

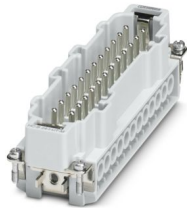
# HC-B 24-I-UT-M - Contact insert



1648296

<https://www.phoenixcontact.com/us/products/1648296>

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Contact insert, number of positions: 24+PE, size: B24, number of connections per position: 1, Pin, Screw connection, 500 V, 16 A, 0.5 mm<sup>2</sup> ... 2.5 mm<sup>2</sup>, application: Power

## Your advantages

- For fast coding with plastic profile
- For test pin 2 mm
- Shock and vibration-resistant in accordance with DIN EN 61373

## Commercial data

Item number	1648296
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF61
Product key	AF7ABC
GTIN	4046356092425
Weight per piece (including packing)	112.8 g
Weight per piece (excluding packing)	111 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.

### Mounting

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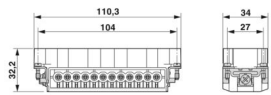
### Product properties

Product type	Contact insert with a fixed no. of positions
Series	HC-B
Application	Power
Type	B24 B48
Number of positions	24
Connection profile	24+PE
Contact numbering	1 - 24
Number of connections per position	1
Contact material type	turned
Screwdriver blade	0.5 x 3.5 mm

### Insulation characteristics

Overvoltage category	III
Degree of pollution	3

### Dimensions

Dimensional drawing	
Width	34 mm
Height	32 mm
Length	111 mm
Drill hole distance, horizontal	104 mm
Drill hole distance, vertical	27 mm

### Mechanical characteristics

Contact diameter	2.5 mm
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### Connection data

#### Connection technology

Connection technology	Screw connection
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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)
	0.5 Nm ... 0.8 Nm
Stripping length of the individual wire	8 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
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

Constructional and testing regulations	DIN EN 61984
	DIN EN 60664
	IEC 60352
Tests	DIN EN 61984
	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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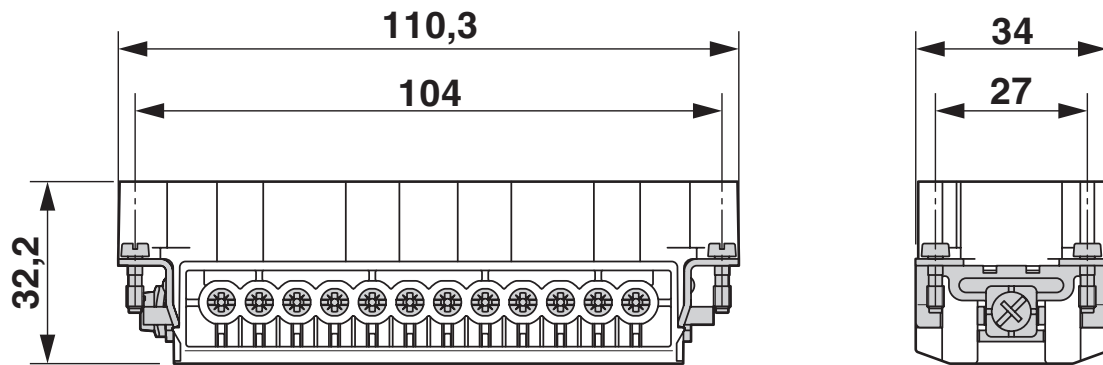
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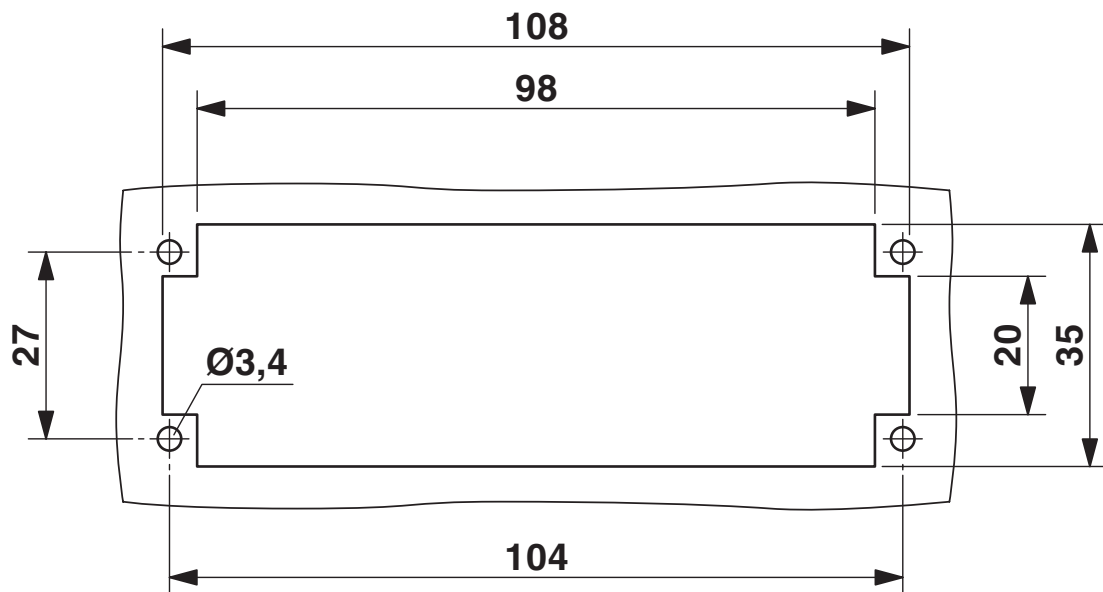
## Drawings

Dimensional drawing



## Male insert

Dimensional drawing



Mounting cutout when used without housing

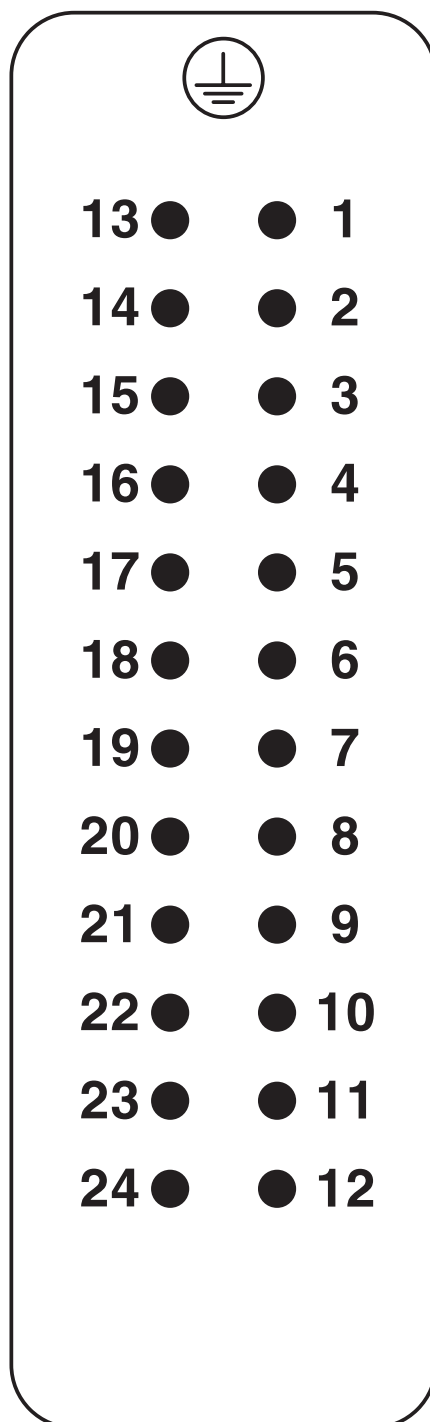
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Schematic diagram



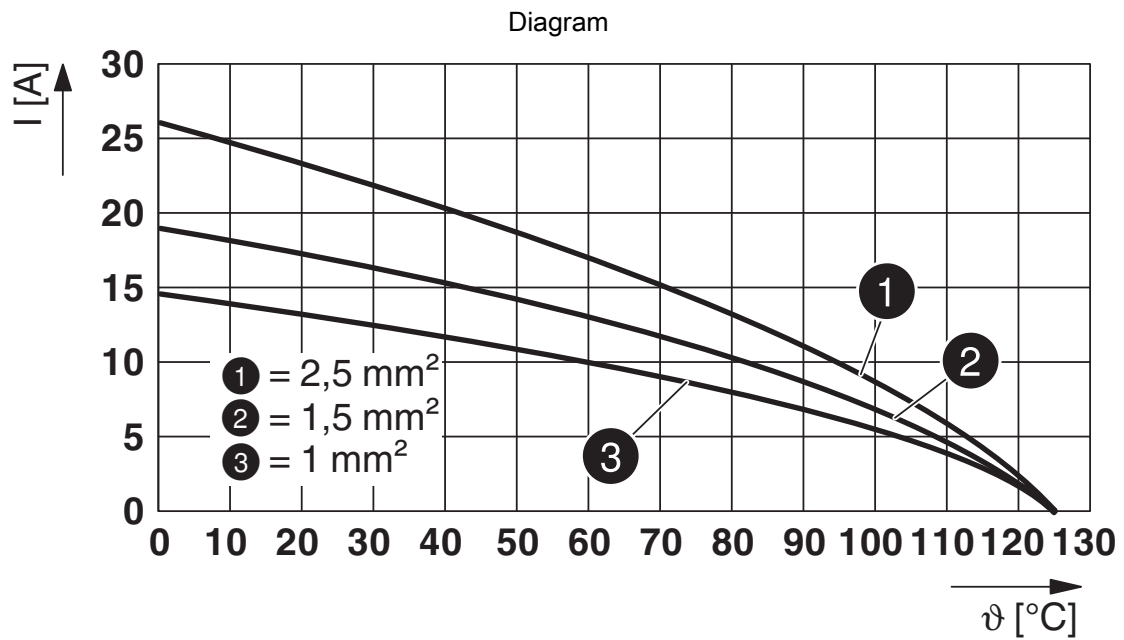
Connector pin assignment, connection side

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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/1648296>

### DNV

Approval ID: TAE000037S



### CSA

Approval ID: 013631\_6233\_01

	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
keine				
	600 V	13 A	22 - 14	-



### UL Recognized

Approval ID: E118976

	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
keine				
	600 V	16 A	- 14	-



### cULus Recognized

Approval ID: E468743

	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
keine				
	600 V	14 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
Exemption	6(c)

### China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

### EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	1dda5b58-b560-4370-8504-b8e98cc79aa6

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