#### 2900342

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PLC-INTERFACE, consisting of PLC-BPT.../21-21 basic terminal block with Push-in connection and plug-in miniature relay with multi-layer gold contact, for mounting on DIN rail NS 35/7,5, 2 changeover contacts, input voltage 120 V AC/DC

### Your advantages

- Slim design
- Efficient connection to system cabling using V8 adapter
- · Safe isolation between coil and contact side
- RT III sealed relay
- · Functional plug-in bridges
- · Integrated input circuit and interference suppression circuit

### Commercial data

| Item number                          | 2900342             |
|--------------------------------------|---------------------|
| Packing unit                         | 10 pc               |
| Minimum order quantity               | 10 pc               |
| Sales key                            | C461                |
| Product key                          | CK62B9              |
| Catalog page                         | Page 367 (C-5-2019) |
| GTIN                                 | 4046356509985       |
| Weight per piece (including packing) | 71.51 g             |
| Weight per piece (excluding packing) | 60 g                |
| Customs tariff number                | 85364900            |
| Country of origin                    | DE                  |



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## Technical data

#### Product properties

| Product type                                    | Relay Module              |  |  |
|---|---------------------------|--|--|
| Product family                                  | PLC-INTERFACE             |  |  |
| Application                                     | Universal                 |  |  |
| Operating mode                                  | 100% operating factor     |  |  |
| Mechanical service life                         | 3x 10 <sup>7</sup> cycles |  |  |
| Data management status                          |                           |  |  |
| Date of last data management                    | 03.07.2024                |  |  |
| Article revision                                | 08                        |  |  |
| Insulation characteristics                      |                           |  |  |
| Insulation                                      | Basic insulation          |  |  |
| Overvoltage category                            | III                       |  |  |
| Pollution degree                                | 3                         |  |  |
| Electrical properties                           |                           |  |  |
| Maximum power dissipation for nominal condition | 0.54 W                    |  |  |

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| Maximum power dissipation for nominal condition | 0.54 W |
|---|--------|
| Rated surge voltage                             | 6 kV   |

#### Input data

| Coil side  |                                    |  |
|--|------------------------------------|--|
| Nominal input voltage U <sub>N</sub>                 | 120 V AC                           |  |
|  | 110 V DC                           |  |
| Input voltage range                                  | 102 V AC 168 V AC (20 °C)          |  |
|  | 85.8 V DC 154 V DC (20 °C)         |  |
| Nominal voltage (plugged-in electromechanical relay) | 110 V DC                           |  |
| Drive and function                                   | monostable                         |  |
| Drive (polarity)                                     | polarized                          |  |
| Typical input current at U <sub>N</sub>              | 4.2 mA (at 110 V DC)               |  |
|  | 4.5 mA (at 120 V AC)               |  |
| Typical response time                                | 7 ms                               |  |
| Typical release time                                 | 10 ms                              |  |
| Protective circuit                                   | Bridge rectifier; Bridge rectifier |  |
| Operating voltage display                            | Yellow LED                         |  |

#### Output data

| Switching              |                        |  |
|------------------------|------------------------|--|
| Contact switching type | 2 changeover contacts  |  |
| Type of switch contact | Single contact         |  |
| Contact material       | AgNi, hard gold-plated |  |

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| Maximum switching voltage                          | 30 V AC                                       |
|--|---|
|  | 36 V DC                                       |
| Minimum switching voltage                          | 100 mV (10 mA)                                |
| Limiting continuous current                        | 50 mA   |
| Maximum inrush current                             | 50 mA   |
| Min. switching current                             | 1 mA (24 V)                                   |
| Interrupting rating (ohmic load) max.              | 1.2 W (at 24 V DC)                            |
| vitabing, when the cold lover is destroyed         |   |
| witching: when the gold layer is destroyed<br>Note |   |
| NOLE   | the following values are applicable if a gold |
|  | layer is destroyed                            |
| Maximum switching voltage                          | 250 V AC/DC                                   |
| Minimum switching voltage                          | 5 V AC/DC                                     |
| Limiting continuous current                        | 6 A   |
| Maximum inrush current                             | 15 A (300 ms)                                 |
| Min. switching current                             | 10 mA   |
| Interrupting rating (ohmic load) max.              | 140 W (at 24 V DC)                            |
|  | 85 W (at 48 V DC)                             |
|  | 60 W (at 60 V DC)                             |
|  | 44 W (at 110 V DC)                            |
|  | 60 W (at 220 V DC)                            |
|  | 1500 VA (for 250 V AC)                        |
| Switching capacity                                 | 2 A (at 24 V, DC13)                           |
|  | 0.2 A (at 110 V, DC13)                        |
|  | 0.2 A (at 250 V, DC13)                        |
|  | 2 A (at 24 V, AC15)                           |
|  | 2 A (at 120 V, AC15)                          |
|  | 2 A (at 250 V, AC15)                          |

#### 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

| Width  | 14 mm |
|--------|-------|
| Height | 80 mm |
| Depth  | 94 mm |

#### Material specifications

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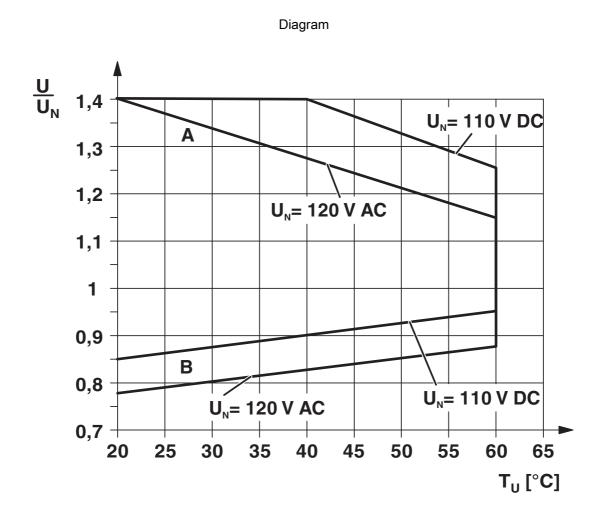
|                           | Color                                   | gray (RAL 7042)  |
|---------------------------|---|--|
|                           | Flammability rating according to UL 94  | V0 (Housing)   |
| Env                       | vironmental and real-life conditions    |  |
| A                         | mbient conditions                       |  |
|                           | Degree of protection (Relay)            | RT III (Relay)   |
|                           | Degree of protection (Relay base)       | IP20 (Relay base)  |
|                           | Ambient temperature (operation)         | -40 °C 60 °C   |
|                           | Ambient temperature (storage/transport) | -40 °C 85 °C   |
| Арр                       | provals                                 |  |
| С                         | E                                       |  |
|                           | Certificate                             | CE-compliant   |
|                           | KCA                                     |  |
| U                         | Certificate                             | UKCA-compliant   |
| s                         | hipbuilding approval                    |  |
| U                         | Certificate                             | TAE0000196   |
|                           |   |  |
| С                         | orrosive gas test                       |  |
|                           | Identification                          | ISA-S71.04. G3 Harsh Group<br>EN 60068-2-60  |
|                           |   | EN 00008-2-00  |
| D                         | NV GL data                              |  |
|                           | Temperature                             | D  |
|                           | Humidity                                | A  |
|                           | Vibration                               | B/C  |
|                           | EMC                                     | В  |
|                           | Enclosure                               | Required protection according to the Rules shall be provided<br>upon installation on board |
| EM                        | C data                                  |  |
|                           | Low Voltage Directive                   | Conformance with Low Voltage Directive   |
|                           | Electromagnetic compatibility           | Conformance with EMC directive   |
| Standards and regulations |   |  |
|                           | Standards/regulations                   | IEC 60947-5-1  |
| Мо                        | unting                                  |  |
|                           | Mounting type                           | DIN rail mounting  |
|                           | Thread type                             | 0  |
|                           | Assembly note                           | in rows with zero spacing  |
|                           | Mounting position                       | any  |
|                           |   |  |

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## Drawings



## Curve A

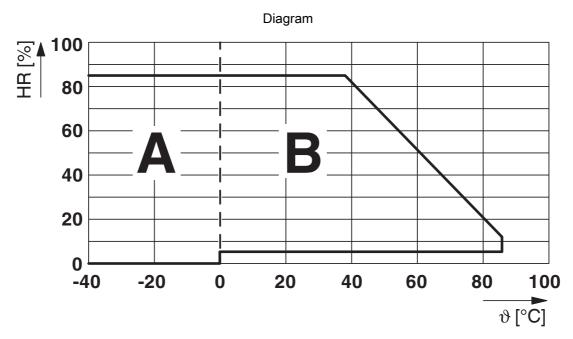
Maximum permissible continuous voltage U<sub>max</sub> with limiting continuous current on the contact side (see relevant technical data) Curve B

Minimum permissible operate voltage  $\mathrm{U}_{\mathrm{op}}$  after pre-excitation (see relevant technical data)



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Permissible humidity for operation and storage.

The maximum permissible ambient temperature as specified in the data sheet must be observed.

Area A: Ice buildup at ambient temperatures  $\leq 0^{\circ}$ C must be prevented Area B: Condensation at ambient temperatures > 0°C must be prevented

On 30 full days that are naturally distributed across an entire year, a humidity level of 95% is permissible at an ambient temperature ≤ 25°C.



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### Approvals

🌣 To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/2900342

| .81          | CUL Recognized<br>Approval ID: E238705   |
|--------------|--|
|              |  |
| <b>FL</b>    | UL Recognized<br>Approval ID: E238705    |
|              |  |
| EAC          | EAC<br>Approval ID: TR_TS_D_00573_c      |
|              |  |
|              | DNV GL<br>Approval ID: TAE0000196        |
|              |  |
| EAC          | EAC<br>Approval ID: RU*C-DE.*08.B.00010  |
|              |  |
|              | UL Listed<br>Approval ID: FILE E 172140  |
|              |  |
| •            | CUL Listed<br>Approval ID: FILE E 172140 |
|              |  |
| · <b>@</b> * | CULus Listed<br>Approval ID: E140324     |
|              |  |
| cL           | JLus Recognized                          |
|              |  |
| cL           | JLus Listed                              |

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## Classifications

#### ECLASS

| ECLASS-11.0 | 27371601 |
|-------------|----------|
| ECLASS-12.0 | 27371601 |
| ECLASS-13.0 | 27371601 |

#### ETIM

|    | ETIM 9.0    | EC001437 |  |
|----|-------------|----------|--|
| UN | UNSPSC      |          |  |
|    | UNSPSC 21.0 | 39122300 |  |

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## Environmental product compliance

#### EU RoHS

| Yes  |
|--|
| 7(a), 7(c)-l   |
|  |
| EFUP-50  |
| An article-related China RoHS declaration table can be found in<br>the download area for the respective article under "Manufacturer<br>declaration". For all articles with EFUP-E, no China RoHS<br>declaration table issued and required. |
|  |
| Hexahydromethylphthalic anhydride(CAS: n/a)  |
| Lead(CAS: 7439-92-1)   |
| 45ccee08-5608-479c-b3a5-11297308f2ae   |
|  |

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