

# HC-BB18-I-PT-F - Contact insert



1014419

<https://www.phoenixcontact.com/us/products/1014419>

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Contact insert, number of positions: 18+PE, size: B10, power contacts: 18, control contacts: 0, number of connections per position: 1, Socket, Push-in connection, 500 V, 16 A, 0.5 mm<sup>2</sup> ... 2.5 mm<sup>2</sup>, 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
- High contact density

## Commercial data

Item number	1014419
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF61
Product key	AF7ABD
GTIN	4055626492964
Weight per piece (including packing)	82.8 g
Weight per piece (excluding packing)	82.7 g
Customs tariff number	85366990
Country of origin	CN

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## Technical data

### Notes

General	for flexible conductors with or without ferrules
General	Connectors may be operated only when there is no load/voltage.
General	Flexible conductors may be used without ferrules as long as they comply with IEC 60228 Class 1 ... 5. The individual litz wires must have a min. diameter of 0.17 mm.

### Mounting

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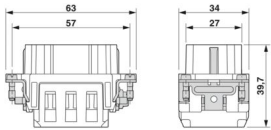
### Product properties

Product type	Contact insert with a fixed no. of positions
Series	HC-BB
Application	Power
Type	B10
Number of positions	18
Connection profile	18+PE
Contact numbering	1 - 18
Number of connections per position	1
No. of power contacts	18
No. of control contacts	0
Contact material type	turned

### Insulation characteristics

Overvoltage category	III
Degree of pollution	3

### Dimensions

Dimensional drawing	
Width	34 mm
Height	33.2 mm
Length	64 mm
Drill hole distance, horizontal	57 mm
Drill hole distance, vertical	27 mm

### Mechanical characteristics

Minimum housing height	72 mm
Contact diameter	2.5 mm

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## Connection data

### Connection technology

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

### Conductor connection

Conductor cross-section	0.5 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Connection cross section AWG	20 ... 14
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 of the individual wire	10 mm

## Electrical properties

Rated voltage (III/3)	500 V
Rated surge voltage	6 kV
Rated current	16 A (power contacts)
SCCR	5 kA

## 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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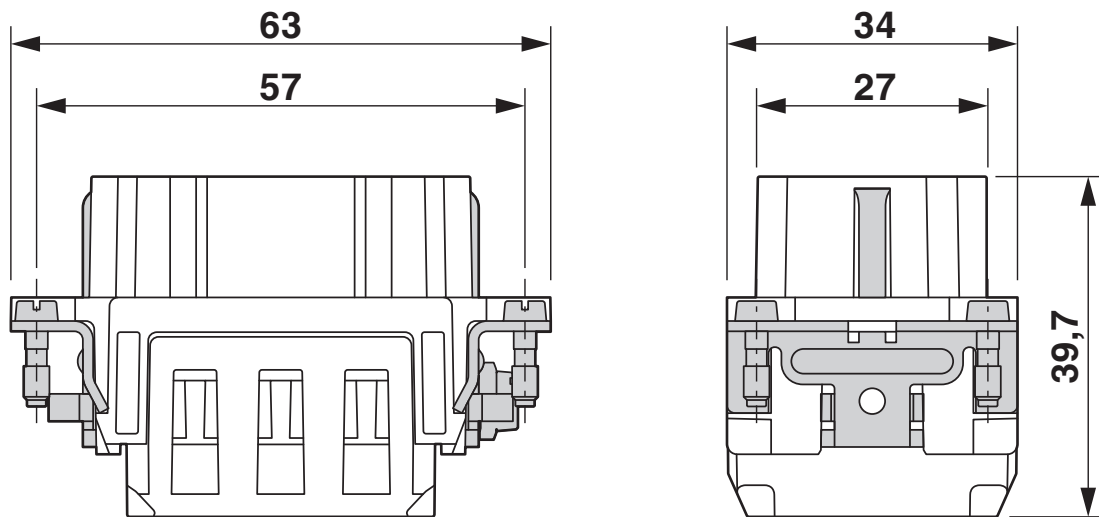
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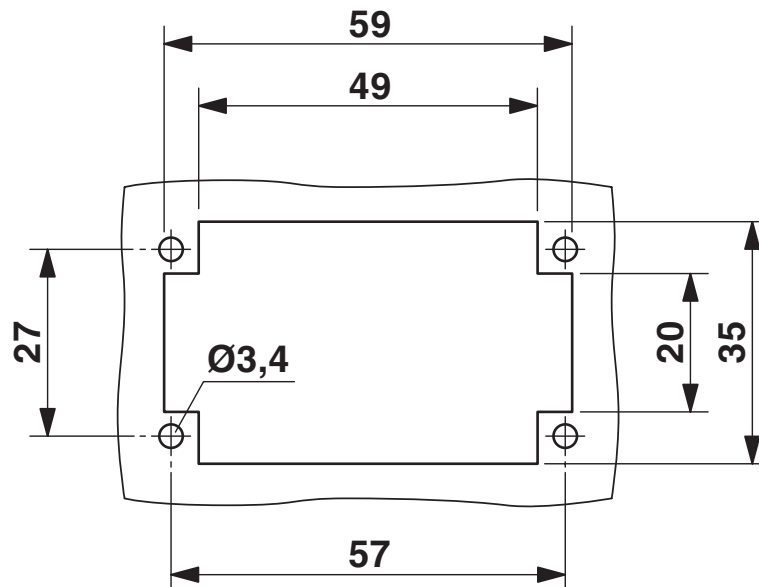
## Drawings

Dimensional drawing



## Female insert

Dimensional drawing



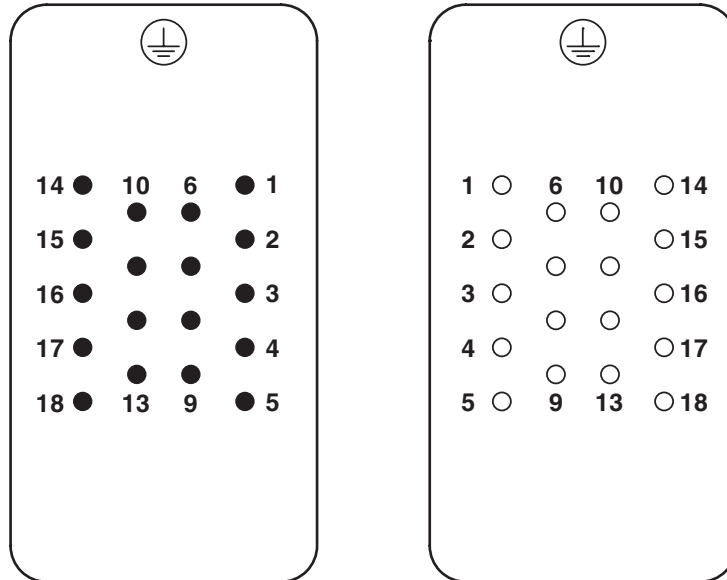
## Mounting cutout when used without housing

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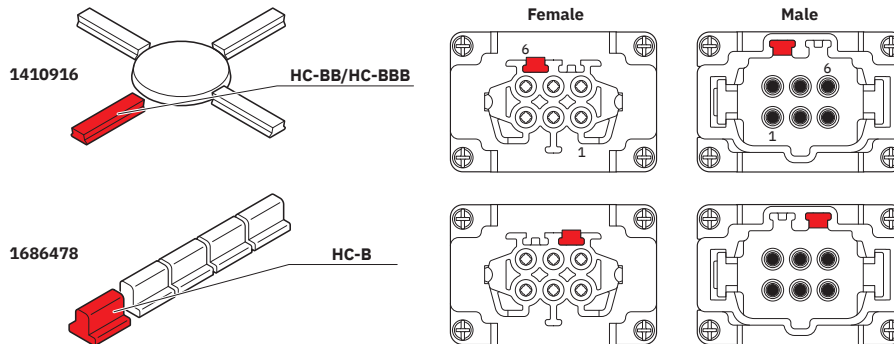
<https://www.phoenixcontact.com/us/products/1014419>

## Schematic diagram



Connector pin assignment: Left pin - right socket

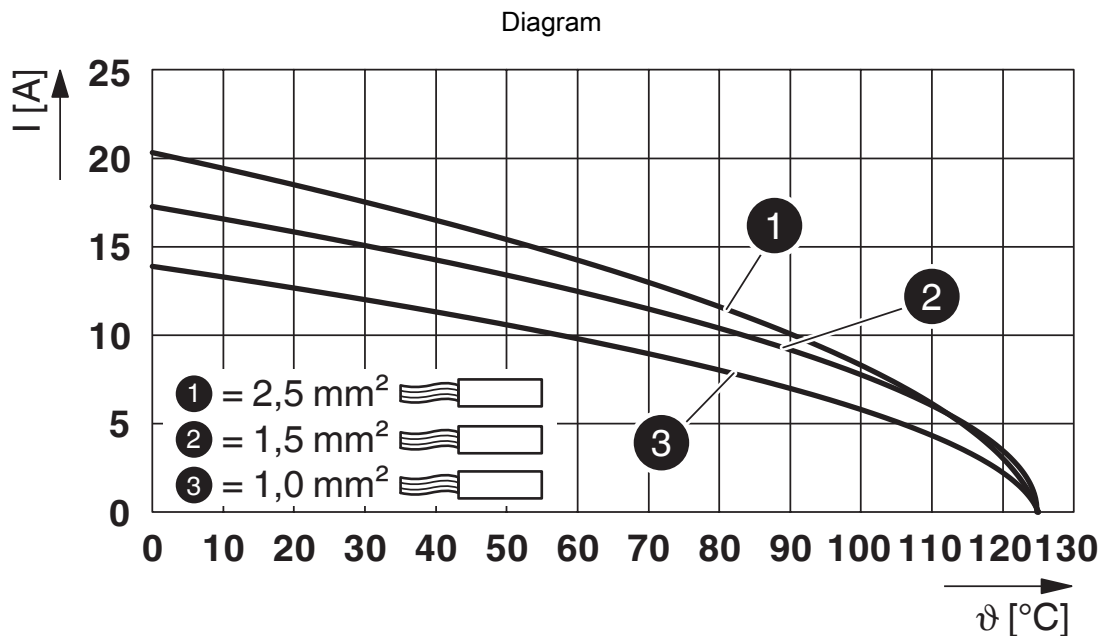
## Schematic diagram



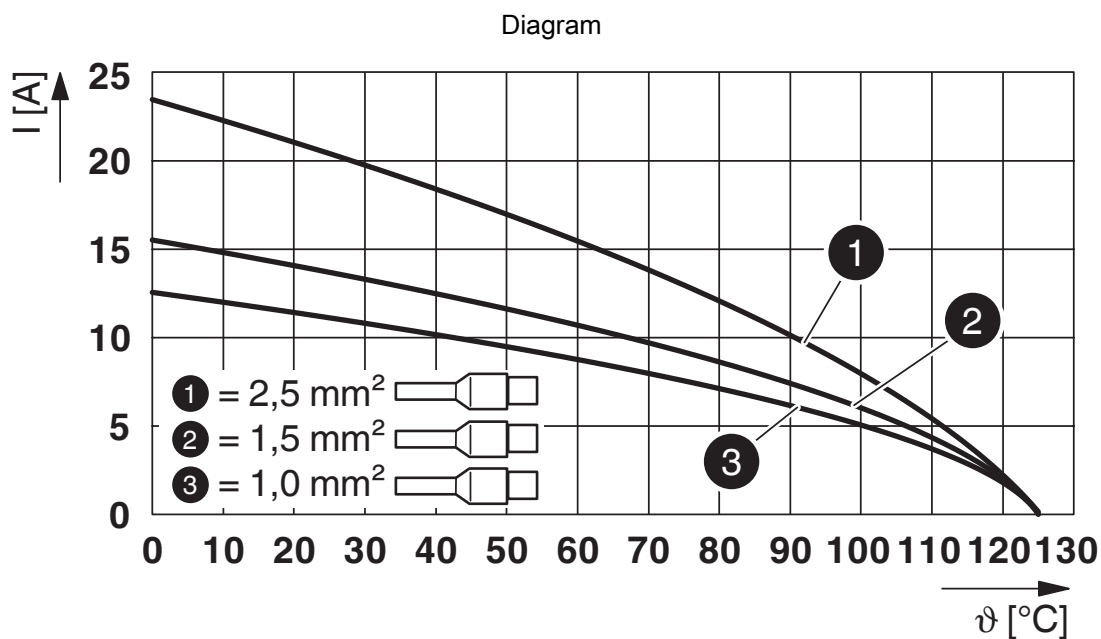
Coding options

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Derating diagram for flexible conductors



Derating diagram for flexible conductors with ferrule

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## Approvals

🔗 To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1014419>

### DNV

Approval ID: TAE000037S



### UL Recognized

Approval ID: E468743

	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
keine				
	600 V	21 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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