | ECLASS-13.0 | 27371604 |
|------|-------------|----------|
|      | ECLASS-15.0 | 27371604 |
| ETIM |             |          |
|      | IIVI        |          |
|      | ETIM 9.0    | EC001504 |
| U    | NSPSC       |          |
|      | UNSPSC 21.0 | 39122300 |



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### Environmental product compliance

#### EU RoHS

| Fulfills EU RoHS substance requirements | Yes   |
|---|---|
| Exemption                               | 7(a), 7(c)-l  |
| 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                                    | c2cd0d0f-d1bd-4c35-8267-a4533c20fc32  |
|   |   |

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