

## Contact insert - HC-B 24-ESTQ-2,5-48 - 1605666

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HEAVYCON male insert, B24 series, 24-pos., QUICKON connection, numbering 25-48

RoHS

COMPLETE RoHS

### Key Commercial Data

Packing unit	1 pc
Minimum order quantity	10 pc
GTIN	 4 017918 940751
GTIN	4017918940751
Weight per Piece (excluding packing)	138.120 g
Custom tariff number	85366990
Country of origin	Poland

### Technical data

#### General

Note	For HEAVYCON-ADVANCE housing of B24 type and HEAVYCON housing of B24/B48 type. Encoding using coding profile CP-HC (1686478). HC-B6.../ HC-B10... for two coding profiles. HC-B16.../ HC-B24... for four coding profiles. Connectors may only be actuated when there is no load/ voltage.
	Connectors may be operated only when there is no load/voltage.
Connection method	QUICKON connection
Degree of pollution	3
Overvoltage category	III
Number of positions	24+PE
Insertion/withdrawal cycles	≥ 500

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## Technical data

### General

Size	B24
Contact numbering	1 - 24
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
Wire diameter including insulation	1 mm ... 3.5 mm
Frequency of connections between conductors of the same cross section	10
Assembly instructions	To ensure correct use, installation in housing with IP54 protection or better is required
Connection	For housings of type B16/B32. Connectors may only be actuated when there is no load/voltage.

### Ambient conditions

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

### Material data

Contact material	Copper alloy
Contact surface material	Ag
Contact carrier material	PA
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)

### Electrical characteristics

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

### Standards and Regulations

Connection in acc. with standard	CSA
Flammability rating according to UL 94	V0

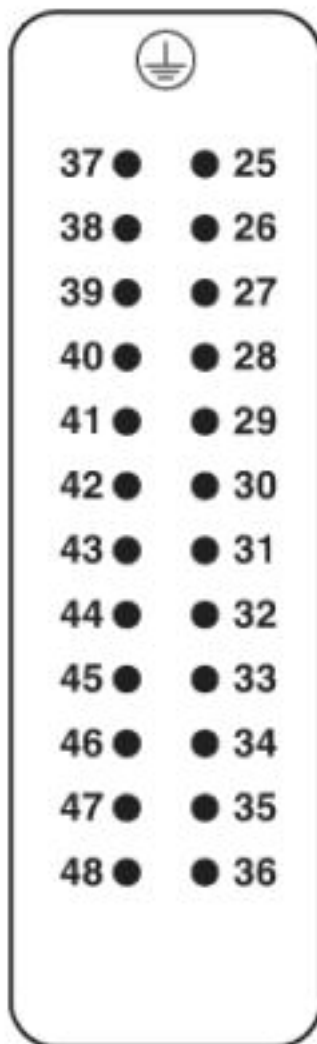
### Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

## Drawings

## Contact insert - HC-B 24-ESTQ-2,5-48 - 1605666

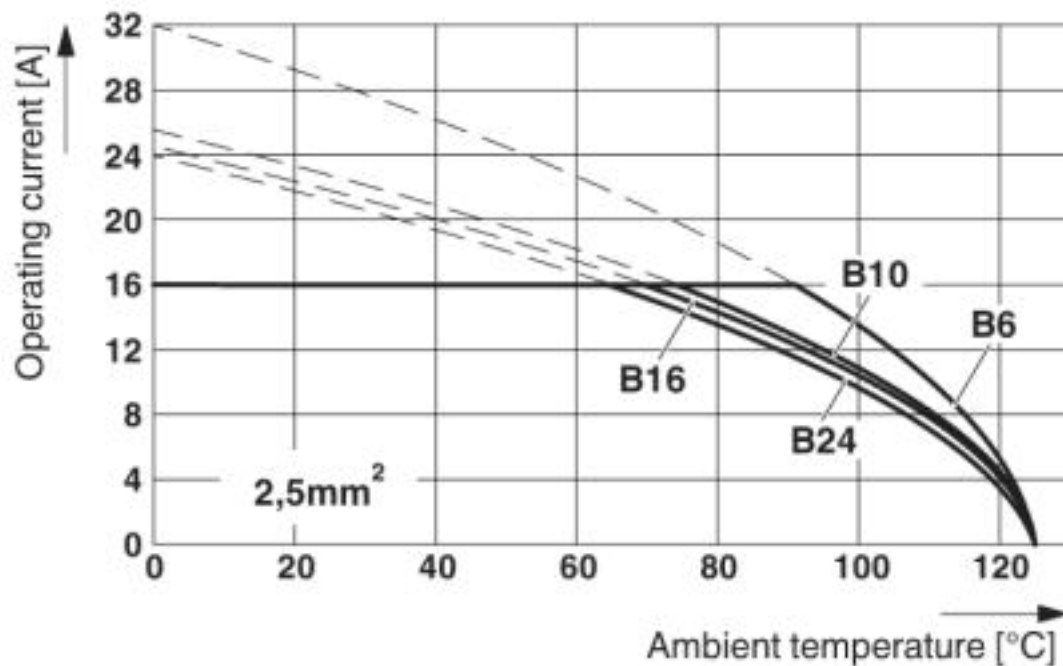
Schematic diagram



Connector pin assignment, connection side

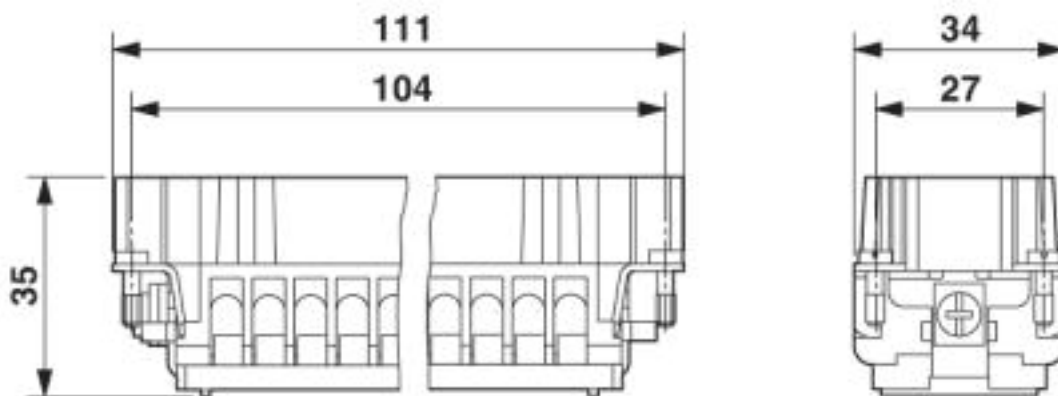
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Diagram



The figure shows the derating diagram of various series B contact inserts (B6 to B24), conductor cross section 2.5 mm²

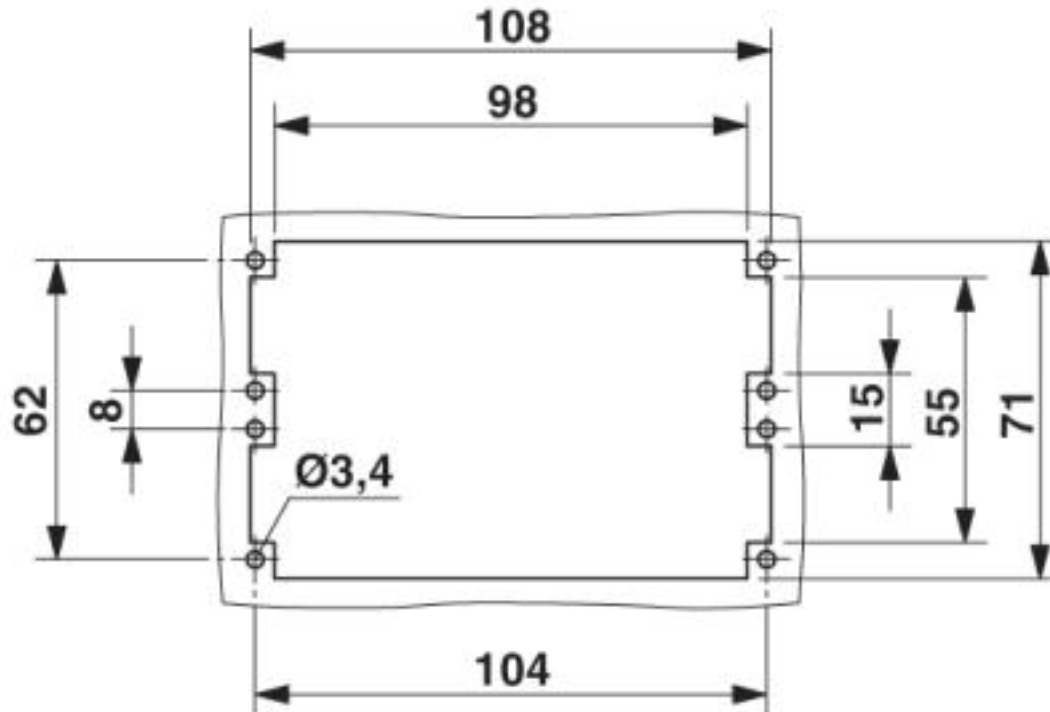
Dimensional drawing



Male insert

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Dimensional drawing



Mounting cutout when used without housing

### Classifications

eCl@ss

eCl@ss 4.0	27140800
eCl@ss 4.1	27140800
eCl@ss 5.0	27143400
eCl@ss 5.1	27261200
eCl@ss 6.0	27261200
eCl@ss 7.0	27440205
eCl@ss 8.0	27440205
eCl@ss 9.0	27440205

ETIM

ETIM 2.0	EC000437
ETIM 3.0	EC000437
ETIM 4.0	EC000438
ETIM 5.0	EC000438

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### Classifications

#### ETIM

ETIM 6.0	EC000438
ETIM 7.0	EC000438

#### UNSPSC

UNSPSC 6.01	30211923
UNSPSC 7.0901	39121522
UNSPSC 11	39121522
UNSPSC 12.01	39121522
UNSPSC 13.2	39121522

### Approvals


#### Approvals


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CSA / UL Recognized / cUL Recognized / EAC / DNV GL / cULus Recognized

#### Ex Approvals


### Approval details


CSA		<a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a>	013631_6233_01
Nominal voltage UN	600 V		
Nominal current IN	10 A		
mm²/AWG/kcmil	16		

UL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 118976
Nominal voltage UN	600 V		
Nominal current IN	10 A		
mm²/AWG/kcmil	14		


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### Approvals

cUL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 118976
Nominal voltage UN	600 V		
Nominal current IN	10 A		
mm²/AWG/kcmil	14		

EAC		RU C- DE.AI30.B.01102
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DNV GL		<a href="https://approvalfinder.dnvgl.com/">https://approvalfinder.dnvgl.com/</a>	TAE000037S
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cULus Recognized	
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### Accessories

#### Accessories

#### Coding element

Coding profile - CP-HC - 1686478



Coding profile, 4 coding profiles per strip, for insertion in coding keyways

Coding element - HC-CST - 1676857



Coding peg for coding up to 16 connectors

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### Accessories

Coding element - HC-CBU - 1676860



Coding socket for coding up to 16 connectors

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Coding bolt - HC-CB - 1772722



Coding pin, prevents mismatching of up to six connectors with an identical number of positions

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### DIN rail mounting frame

DIN rail mounting frame - HC-SMR-B24 - 1687985



HEAVYCON DIN rail mounting frame, for contact inserts of type B24

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### Docking frame

Docking frames - HC-B 24-ANDOCK - 1586141



Docking frame for racks, for contact inserts of B24 type, with four M5 flat headed screws, rack balance x/y axis  $\pm 1.5$  mm

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### Mounting material



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### Accessories

Screw - HC-B-PES - 1604997



PE screw, for contact inserts HC-B / HC-BB / HC-DD / HC-D40 / HC-D64

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PE multiplier - HC-B-3PE - 1644326



PE multiplier, for three PE connections, for HC-B (besides HC-B..E..ZZ) / HC-BB / HC-DD / HC-D40 / HC-D64 contact inserts

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Strain relief clamp - HC-B-ZG - 1685327



Strain relief clamps contact inserts of series: B-, BB-, D 40, D 64, DD and HV, straight cable exit

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Strain relief clamp - HC-B-ZS - 1685330



Strain relief clamps contact inserts of series: B-, BB-, D 40, D 64, DD and HV, lateral cable exit

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