

HC-Q02-I-AT-HV-F - Contact insert



1496730

<https://www.phoenixcontact.com/us/products/1496730>

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Contact insert, number of positions: 2+PE, size: D7, power contacts: 2, number of connections per position: 1, Socket, Axial screw connection, 830 V, 40 A, 1.5 mm² ... 10 mm², application: Power

Your advantages

- Shock and vibration-resistant in accordance with DIN EN 61373

Commercial data

Item number	1496730
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF61
Product key	AF7ABJ
GTIN	4063151946197
Weight per piece (including packing)	21.8 g
Weight per piece (excluding packing)	22.22 g
Customs tariff number	85366990
Country of origin	PL

Technical data

Notes

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> <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>
Hexagonal socket	SW2,0

Product properties

Product type	Contact insert with a fixed no. of positions
Series	HC-Q
Application	Power
Type	D7
Number of positions	2
Connection profile	2+PE
Number of connections per position	1
No. of power contacts	2
Contact material type	turned

Insulation characteristics

Overvoltage category	III
Degree of pollution	3

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Dimensions

Mechanical characteristics

Contact diameter	4 mm
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Connection data

Connection technology

Connection technology	Axial screw connection
Number of connections per position	1
Connection in acc. with standard	IEC / EN

Conductor connection

Conductor cross-section	1.5 mm ² ... 10 mm ² (The cross section specification refers to the geometric cross section of the cable used)
Tightening torque	0.5 Nm ... 0.8 Nm (Mounting screws for mounting in the HEAVYCON housing)
	0.5 Nm (1.5 mm ²)
	0.8 Nm (2.5 mm ² ... 4 mm ²)
	1.5 Nm (6 mm ² ... 10 mm ²)
Stripping length of the individual wire	6 mm
Stripping length	5 mm ... 7 mm

Electrical properties

Rated voltage (III/3)	830 V
Rated surge voltage	6 kV
Rated current	40 A
Nominal voltage U _N	800 V (The UL voltage specification is based on the specifications of UL 840 in accordance with UL 2237.)

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
Contact carrier material	PC
Standards/regulations	PC

Environmental and real-life conditions

Ambient conditions

Ambient temperature (operation)	-40 °C ... 125 °C (including heating up of contacts)
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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)

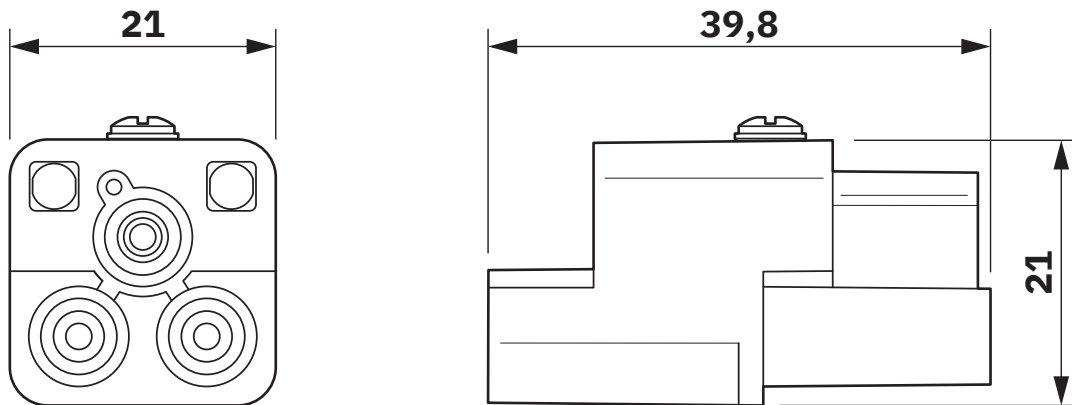
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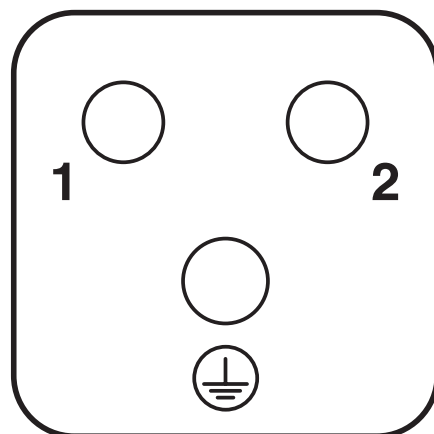
Drawings

Dimensional drawing



Female insert

Schematic diagram



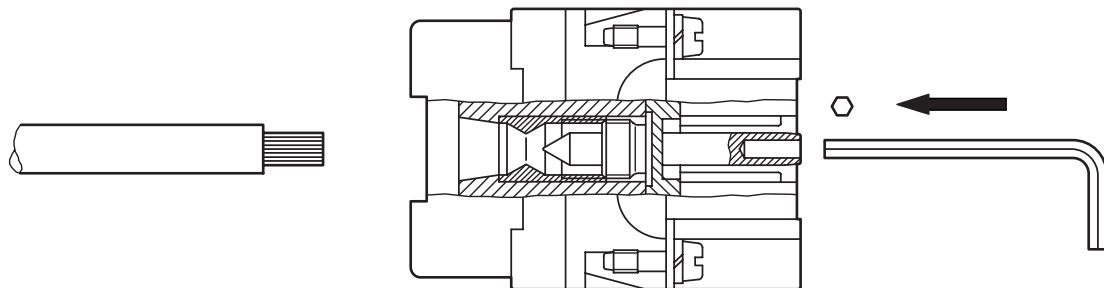
Connector pin assignment

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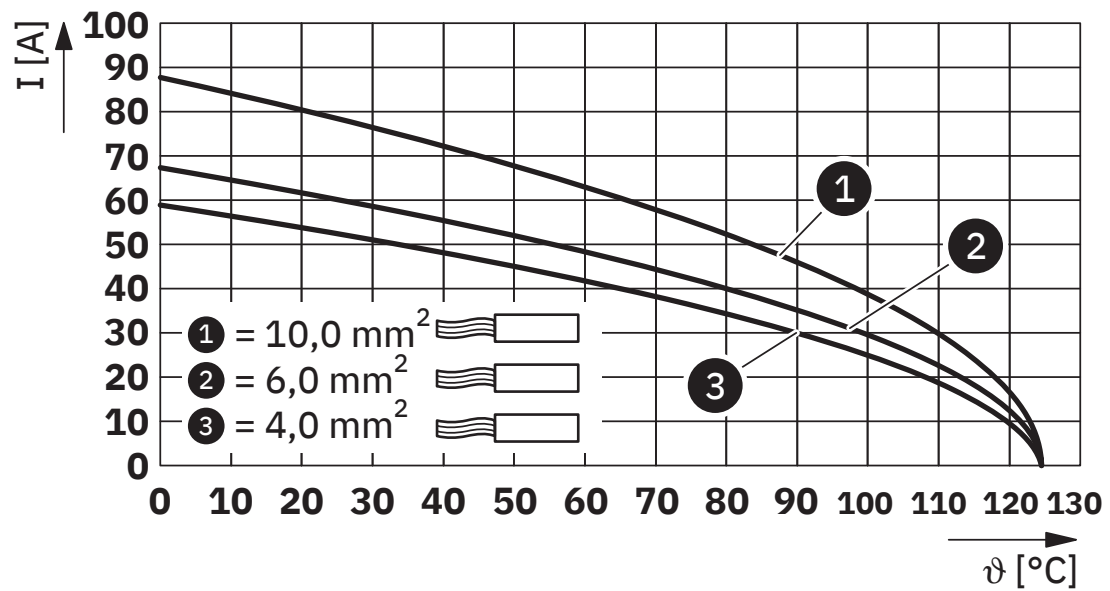
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Schematic diagram



Axial screw connection

Diagram



Derating diagram

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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1496730>

 UL Recognized Approval ID: E468743				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
Power	800 V	45 A	- 8	-
PE connection	-	-	- 10	-

 CSA Approval ID: 158887				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
Power	800 V	45 A	- 8	-
PE connection	-	-	- 10	-

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Classifications

ECLASS

ECLASS-13.0	27440205
ECLASS-15.0	27440205

ETIM

ETIM 10.0	EC000438
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UNSPSC

UNSPSC 21.0	39121500
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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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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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