

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



1417389

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

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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	BF7ACE
Catalog page	Page 573 (C-2-2019)
GTIN	4055626112695
Weight per piece (including packing)	26.3 g
Weight per piece (excluding packing)	24.9 g
Customs tariff number	85366990
Country of origin	PL

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
	Note regarding axial connection technology: 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. 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. Assembly instructions 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.
Hexagonal socket	SW2,0

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
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Degree of pollution	3
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Connection data

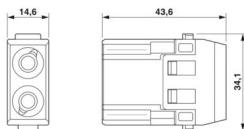
Connection technology

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 -8 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
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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

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	≥ 500
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Material specifications

Flammability rating according to UL 94	V0
Contact material	Copper alloy
Contact surface material	Ag

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

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)

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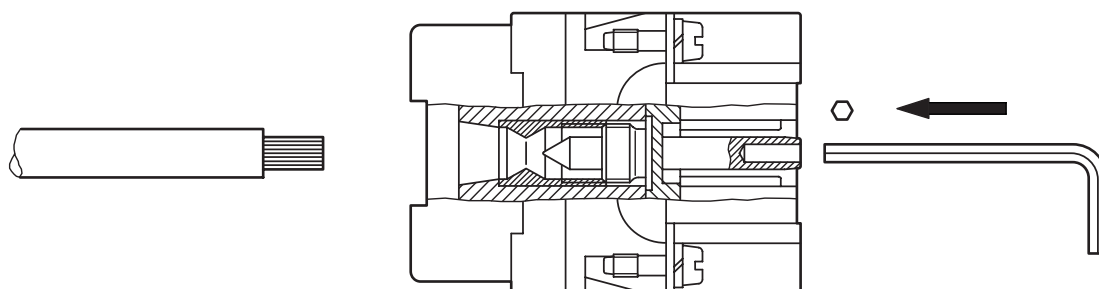
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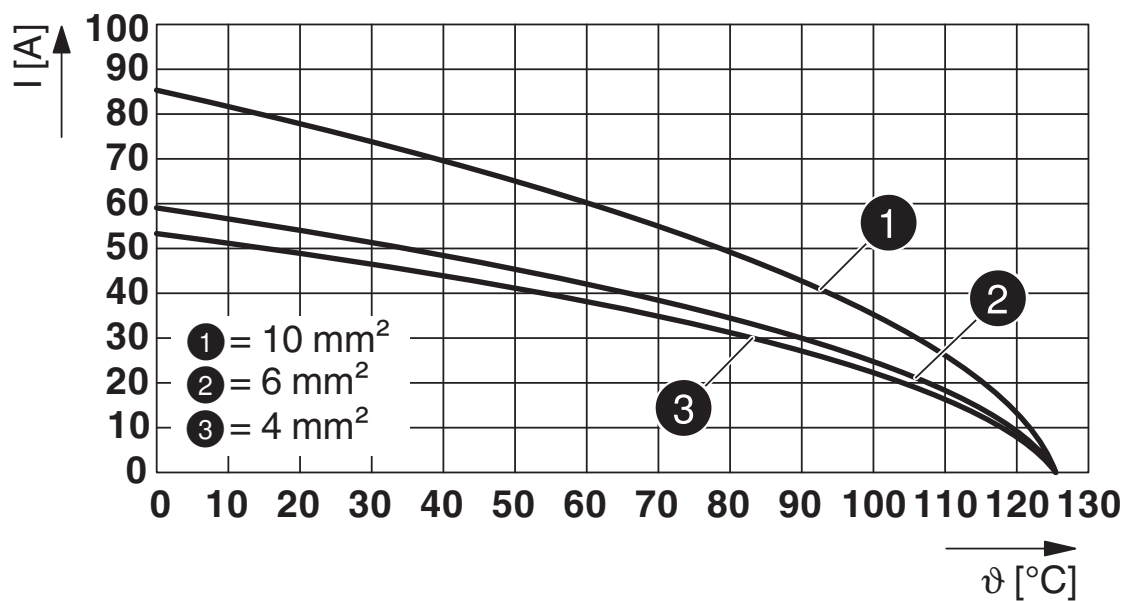
Drawings

Schematic diagram



Axial connection (2 mm Allen key)

Diagram



Derating diagram

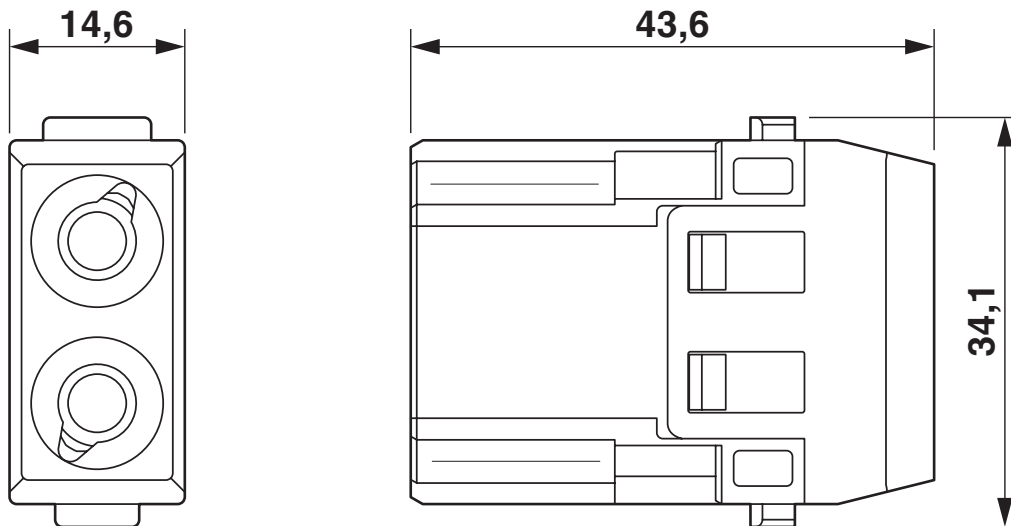
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Dimensional drawing



Male insert

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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
	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
	600 V	55 A	- 8	-



EAC

Approval ID: RU C-DE.BL08.B.00511



UL Recognized

Approval ID: E468743

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	600 V	55 A	-	-

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Classifications

ECLASS

ECLASS-11.0	27440217
ECLASS-12.0	27440217
ECLASS-13.0	27440217

ETIM

ETIM 9.0	EC000438
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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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Accessories

HC-CBU-MOD - Coding element

1636130

<https://www.phoenixcontact.com/us/products/1636130>



Coding socket for coding up to 16 connectors, for HC Modular

HC-CST-MOD - Coding element

1636127

<https://www.phoenixcontact.com/us/products/1636127>



Coding peg for coding up to 16 connectors, for HC Modular

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HC-M-B06-MFH-B - Module carrier frame

1182085

<https://www.phoenixcontact.com/us/products/1182085>



Module carrier frame, size: B6, type : for the panel mounting side (a, b, c, ...), 4 mm² ... 6 mm², application: Module carrier frame

HC-M-B10-MFH-B - Module carrier frame

1182088

<https://www.phoenixcontact.com/us/products/1182088>



Module carrier frame, size: B10, type : for the panel mounting side (a, b, c, ...), 4 mm² ... 6 mm², application: Module carrier frame

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HC-M-B16-MFH-B - Module carrier frame

1182090

<https://www.phoenixcontact.com/us/products/1182090>

Module carrier frame, size: B16, type : for the panel mounting side (a, b, c, ...), 4 mm² ... 6 mm², application: Module carrier frame



HC-M-B24-MFH-B - Module carrier frame

1182094

<https://www.phoenixcontact.com/us/products/1182094>

Module carrier frame, size: B24, type : for the panel mounting side (a, b, c, ...), 4 mm² ... 6 mm², application: Module carrier frame



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HC-M-B06-MFH-H - Module carrier frame

1182087

<https://www.phoenixcontact.com/us/products/1182087>



Module carrier frame, size: B6, type : for the sleeve side (A, B, C, ...), 4 mm² ... 6 mm², application: Module carrier frame

HC-M-B10-MFH-H - Module carrier frame

1182089

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Module carrier frame, size: B10, type : for the sleeve side (A, B, C, ...), 4 mm² ... 6 mm², application: Module carrier frame

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HC-M-B16-MFH-H - Module carrier frame

1182093

<https://www.phoenixcontact.com/us/products/1182093>

Module carrier frame, size: B16, type : for the sleeve side (A, B, C, ...), 4 mm² ...
6 mm², application: Module carrier frame



HC-M-B24-MFH-H - Module carrier frame

1182095

<https://www.phoenixcontact.com/us/products/1182095>

Module carrier frame, size: B24, type : for the sleeve side (A, B, C, ...), 4 mm² ...
6 mm², application: Module carrier frame



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

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<https://www.phoenixcontact.com/us/products/1417387>



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

SF-BIT-HEX 2-89 S - Screw insert

1200300

<https://www.phoenixcontact.com/us/products/1200300>



Screw bit, hexagon, E6.3-1/4" drive, size: Hex 2 x 89 mm, hardened, suitable for holder according to DIN 3126-F6.3/ISO 1173

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TSD-M 3NM - Torque screwdriver

1212225

<https://www.phoenixcontact.com/us/products/1212225>



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 1.2 - 3 Nm

SF-THEX 2-100 - Screwdriver

1212637

<https://www.phoenixcontact.com/us/products/1212637>



T-handle screwdriver, for Allen screws, hexagonal (with chamfer), size: hex 2 x 100 mm, ergonomically shaped handle, matt chrome-plated

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