

# Contact insert - HC-D 40-I-CT-M - 1584415

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HEAVYCON male insert, D40 series, 40-pos., crimp connection

## Your advantages

- Can be used in rail vehicles, satisfy DIN EN 45545-2 with requirement sets R22, R23, and R24 in hazard levels HL1, HL2, and HL3.
- For fast coding with plastic profile (Order No. 1410916, type CP-HC-S)



## Key Commercial Data

|              |               |
|--------------|---------------|
| Packing unit | 1 pc          |
| GTIN         |               |
| GTIN         | 4046356142670 |

## Technical data

### General

|                                    |   |
|------------------------------------|---|
| Note                               | For HEAVYCON ADVANCE and HEAVYCON housing of type B16, crimp contacts: CK 1,6-ED... (not included in scope of supply) |
|                                    | Connectors may be operated only when there is no load/voltage.  |
|                                    | It is imperative that guide pins (HC-CST) and sockets (HC-CBU) are used to prevent tip collision due to misalignment. |
|                                    | This product replaces 1679485 HC-D 40-ESTC-R  |
| Connection method                  | Crimp 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                | 40+PE   |
| Insertion/withdrawal cycles        | ≥ 500   |

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## Technical data

### General

|   |   |
|---|---|
| Size                                    | B16   |
|   | B32   |
| Conductor cross section                 | 0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>  |
| Connection cross section AWG            | 26 ... 14   |
| Stripping length of the individual wire | 8 mm (0.14 ... 1.5 mm <sup>2</sup> )  |
|   | 6 mm (2.5 mm <sup>2</sup> )   |
| 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 (alternatively Au)   |
| Contact carrier material | PC  |
| Standards/regulations    | PC: Fire protection in rail vehicles - requirement sets R22, R23, and R24 acc. to DIN EN 45545-2 (Risk level HL1 - HL3) |

### Electrical characteristics

|                       |       |
|-----------------------|-------|
| Rated voltage (III/3) | 250 V |
| Rated surge voltage   | 4 kV  |
| Rated current         | 10 A  |

### Standards and Regulations

|  |                            |
|--|----------------------------|
| Constructional and testing regulations | DIN VDE 0627/86            |
|  | DIN VDE 0110/02.79         |
|  | DIN VDE 0110-1/04.97       |
|  | IEC 60664-1, DIN IEC 60512 |
|  | IEC 60352                  |
| Flammability rating according to UL 94 | V0                         |
| Standards/regulations                  | acc. to DIN EN 45545-2     |

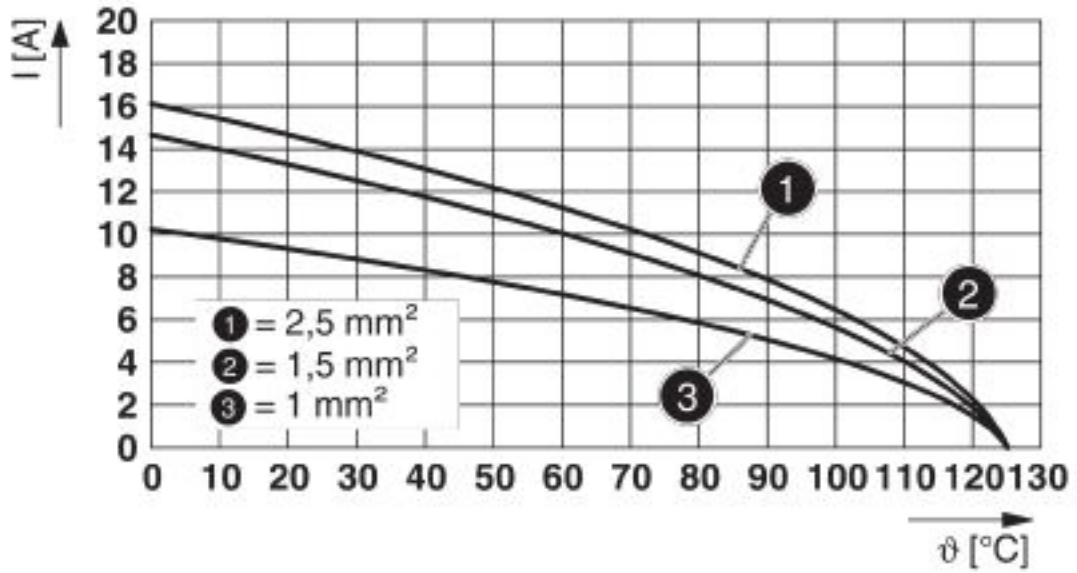
### Environmental Product Compliance

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

## Drawings

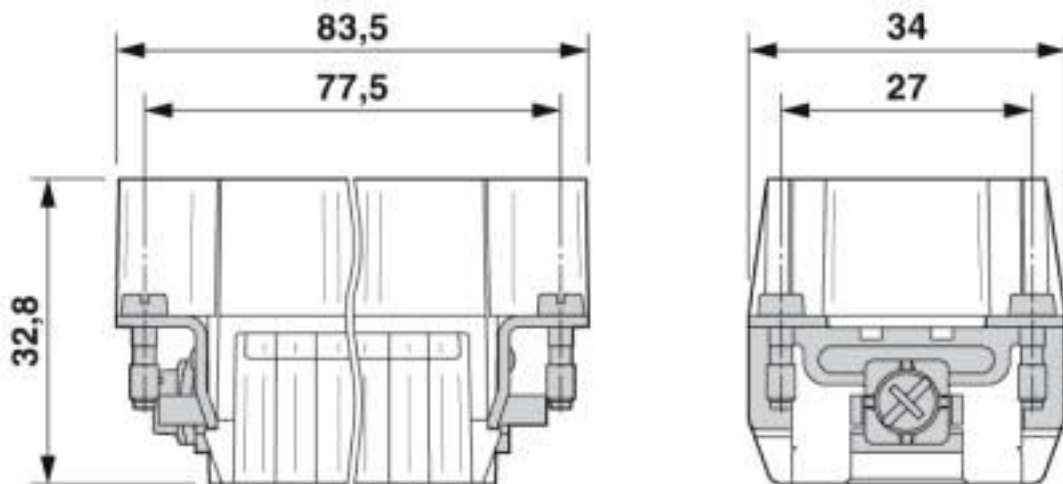
# Contact insert - HC-D 40-I-CT-M - 1584415

Diagram



Derating diagram turned contacts

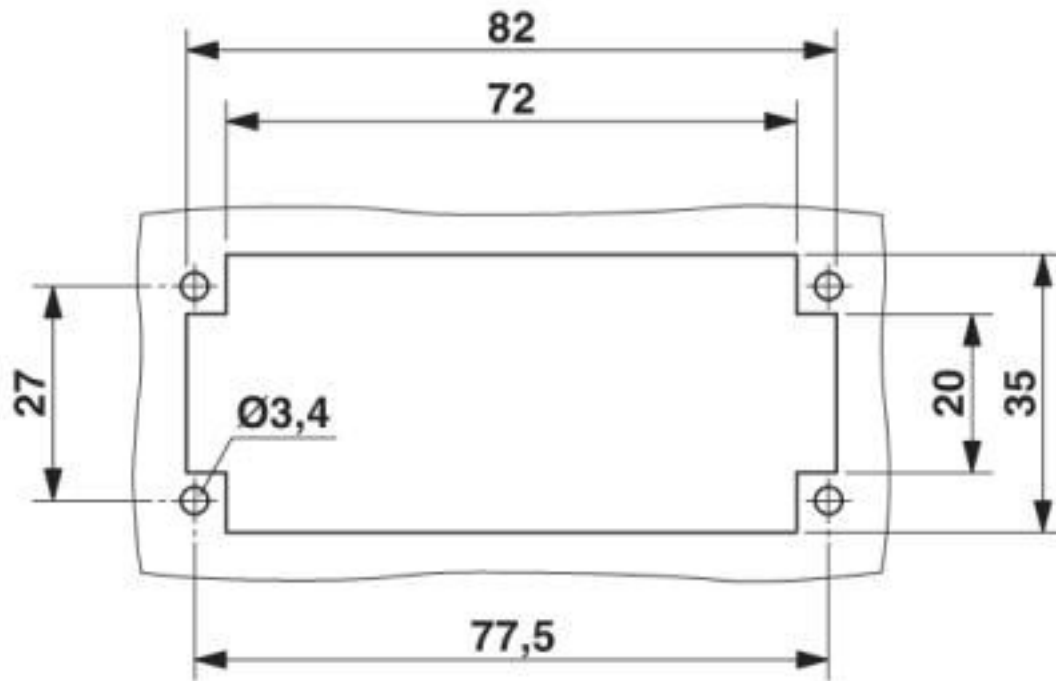
Dimensional drawing



Male insert

## Contact insert - HC-D 40-I-CT-M - 1584415

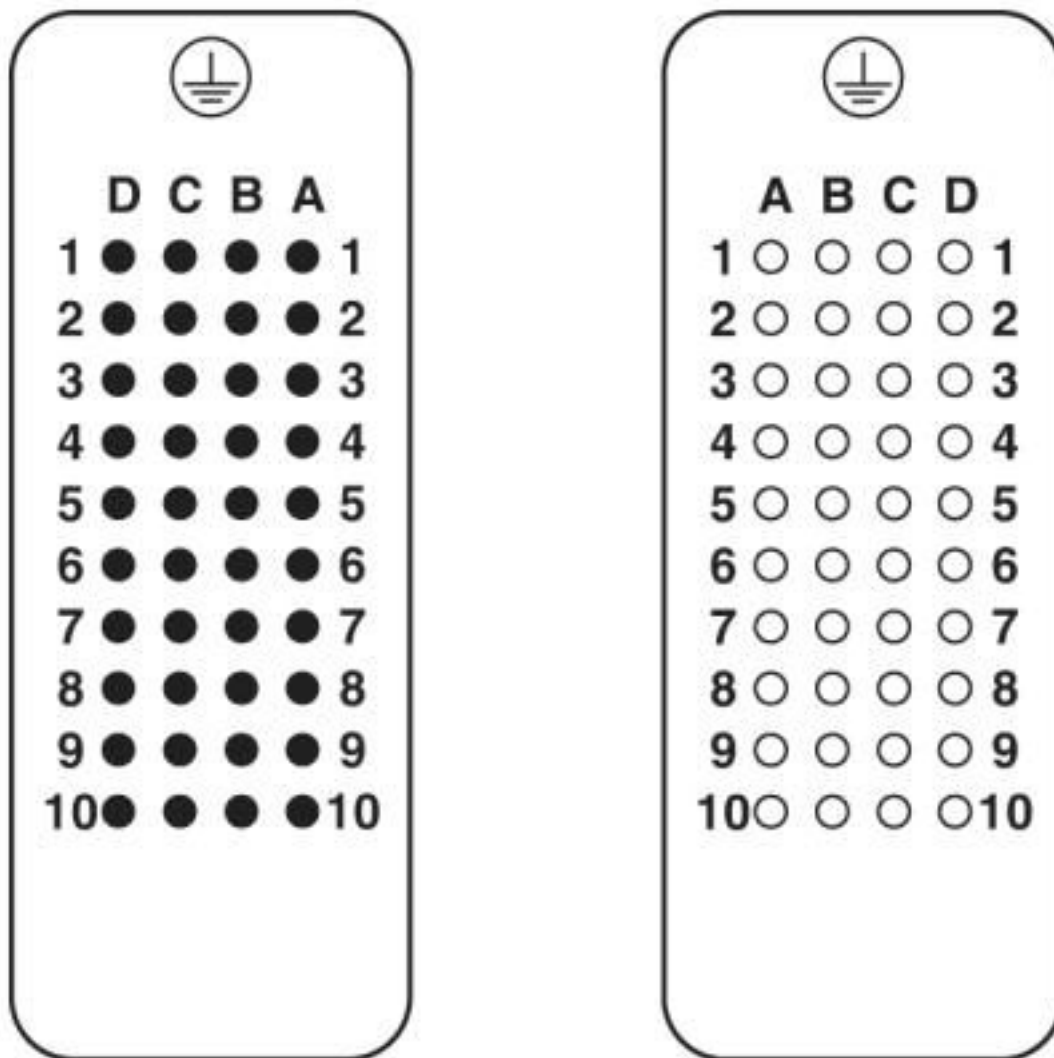
Dimensional drawing



Mounting cutout when used without housing

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Schematic diagram



Connector pin assignment connection side: Left pin; right socket

## 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 |

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## Classifications

### ETIM

|          |          |
|----------|----------|
| ETIM 2.0 | EC000438 |
| 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 |
| 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         | 7 A   |   |       |
| mm <sup>2</sup> /AWG/kcmil | 14  |   |       |

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## 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 |  | 10 A  |               |
| mm²/AWG/kcmil      |  | 14  |               |

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

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

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

## Accessories

### Accessories

#### Assembly tool

Assembly tool - UNIFOX MT-CK 1.6/2.5 - 1089092



Assembly tool, for CK 1.6... crimp contacts for small conductor cross sections

#### Coding element

Coding element - HC-CBU - 1676860



Coding socket for coding up to 16 connectors

## Contact insert - HC-D 40-I-CT-M - 1584415

### Accessories

Coding bolt - HC-CB - 1772722



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

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Coding element - HC-CST - 1676857



Coding peg for coding up to 16 connectors

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Coding profile - CP-HC-S - 1410916



Coding profile, 4 elements per star, for insertion in a coding keyway, for contact inserts HC-BB... / HC-A10-I-UT... / HC-A16-I-UT...

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### Crimp contact

Crimp contact - CK1,6-ED-0,37ST AG - 1663336



Turned 1.6 crimp contact, individual male contact, core diameter 0.14 to 0.37 mm<sup>2</sup>, silver-plated

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Crimp contact - CK1,6-ED-0,50ST AG - 1663349



Turned 1.6 crimp contact, individual male contact, core diameter 0.5 mm<sup>2</sup>, silver-plated

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## Contact insert - HC-D 40-I-CT-M - 1584415

### Accessories

Crimp contact - CK1,6-ED-0,75ST AG - 1663352



Turned 1.6 crimp contact, individual male contact, core diameter 0.75 mm<sup>2</sup>, silver-plated

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Crimp contact - CK1,6-ED-1,00ST AG - 1663365



Turned 1.6 crimp contact, individual male contact, core diameter 0.75 to 1.00 mm<sup>2</sup>, silver-plated

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Crimp contact - CK1,6-ED-1,50ST AG - 1663378



Turned 1.6 crimp contact, individual male contact, core diameter 1.5 mm<sup>2</sup>, silver-plated

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Crimp contact - CK1,6-ED-2,50ST AG - 1663381



Turned 1.6 crimp contact, individual male contact, core diameter 2.5 mm<sup>2</sup>, silver-plated

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Crimp contact - CK1,6-ED-0,37ST AU - 1674901



Turned 1.6 crimp contact, individual male contact, core diameter 0.14 to 0.37 mm<sup>2</sup>, gold-plated

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## Contact insert - HC-D 40-I-CT-M - 1584415

### Accessories

Crimp contact - CK1,6-ED-0,50ST AU - 1672453



Turned 1.6 crimp contact, individual male contact, core diameter 0.5 mm<sup>2</sup>, gold-plated

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Crimp contact - CK1,6-ED-0,75ST AU - 1674914



Turned 1.6 crimp contact, individual male contact, core diameter 0.75 mm<sup>2</sup>, gold-plated

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Crimp contact - CK1,6-ED-1,00ST AU - 1674888



Turned 1.6 crimp contact, individual male contact, core diameter 0.75 to 1.00 mm<sup>2</sup>, gold-plated

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Crimp contact - CK1,6-ED-1,50ST AU - 1674875



Turned 1.6 crimp contact, individual male contact, core diameter 1.5 mm<sup>2</sup>, gold-plated

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Crimp contact - CK1,6-ED-2,50ST AU - 1674927



Turned 1.6 crimp contact, individual male contact, core diameter 2.5 mm<sup>2</sup>, gold-plated

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## Contact insert - HC-D 40-I-CT-M - 1584415

### Accessories

Crimp contact - CK1,6-ER-1,00ST OIC AG - 1004360



Crimp contact, contact diameter: 1.6 mm, rolled, Pin, contact material: Cu alloy, nickel-plated, contact surface: silver-plated, connection cross section: 0.34 mm<sup>2</sup> ... 1 mm<sup>2</sup> AWG 22 ... 17

Crimp contact - CK1,6-ER-2,50ST OIC AG - 1004365



Crimp contact, contact diameter: 1.6 mm, rolled, Pin, contact material: Cu alloy, nickel-plated, contact surface: silver-plated, connection cross section: 1.5 mm<sup>2</sup> ... 2.5 mm<sup>2</sup> AWG 16 ... 14

Crimp contact - CK1,6-BR-1,00ST OIC AG - 1004380



Crimp contact, contact diameter: 1.6 mm, rolled, Pin, contact material: Cu alloy, nickel-plated, contact surface: silver-plated, connection cross section: 0.34 mm<sup>2</sup> ... 1 mm<sup>2</sup> AWG 22 ... 17

Crimp contact - CK1,6-BR-2,50ST OIC AG - 1004382



Crimp contact, contact diameter: 1.6 mm, rolled, Pin, contact material: Cu alloy, nickel-plated, contact surface: silver-plated, connection cross section: 1.5 mm<sup>2</sup> ... 2.5 mm<sup>2</sup> AWG 16 ... 14

### Crimping tool

Crimping pliers - CRIMPFOX-TC 4 - 1212113



Crimping pliers, for CK 1,6-ED..., CK 2,5-ED..., CK 4,0-ED... turned contacts, 4 marked die stations, unlockable pressure lock, lateral entry, incl. positioning tool

### Docking frame

## Contact insert - HC-D 40-I-CT-M - 1584415

### Accessories

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

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

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

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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### Universal tools

## Contact insert - HC-D 40-I-CT-M - 1584415

### Accessories

Contact removal tool - UNIFOX RT-CK 1.6 - 1072069



Contact removal tool, for turned and rolled CK- 1.6-... contacts

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### Additional products

Contact insert - HC-D 40-I-CT-F - 1584428



HEAVYCON female insert, D40 series, 40-pos., crimp connection

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