

HC-B 6-I-CT-F - Contact insert



1648160

<https://www.phoenixcontact.com/us/products/1648160>

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Contact insert, number of positions: 6+PE, size: B6, number of connections per position: 1, Socket, Crimp connection, 500 V, 16 A, 0.5 mm² ... 4 mm², application: Power

Your advantages

- For fast coding with plastic profile
- Shock and vibration-resistant in accordance with DIN EN 61373

Commercial data

| | |
|--------------------------------------|---------------|
| Item number | 1648160 |
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Sales key | BF61 |
| Product key | AF7ABC |
| GTIN | 4046356092289 |
| Weight per piece (including packing) | 38.2 g |
| Weight per piece (excluding packing) | 37 g |
| Customs tariff number | 85366990 |
| Country of origin | CN |

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Technical data

Mounting

| | |
|---------------|---|
| Assembly note | To ensure correct use, installation in housing with IP54 protection or better is required |
| | Remove the crimp contact using a screwdriver. The opening for the screwdriver is next to the opening where the conductor is inserted. |

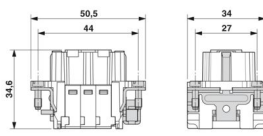
Product properties

| | |
|------------------------------------|--|
| Product type | Contact insert with a fixed no. of positions |
| Series | HC-B |
| Application | Power |
| Type | B6 |
| Number of positions | 6 |
| Connection profile | 6+PE |
| Contact numbering | 1 - 6 |
| Number of connections per position | 1 |
| Contact material type | turned |

Insulation characteristics

| | |
|----------------------|-----|
| Overvoltage category | III |
| Degree of pollution | 3 |

Dimensions

| | |
|---------------------------------|--|
| Dimensional drawing |  |
| Width | 34 mm |
| Height | 34.6 mm |
| Length | 50.5 mm |
| Drill hole distance, horizontal | 44 mm |

Mechanical characteristics

| | |
|------------------|--------|
| Contact diameter | 2.5 mm |
|------------------|--------|

Connection data

Connection technology

| | |
|------------------------------------|------------------|
| Connection technology | Crimp connection |
| Number of connections per position | 1 |
| Connection in acc. with standard | IEC / EN |

Conductor connection

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| | |
|---|--|
| Conductor cross-section | 0.5 mm ² ... 4 mm ² |
| Connection cross section AWG | 20 ... 12 |
| Tightening torque | 0.8 Nm ... 1.2 Nm (PE connection) |
| | 0.5 Nm ... 0.8 Nm (Mounting screws for mounting in the HEAVYCON housing) |
| Stripping length of the individual wire | 7.5 mm |

Electrical properties

| | |
|-----------------------|----------------|
| Rated voltage (III/3) | 500 V |
| Rated surge voltage | 6 kV |
| Rated current | 16 A |
| SCCR | 5 kA (UL 2237) |

Mechanical properties

Mechanical data

| | |
|-----------------------------|-------|
| Insertion/withdrawal cycles | ≥ 500 |
|-----------------------------|-------|

Material specifications

| | |
|--|-----------------------|
| Flammability rating according to UL 94 | V0 |
| Contact material | Copper alloy |
| Contact surface material | Ag (alternatively Au) |
| Contact carrier material | PC |
| Standards/regulations | PC |

Environmental and real-life conditions

Ambient conditions

| | |
|---------------------------------|--|
| Degree of protection | IP20 |
| Ambient temperature (operation) | -40 °C ... 125 °C (including heating up of contacts) |

Standards and regulations

| | |
|--|--------------|
| Constructional and testing regulations | DIN EN 61984 |
| | DIN EN 60664 |
| | IEC 60352 |
| Tests | DIN EN 61984 |
| | DIN EN 60664 |
| | IEC 60352 |

Testing

| | |
|-----------------------|---|
| Standards/regulations | PC: Fire protection in rail vehicles - requirement sets R22, R23, and R24 acc. to DIN EN 45545-2 (Risk level HL1 - HL3) |
|-----------------------|---|

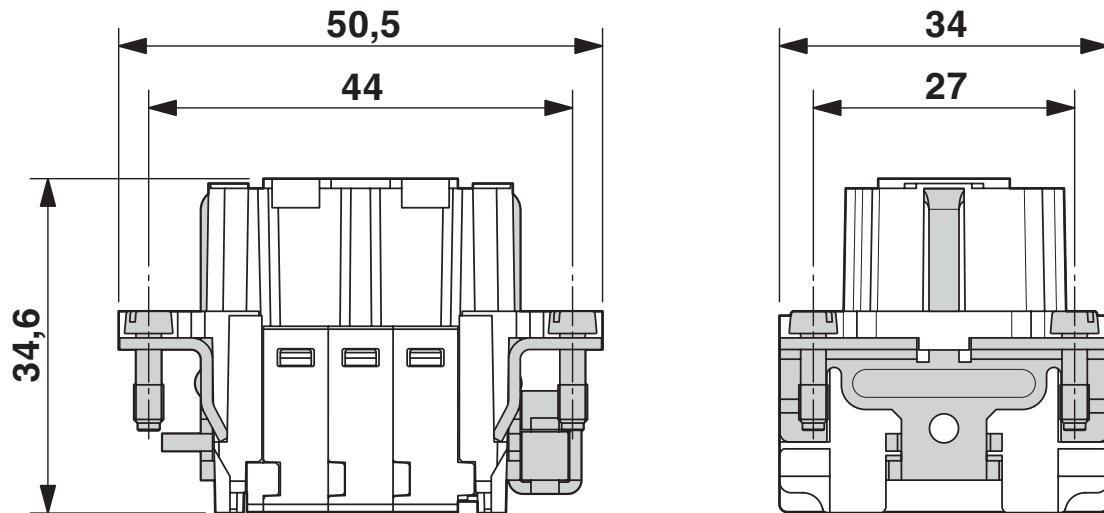
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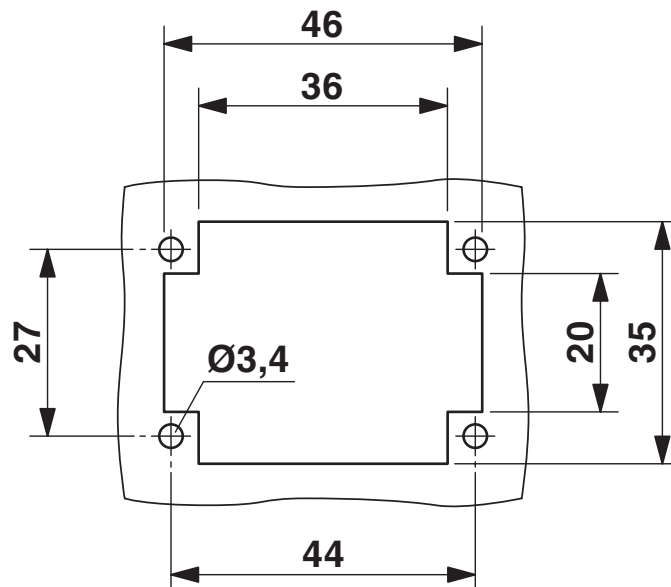
Drawings

Dimensional drawing



Female insert

Dimensional drawing



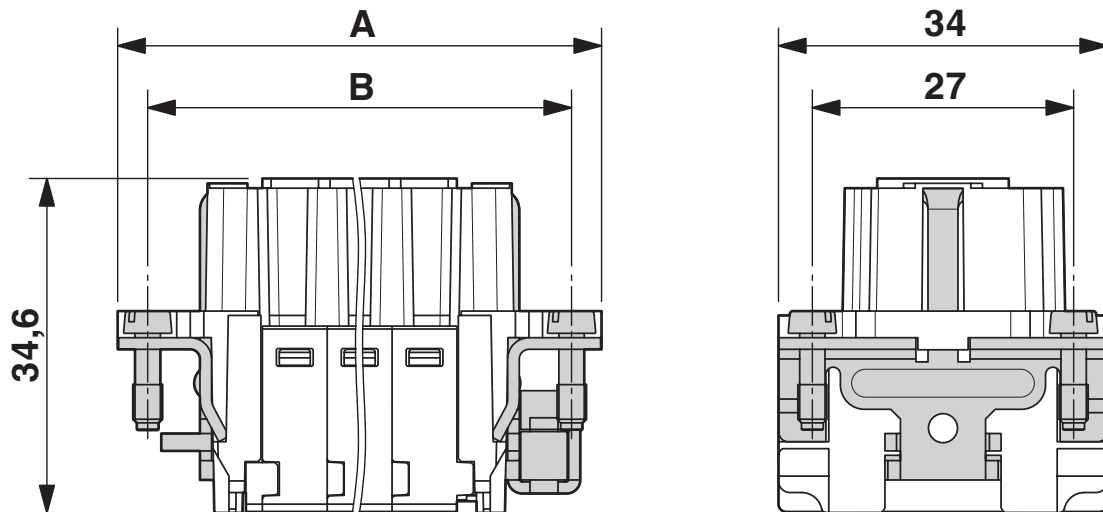
Mounting cutout when used without housing

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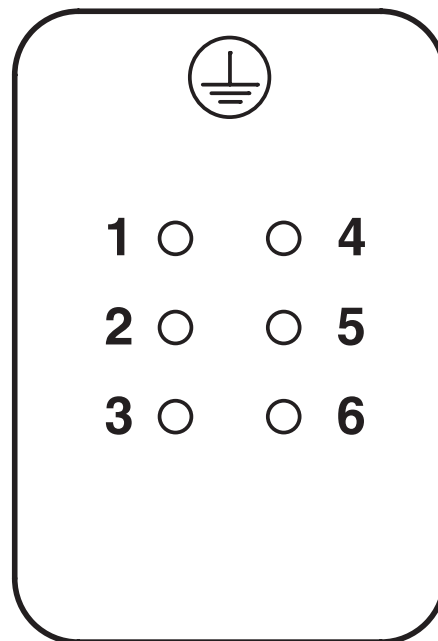
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Dimensional drawing



Schematic diagram



Connector pin assignment, connection side

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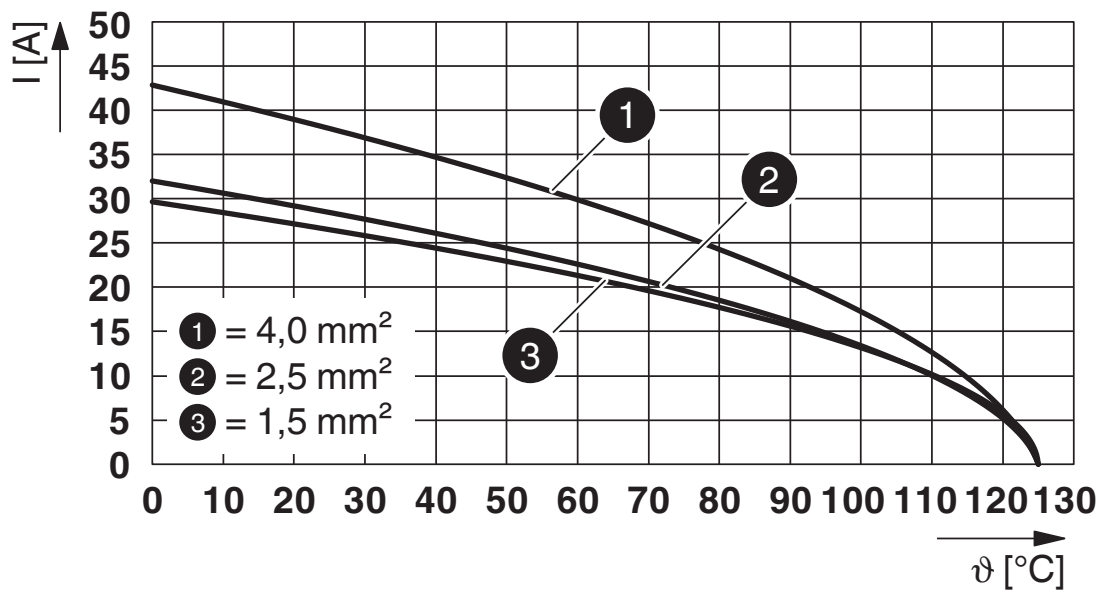
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Schematic diagram



Coding options

Diagram



Derating diagram

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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1648160>

DNV

Approval ID: TAE000037S



CSA

Approval ID: 013631_6233_01

| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
|-------|-----------------------|-----------------------|-------------------|-----------------------------|
| keine | | | | |
| | 600 V | 20 A | 20 - 12 | - |



cULus Recognized

Approval ID: E468743

| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
|-------|-----------------------|-----------------------|-------------------|-----------------------------|
| keine | | | | |
| | 600 V | 13 A | - | - |



cULus Recognized

Approval ID: E468743

| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
|-------|-----------------------|-----------------------|-------------------|-----------------------------|
| keine | | | | |
| | 600 V | 14 A | - | - |

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Classifications

ECLASS

| | |
|-------------|----------|
| ECLASS-13.0 | 27440205 |
| ECLASS-15.0 | 27440205 |

ETIM

| | |
|-----------|----------|
| ETIM 10.0 | EC000438 |
|-----------|----------|

UNSPSC

| | |
|-------------|----------|
| UNSPSC 21.0 | 39121500 |
|-------------|----------|

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Environmental product compliance

EU RoHS

| | |
|---|--------------------|
| Fulfills EU RoHS substance requirements | Yes, No exemptions |
|---|--------------------|

China RoHS

| | |
|--|--|
| Environment friendly use period (EFUP) | EFUP-E |
| | No hazardous substances above the limits |

EU REACH SVHC

| | |
|-------------------------------------|--|
| REACH candidate substance (CAS No.) | Perfluorobutane sulfonic acid (PFBS) and its salts(CAS: n/a) |
| SCIP | 7d7c03fc-2c4d-4648-b29f-4b009c087a26 |

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