1607751

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Contact insert, Range of articles: VARIOCON, design: VC4, housing material: PA, color: light grey, number of positions: 7, min. conductor cross section: 0.5 mm<sup>2</sup>, max. conductor cross section: 16 mm<sup>2</sup>, rated voltage: 690, rated current: 70 A, Connection method: Screw connection, 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	1607751		
Packing unit	5 pc		
Minimum order quantity	1 pc		
Note	Made to order (non-returnable)		
Sales key	AB01		
Product key	ABLACC		
Catalog page	Page 25 (C-2-2013)		
GTIN	4017918969219		
Weight per piece (including packing)	78.29 g		
Weight per piece (excluding packing)	78.29 g		
Customs tariff number	85366990		
Country of origin	PL		

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### Technical data

General	Connectors may only be connected/disconnected when under r load.
afety note	
Safety note	WARNING: The connectors may not be plugged in or disconnected under load. Ignoring the warning or improper use may damage persons and/or property.
	WARNING: Commission properly functioning products only. The products must be regularly inspected for damage. Decommission defective products immediately. Replace damaged products. Repairs are not possible.
	WARNING: Only electrically qualified personnel may install an operate the product. They must observe the following safety notes. The qualified personnel must be familiar with the basics electrical engineering. They must be able to recognize and prevent danger. The relevant symbol on the packaging indicate that only personnel familiar with electrical engineering are allowed to install and operate the product.
	• The products are suitable for applications in plant, controller, and electrical device engineering.
	<ul> <li>When operating the connectors in outdoor applications, they must be separately protected against environmental influences.</li> </ul>
	Assembled products may not be manipulated or improperly opened.
	<ul> <li>Only use mating connectors that are specified in the technical data of the standards listed (e.g. the ones listed in the product accessories online at phoenixcontact.com/products).</li> </ul>
	When using the product in direct connection with third-party manufacturers, the user is responsible.
	<ul> <li>For operating voltages &gt; 50 V AC, conductive connector housings must be grounded</li> </ul>
	<ul> <li>Ensure that the protective or functional ground has been properly connected.</li> </ul>
	VDE 0100/1.97 § 411.1.3.2 and DIN EN 60 204/11.98 § 14.1.3 are applicable when combining several circuits in a cable and/o connector
	Observe the corresponding technical data. You will find information: o On the product o On the packing label o In the supplied documentation o Online at phoenixcontact.com/products under the product
	Only use tools recommended by Phoenix Contact
	<ul> <li>The installation notes/Design In documents online on the download page at phoenixcontact.com/products must be observed for this product.</li> </ul>
	Use a protective cap to protect connectors that are not in use. The suitable accessories are available online in the accessory section of the product at phoenixcontact.com/products
	Operate the connector only when it is fully plugged in.

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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-M
Туре	VC4
Number of positions	7
Connection profile	6+PE
Number of module slots	5
Data management status	
Article revision	03
Insulation characteristics	
Degree of pollution	3
Rated voltage (II/2)	1000 V
Rated voltage (II/2)	1000 V
Rated voltage (III/2)	1000 V
Rated voltage (III/3)	690 V
	690 V
Nominal voltage ATD	690
Rated surge voltage	6 kV
Rated surge voltage (II/2)	6 kV
Rated surge voltage (III/2)	8 kV
Rated surge voltage (III/3)	8 kV
Rated surge voltage	6 kV
Rated current	70 A
	70 A
	70 A
Contact resistance, inner conductor	≤

Connection data

Connection method	Screw connection	
Tightening torque	1.2 1.8 Nm	
Cross section AWG	20 6	

Dimensions

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Dimensional drawing	
Width	75 mm
Height	33.6 mm
Length	47.5 mm

#### Material specifications

Color	light grey
Color of the housing part	gray
Material	Polyamide
Flammability rating according to UL 94	VO
Insulating material group	1
Housing material	PA
Contact material E-Cu 58	
Contact surface material	hard-silver plated
Contact carrier material	PA
Material for screw connection	CuZn

#### Cable/line

Single wire, cross section	0.5 mm² 16 mm²	
Stripping length of the individual wire	12 mm	
Halogen-free	yes	

#### Mechanical properties

Mechanical data	
Insertion/withdrawal cycles	≥ 50

#### Environmental and real-life conditions

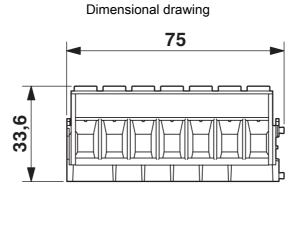
Ambient	conditions
	00110110115

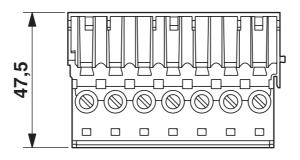
Ambient temperature (operation) -40 °C 100 °C
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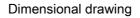
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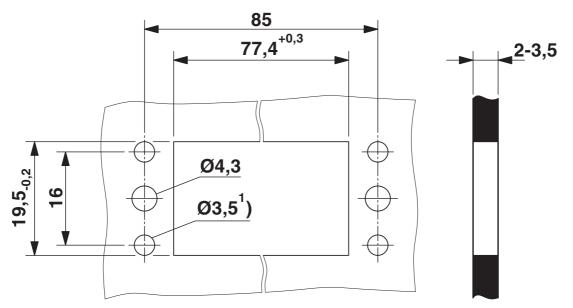
## Drawings





Contact insert





Mounting cutout



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### Approvals

🌣 To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1607751

Approval ID: E1	<b>ized</b> 18976			
	Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
	600 V	45 A	20 - 6	-

<b>91</b>	UL Recognized Approval ID: E118976				
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		600 V	55 A	20 - 6	-

cULus Recognized

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### Classifications

#### ECLASS

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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Phoenix Contact USA 586 Fulling Mill Road Middletown, PA 17057, United States (+717) 944-1300 info@phoenixcon.com