

# Contact insert - HC-B16-I-PT-F - 1407731

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HEAVYCON socket insert, B16 series, 16 + PE-pos., push-in connection

## Your advantages

- For fast coding with plastic profile
- Conductor connection without tools
- Significant time savings during conductor connection
- Test connection for 2 mm test plug



## Key Commercial Data

|              |               |
|--------------|---------------|
| Packing unit | 1 pc          |
| GTIN         |               |
| GTIN         | 4046356777568 |

## Technical data

### General

|                                    |  |
|------------------------------------|--|
| Note                               | only use flexible conductors with ferrules                               |
|                                    | Connectors may be operated only when there is no load/voltage.           |
| Connection method                  | Push-in 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                | 16+PE  |
| Insertion/withdrawal cycles        | ≥ 500  |
| Size                               | B16  |
|                                    | B32  |

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## Technical data

### General

|                              |   |
|------------------------------|---|
| Contact numbering            | 1 - 16  |
| Conductor cross section      | 0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>  |
| Connection cross section AWG | 26 ... 14   |
| Stripping length             | 8 mm ... 10 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/Sn (tarnish protection)  |
| 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) |
|                          | PC: 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                  |
| Rated current         | 16 A (power contacts) |

### Standards and Regulations

|  |    |
|--|----|
| Flammability rating according to UL 94 | V0 |
|--|----|

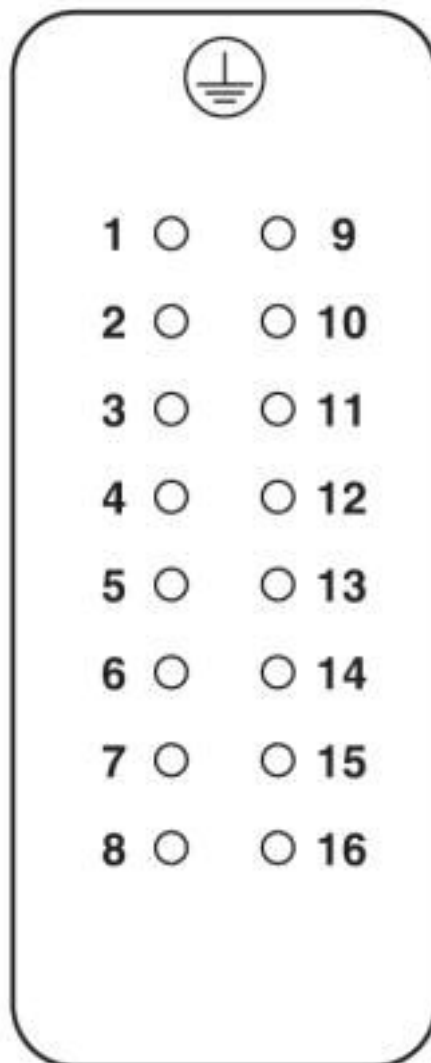
### Environmental Product Compliance

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

## Drawings

# Contact insert - HC-B16-I-PT-F - 1407731

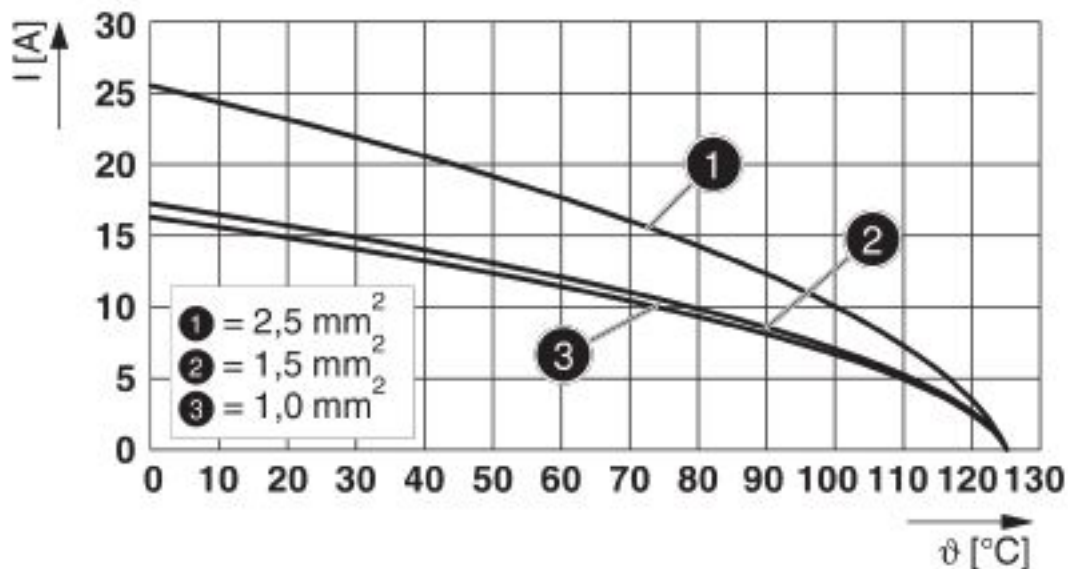
Schematic diagram



Connector pin assignment, connection side

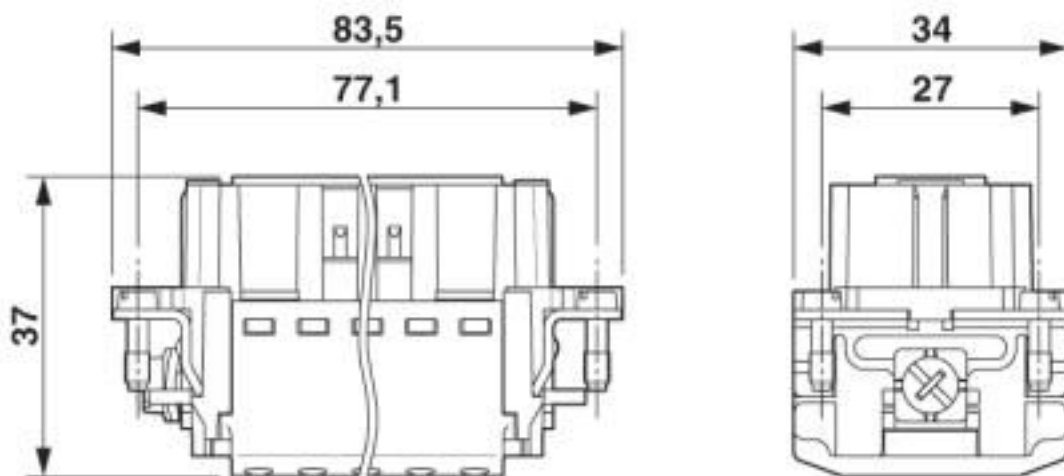
# Contact insert - HC-B16-I-PT-F - 1407731

Diagram



Derating diagram

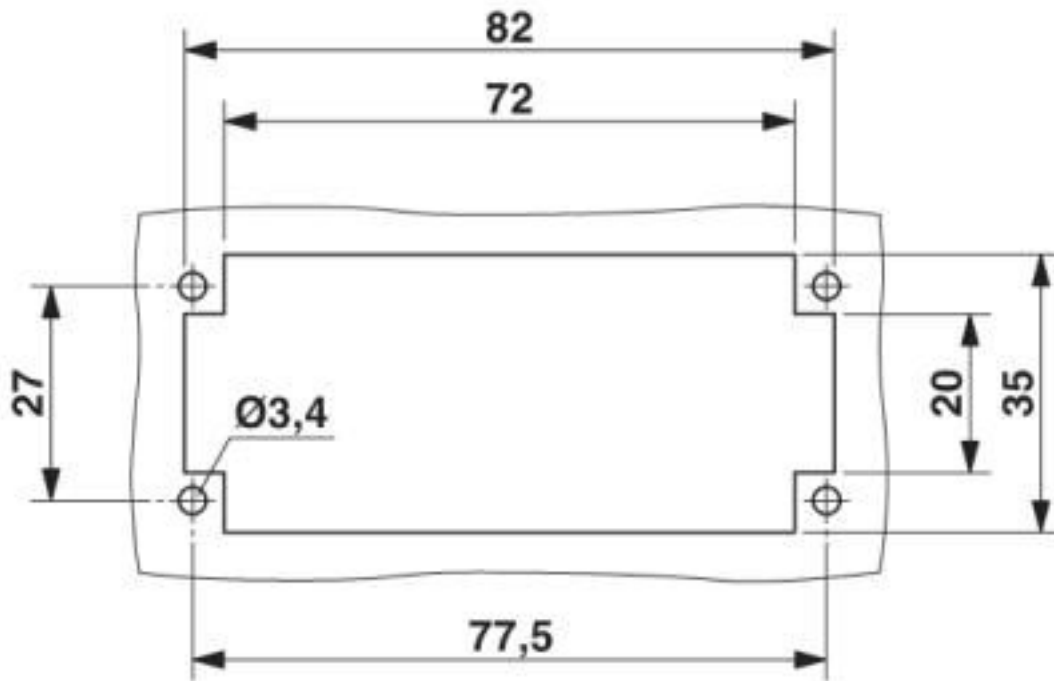
Dimensional drawing



Dimensional drawing

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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 3.0 | EC000438 |
| ETIM 4.0 | EC000438 |
| ETIM 5.0 | EC000438 |
| ETIM 6.0 | EC000438 |
| ETIM 7.0 | EC000438 |

UNSPSC

|             |          |
|-------------|----------|
| UNSPSC 6.01 | 30211923 |
|-------------|----------|

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## Classifications

### UNSPSC

|               |          |
|---------------|----------|
| 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 / UL Recognized / EAC / DNV GL / EAC

#### Ex Approvals

### Approval details

|                            |   |   |       |
|----------------------------|---|---|-------|
| CSA                        |  | <a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a> | 13631 |
| Nominal voltage UN         |   | 600 V   |       |
| Nominal current IN         |   | 10 A  |       |
| mm <sup>2</sup> /AWG/kcmil |   | 14  |       |

|                            |   |   |               |
|----------------------------|---|---|---------------|
| 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         |   | 13 A  |               |
| mm <sup>2</sup> /AWG/kcmil |   | 14  |               |

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

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## Approvals

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

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

## 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

Coding element - HC-CST - 1676857



Coding peg for coding up to 16 connectors

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### Accessories

#### Crimping tool

Crimping pliers - CRIMPFOX 6 - 1212034



Crimping pliers, for ferrules without insulating collar according to DIN 46228 Part 1 and ferrules with insulating collar according to DIN 46228 Part 4, 0.25 mm<sup>2</sup> ... 6.0 mm<sup>2</sup>, lateral entry, trapezoidal crimp

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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 +/- 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

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## Contact insert - HC-B16-I-PT-F - 1407731

### 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-B16-I-PT-M - 1407732



HEAVYCON pin insert, B16 series, 16 + PE-pos., push-in connection

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