

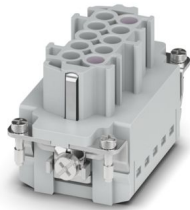
HC-HV03-I-PT-F - Contact insert



1407743

<https://www.phoenixcontact.com/us/products/1407743>

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Contact insert, number of positions: 3+2+PE, size: B10, power contacts: 3, control contacts: 2, number of connections per position: 1, Socket, Push-in connection, 690 V, 16 A, 0.14 mm² ... 2.5 mm², application: Power

Your advantages

- Easy installation without tools, even when mounted, with push-in connection technology
- Shortest installation time compared to other connection technologies
- Quick and effortless wiring, in particular when space is tight
- Automatic cabling with robots possible
- Safe wiring and operation with color-coded actuators
- Shock and vibration-resistant in accordance with DIN EN 61373
- Cost-effective and fast coding with plastic profiles

Commercial data

Item number	1407743
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF61
Product key	AF7ABG
GTIN	4046356777483
Weight per piece (including packing)	56.7 g
Weight per piece (excluding packing)	56.7 g
Customs tariff number	85366990
Country of origin	CN

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Technical data

Notes

General	only use flexible conductors with ferrules
General	Connectors may be operated only when there is no load/voltage.

Mounting

Assembly note	To ensure correct use, installation in housing with IP54 protection or better is required
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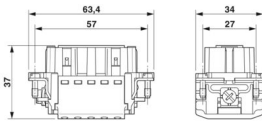
Product properties

Product type	Contact insert with a fixed no. of positions
Series	HC-HV
Application	Power
Type	B10
Number of positions	5
Connection profile	3+2+PE
Number of connections per position	1
No. of power contacts	3
No. of control contacts	2

Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Dimensions

Dimensional drawing	
Width	34 mm
Height	34.6 mm
Length	64 mm
Drill hole distance, horizontal	57 mm

Mechanical characteristics

Contact diameter	2.5 mm
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Connection data

Connection technology

Connection technology	Push-in connection (power contacts)
	Push-in connection (control contacts)
Number of connections per position	1

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Conductor connection

Conductor cross-section	0.14 mm ² ... 2.5 mm ² (power contacts)
	0.14 mm ² ... 2.5 mm ² (control contacts)
Connection cross section AWG	26 ... 14 (power contacts)
	26 ... 14 (control contacts)
Tightening torque	0.8 Nm ... 1.2 Nm (PE connection)
	0.5 Nm ... 0.8 Nm (Mounting screws for mounting in the HEAVYCON housing)
Stripping length	8 mm ... 10 mm (power contacts)
	8 mm ... 10 mm (control contacts)

Electrical properties

Rated voltage (III/2) contacts	830 V
Rated voltage (III/3)	690 V
Rated surge voltage (III/2)	8 kV
Rated surge voltage (III/3)	6 kV
Rated surge voltage	8 kV (power contacts)
	6 kV (control contacts)
Rated current	16 A
	16 A
SCCR	5 kA (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 carrier material	PC
Material of contact surface, power contact	Ag
Material of contact surface, control contact	Ag
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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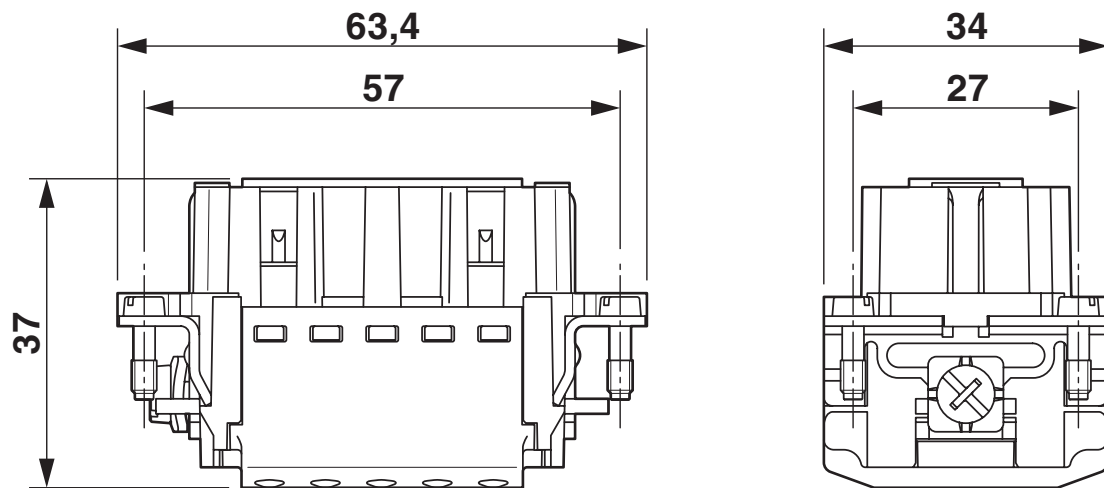


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Drawings

Dimensional drawing



Dimensional drawing

Dimensional drawing



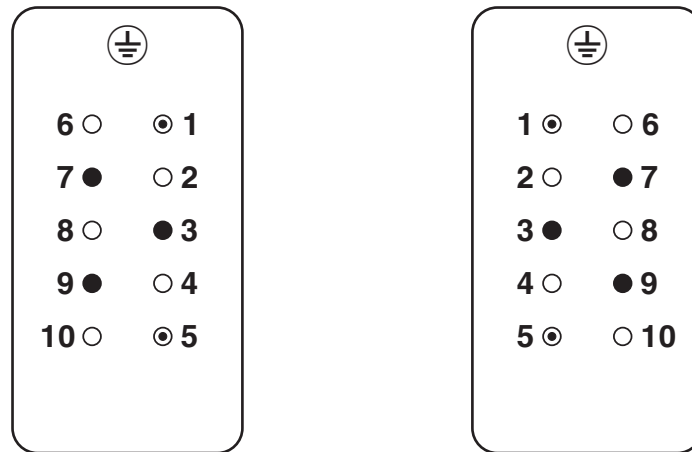
Mounting cutout when used without housing

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Schematic diagram



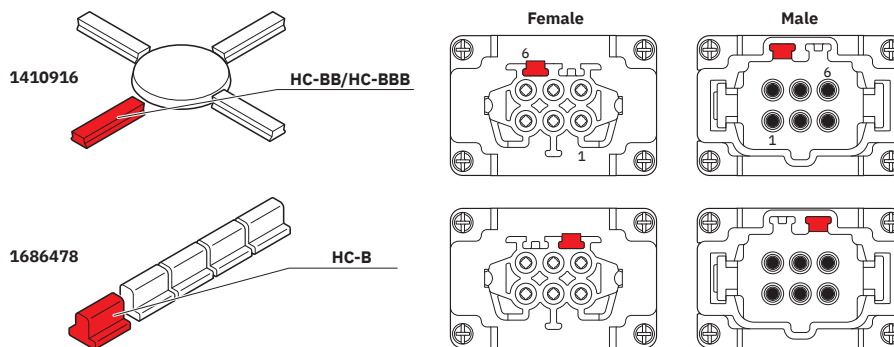
ST

- N/O contact
- ◐ Switch contact
- without contact

BU

View termination side

Schematic diagram



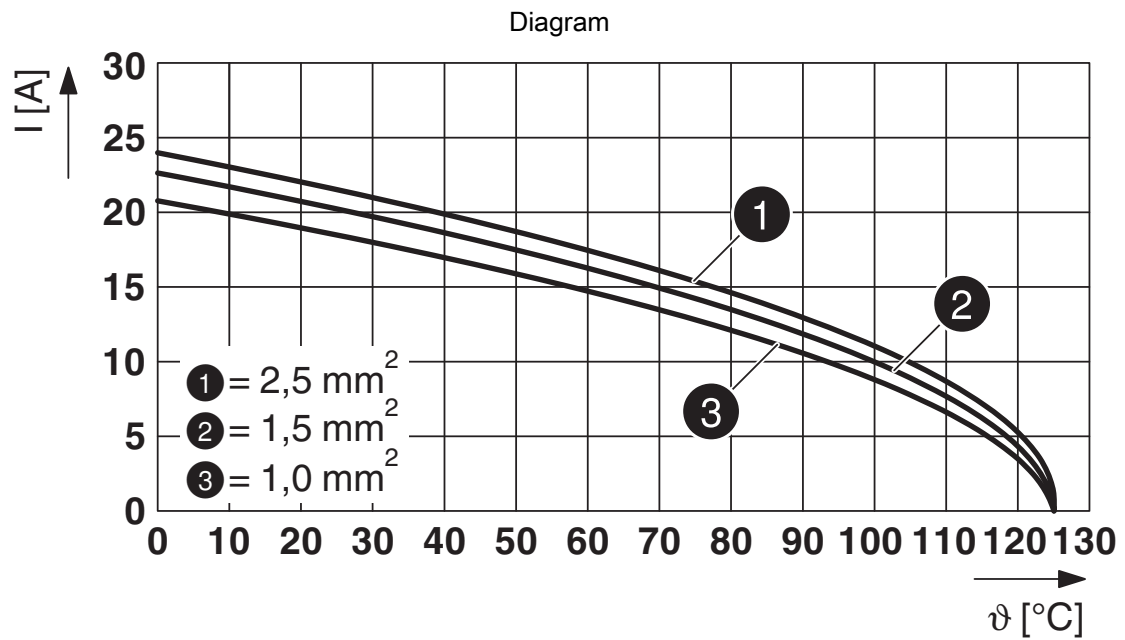
Coding options

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Derating diagram

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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1407743>

DNV

Approval ID: TAE000037S



CSA

Approval ID: 013631_0_000

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	600 V	16 A	- 14	-



UL Recognized

Approval ID: E118976

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	600 V	21 A	- 14	-



cULus Recognized

Approval ID: E468743

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	600 V	20 A	- 14	-

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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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