

## Contact insert - HC-B 16-I-UT-F - 1648241

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HEAVYCON female insert, B16 series, 16-pos., screw connection

### Your advantages

- ✓ For fast coding with plastic profile
- ✓ For test pin 2 mm



### Key Commercial Data

|              |                                                                                                         |
|--------------|---------------------------------------------------------------------------------------------------------|
| Packing unit | 1 pc                                                                                                    |
| GTIN         | <br>4 046356 092371 |
| GTIN         | 4046356092371                                                                                           |

### Technical data

#### General

|                                    |                                                                          |
|------------------------------------|--------------------------------------------------------------------------|
| Note                               | for flexible conductors with or without ferrules                         |
|                                    | Connectors may be operated only when there is no load/voltage.           |
| Connection method                  | Screw connection                                                         |
| Tightening torque                  | 0.5 Nm ... 0.8 Nm                                                        |
| Torque                             | 0.8 Nm ... 1.2 Nm (PE connection)                                        |
|                                    | 0.5 Nm ... 0.8 Nm (Mounting screws for mounting in the HEAVYCON housing) |
| Screwdriver blade                  | 0.5 x 3.5 mm                                                             |
| Number of connections per position | 1                                                                        |
| Degree of pollution                | 3                                                                        |
| Overvoltage category               | III                                                                      |
| Number of positions                | 16+PE                                                                    |
| Insertion/withdrawal cycles        | ≥ 500                                                                    |
| Size                               | B16                                                                      |

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## Technical data

### General

|                                         |                                                                                           |
|-----------------------------------------|-------------------------------------------------------------------------------------------|
|                                         | B32                                                                                       |
| Contact numbering                       | 1 - 16                                                                                    |
| Conductor cross section                 | 0.5 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>                                               |
| Connection cross section AWG            | 20 ... 14                                                                                 |
| Stripping length of the individual wire | 8 mm                                                                                      |
| 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) |
|---------------------------------|------------------------------------------------------|

### Material data

|                          |                                                                                                                   |
|--------------------------|-------------------------------------------------------------------------------------------------------------------|
| Contact material         | Copper alloy                                                                                                      |
| Contact surface material | Ag                                                                                                                |
| Contact carrier material | PC                                                                                                                |
| Standards/regulations    | PC: Fire protection in rail vehicles - requirement sets R22 and R23 acc. to DIN EN 45545-2 (Risk level HL1 - HL2) |

### Electrical characteristics

|                       |       |
|-----------------------|-------|
| Rated voltage (III/3) | 500 V |
| Rated surge voltage   | 6 kV  |
| Rated current         | 20 A  |

### Standards and Regulations

|                                        |                        |
|----------------------------------------|------------------------|
| Connection in acc. with standard       | CSA                    |
| Constructional and testing regulations | DIN EN 61984           |
|                                        | DIN EN 60664           |
|                                        | IEC 60352              |
| Flammability rating according to UL 94 | V0                     |
| Standards/regulations                  | acc. to DIN EN 45545-2 |

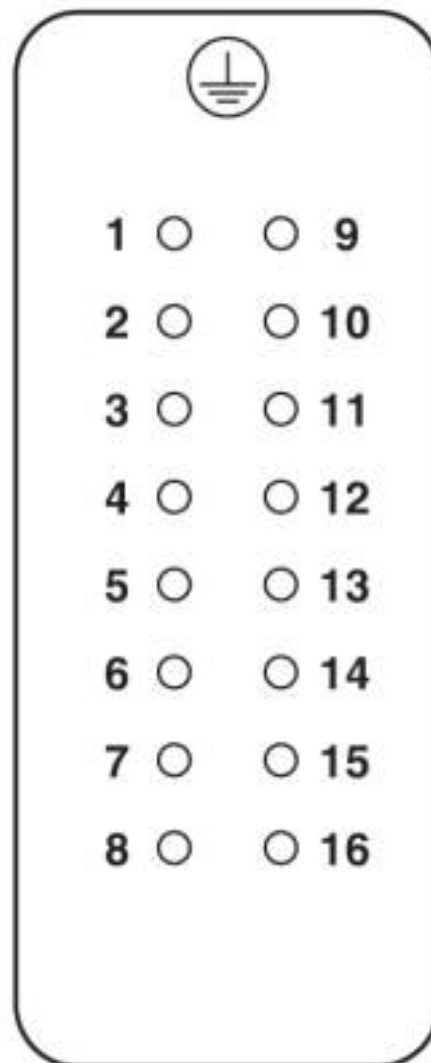
### Environmental Product Compliance

|            |                                                         |
|------------|---------------------------------------------------------|
| REACH SVHC | Lead 7439-92-1                                          |
| China RoHS | Environmentally friendly use period: unlimited = EFUP-e |
|            | No hazardous substances above threshold values          |

## Drawings

## Contact insert - HC-B 16-I-UT-F - 1648241

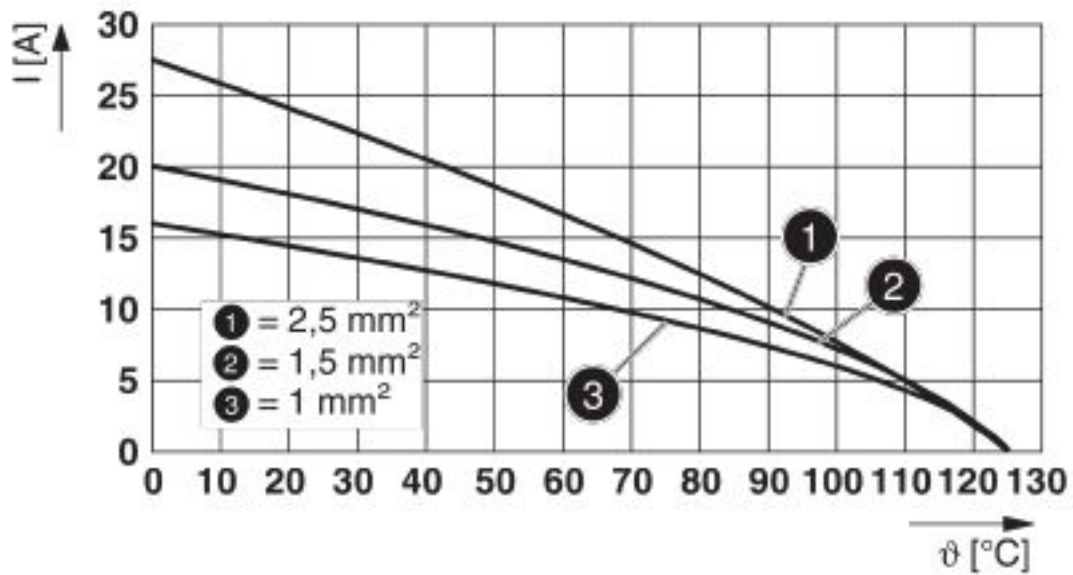
Schematic diagram



Connector pin assignment, connection side

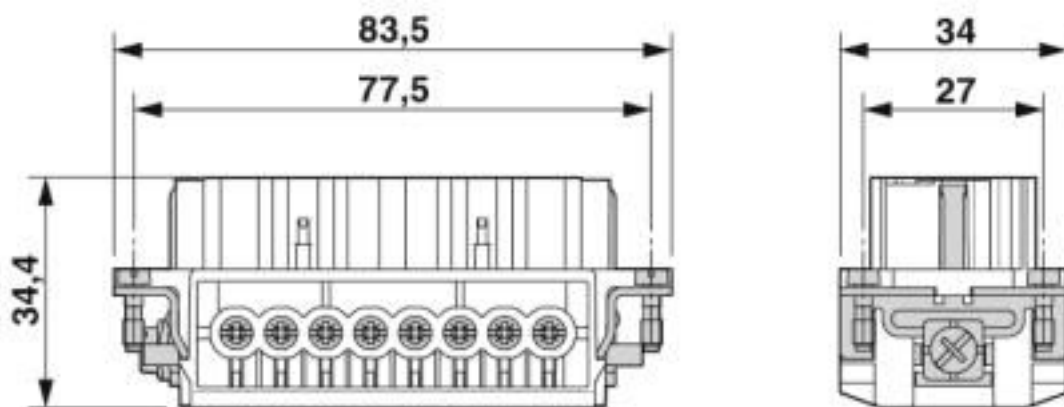
## Contact insert - HC-B 16-I-UT-F - 1648241

Diagram



Derating diagram

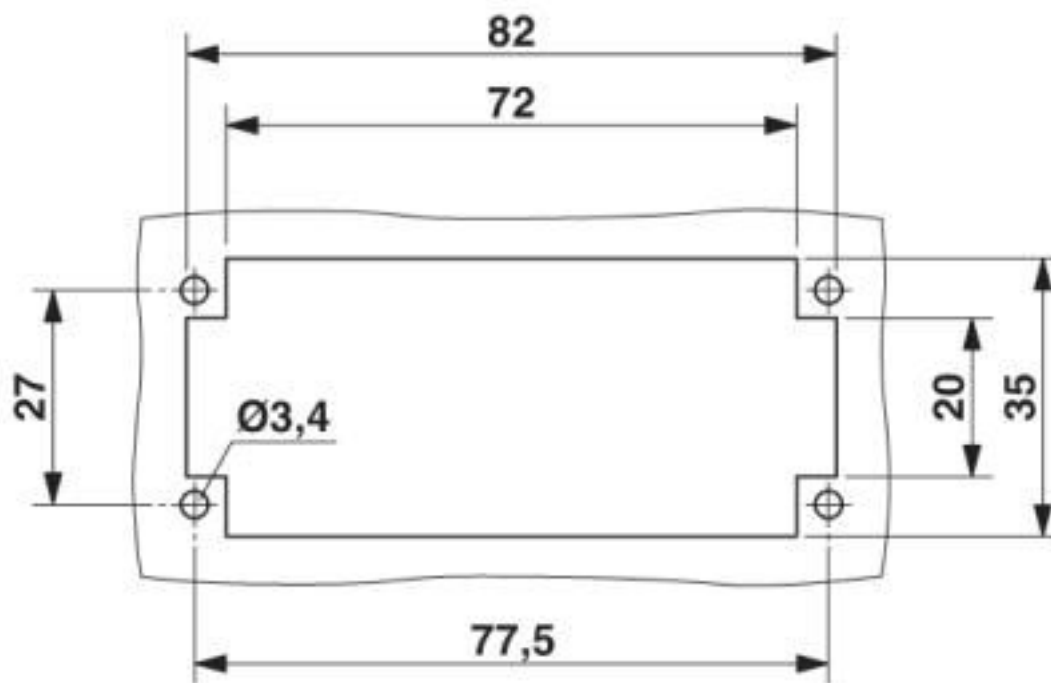
Dimensional drawing



Female insert

## Contact insert - HC-B 16-I-UT-F - 1648241

Dimensional drawing



Mounting cutout when used without housing

### Classifications

eCl@ss

|               |          |
|---------------|----------|
| eCl@ss 10.0.1 | 27440205 |
| eCl@ss 11.0   | 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 3.0 | EC000438 |
| ETIM 4.0 | EC000438 |
| ETIM 5.0 | EC000438 |
| ETIM 6.0 | EC000438 |
| ETIM 7.0 | EC000438 |

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### Classifications

#### UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 30211923 |
| UNSPSC 7.0901 | 39121522 |
| UNSPSC 11     | 39121522 |
| 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 / EAC / EAC / UL Recognized / DNV GL

#### 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 |                                                                                     | 13 A                                                                                                                                    |                |
| mm²/AWG/kcmil      |                                                                                     | 22-14                                                                                                                                   |                |

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

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

## Contact insert - HC-B 16-I-UT-F - 1648241

### Approvals

|                    |                                                                                   |                                                                                                                                                       |               |
|--------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| 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 |                                                                                   | 16 A                                                                                                                                                  |               |
| mm²/AWG/kcmil      |                                                                                   | 14                                                                                                                                                    |               |

|        |                                                                                   |                                                                                   |            |
|--------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------|
| DNV GL |  | <a href="https://approvalfinder.dnvgl.com/">https://approvalfinder.dnvgl.com/</a> | TAE000037S |
|--------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------|

### Accessories

#### Accessories

#### Coding element

Coding profile - CP-HC - 1686478



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

Coding element - HC-CBU - 1676860



Coding socket for coding up to 16 connectors

Coding bolt - HC-CB - 1772722



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

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### Accessories

Coding element - HC-CST - 1676857



Coding peg for coding up to 16 connectors

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### Docking frame

Docking frames - HC-B 16-ANDOCK - 1586138



Docking frame for racks, for contact inserts of B16 type, with four M5 flat headed screws, rack balance x/y axis  $\pm 1.5$  mm

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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



## Contact insert - HC-B 16-I-UT-F - 1648241

### Accessories

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 16-I-UT-M - 1648238



HEAVYCON male insert, B16 series, 16-pos., screw connection

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