HC-M-02-AT-F-16 - Contact insert module

1417296

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Contact insert module, number of positions: 2, power contacts: 2, control contacts: 0, Socket, Axial screw connection, 690 V, 70 A, 4 mm^2 ... 25 mm^2, application: Power

Commercial data

Item number	1417296
Packing unit	2 pc
Minimum order quantity	2 pc
Sales key	BF62
Product key	AF7ACE
GTIN	4055626111490
Weight per piece (including packing)	30 g
Weight per piece (excluding packing)	30 g
Customs tariff number	85366990
Country of origin	PL

Technical data

Notes

General	For HEAVYCON HC-B6 to B48 housing, HC-M-MHR... hinged retaining frame required, axial connection for 2.5 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 2.5 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	SW2,5

Product properties

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

Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Connection data

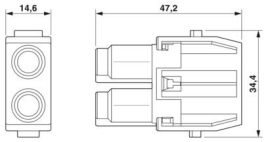
Connection technology

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

Conductor connection

Conductor cross-section	4 mm² ... 25 mm² (The cross section specification refers to the geometric cross section of the cable used)
Connection cross section AWG	16 ... 4
Tightening torque	2 Nm (4 ... 6 mm²)
	3 Nm (10 mm² ... 25 mm²)
Stripping length of the individual wire	11 mm (with an outside conductor diameter up to 7 mm)
	15 mm (with an outside conductor diameter up to 10.5 mm)

Dimensions

Dimensional drawing	
Width	34.2 mm
Height	46.5 mm
Length	14.6 mm

Mechanical characteristics

Minimum housing height	72 mm
Contact diameter	6 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)	6 kV
Rated surge voltage	6 kV
Rated current	70 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
Contact surface material	Ag
Contact carrier material	PC

Environmental and real-life conditions

Ambient conditions

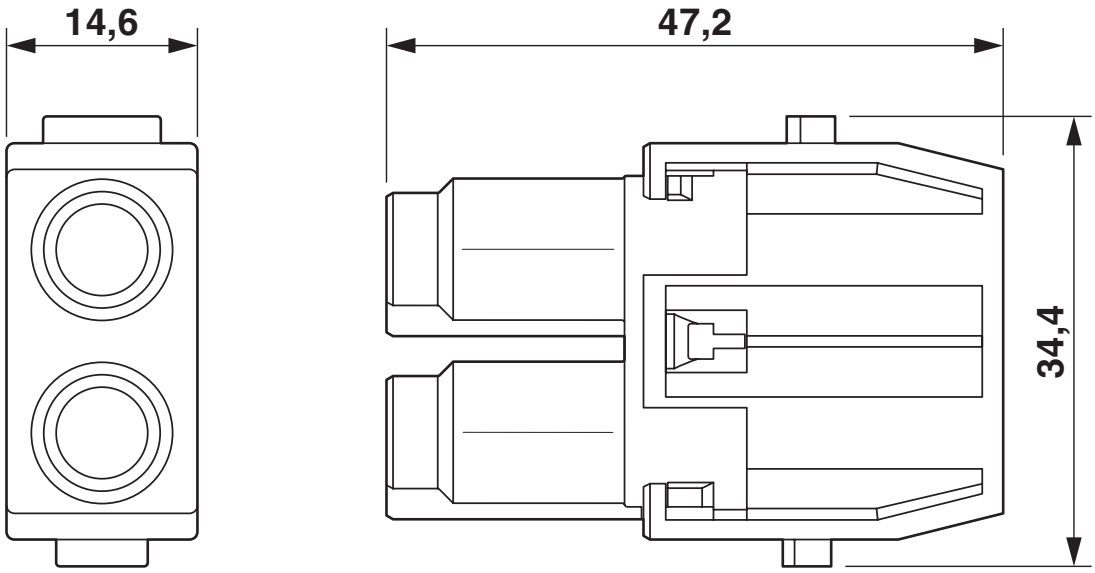
Ambient temperature (operation)	-40 °C ... 125 °C

Standards and regulations

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

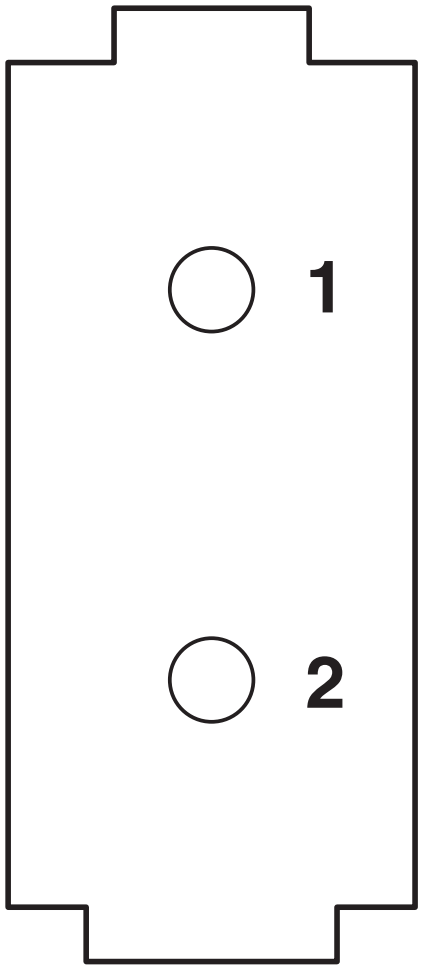
Drawings

Dimensional drawing



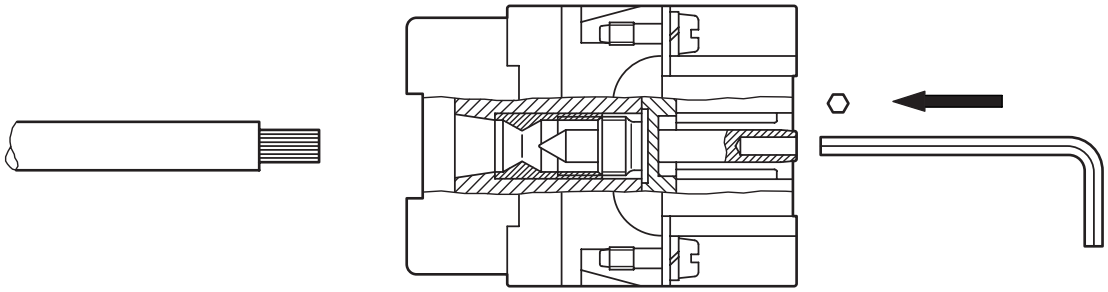
Socket module

Schematic diagram



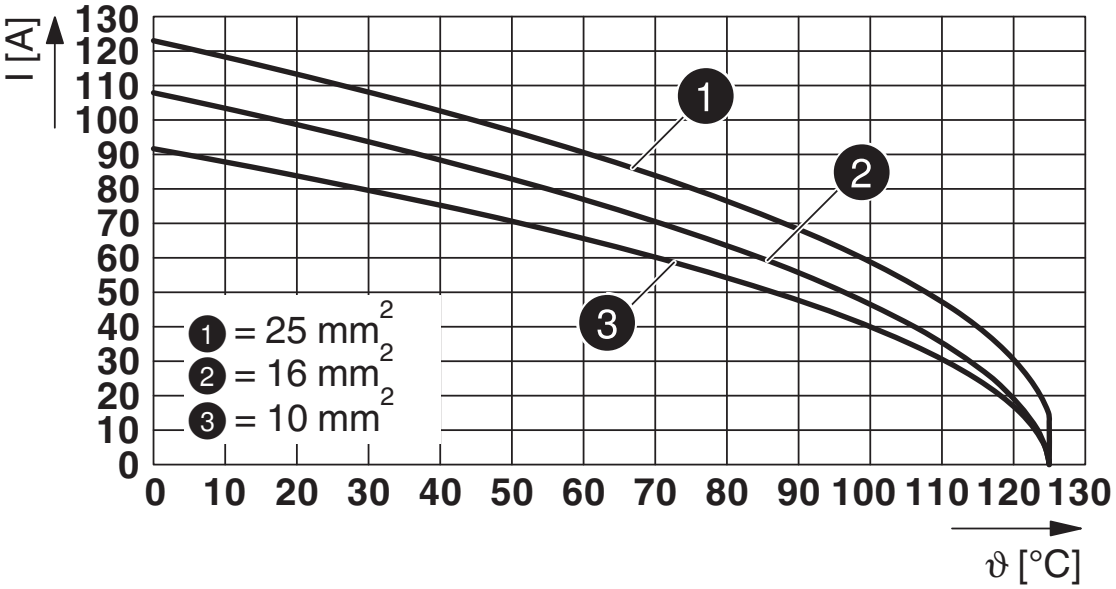
Connector pin assignment, connection side

Schematic diagram



Axial screw connection

Diagram



Derating diagram

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1417296

DNV
Approval ID: TAE000037S

CSA
Approval ID: 158887

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	600 V	54 A	- 6	-

UL Recognized
Approval ID: E118976

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	600 V	69 A	- 6	-

UL Recognized
Approval ID: E468743

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	600 V	69 A	-	-

Classifications

ECLASS

ECLASS-13.0	27440217
ECLASS-15.0	27440217

ETIM

ETIM 10.0	EC000438

UNSPSC

UNSPSC 21.0	39121400

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%

EF3.1 Climate Change

CO2e kg	0.381 kg CO2e

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