

# VC-AML 4 - Contact insert

1607509

<https://www.phoenixcontact.com/us/products/1607509>



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Contact insert, Range of articles: VARIOCON, design: VC2, housing material: PA, color: light grey, number of positions: 4, rated voltage: 690, rated current: 63 A, Connection method: PCB 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	1607509
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	AB01
Product key	ABLACC
Catalog page	Page 26 (C-2-2013)
GTIN	4017918943585
Weight per piece (including packing)	26.72 g
Weight per piece (excluding packing)	26.24 g
Customs tariff number	85366990
Country of origin	PL

## Technical data

### Notes

General	Connectors may only be connected/disconnected when under no load.
Safety note	<p>WARNING: The connectors may not be plugged in or disconnected under load. Ignoring the warning or improper use may damage persons and/or property.</p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• WARNING: Only electrically qualified personnel may install and operate the product. They must observe the following safety notes. The qualified personnel must be familiar with the basics of electrical engineering. They must be able to recognize and prevent danger. The relevant symbol on the packaging indicates that only personnel familiar with electrical engineering are allowed to install and operate the product.</li> <li>• The products are suitable for applications in plant, controller, and electrical device engineering.</li> <li>• When operating the connectors in outdoor applications, they must be separately protected against environmental influences.</li> <li>• Assembled products may not be manipulated or improperly opened.</li> <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 <a href="https://www.phoenixcontact.com/products">phoenixcontact.com/products</a>).</li> <li>• When using the product in direct connection with third-party manufacturers, the user is responsible.</li> <li>• For operating voltages &gt; 50 V AC, conductive connector housings must be grounded</li> <li>• Ensure that the protective or functional ground has been properly connected.</li> <li>• 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/or connector</li> <li>• Observe the corresponding technical data. You will find information: <ul style="list-style-type: none"> <li>o On the product</li> <li>o On the packing label</li> <li>o In the supplied documentation</li> <li>o Online at <a href="https://www.phoenixcontact.com/products">phoenixcontact.com/products</a> under the product</li> </ul> </li> <li>• Only use tools recommended by Phoenix Contact</li> <li>• The installation notes/Design In documents online on the download page at <a href="https://www.phoenixcontact.com/products">phoenixcontact.com/products</a> must be observed for this product.</li> <li>• 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 <a href="https://www.phoenixcontact.com/products">phoenixcontact.com/products</a></li> <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.
- 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
Type	VC2
Number of positions	4
Connection profile	3+PE
Number of module slots	3

## Data management status

Article revision	02
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## Insulation characteristics

Degree of pollution	3
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## Electrical properties

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)	8 kV
Rated surge voltage (III/2)	8 kV
Rated surge voltage (III/3)	8 kV
Rated surge voltage	6 kV
	63 A
	70 A
Rated current	63 A
	70 A
	63 A
Nominal voltage $U_N$	690 V

## Connection data

Connection method	PCB connection
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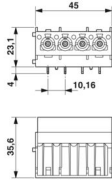
## Dimensions

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Dimensional drawing		
Width		45 mm
Height		23.1 mm
Length		35.6 mm

## Material specifications

Color	light grey
Color of the housing part	gray
Material	Polyamide
Flammability rating according to UL 94	V0
Insulating material group	I
Housing material	PA
Contact material	E-Cu 58
Contact surface material	hard-silver plated
Contact carrier material	PA

## Cable/line

Halogen-free	yes
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## Mechanical properties

Mechanical data	
Insertion/withdrawal cycles	≥ 50

## Environmental and real-life conditions

Ambient conditions	
Ambient temperature (operation)	-40 °C ... 100 °C

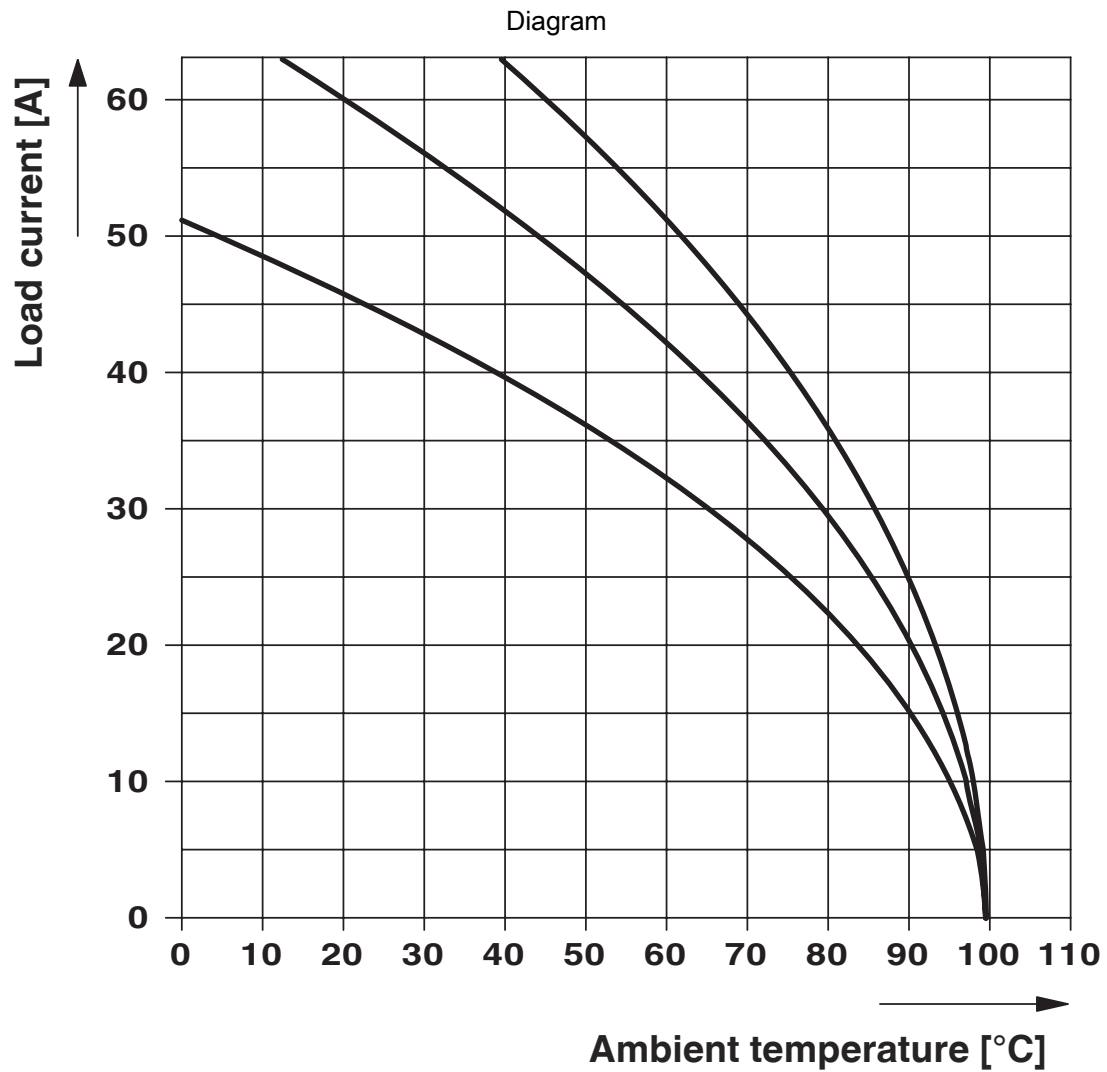
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## Drawings



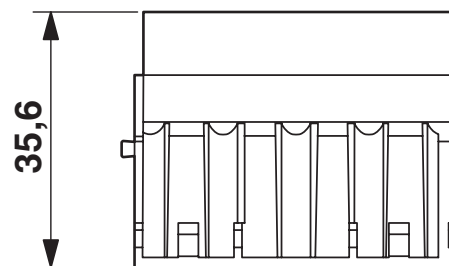
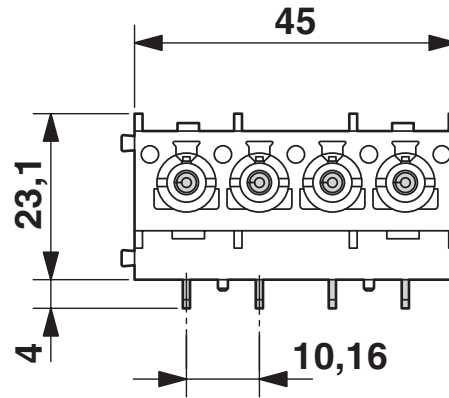
# VC-AML 4 - Contact insert

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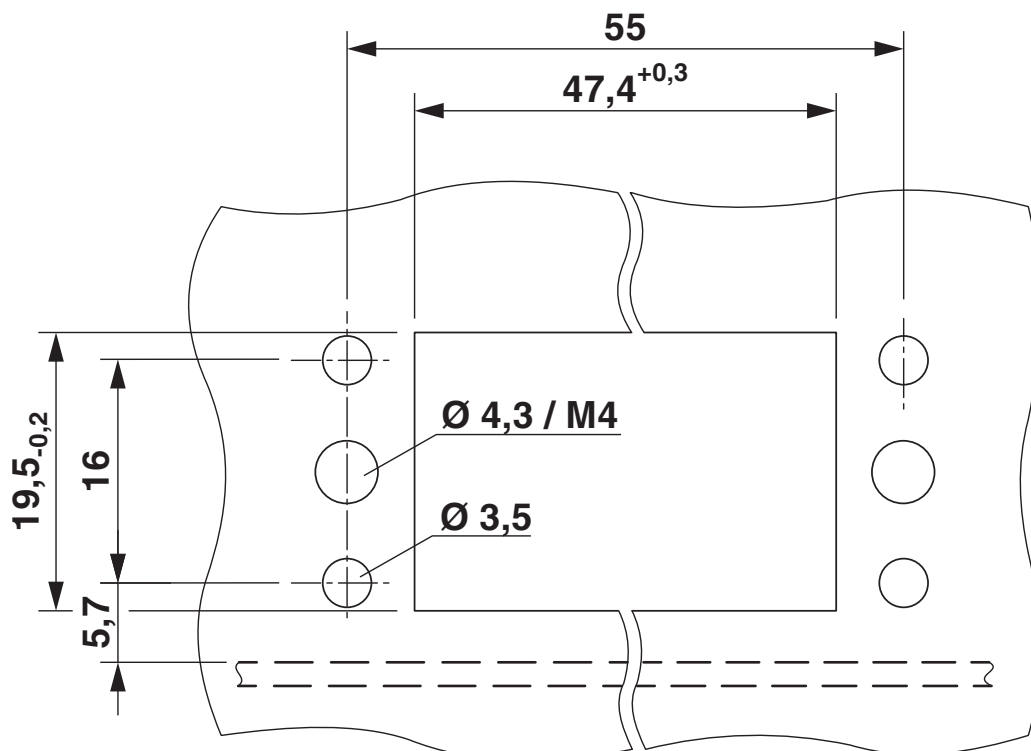
<https://www.phoenixcontact.com/us/products/1607509>



Dimensional drawing



Dimensional drawing



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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1607509>

 <b>cUL Recognized</b> Approval ID: E118976				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
	600 V	45 A	-	-

 <b>UL Recognized</b> Approval ID: E118976				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
	600 V	55 A	-	-

<b>cULus Recognized</b>				
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## Classifications

### ECLASS

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

### ETIM

ETIM 9.0	EC003557
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### 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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