1607418

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**PHŒNIX** CONTACT

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Contact insert set, Range of articles: VARIOCON, design: VC3, housing material: PA, number of positions: 32, min. conductor cross section: 0.14 mm<sup>2</sup>, max. conductor cross section: 1.5 mm<sup>2</sup>, rated voltage: 160, rated current: 10 A, Contact connection type: Pin, Connectors may only be connected/disconnected when under no load.



### Your advantages

- Proven COMBICON technology
- Universal connection
- · Can be keyed to prevent incorrect connection

### Commercial data

| Item number                          | 1607418            |
|--------------------------------------|--------------------|
| Packing unit                         | 5 pc               |
| Minimum order quantity               | 5 pc               |
| Sales key                            | AB01               |
| Product key                          | ABLADB             |
| Catalog page                         | Page 24 (C-2-2013) |
| GTIN                                 | 4017918941130      |
| Weight per piece (including packing) | 59.12 g            |
| Weight per piece (excluding packing) | 60.94 g            |
| Customs tariff number                | 85366990           |
| Country of origin                    | PL                 |

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## Technical data

| General     | Connectors may only be connected/disconnected when under load.  |
|-------------|---|
| afety note  |   |
| Safety note | WARNING: The connectors may not be plugged in or<br>disconnected under load. Ignoring the warning or improper use<br>may damage persons and/or property.  |
|             | <ul> <li>WARNING: Commission properly functioning products only.<br/>The products must be regularly inspected for damage.</li> <li>Decommission defective products immediately. Replace<br/>damaged products. Repairs are not possible.</li> </ul>  |
|             | <ul> <li>WARNING: Only electrically qualified personnel may install an<br/>operate the product. They must observe the following safety<br/>notes. The qualified personnel must be familiar with the basics<br/>electrical engineering. They must be able to recognize and<br/>prevent danger. The relevant symbol on the packaging indicate<br/>that only personnel familiar with electrical engineering are<br/>allowed to install and operate the product.</li> </ul> |
|             | • The products are suitable for applications in plant, controller, and electrical device engineering.   |
|             | <ul> <li>When operating the connectors in outdoor applications, they<br/>must be separately protected against environmental influences</li> </ul>   |
|             | <ul> <li>Assembled products may not be manipulated or improperly<br/>opened.</li> </ul>   |
|             | <ul> <li>Only use mating connectors that are specified in the technica<br/>data of the standards listed (e.g. the ones listed in the product<br/>accessories online at phoenixcontact.com/products).</li> </ul>   |
|             | <ul> <li>When using the product in direct connection with third-party<br/>manufacturers, the user is responsible.</li> </ul>  |
|             | <ul> <li>For operating voltages &gt; 50 V AC, conductive connector<br/>housings must be grounded</li> </ul>   |
|             | <ul> <li>Ensure that the protective or functional ground has been<br/>properly connected.</li> </ul>  |
|             | <ul> <li>VDE 0100/1.97 § 411.1.3.2 and DIN EN 60 204/11.98 § 14.1.<br/>are applicable when combining several circuits in a cable and/o<br/>connector</li> </ul>   |
|             | <ul> <li>Observe the corresponding technical data. You will find<br/>information:</li> <li>o On the product</li> <li>o On the packing label</li> <li>o In the supplied documentation</li> <li>o Online at phoenixcontact.com/products under the product</li> </ul>  |
|             | Only use tools recommended by Phoenix Contact   |
|             | <ul> <li>The installation notes/Design In documents online on the<br/>download page at phoenixcontact.com/products must be<br/>observed for this product.</li> </ul>  |
|             | <ul> <li>Use a protective cap to protect connectors that are not in use<br/>The suitable accessories are available online in the accessory<br/>section of the product at phoenixcontact.com/products</li> </ul>   |
|             | <ul> <li>Operate the connector only when it is fully plugged in.</li> </ul>   |



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• Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards.

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• Observe the minimum bending radius of the cable. Lay the cable without twisting it.

• The connector warms up in normal operation. Depending on the ambient conditions, the surface of the connector can continue to warm up. In this case, the user is responsible for posting warnings (e.g. DIN EN ISO 13732-1:2008-12).

#### Product properties

| Product type               | Contact insert |  |
|----------------------------|----------------|--|
| Product family             | VARIOCON       |  |
| Series                     | VC-D           |  |
| Туре                       | VC3            |  |
| Number of positions        | 32             |  |
| Connection profile         | 31+PE          |  |
| Number of module slots     | 4              |  |
|                            |                |  |
| Insulation characteristics |                |  |

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#### Degree of pollution

### Electrical properties

| Rated voltage (II/2)320 VRated voltage (III/2)160 VRated voltage (III/3)160 VNominal voltage ATD160Rated surge voltage2.5 kVRated surge voltage (III/3)2.5 kVRated surge voltage (III/3)10 ARated surge voltage (III/3)10 ANominal voltage UN10 A |                                |        |
|---|--------------------------------|--------|
| Rated voltage (III/3)       160 V         160 V       160 V         Nominal voltage ATD       160         Rated surge voltage       2.5 kV         Rated surge voltage (III/3)       2.5 kV         Rated surge voltage       10 A         Rated current       10 A         Nominal voltage U <sub>N</sub> 10 A         Nominal voltage U <sub>N</sub> 160 V                          | Rated voltage (II/2)           | 320 V  |
| InterfactInterfactNominal voltage ATDInterfactRated surge voltage2.5 kVRated surge voltage (III/3)2.5 kVRated surge voltageInterfactNameInterfactInterfactInterfactNominal voltage UNInterfactNominal voltage UNInterfact   | Rated voltage (III/2)          | 160 V  |
| Nominal voltage ATD160Rated surge voltage2.5 kVRated surge voltage (III/3)2.5 kVRated surge voltage2.5 kVRated current10 A10 A10 ANominal voltage UN160 V   | Rated voltage (III/3)          | 160 V  |
| Rated surge voltage         2.5 kV           Rated surge voltage (III/3)         2.5 kV           Rated surge voltage         2.5 kV           Rated current         10 A           Voltage UN         10 A   |                                | 160 V  |
| Rated surge voltage (III/3)         2.5 kV           Rated surge voltage         2.5 kV           Rated current         10 A           10 A         10 A           Nominal voltage U <sub>N</sub> 160 V   | Nominal voltage ATD            | 160    |
| Rated surge voltage         2.5 kV           Rated current         10 A           10 A         10 A           10 A         10 A           Nominal voltage U <sub>N</sub> 160 V  | Rated surge voltage            | 2.5 kV |
| Rated current         10 A           10 A         10 A           10 A         10 A           Nominal voltage U <sub>N</sub> 160 V   | Rated surge voltage (III/3)    | 2.5 kV |
| 10 A           10 A           10 A           10 A           10 A           10 A   | Rated surge voltage            | 2.5 kV |
| Nominal voltage U <sub>N</sub> 10 A       160 V   | Rated current                  | 10 A   |
| Nominal voltage U <sub>N</sub> 160 V  |                                | 10 A   |
|   |                                | 10 A   |
| Nominal current I <sub>N</sub> 10 A   | Nominal voltage U <sub>N</sub> | 160 V  |
|   | Nominal current I <sub>N</sub> | 10 A   |

#### Connection data

| Tightening torque                | 0.22 0.25 Nm                              |
|----------------------------------|---|
| Conductor cross section flexible | 0.14 mm <sup>2</sup> 0.75 mm <sup>2</sup> |
| Conductor cross section rigid    | 0.14 mm <sup>2</sup> 1.5 mm <sup>2</sup>  |

#### Dimensions



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| Dimensional drawing |         |
|---------------------|---------|
| Width               | 82.1 mm |
| Height              | 26.5 mm |
| Length              | 34.7 mm |

### Material specifications

| Color of the housing part              | gray                 |
|--|----------------------|
| Material                               | Polyamide            |
|  | Polyamide            |
| Flammability rating according to UL 94 | VO                   |
| Insulating material group              | I / CTI 600          |
| Housing material                       | PA                   |
| Contact material                       | CuZn                 |
| Contact surface material               | nickel-plated        |
| Contact carrier material               | PA                   |
| Material for screw connection          | 1.5523 (19MNB4) 10.9 |

#### Cable/line

| Single wire, cross section              | 0.14 mm² 1.5 mm² |
|---|------------------|
| Stripping length of the individual wire | 7 mm             |

### Mechanical properties

| Mechanical data             |       |  |
|-----------------------------|-------|--|
| Insertion/withdrawal cvcles | ≥ 100 |  |

### Environmental and real-life conditions

| Ambient | conditions |
|---------|------------|
|         | oonantions |

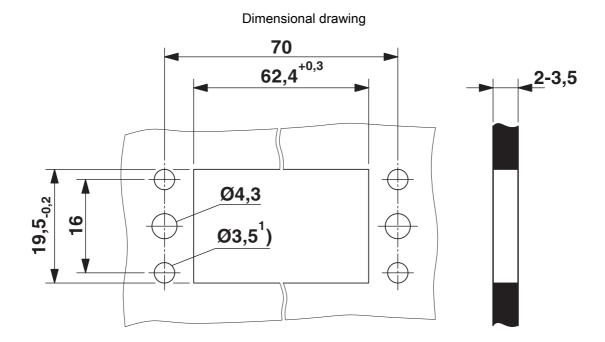
| Ambient temperature (operation) | -40 °C 100 °C |
|---------------------------------|---------------|
|---------------------------------|---------------|

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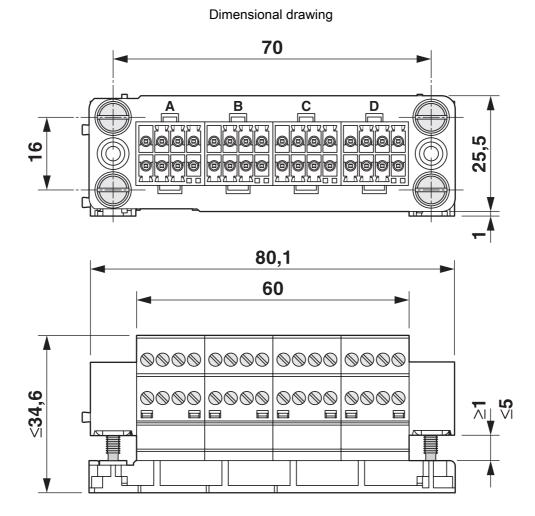
## Drawings





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## Classifications

#### ECLASS

| ECLASS-11.0 | 27440223 |
|-------------|----------|
| ECLASS-12.0 | 27440223 |
| ECLASS-13.0 | 27440223 |

### ETIM

|        | ETIM 9.0    | EC003557 |  |
|--------|-------------|----------|--|
| UNSPSC |             |          |  |
|        | UNSPSC 21.0 | 39121400 |  |

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### Environmental product compliance

#### EU RoHS

| Fulfills EU RoHS substance requirements | Yes, No exemptions                       |
|---|--|
| China RoHS                              |  |
| Environment friendly use period (EFUP)  | EFUP-E                                   |
|   | No hazardous substances above the limits |
| EU REACH SVHC                           |  |
| REACH candidate substance (CAS No.)     | No substance above 0.1 wt%               |

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