

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

1605640

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



Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



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

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

1605640

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



## Technical data

### Notes

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
---------------	---

### 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
------------------	--------

### Connection data

#### Connection technology

Connection technology	QUICKON connection
Number of connections per position	1

#### Conductor connection

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



1605640

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

Conductor cross section	0.34 mm² ... 2.5 mm² (Litz wire structure VDE 0295, Class 1 - 5/litz wire diameter $\geq$ 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	$\geq$ 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)

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

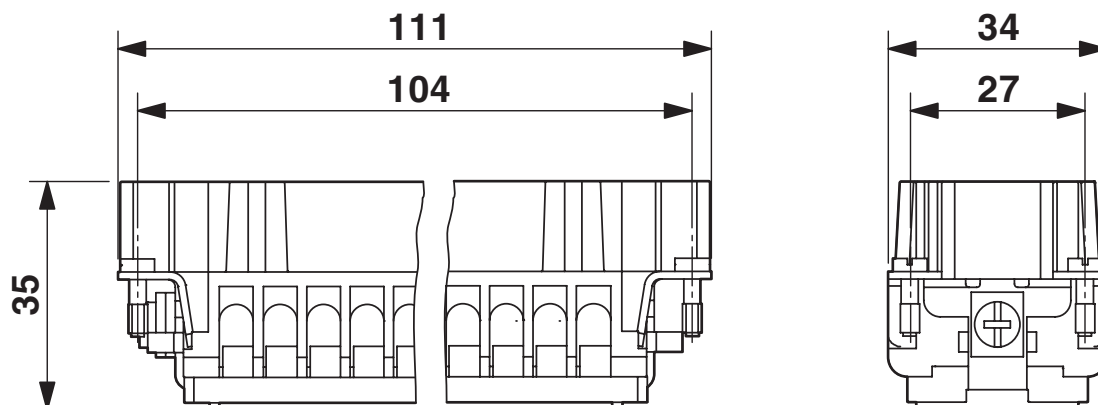
1605640

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



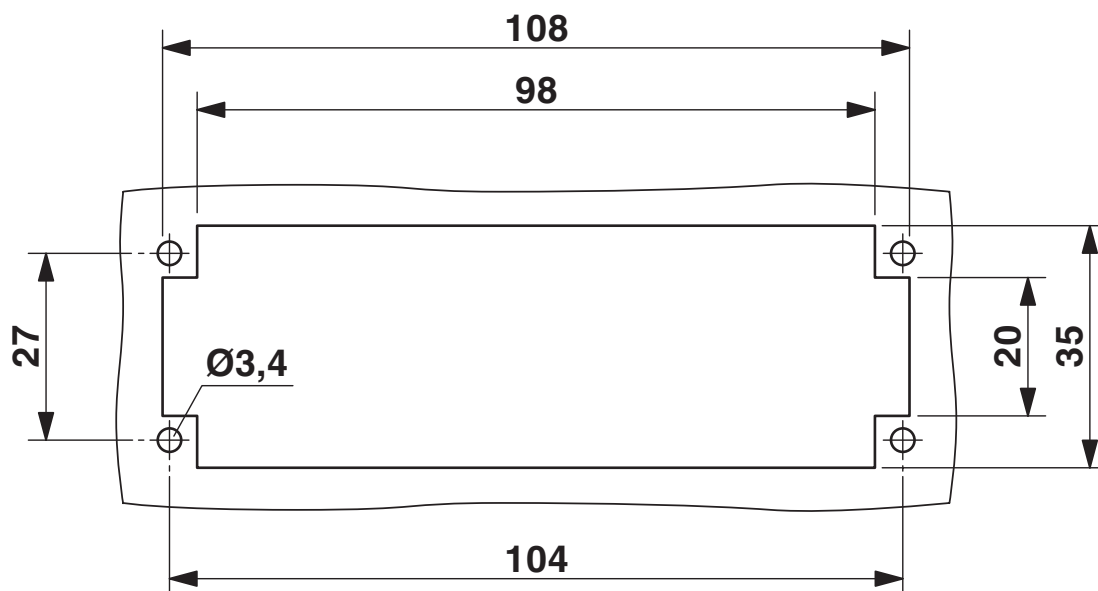
## Drawings

Dimensional drawing



## Male insert

Dimensional drawing



Mounting cutout when used without housing

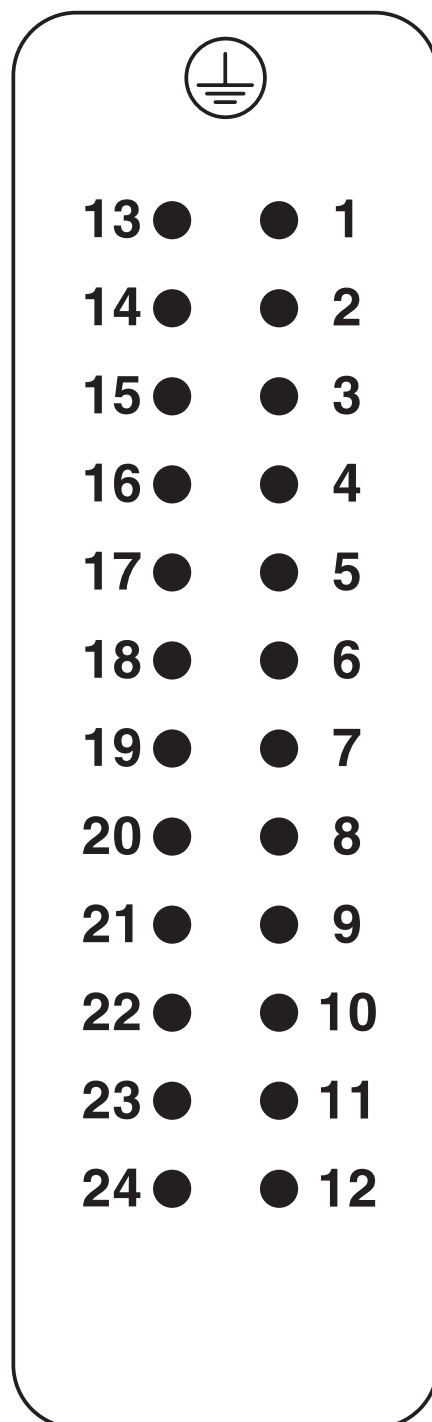
# HC-B 24-ESTQ-2,5 - Contact insert

1605640

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



Schematic diagram



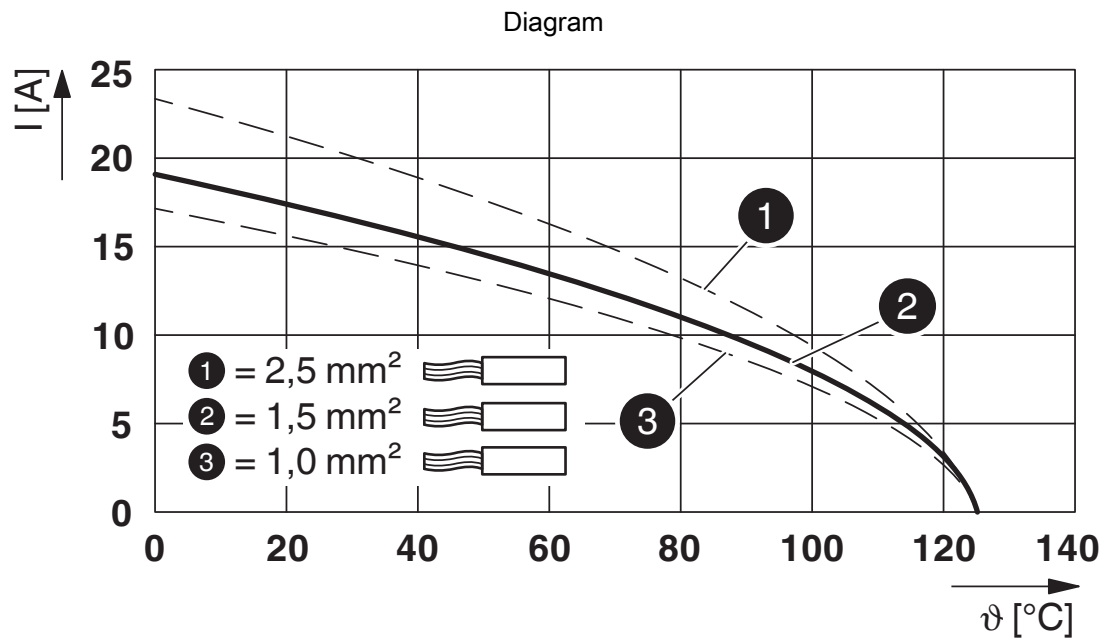
Connector pin assignment, connection side

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

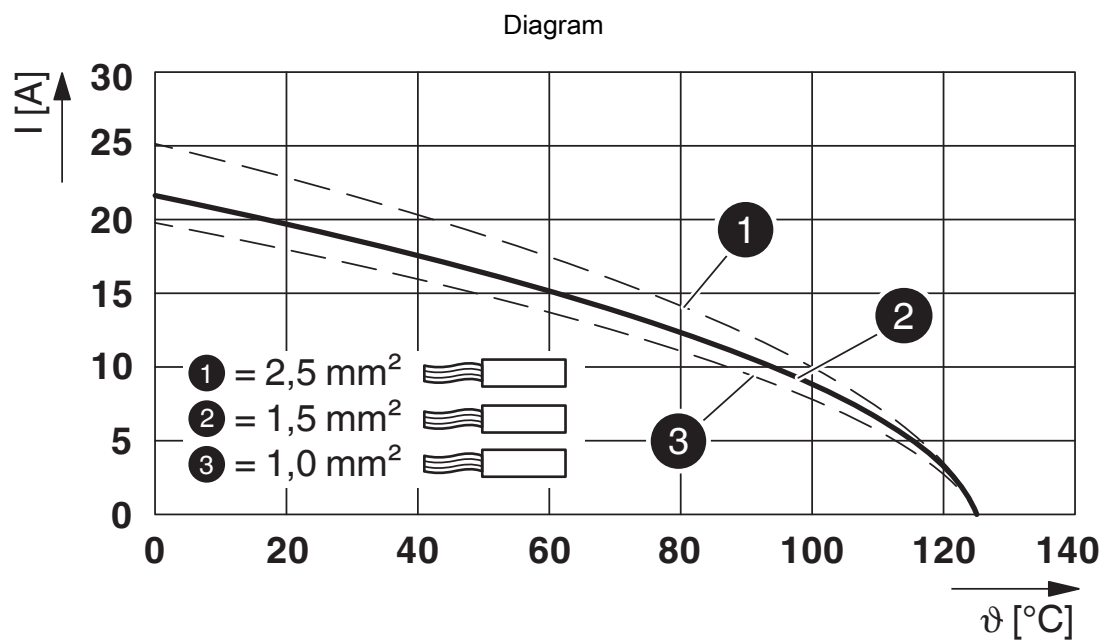


1605640

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



Derating diagram for flexible conductors



Derating diagram for solid conductors

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



1605640

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

## 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



**UL Recognized**

Approval ID: E118976

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



1605640

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

## Classifications

### ECLASS

ECLASS-13.0	27440205
ECLASS-15.0	27440205

### ETIM

ETIM 9.0	EC000438
----------	----------

### UNSPSC

UNSPSC 21.0	39121500
-------------	----------



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

1605640

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



## 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%

Phoenix Contact 2025 © - all rights reserved  
<https://www.phoenixcontact.com>

Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)