

## Contact insert - HC-B 24-EBUQ-2,5 - 1605585

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HEAVYCON female insert, B24 series, 24-pos., QUICKON-connection

### 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%.

**RoHS**

COMPLETE

### Key Commercial Data

|              |                                                                                                         |
|--------------|---------------------------------------------------------------------------------------------------------|
| Packing unit | 10 pc                                                                                                   |
| GTIN         | <br>4 017918 940676 |
| GTIN         | 4017918940676                                                                                           |

### Technical data

#### General

|                                    |                                                                                              |
|------------------------------------|----------------------------------------------------------------------------------------------|
| Note                               | Connectors may be operated only when there is no load/voltage.                               |
| Connection method                  | QUICKON connection                                                                           |
| Torque                             | 0.8 Nm ... 1.2 Nm (PE connection)                                                            |
|                                    | 0.5 Nm ... 0.8 Nm (Mounting screws for mounting in the HEAVYCON housing)                     |
| Number of connections per position | 1                                                                                            |
| Degree of pollution                | 3                                                                                            |
| Overvoltage category               | III                                                                                          |
| Number of positions                | 24+PE                                                                                        |
| Insertion/withdrawal cycles        | ≥ 500                                                                                        |
| Size                               | B24                                                                                          |
|                                    | B48                                                                                          |
| Contact numbering                  | 1 - 24                                                                                       |
| Conductor cross section            | 0.34 mm² ... 2.5 mm² (Litz wire structure VDE 0295, Class 1 - 5/litz wire diameter ≥ 0.2 mm) |

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## Technical data

### General

|                                                                       |                                                                                           |
|-----------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| 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 |

### 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                                                                                                                |
| Material wire insulation | PVC / PE                                                                                                          |
| 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  |

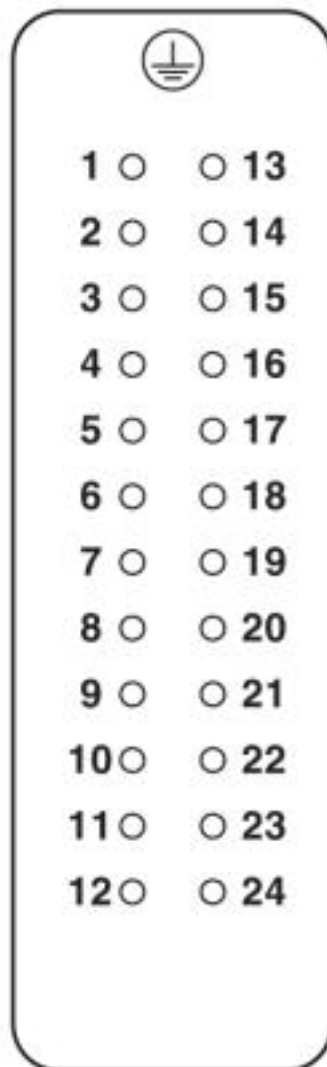
### Environmental Product Compliance

|            |                                                         |
|------------|---------------------------------------------------------|
| China RoHS | Environmentally friendly use period: unlimited = EFUP-e |
|            | No hazardous substances above threshold values          |

## Drawings

## Contact insert - HC-B 24-EBUQ-2,5 - 1605585

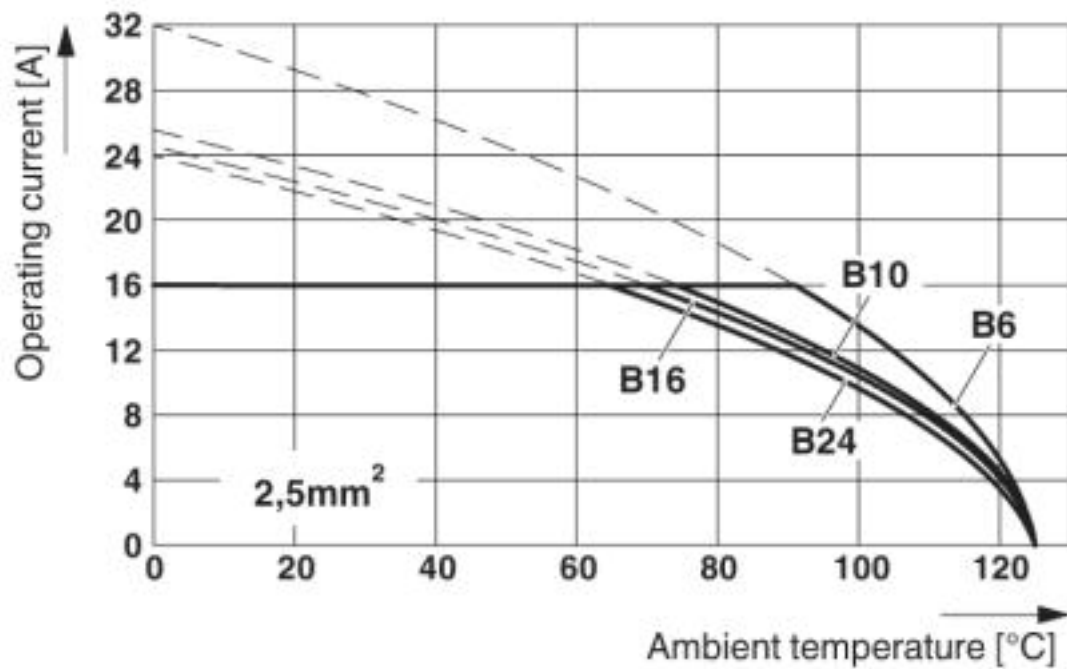
Schematic diagram



Connector pin assignment, connection side

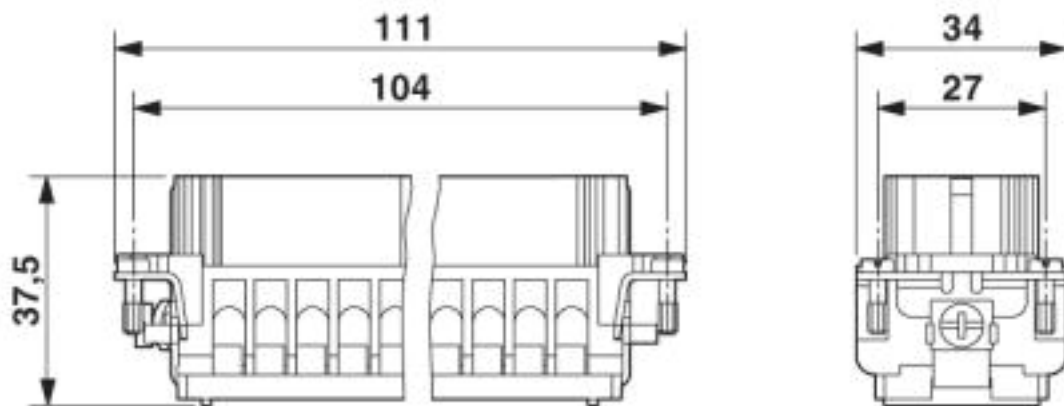
## Contact insert - HC-B 24-EBUQ-2,5 - 1605585

Diagram



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

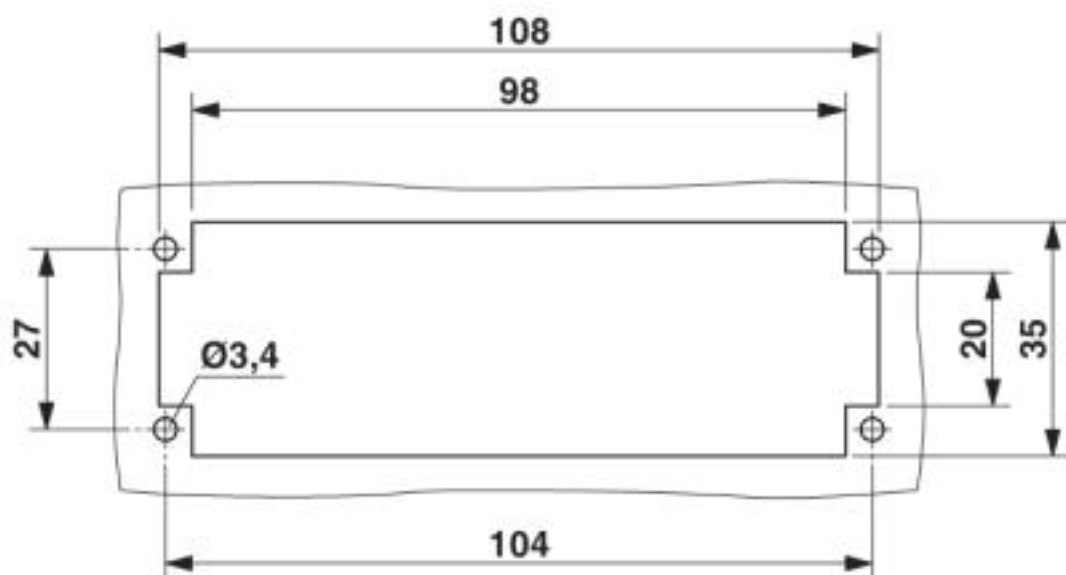
Dimensional drawing



Female insert

## Contact insert - HC-B 24-EBUQ-2,5 - 1605585

Dimensional drawing



Mounting cutout when used without housing

### Classifications

eCl@ss

|               |          |
|---------------|----------|
| eCl@ss 10.0.1 | 27440205 |
| 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 |
| ETIM 6.0 | EC000438 |
| ETIM 7.0 | EC000438 |

UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 30211923 |
| UNSPSC 7.0901 | 39121522 |
| UNSPSC 11     | 39121522 |

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### Classifications

#### UNSPSC

|              |          |
|--------------|----------|
| UNSPSC 12.01 | 39121522 |
| UNSPSC 13.2  | 39121522 |
| UNSPSC 18.0  | 39121522 |
| UNSPSC 19.0  | 39121522 |
| UNSPSC 20.0  | 39121522 |
| UNSPSC 21.0  | 39121522 |

### Approvals

#### Approvals

#### Approvals

CSA / UL Recognized / cUL Recognized / EAC / EAC / 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                                                                                  |                                                                                                                                                       |               |

|                    |  |                                                                                     |                                                                                                                                                       |               |
|--------------------|--|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| 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                                                                                |                                                                                                                                                       |               |

## Contact insert - HC-B 24-EBUQ-2,5 - 1605585

### Approvals

|               |    |
|---------------|----|
|               |    |
| mm²/AWG/kcmil | 14 |

|     |                                                                                   |                          |
|-----|-----------------------------------------------------------------------------------|--------------------------|
| EAC |  | RU C-<br>DE.AI30.B.01102 |
|-----|-----------------------------------------------------------------------------------|--------------------------|

|     |                                                                                   |                          |
|-----|-----------------------------------------------------------------------------------|--------------------------|
| EAC |  | RU C-<br>DE.BL08.B.00511 |
|-----|-----------------------------------------------------------------------------------|--------------------------|

|                  |                                                                                   |  |
|------------------|-----------------------------------------------------------------------------------|--|
| cULus Recognized |  |  |
|------------------|-----------------------------------------------------------------------------------|--|

### 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

Coding element - HC-CBU - 1676860



Coding socket for coding up to 16 connectors

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### Accessories

Coding bolt - HC-CB - 1772722



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

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### Mounting material

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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### Additional products



## Contact insert - HC-B 24-EBUQ-2,5 - 1605585

### Accessories

Contact insert - HC-B 24-ESTQ-2,5 - 1605640



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

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