

# HC-B 16-I-CT-M - Contact insert



1648270

<https://www.phoenixcontact.com/us/products/1648270>

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Contact insert, number of positions: 16+PE, size: B16, number of connections per position: 1, Pin, Crimp connection, 500 V, 16 A, 0.5 mm<sup>2</sup> ... 4 mm<sup>2</sup>, application: Power

## Your advantages

- For fast coding with plastic profile<br/>
- Shock and vibration-resistant in accordance with DIN EN 61373

## Commercial data

Item number	1648270
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF61
Product key	BF7ABC
Catalog page	Page 545 (C-2-2019)
GTIN	4046356092401
Weight per piece (including packing)	54.6 g
Weight per piece (excluding packing)	54.6 g
Customs tariff number	85366990
Country of origin	CN

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## Technical data

### Notes

General	For HEAVYCON ADVANCE and HEAVYCON housing of B16 type, crimp contacts CK 2,5-ED (crimp contacts not included in the scope of supply).
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  Remove the crimp contact using a screwdriver. The opening for the screwdriver is next to the opening where the conductor is inserted.
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### Product properties

Product type	Contact insert with a fixed no. of positions
Series	HC-B
Application	Power
Type	B16 B32
Number of positions	16
Connection profile	16+PE
Contact numbering	1 - 16
Number of connections per position	1
Contact material type	turned

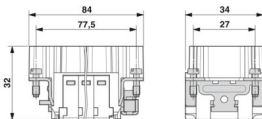
### Insulation characteristics

Overvoltage category	III
Degree of pollution	3

### Data management status

Article revision	11
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### Dimensions

Dimensional drawing	
Width	34 mm
Height	32 mm
Length	84 mm
Drill hole distance, horizontal	77.5 mm

### Mechanical characteristics

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Contact diameter	2.5 mm
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## Connection data

### Connection technology

Connection technology	Crimp 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> ... 4 mm <sup>2</sup>
Connection cross section AWG	20 ... 12
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	7.5 mm

## Electrical properties

Rated voltage (III/3)	500 V
Rated surge voltage	6 kV
Rated current	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 surface material	Ag (alternatively Au)
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

Degree of protection	IP20
Ambient temperature (operation)	-40 °C ... 125 °C (including heating up of contacts)

## Standards and regulations

Constructional and testing regulations	DIN EN 61984
	DIN EN 60664
	IEC 60352
	DIN EN 61984

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Tests	DIN EN 60664
	IEC 60352
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)

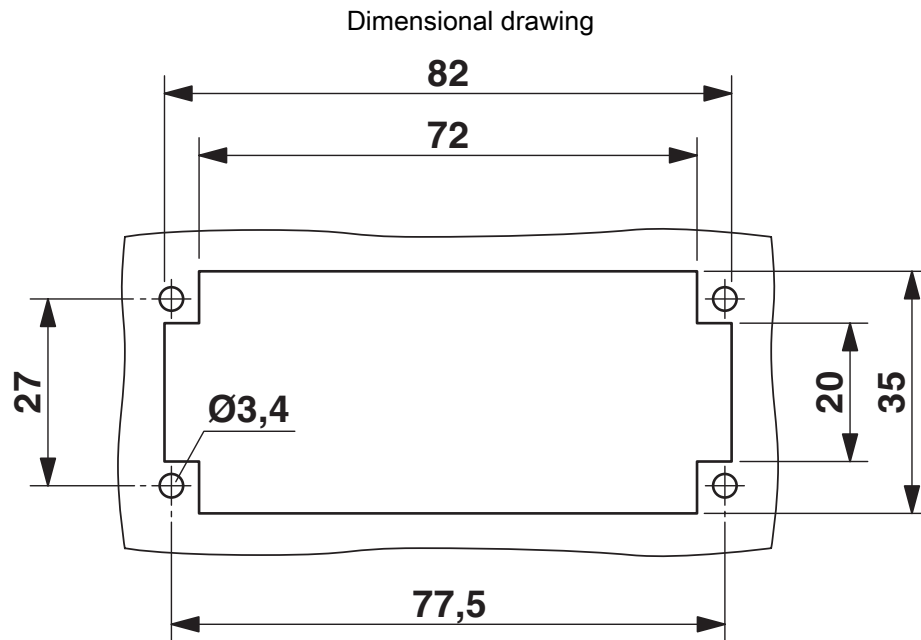
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## Drawings



Mounting cutout when used without housing

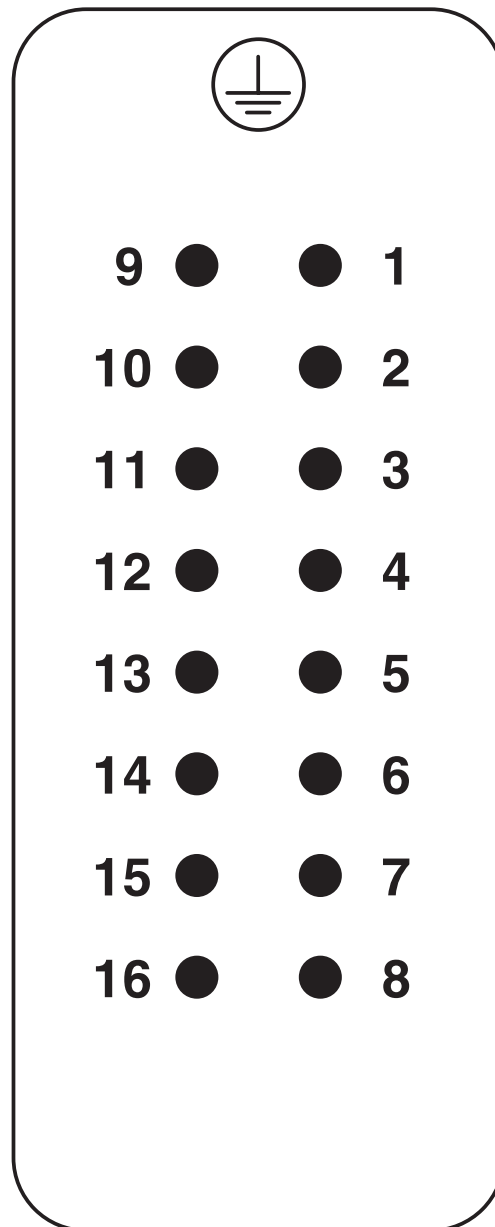
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Schematic diagram



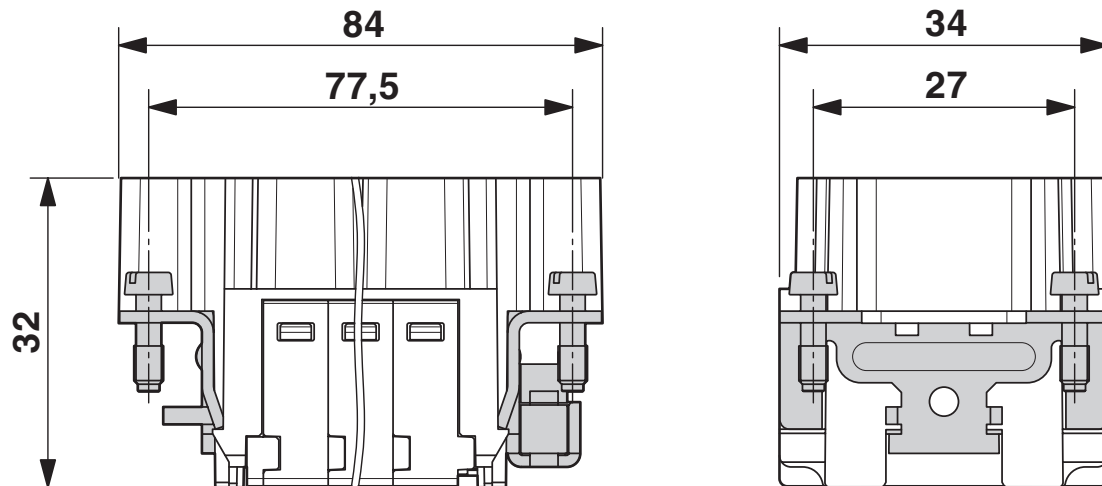
Connector pin assignment, connection side

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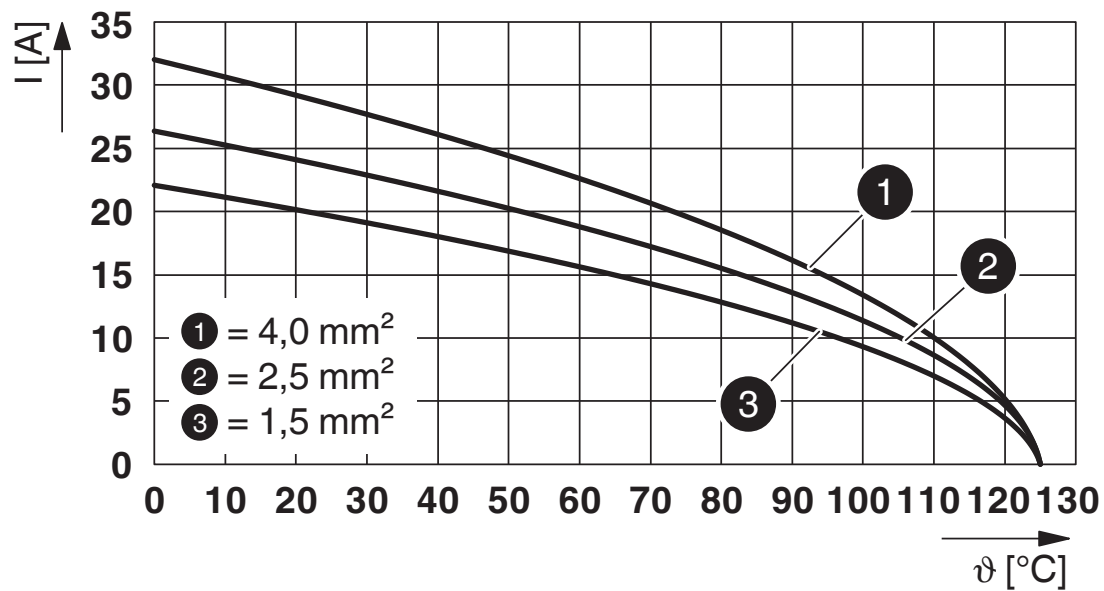
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Dimensional drawing



Male insert

Diagram



Derating diagram

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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1648270>

<b>DNV</b> Approval ID: TAE000037S				
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 <b>CSA</b> Approval ID: 013631_6233_01				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
	600 V	20 A	20 - 12	-

 <b>cULus Recognized</b> Approval ID: E468743				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
	600 V	13 A	-	-

 <b>cULus Recognized</b> Approval ID: E468743				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
	600 V	14 A	-	-



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## Classifications

### ECLASS

ECLASS-11.0	27440205
ECLASS-12.0	27440205
ECLASS-13.0	27440205

### ETIM

ETIM 9.0	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
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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