

# HC-B 24-ESTQ-2,5 - Contact insert



1605640

<https://www.phoenixcontact.com/us/products/1605640>

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Contact insert, number of positions: 24+PE, size: B24, number of connections per position: 1, Pin, QUICKON connection, 500 V, 16 A, 0.34 mm<sup>2</sup> ... 2.5 mm<sup>2</sup>

## Product description

### Contact insert

With QUICKON connection technology, the wires are connected with just a turn of the screwdriver. The wires do not have to be stripped first. This reduces connection time by at least 60%.

## Your advantages

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

## Commercial data

Item number	1605640
Packing unit	10 pc
Minimum order quantity	1 pc
Sales key	BF61
Product key	AF7ABC
GTIN	4017918940737
Weight per piece (including packing)	123.1 g
Weight per piece (excluding packing)	123.1 g
Customs tariff number	85366990
Country of origin	PL

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## Technical data

### Notes

General	Connectors may be operated only when there is no load/voltage.
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### 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
Type	B24
	B48
Number of positions	24
Connection profile	24+PE
Contact numbering	1 - 24
Number of connections per position	1
Contact material type	rolled

### Insulation characteristics

Overvoltage category	III
Degree of pollution	3

### Dimensions

Dimensional drawing	
Width	34 mm
Height	35 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	QUICKON connection
Number of connections per position	1

### Conductor connection

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Conductor cross section	0.34 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> (Litz wire structure VDE 0295, Class 1 - 5/litz wire diameter >= 0.2 mm)
Connection cross section AWG	22 ... 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)

## Electrical properties

Rated voltage (III/3)	500 V
	500 V
Rated surge voltage	6 kV
	6 kV
Rated current	16 A
	16 A

## Mechanical properties

Mechanical data	
Insertion/withdrawal cycles	≥ 500

## Material specifications

Material Wire insulation	PVC / PE
Flammability rating according to UL 94	V0
Contact material	Copper alloy
Contact surface material	Ag
Contact carrier material	PA
Standards/regulations	PA
	PA

## Environmental and real-life conditions

Ambient conditions	
Ambient temperature (operation)	-40 °C ... 125 °C (including heating up of contacts)
Ambient temperature (assembly)	-25 °C ... 50 °C

## Standards and regulations

Testing	
Standards/regulations	PA: Fire protection in rail vehicles - requirement sets R22 and R23 acc. to DIN EN 45545-2 (Risk level HL1 - HL2)
	PA: Fire protection in rail vehicles - requirement set R24 acc. to DIN EN 45545-2 (Risk level HL1 - HL3)

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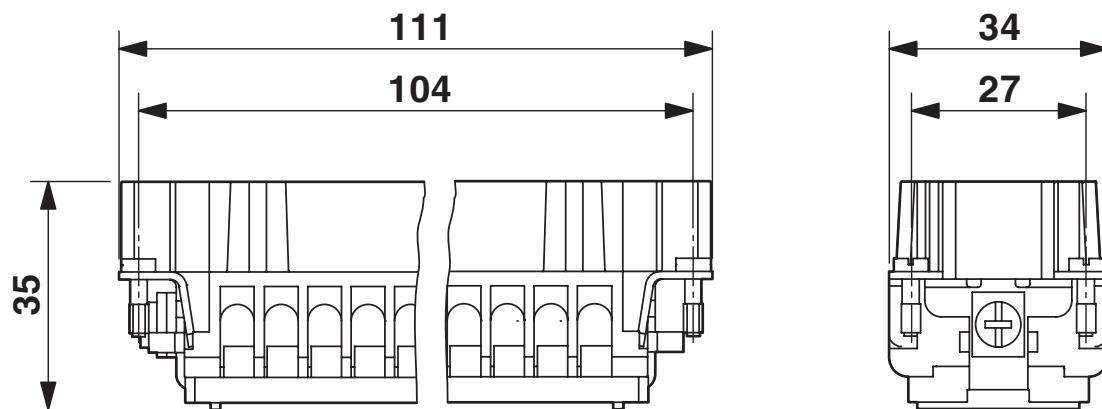


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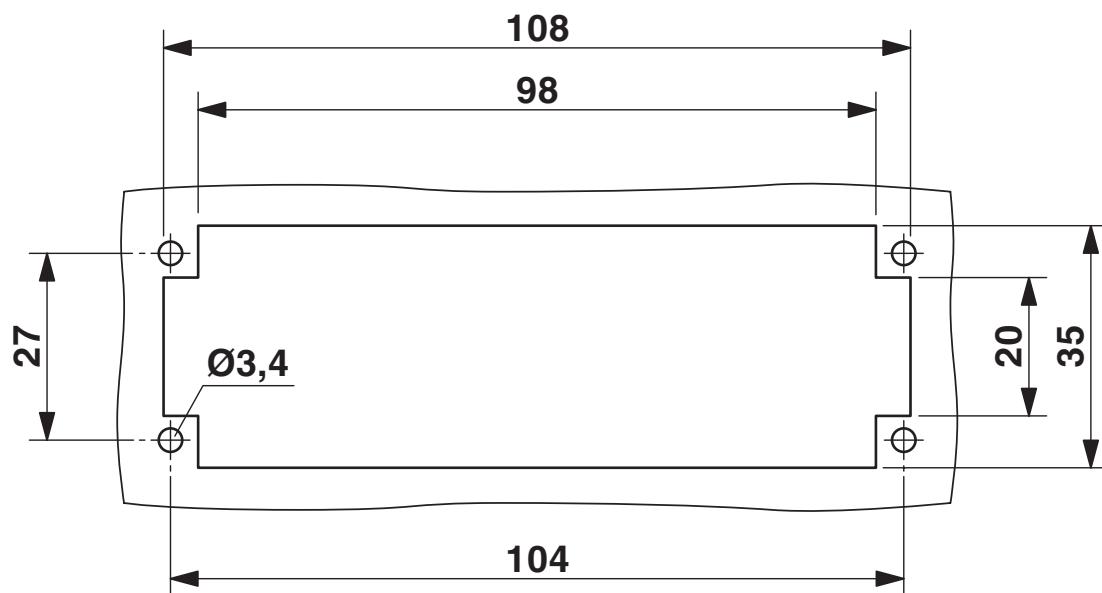
## Drawings

Dimensional drawing



Male insert

Dimensional drawing



Mounting cutout when used without housing

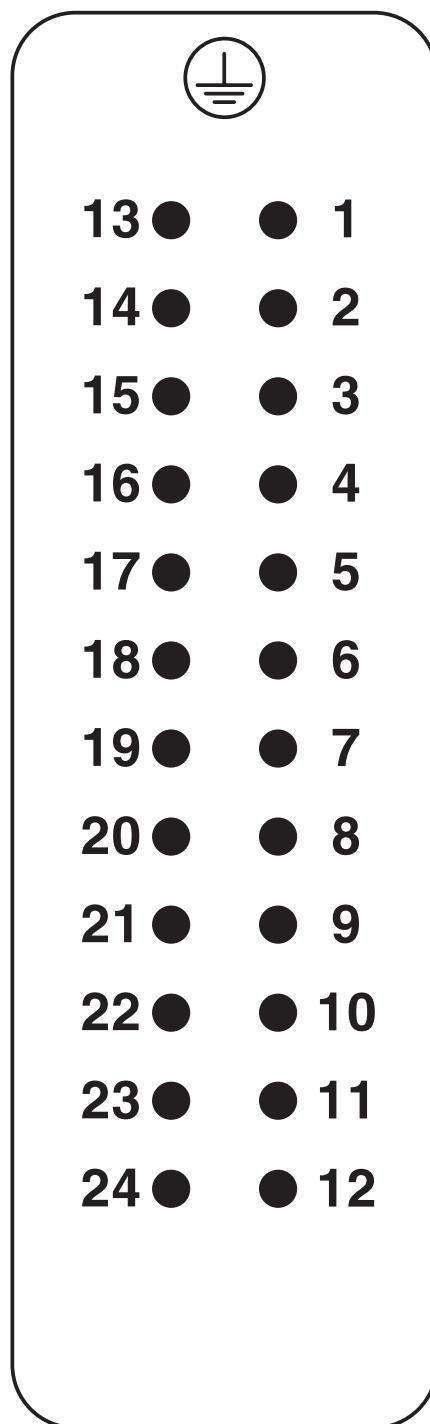
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Schematic diagram



Connector pin assignment, connection side

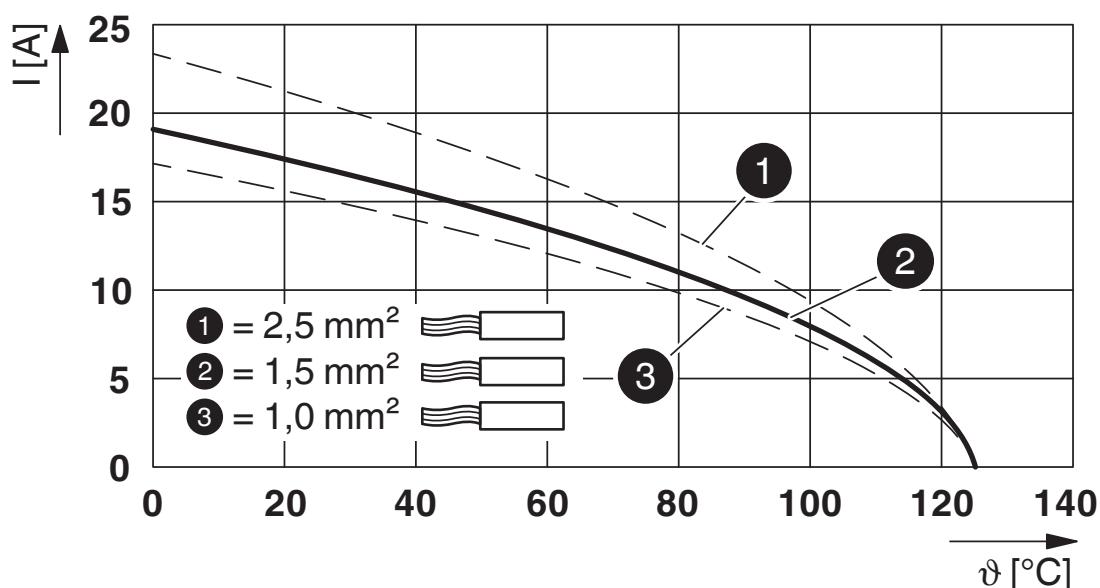
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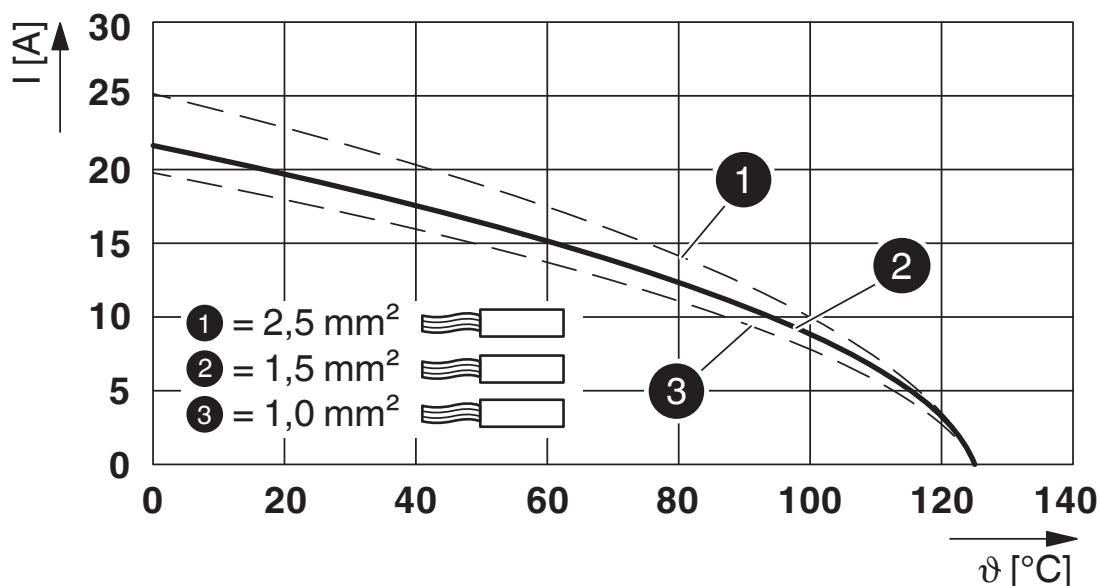


Diagram



Derating diagram for flexible conductors

Diagram



Derating diagram for solid conductors

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## Approvals

ⓘ To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1605640>

**DNV**

Approval ID: TAE000037S



**CSA**

Approval ID: 013631\_6233\_01



**cUL Recognized**

Approval ID: E118976



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## Classifications

### ECLASS

ECLASS-13.0	27440205
ECLASS-15.0	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
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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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