

HC-M-02-AT-M-10 - Contact insert module

1417389

<https://www.phoenixcontact.com/us/products/1417389>



Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Contact insert module, number of positions: 2, power contacts: 2, control contacts: 0, Pin, Axial screw connection, 690 V, 40 A, 2.5 mm² ... 10 mm², application: Power

Commercial data

Item number	1417389
Packing unit	2 pc
Minimum order quantity	2 pc
Sales key	BF62
Product key	AF7ACE
GTIN	4055626112695
Weight per piece (including packing)	26.05 g
Weight per piece (excluding packing)	24.9 g
Customs tariff number	85366990
Country of origin	PL

HC-M-02-AT-M-10 - Contact insert module

1417389

<https://www.phoenixcontact.com/us/products/1417389>



Technical data

Notes

General	For HEAVYCON HC-B6 to B48 housing, snap-in module frame required, axial connection for 2 mm Allen key
General	Connectors may be operated only when there is no load/voltage.
General	The axial screw connection must be established using a 2 mm Allen key (for stranded conductors only)

Mounting

Assembly note	To ensure correct use, installation in housing with IP54 protection or better is required
	<p>Note regarding axial connection technology:</p> <p>Only for stranded wires. The specified conductor cross-sections refer to the geometric cross section of the cable used. Cables with a geometric cross section which deviates significantly from the nominal cable cross section must be checked before use.</p> <p>The axial connection technology connection space is designed for fine strand cables according to VDE 0295 Class 5. Deviating cable structures (e.g., Class 6 cables) must be checked before use.</p>
Hexagonal socket	<p>Assembly instructions</p> <p>Before assembly, ensure that the tapered screw is fully loosened (chamber is open). Cables must not be twisted. The wires must be pushed into the contact chamber as far as they will go (until the insulation touches the contact). Hold the wires in position and tighten using an Allen key. The used wire end must be cut off before reconnection. The terminal screw must only be retightened once to prevent the litz wires from breaking. To prevent damage to the contact, the wire/cable must be mechanically held at an appropriate distance from the connection point (e.g., when used in a plate cut out). For notes on correct execution, see DIN VDE 0100-520:2003-06. Unused connections must be tightened with maximum torque.</p> <p>SW2,0</p>

Product properties

Product type	Modular contact insert
Series	HC-M-02
Application	Power
Number of positions	2
Connection profile	2
Number of module slots	1
No. of power contacts	2
No. of control contacts	0

Insulation characteristics

Overvoltage category	III
----------------------	-----

HC-M-02-AT-M-10 - Contact insert module

1417389

<https://www.phoenixcontact.com/us/products/1417389>



Degree of pollution

3

Connection data

Connection technology

Connection technology	Axial screw connection
Connection in acc. with standard	IEC / EN

Conductor connection

Conductor cross section	2.5 mm ² ... 10 mm ² (The cross section specification refers to the geometric cross section of the cable used)
Connection cross section AWG	12 ... 10
Tightening torque	1.5 Nm (2.5 mm ² ... 4 mm ²) 2 Nm (6 mm ² ... 10 mm ²)
Stripping length of the individual wire	9 mm (with an outside conductor diameter up to 4.8 mm) 11 mm (with an outside conductor diameter up to 6.5 mm)

Dimensions

Dimensional drawing	
Width	34.2 mm
Height	34.7 mm
Length	14.6 mm

Mechanical characteristics

Contact diameter	4 mm
------------------	------

Electrical properties

Rated voltage (III/2) contacts	1000 V
Rated voltage (III/3)	690 V
Rated surge voltage (III/2)	8 kV
Rated surge voltage (III/3)	8 kV
Rated surge voltage	8 kV
Rated current	40 A
SCCR	5 kA (UL 2237)

Mechanical properties

Mechanical data	
Insertion/withdrawal cycles	≥ 500

Material specifications

Flammability rating according to UL 94	V0
Contact material	Copper alloy

HC-M-02-AT-M-10 - Contact insert module

1417389

<https://www.phoenixcontact.com/us/products/1417389>



Contact surface material	Ag
Contact carrier material	PC
Standards/regulations	PC

Environmental and real-life conditions

Ambient conditions

Ambient temperature (operation)	-40 °C ... 125 °C
---------------------------------	-------------------

Standards and regulations

Testing

Standards/regulations	PC: Fire protection in rail vehicles - requirement sets R22, R23, and R24 acc. to DIN EN 45545-2 (Risk level HL1 - HL3)
-----------------------	---

HC-M-02-AT-M-10 - Contact insert module

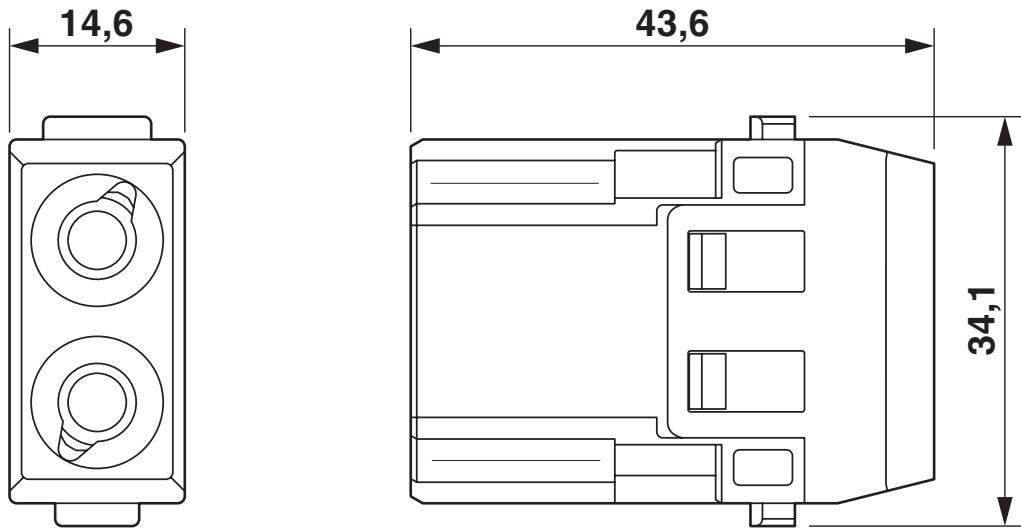
1417389

<https://www.phoenixcontact.com/us/products/1417389>



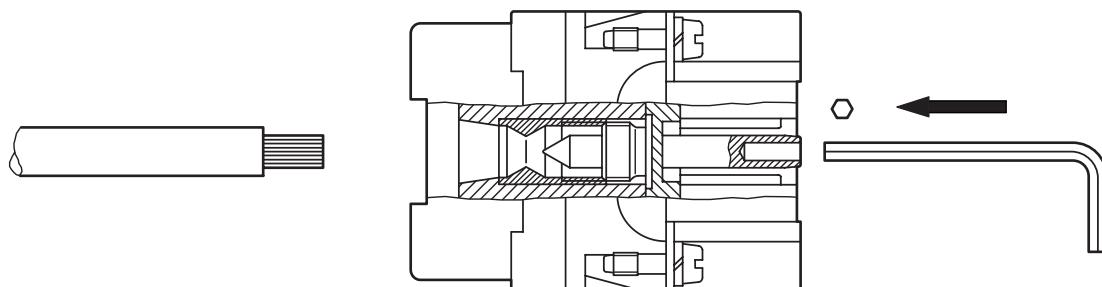
Drawings

Dimensional drawing



Male insert

Schematic diagram



Axial connection (2 mm Allen key)

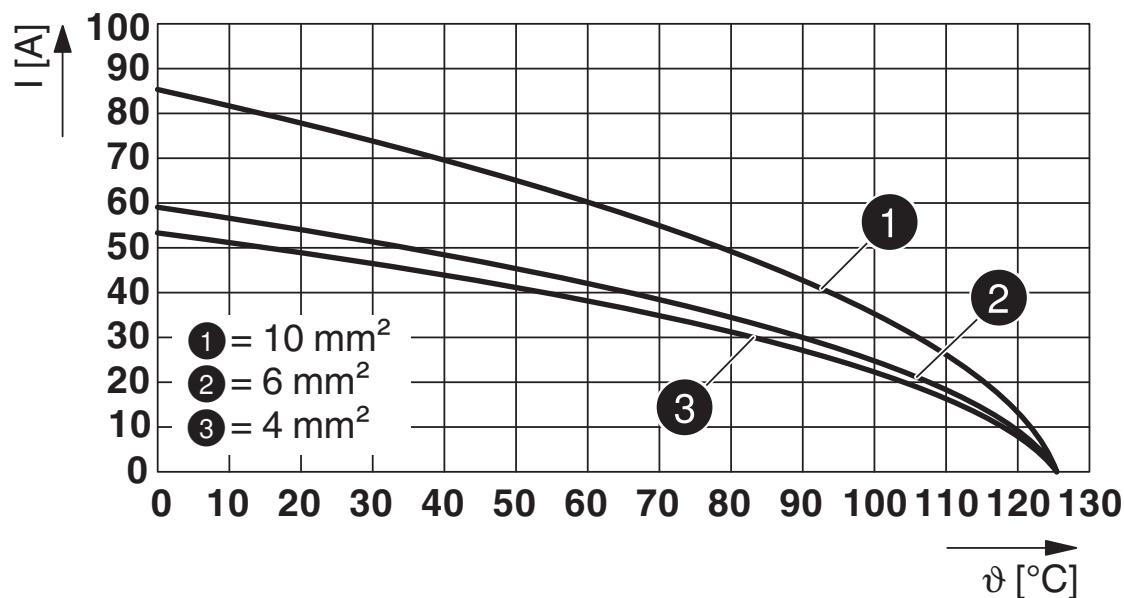
HC-M-02-AT-M-10 - Contact insert module

1417389

<https://www.phoenixcontact.com/us/products/1417389>



Diagram



Derating diagram

HC-M-02-AT-M-10 - Contact insert module

1417389

<https://www.phoenixcontact.com/us/products/1417389>



Approvals

ⓘ To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1417389>

DNV

Approval ID: TAE000037S

 CSA Approval ID: 13631	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine	600 V	45 A	- 8	-

 UL Recognized Approval ID: E118976	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine	600 V	55 A	- 8	-

 UL Recognized Approval ID: E468743	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine	600 V	55 A	-	-

HC-M-02-AT-M-10 - Contact insert module

1417389

<https://www.phoenixcontact.com/us/products/1417389>



Classifications

ECLASS

ECLASS-13.0	27440217
ECLASS-15.0	27440217

ETIM

ETIM 9.0	EC000438
----------	----------

UNSPSC

UNSPSC 21.0	39121400
-------------	----------

HC-M-02-AT-M-10 - Contact insert module

1417389

<https://www.phoenixcontact.com/us/products/1417389>



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%
-------------------------------------	----------------------------

EF3.0 Climate Change

CO2e kg	0.166 kg CO2e
---------	---------------

Phoenix Contact 2025 © - all rights reserved

<https://www.phoenixcontact.com>

Phoenix Contact USA

586 Fulling Mill Road

Middletown, PA 17057, United States

(+717) 944-1300

info@phoenixcon.com