

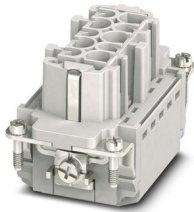
Contact insert - HC-HV03-I-PT-F

1407743

<https://www.phoenixcontact.com/pc/products/1407743>



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HEAVYCON socket insert, HV3 series, 3-pos. + 2 switching contacts + PE, 830 V, push-in connection

Your advantages

- Easy installation without tools, even when mounted, with push-in connection technology
- Shortest installation time compared to other connection technologies
- Quick and effortless wiring, in particular when space is tight
- Automatic cabling with robots possible
- Safe wiring and operation with color-coded actuators
- Shock and vibration-resistant in accordance with DIN EN 61373
- Cost-effective and fast coding with plastic profiles

Contact insert - HC-HV03-I-PT-F



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Commercial Data

| | |
|--------------------------------------|---------------------|
| Item number | 1407743 |
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Product Key | BF7ABG |
| Catalog Page | Page 559 (C-2-2019) |
| GTIN | 4046356777483 |
| Weight per Piece (including packing) | 56.7 g |
| Weight per Piece (excluding packing) | 56.7 g |
| Customs tariff number | 85366990 |
| Country of origin | CN |

Contact insert - HC-HV03-I-PT-F



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Technical Data

Notes

| | |
|---------|--|
| General | only use flexible conductors with ferrules |
| General | Connectors may be operated only when there is no load/voltage. |

Product properties

| | |
|------------------------------------|--|
| Type | B10 |
| Product type | Contact insert with a fixed no. of positions |
| Number of positions | 5 |
| Connection profile | 3+2+PE |
| Application | Power |
| Number of connections per position | 1 |
| No. of power contacts | 3 |
| No. of control contacts | 2 |
| Series | HC-HV |

Insulation characteristics

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

Connection data

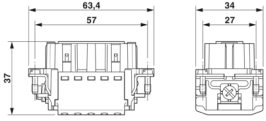
Connection technology

| | |
|------------------------------------|-------------------------------------|
| Connection technology | Push-in connection (power contacts) |
| Number of connections per position | 1 |

Conductor connection

| | |
|------------------------------|-----------------------------------|
| Connection cross section AWG | 26 ... 14 (power contacts) |
| | 26 ... 14 (control contacts) |
| Stripping length | 8 mm ... 10 mm (power contacts) |
| | 8 mm ... 10 mm (control contacts) |

Dimensions

| | |
|---------------------------------|--|
| Dimensional drawing |  |
| Width | 34 mm |
| Height | 34.6 mm |
| Length | 64 mm |
| Drill hole distance, horizontal | 57 mm |

Mechanical characteristics

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

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Electrical properties

| | |
|-----------------------|--------------------------|
| Rated voltage (III/3) | 830 V (power contacts) |
| | 500 V (control contacts) |
| Rated surge voltage | 8 kV (power contacts) |
| | 6 kV (control contacts) |
| Rated current | 16 A (power contacts) |
| | 16 A (control contacts) |
| SCCR | 5 kA (UL 2237) |

Material specifications

| | |
|--|---|
| Flammability rating according to UL 94 | V0 |
| Contact material | Copper alloy |
| Contact carrier material | PC |
| Material of contact surface, power contact | Ag |
| Material of contact surface, control contact | Ag |
| Standards/regulations | PC: Fire protection in rail vehicles - requirement sets R22, R23, and R24 acc. to DIN EN 45545-2 (Risk level HL1 - HL3) |

Connector

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

Mounting

| | |
|-----------------------|---|
| 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) |
|---------------------------------|--|

Standards and regulations

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) |
|-----------------------|---|

Contact insert - HC-HV03-I-PT-F

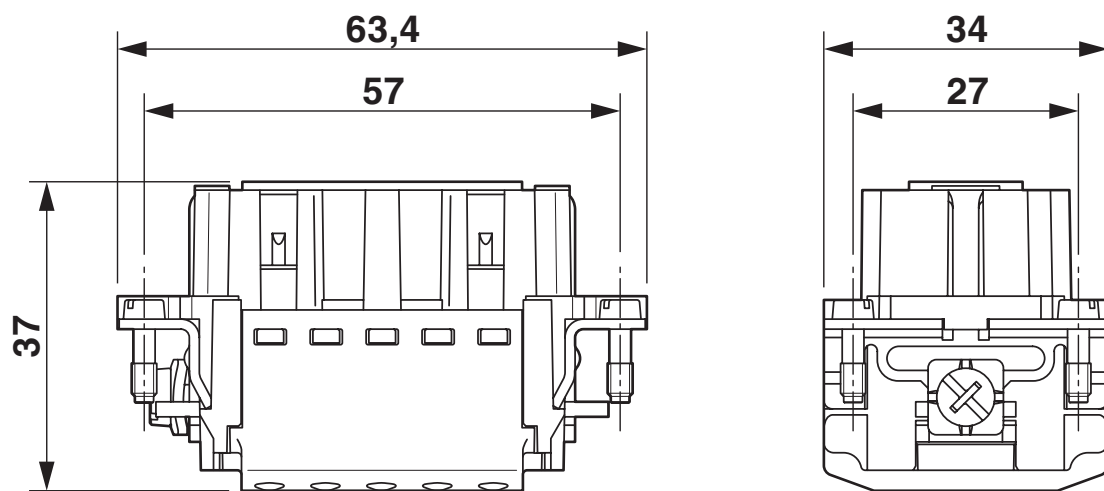


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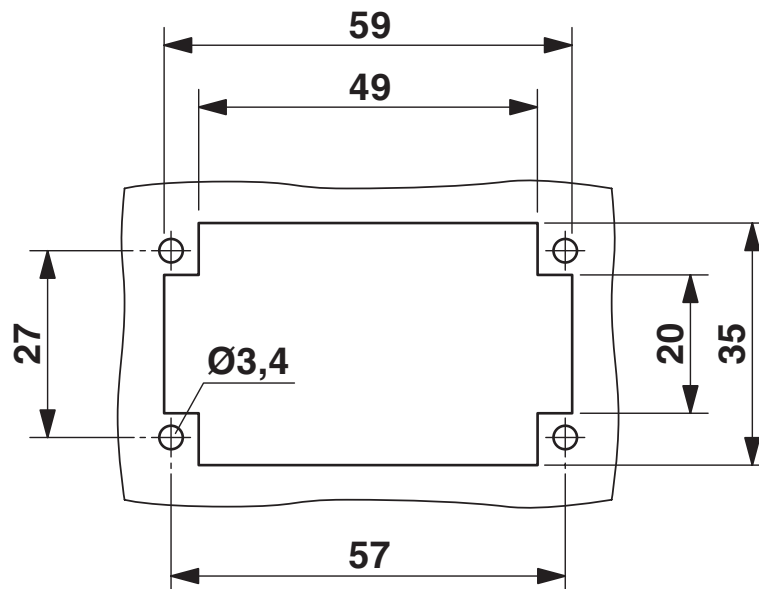
Drawings

Dimensional drawing



Dimensional drawing

Dimensional drawing



Mounting cutout when used without housing

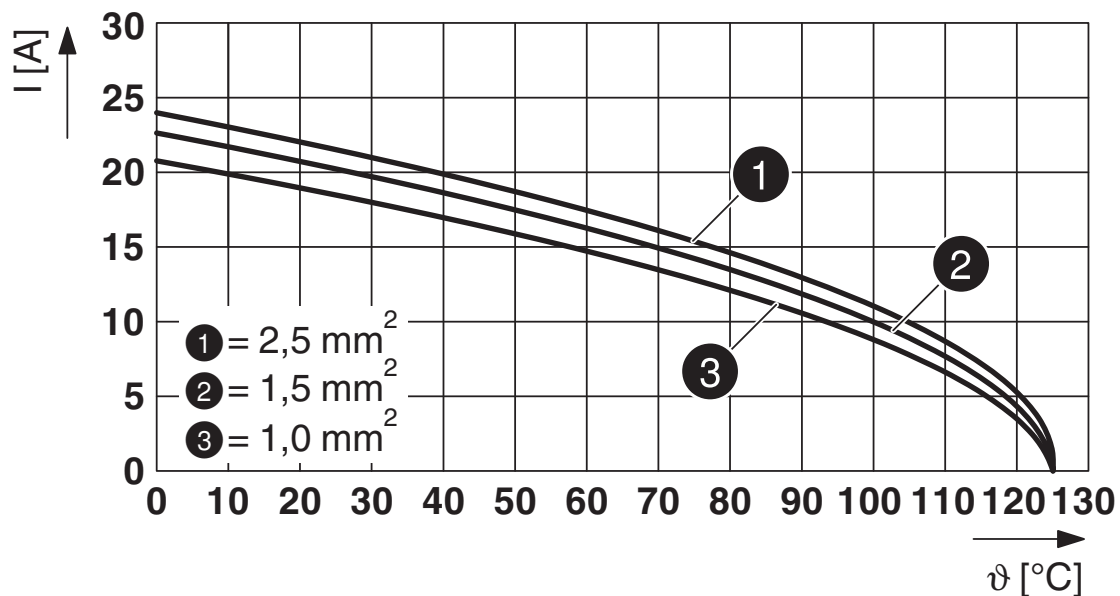
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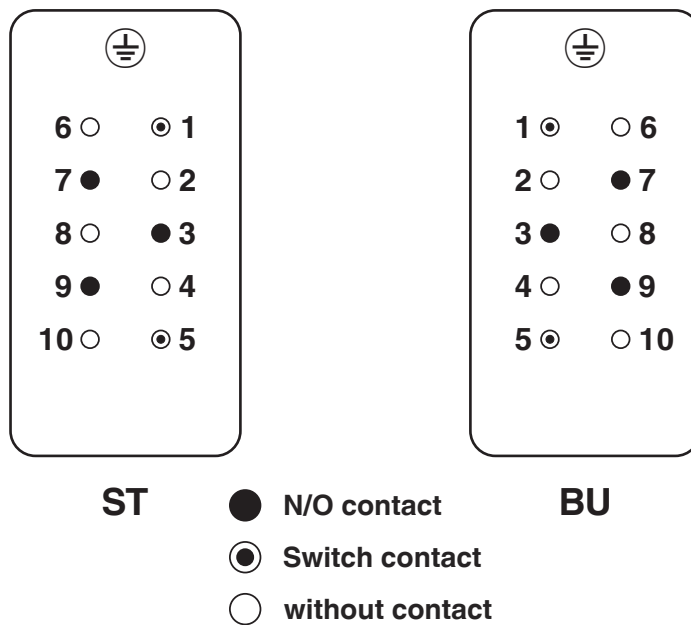
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Diagram



Derating diagram

Schematic diagram



View termination side

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Approvals

DNV

Approval ID: TAE000037S



CSA

Approval ID: 013631_0_000

| | Nominal Voltage U_N | Nominal Current I_N | Cross Section AWG | Cross Section mm^2 |
|--|-----------------------|-----------------------|-------------------|-----------------------------|
| | 600 V | 16 A | - 14 | - |



UL Recognized

Approval ID: E118976

| | Nominal Voltage U_N | Nominal Current I_N | Cross Section AWG | Cross Section mm^2 |
|--|-----------------------|-----------------------|-------------------|-----------------------------|
| | 600 V | 21 A | - 14 | - |



EAC

Approval ID: RU C-DE.AI30.B.01102



cULus Recognized

Approval ID: E468743

| | Nominal Voltage U_N | Nominal Current I_N | Cross Section AWG | Cross Section mm^2 |
|--|-----------------------|-----------------------|-------------------|-----------------------------|
| | 600 V | 20 A | - 14 | - |



EAC

Approval ID: RU C-DE.BL08.B.00511

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Classifications

ECLASS

| | |
|---------------|----------|
| ECLASS-9.0 | 27440205 |
| ECLASS-10.0.1 | 27440205 |
| ECLASS-11.0 | 27440205 |

ETIM

| | |
|----------|----------|
| ETIM 8.0 | EC000438 |
|----------|----------|

UNSPSC

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

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Environmental Product Compliance

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

Contact insert - HC-HV03-I-PT-F

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Accessories

Electrical crimping tool

Electrical crimping tool - CF CRIMPHANDY 0,5 - 1212463

<https://www.phoenixcontact.com/pc/products/1212463>



Mobile handheld device, battery-powered, for processing on-tape ferrules 0.5 mm² with functional end, suitable for PVC insulated conductors (H05V-K), incl. battery, charger, CUTFOX 12 cable cutter, waste guide plate 2, service tool for error correction, and one strip of ferrules 0.5 mm², packed in a robust case.

Electrical crimping tool

Electrical crimping tool - CF CRIMPHANDY 0,75 - 1212464

<https://www.phoenixcontact.com/pc/products/1212464>



Mobile handheld device, battery-powered, for processing on-tape ferrules 0.75 mm² with functional end, suitable for PVC insulated conductors (H05V-K), incl. battery, charger, CUTFOX 12 cable cutter, waste guide plate 2, service tool for error correction, and one strip of ferrules 0.75 mm², packed in a robust case.

Contact insert - HC-HV03-I-PT-F

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<https://www.phoenixcontact.com/pc/products/1407743>



Electrical crimping tool

Electrical crimping tool - CF CRIMPHANDY 1,0 - 1212465

<https://www.phoenixcontact.com/pc/products/1212465>



Mobile handheld device, battery-powered, for processing on-tape ferrules 1.0 mm² with functional end, suitable for PVC insulated conductors (H05V-K), incl. battery, charger, CUTFOX 12 cable cutter, waste guide plate 2, service tool for error correction, and one strip of ferrules 1.0 mm², packed in a robust case.

Electrical crimping tool

Electrical crimping tool - CF CRIMPHANDY 1,5 - 1212466

<https://www.phoenixcontact.com/pc/products/1212466>



Mobile handheld device, battery-powered, for processing on-tape ferrules 1.5 mm² with functional end, suitable for PVC insulated conductors (H07V-K), incl. battery, charger, CUTFOX 12 cable cutter, waste guide plate 2, service tool for error correction, and one strip of ferrules 1.5 mm², packed in a robust case.

Contact insert - HC-HV03-I-PT-F

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Coding bolt

Coding bolt - HC-CB - 1772722

<https://www.phoenixcontact.com/pc/products/1772722>



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

Strain relief clamp

Strain relief clamp - HC-B-ZG - 1685327

<https://www.phoenixcontact.com/pc/products/1685327>



Strain relief clamps contact inserts of series: B-, BB-, D 40, D 64, DD and HV, straight cable exit

Contact insert - HC-HV03-I-PT-F

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<https://www.phoenixcontact.com/pc/products/1407743>

Strain relief clamp

Strain relief clamp - HC-B-ZS - 1685330

<https://www.phoenixcontact.com/pc/products/1685330>



Strain relief clamps contact inserts of series: B-, BB-, D 40, D 64, DD and HV, lateral cable exit

Screw

Screw - HC-B-PES - 1604997

<https://www.phoenixcontact.com/pc/products/1604997>



PE screw, for contact inserts HC-B / HC-BB / HC-DD / HC-D40 / HC-D64

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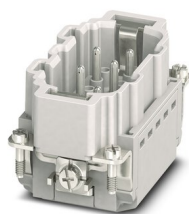
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Contact insert

Contact insert - HC-HV03-I-PT-M - 1407739

<https://www.phoenixcontact.com/pc/products/1407739>



HEAVYCON pin insert, HV3 series, 3-pos. + 2 switching contacts + PE, 830 V, push-in connection

DIN rail mounting frame

DIN rail mounting frame - HC-CIF-B10-HFWL-PL - 1424335

<https://www.phoenixcontact.com/pc/products/1424335>



DIN rail mounting frame, type: B10, for contact inserts, Top frame

Contact insert - HC-HV03-I-PT-F

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<https://www.phoenixcontact.com/pc/products/1407743>



DIN rail mounting frame

DIN rail mounting frame - HC-CIF-B06-24-BFAFL-PL - 1424338

<https://www.phoenixcontact.com/pc/products/1424338>



DIN rail mounting frame, type: B6 - B24, for contact inserts, Base frame

Docking frames

Docking frames - HC-B 10-ANDOCK - 1586125

<https://www.phoenixcontact.com/pc/products/1586125>



Docking frame for racks, for contact inserts of B10 type, with four M5 flat headed screws, rack balance x/y axis ± 1.5 mm

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<https://www.phoenixcontact.com/pc/products/1407743>



Adapter

Adapter - HC-B-PE-PT - 1054672

<https://www.phoenixcontact.com/pc/products/1054672>



PE adapter with PT connection, for 1 PE connection, for HC-B / HC-BB / HC-DD / HC-D40 / HC-D64 contact inserts

Coding element

Coding element - HC-CST - 1676857

<https://www.phoenixcontact.com/pc/products/1676857>



Coding peg for coding up to 16 connectors

Contact insert - HC-HV03-I-PT-F

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<https://www.phoenixcontact.com/pc/products/1407743>



Coding element

Coding element - HC-CBU - 1676860

<https://www.phoenixcontact.com/pc/products/1676860>



Coding socket for coding up to 16 connectors

Coding profile

Coding profile - CP-HC - 1686478

<https://www.phoenixcontact.com/pc/products/1686478>



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

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Adapter plate

Adapter plate - HC-B24/10-ADP-SS - 1034213

<https://www.phoenixcontact.com/pc/products/1034213>

Adapter plate, type: B24 to B10

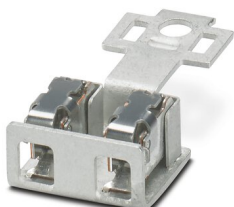


PE multiplier

PE multiplier - HC-B-2PE-PT - 1054675

<https://www.phoenixcontact.com/pc/products/1054675>

PE adapter with PT connection, for 2 PE connections, for HC-B / HC-BB / HC-DD / HC-D40 / HC-D64 contact inserts



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Crimping pliers

Crimping pliers - CRIMPFOX CENTRUS 6S - 1213144

<https://www.phoenixcontact.com/pc/products/1213144>



Crimping pliers, for uninsulated and insulated ferrules, DIN 46228 Part 1 and 4, from 0.14 mm² ... 6 mm², also for TWIN ferrules up to 2 x 4 mm², automatic cross section adjustment, lateral insertion, equipped with fall protection

Crimping pliers

Crimping pliers - CRIMPFOX CENTRUS 10S - 1213154

<https://www.phoenixcontact.com/pc/products/1213154>



Crimping pliers, for uninsulated and insulated ferrules, DIN 46228 Part 1 and 4, from 0.14 mm² ... 10 mm², also for TWIN ferrules up to 2 x 4 mm², automatic cross section adjustment, lateral insertion, equipped with fall protection

Contact insert - HC-HV03-I-PT-F

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<https://www.phoenixcontact.com/pc/products/1407743>

Crimping pliers

Crimping pliers - CRIMPFOX 6 - 1212034

<https://www.phoenixcontact.com/pc/products/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 mm² ... 6.0 mm², lateral entry, trapezoidal crimp

Crimping pliers

Crimping pliers - CRIMPFOX 10S - 1212045

<https://www.phoenixcontact.com/pc/products/1212045>



Crimping pliers, for ferrules without insulating collar according to DIN 46228 Part 1 and ferrules with insulating collar according to DIN 46228 Part 4, 0.14 mm² ... 10 mm², unlockable pressure lock, lateral entry

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