

https://www.phoenixcontact.com/us/products/1679427



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Contact insert, number of positions: 4+PE, size: B16, power contacts: 4, control contacts: 0, Socket, Screw connection, 830 V, 80 A, 1.5 mm² ... 16 mm², application: Power

Your advantages

• Shock and vibration-resistant in accordance with DIN EN 61373

Commercial data

| Item number | 1679427 |
|--------------------------------------|---------------|
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Sales key | BF61 |
| Product key | AF7ABA |
| GTIN | 4017918168865 |
| Weight per piece (including packing) | 117.1 g |
| Weight per piece (excluding packing) | 114.9 g |
| Customs tariff number | 85366990 |
| Country of origin | CN |



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Technical data

Notes

| General | For HEAVYCON-ADVANCE housings of B16 type and HEAVYCON housings of B16 and B32 types |
|---------|--------------------------------------------------------------------------------------|
| General | Connectors may be operated only when there is no load/voltage. |

Mounting

| Assembly note | To ensure correct use, installation in housing with IP54 protection or better is required |
|---------------|-------------------------------------------------------------------------------------------|
| | Use wire end protection (screw connections do not have wire protection) |

Product properties

| Product type | Contact insert with a fixed no. of positions |
|-------------------------|----------------------------------------------|
| Series | HC-K |
| Application | Power |
| Туре | B16 |
| | B32 |
| Number of positions | 4 |
| Connection profile | 4+PE |
| Contact numbering | 1 - 4 |
| No. of power contacts | 4 |
| No. of control contacts | 0 |
| Contact material type | turned |
| Screwdriver blade | 0.8 x 4.5 mm (power contacts) |

Insulation characteristics

| insulation orial actions in | |
|-----------------------------|-----|
| Overvoltage category | III |
| Degree of pollution | 3 |

Dimensions

| Dimensional drawing | 04,5 77,5 27 34 27 27 |
|---------------------------------|--------------------------------------|
| Width | 34 mm |
| Height | 44.2 mm |
| Length | 84.5 mm |
| Drill hole distance, horizontal | 77.5 mm |
| Mechanical characteristics | |
| Contact diameter | 6 mm |



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Connection data

| O | 4 |
|------------|------------|
| Connection | rechnology |

| Connection technology | Screw connection (power contacts) |
|-----------------------------------------|---------------------------------------------------------------------------------|
| Conductor connection | |
| Conductor cross section | 1.5 mm² 16 mm² |
| Connection cross section AWG | 16 6 |
| Tightening torque | 0.8 Nm 1.2 Nm (PE connection cross-section with cable lug expandable to 16 mm²) |
| | 0.5 Nm 0.8 Nm (Mounting screws for mounting in the HEAVYCON housing) |
| | 3 Nm (4.0 mm² 16 mm²) |
| | 2 Nm (2.5 mm²) |
| | 1.2 Nm (1.5 mm²) |
| Stripping length of the individual wire | 14 mm |
| Stripping length | 14 mm |

Electrical properties

| Rated voltage (III/3) | 830 V (power contacts) |
|-----------------------|------------------------|
| Rated surge voltage | 8 kV (power contacts) |
| Rated current | 80 A (power contacts) |

Mechanical properties

Mechanical data

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

Material specifications

| Flammability rating according to UL 94 | V0 |
|--------------------------------------------|----------|
| Contact material | Cu alloy |
| Contact surface material | Ag |
| Contact carrier material | PC |
| Material of contact surface, power contact | Ag |
| Standards/regulations | PC |
| | PC |

Environmental and real-life conditions

| Ambient conditions |
|--------------------|
|--------------------|

| Ambient temperature (energtion) | -40 °C 125 °C |
|---------------------------------|---------------|
| Ambient temperature (operation) | -40 C 125 C |

Standards and regulations

Testing

| 3 | |
|-----------------------|--------------------------------------------------------------------|
| Standards/regulations | PC: Fire protection in rail vehicles - requirement set R22 acc. to |
| | DIN EN 45545-2 (Risk level HL1 - HL2) |



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| PC: Fire protection in rail vehicles - requirement set R23 acc. to |
|--------------------------------------------------------------------|
| DIN EN 45545-2 (Risk level HL1 - HL3) |

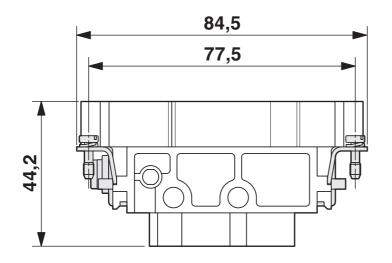
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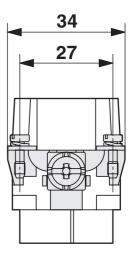
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Drawings

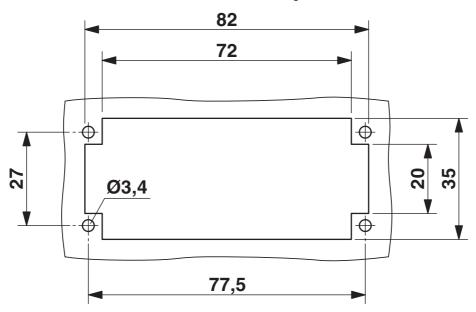
Dimensional drawing





Female insert

Dimensional drawing



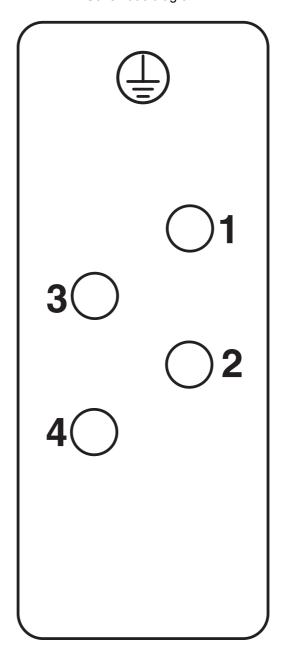
Mounting cutout when used without housing



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Schematic diagram

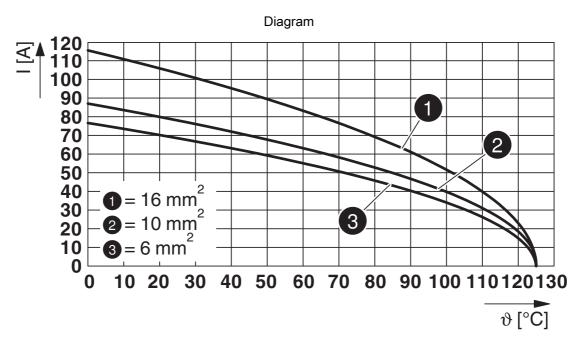


Connector pin assignment, connection side



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Derating diagram



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Approvals

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| 7/ | UL Recognized Approval ID: E118976 | o gnized D: E118976 | | | |
|-------|-------------------------------------------|--------------------------------|--------------------------------|-------------------|-------------------------------|
| | | Nominal voltage U _N | Nominal current I _N | Cross section AWG | Cross section mm ² |
| keine | | | | | |
| | | 600 V | 80 A | - 6 | - |



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Classifications

ECLASS

| | ECLASS-13.0 | 27440205 |
|--------|-------------|----------|
| | ECLASS-15.0 | 27440205 |
| | | |
| ETIM | | |
| | ETIM 9.0 | EC000438 |
| UNSPSC | | |
| | UNSPSC 21.0 | 39121500 |



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Environmental product compliance

EU RoHS

| Fulfills EU RoHS substance requirements | Yes |
|-----------------------------------------|------------------------------------------|
| Exemption | 6(c) |
| China RoHS | |
| Environment friendly use period (EFUP) | EFUP-E |
| | No hazardous substances above the limits |
| EU REACH SVHC | |
| REACH candidate substance (CAS No.) | Lead(CAS: 7439-92-1) |
| SCIP | 909012c5-b36c-429a-a199-41c91cd50023 |
| EF3.0 Climate Change | |
| CO2e kg | 9.984 kg CO2e |
| | |

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