

# Conductor connectors - QPD C3PE2,5 1X6-10 BK



1423991

<https://www.phoenixcontact.com/pc/products/1423991>

Please be informed that the data shown in this PDF document is generated from our Online Catalog. Please find the complete data in the user documentation. Our General Terms of Use for Downloads are valid.



Conductor connectors, QUICKON connection, number of positions: 3+PE, 1 mm<sup>2</sup> ... 2.5 mm<sup>2</sup>, 690 V, 20 A, black, with one QUICKON nut, external cable diameter: 6 mm ... 10 mm, QUICKON fast connection

## Your advantages

- Innovative and time saving - QUICKON fast connection for time saving of up to 80 % for on-site connection
- Robust throughout: housing with IP68/IP69K and IK07 protection for a wide range of applications
- Safer connection with mechanical coding to protect against mismatching, and touch-proof protection in accordance with DIN EN 0105
- Easy and safe - with the cable connector, you can repair or extend cables quickly, in combination with the connector as well as the coupling connection

## Commercial Data

|                                      |                     |
|--------------------------------------|---------------------|
| Item number                          | 1423991             |
| Packing unit                         | 1 pc                |
| Minimum order quantity               | 1 pc                |
| Product Key                          | BF6CBB              |
| Catalog Page                         | Page 483 (C-2-2019) |
| GTIN                                 | 4055626366081       |
| Weight per Piece (including packing) | 48.3 g              |
| Weight per Piece (excluding packing) | 47.3 g              |
| Customs tariff number                | 85366990            |
| Country of origin                    | PL                  |

# Conductor connectors - QPD C3PE2,5 1X6-10 BK



1423991

<https://www.phoenixcontact.com/pc/products/1423991>

## Technical Data

### Product properties

|                                    |                 |
|------------------------------------|-----------------|
| Type                               | QPD 4x2,5       |
| Product type                       | Cable connector |
| Number of positions                | 4               |
| Connection profile                 | 3+PE            |
| Position marking                   | 1, 2, 3, PE     |
| Number of connections per position | 1               |
| Locking type                       | Screw locking   |
| Series                             | QPD             |
| Coding                             | Coding profile  |

### Insulation characteristics

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

### Dimensions

|                     |       |
|---------------------|-------|
| Dimensional drawing |       |
| Width               | 30 mm |
| Height              | 30 mm |
| Length              | 84 mm |
| Diameter            | 30 mm |

### Connection data

#### Connection technology

|   |                         |
|---|-------------------------|
| Connection method   | QUICKON fast connection |
| Connection system, internal   | IDC connection          |
| Connection technology   | QUICKON connection      |
| Frequency of connections between conductors of the same cross section | max. 10                 |

#### Conductor connection

|                                  |   |
|----------------------------------|---|
| Conductor cross section solid    | 1 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> |
| Conductor cross section flexible | 1 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> |
| Conductor cross section AWG      | 16 ... 14                                 |
| Tightening torque, union nut     | 7 Nm                                      |

### Electrical properties

|                             |      |
|-----------------------------|------|
| Rated surge voltage (II/2)  | 6 kV |
| Rated surge voltage (III/2) | 6 kV |

1423991

<https://www.phoenixcontact.com/pc/products/1423991>

|                             |          |
|-----------------------------|----------|
| Rated surge voltage (III/3) | 6 kV     |
| Rated current               | 20 A     |
| Contact resistance          | < 3 mΩ   |
| rated voltage (II/2)        | 1000 V   |
| rated voltage (III/2)       | 690 V    |
| Rated voltage (III/3)       | 690 V    |
| Nominal voltage $U_N$       | 690 V AC |
|                             | 690 V DC |
| Nominal current $I_N$       | 20 A     |

## Mechanical properties

### Mechanical data

|                             |         |
|-----------------------------|---------|
| Insertion/withdrawal cycles | max. 50 |
|-----------------------------|---------|

## Material specifications

|  |               |
|--|---------------|
| Color                                  | black         |
| Flammability rating according to UL 94 | V0            |
| Insulating material                    | PA            |
| Contact material                       | Cu            |
| Contact surface material               | silver-plated |
| Contact carrier material               | PA            |
| Housing material                       | PA            |

## Cable / line

|   |                                    |
|---|------------------------------------|
| Structure of individual litz in acc. with VDE 0295 / smallest wire diameter | VDE 0295 class 1 to 6/min. 0.15 mm |
| External cable diameter   | 6 mm ... 10 mm                     |
| Wire diameter including insulation  | 2 mm ... 3.6 mm                    |
| Position marking  | 1, 2, 3, PE                        |
| Material wire insulation  | PVC/PE/TPE/rubber                  |
| Halogen-free  | yes                                |

## Ambient conditions

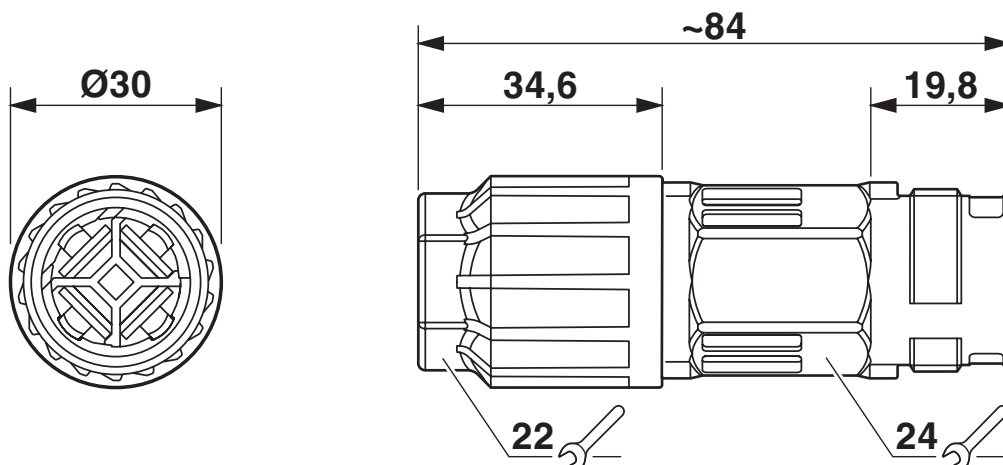
|   |                   |
|---|-------------------|
| Degree of protection                    | IP66              |
|   | IP68 (2 m / 24 h) |
|   | IP69K             |
| Ambient temperature (operation)         | -40 °C ... 100 °C |
| Temperature when conductor connected    | -5 °C ... 50 °C   |
| Ambient temperature (storage/transport) | -40 °C ... 100 °C |

1423991

<https://www.phoenixcontact.com/pc/products/1423991>

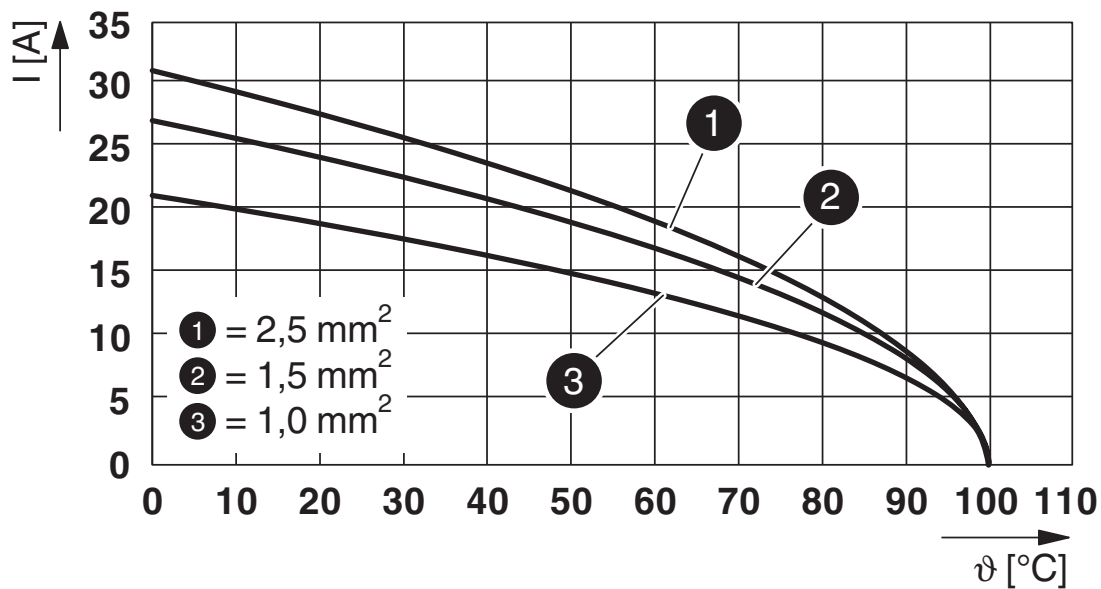
## Drawings

Dimensional drawing



Dimensional drawing

Diagram



Derating diagram

# Conductor connectors - QPD C3PE2,5 1X6-10 BK



1423991

<https://www.phoenixcontact.com/pc/products/1423991>

## Approvals



### IECEE CB Scheme

Approval ID: DE1-65875



### EAC

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



### EAC

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



### VDE Zeichengenehmigung

Approval ID: 40029149

|                          | Nominal Voltage $U_N$ | Nominal Current $I_N$ | Cross Section AWG | Cross Section $\text{mm}^2$ |
|--------------------------|-----------------------|-----------------------|-------------------|-----------------------------|
| Only flexible conductors | 400 V                 | 20 A                  | -                 | 1.5 - 2.5                   |
| Only rigid conductors    | 690 V                 | 20 A                  | -                 | 1.5 - 2.5                   |



### UL Listed

Approval ID: E468743

|  | Nominal Voltage $U_N$ | Nominal Current $I_N$ | Cross Section AWG | Cross Section $\text{mm}^2$ |
|--|-----------------------|-----------------------|-------------------|-----------------------------|
|  | 600 V                 | 10 A                  | -                 | - 16                        |



### cUL Listed

Approval ID: E468743

|  | Nominal Voltage $U_N$ | Nominal Current $I_N$ | Cross Section AWG | Cross Section $\text{mm}^2$ |
|--|-----------------------|-----------------------|-------------------|-----------------------------|
|  | 600 V                 | 10 A                  | - 16              | -                           |

### cULus Listed

# Conductor connectors - QPD C3PE2,5 1X6-10 BK



1423991

<https://www.phoenixcontact.com/pc/products/1423991>

## Classifications

### ECLASS

|               |          |
|---------------|----------|
| ECLASS-9.0    | 27440605 |
| ECLASS-10.0.1 | 27440605 |
| ECLASS-11.0   | 27440605 |

### ETIM

|          |          |
|----------|----------|
| ETIM 8.0 | EC002560 |
|----------|----------|

### UNSPSC

|             |          |
|-------------|----------|
| UNSPSC 21.0 | 39121400 |
|-------------|----------|

# Conductor connectors - QPD C3PE2,5 1X6-10 BK



1423991

<https://www.phoenixcontact.com/pc/products/1423991>

## Environmental Product Compliance

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

# Conductor connectors - QPD C3PE2,5 1X6-10 BK



1423991

<https://www.phoenixcontact.com/pc/products/1423991>

## Mandatory Accessories

### Connector

Connector - QPD P3PE2,5 6-10 BK - 1423987

<https://www.phoenixcontact.com/pc/products/1423987>



Connector, QUICKON connection, number of positions: 3+PE, 1 mm<sup>2</sup> ... 2.5 mm<sup>2</sup>, 690 V, 20 A, black, with QUICKON nut, external cable diameter: 6 mm ... 10 mm

---

### Nut

Nut - QPD N2,5 6-10 BK - 1423993

<https://www.phoenixcontact.com/pc/products/1423993>



Nut, QUICKON connection, 1 mm<sup>2</sup> ... 2.5 mm<sup>2</sup>, 690 V, 20 A, black, external cable diameter: 6 mm ... 10 mm

---

## Accessories

# Conductor connectors - QPD C3PE2,5 1X6-10 BK



1423991

<https://www.phoenixcontact.com/pc/products/1423991>

## Coding profile

Coding profile - CP QPD 4X2,5 - 1425950

<https://www.phoenixcontact.com/pc/products/1425950>



Coding profile red, for pushing into the QUICKON dome and connector, can be positioned in 90° steps.

---

## Socket wrench

Socket wrench - QSS 22 - 1670206

<https://www.phoenixcontact.com/pc/products/1670206>



Allen wrench, for loosening and fastening the QUICKON union nut, WAF 22 mm

# Conductor connectors - QPD C3PE2,5 1X6-10 BK



1423991

<https://www.phoenixcontact.com/pc/products/1423991>

## Protective cap

Protective cap - QPD QSK 5X1,5 - 1414758

<https://www.phoenixcontact.com/pc/products/1414758>

Protective cap plastic, for QPD-QUICKON connection 5x 1.5 mm<sup>2</sup>, IP50



---

## Protective cap

Protective cap - QPD QSK BK 5X1,5 FS - 1414728

<https://www.phoenixcontact.com/pc/products/1414728>

Protective cap, plastic, for QUICKON connection, black, with retaining cord, IP68



# Conductor connectors - QPD C3PE2,5 1X6-10 BK



1423991

<https://www.phoenixcontact.com/pc/products/1423991>

## Closing cap

Closing cap - SEALING PLUG 10X16 RD - 1400284

<https://www.phoenixcontact.com/pc/products/1400284>



Closing cap, for threads pluggable, color: red

---

## Panel feed-through

Panel feed-through - QPD W3PE2,5 6-10 M25 0,5 BK - 1423975

<https://www.phoenixcontact.com/pc/products/1423975>



Panel feed-through, QUICKON connection, number of positions: 3+PE, 1 mm<sup>2</sup> ... 2.5 mm<sup>2</sup>, 690 V, 20 A, black, with QUICKON nut, external cable diameter: 6 mm ... 10 mm, assembly thread: M25, IDC connection (welded-on), 2.5 mm<sup>2</sup>, wires cut flat at the end, cable length: 0.5 m

# Conductor connectors - QPD C3PE2,5 1X6-10 BK



1423991

<https://www.phoenixcontact.com/pc/products/1423991>

## Panel feed-through

Panel feed-through - QPD W3PE2,5 6-10 M25 1,0 BK - 1423974

<https://www.phoenixcontact.com/pc/products/1423974>



Panel feed-through, QUICKON connection, number of positions: 3+PE, 1 mm<sup>2</sup> ... 2.5 mm<sup>2</sup>, 690 V, 20 A, black, with QUICKON nut, external cable diameter: 6 mm ... 10 mm, assembly thread: M25, IDC connection (welded-on), 2.5 mm<sup>2</sup>, wires cut flat at the end, cable length: 1 m

---

## Panel feed-through

Panel feed-through - QPD W3PE2,5 6-10 M25 FC BK - 1423976

<https://www.phoenixcontact.com/pc/products/1423976>



Panel feed-through, QUICKON connection, number of positions: 3+PE, 1 mm<sup>2</sup> ... 2.5 mm<sup>2</sup>, 690 V, 20 A, black, with QUICKON nut, external cable diameter: 6 mm ... 10 mm, assembly thread: M25, IDC connection, 2.5 mm<sup>2</sup>

# Conductor connectors - QPD C3PE2,5 1X6-10 BK

1423991

<https://www.phoenixcontact.com/pc/products/1423991>

## Panel feed-through

Panel feed-through - QPD W3PE2,5 6-10 M25 DT BK - 1423977

<https://www.phoenixcontact.com/pc/products/1423977>



Panel feed-through, QUICKON connection, number of positions: 3+PE, 1 mm<sup>2</sup> ... 2.5 mm<sup>2</sup>, 400 V, 20 A, black, with QUICKON nut, external cable diameter: 6 mm ... 10 mm, assembly thread: M25, Push-in connection, 2.5 mm<sup>2</sup>

---

## Conductor connectors

Conductor connectors - QPD C3PE2,5 2X6-10 BK - 1423989

<https://www.phoenixcontact.com/pc/products/1423989>



Conductor connectors, QUICKON connection, number of positions: 3+PE, 1 mm<sup>2</sup> ... 2.5 mm<sup>2</sup>, 690 V, 20 A, black, With two QUICKON nuts, external cable diameter: 6 mm ... 10 mm, QUICKON fast connection

# Conductor connectors - QPD C3PE2,5 1X6-10 BK



1423991

<https://www.phoenixcontact.com/pc/products/1423991>

## T distributor

T distributor - QPD T3PE2,5 2X6-10 BK - 1424047

<https://www.phoenixcontact.com/pc/products/1424047>



T distributor, QUICKON connection, number of positions: 3+PE, 1 mm<sup>2</sup> ... 2.5 mm<sup>2</sup>, 690 V, 20 A, black, With two QUICKON nuts, external cable diameter: 6 mm ... 10 mm

---

## T distributor

T distributor - QPD T3PE2,5 3X6-10 BK - 1424045

<https://www.phoenixcontact.com/pc/products/1424045>



T distributor, QUICKON connection, number of positions: 3+PE, 1 mm<sup>2</sup> ... 2.5 mm<sup>2</sup>, 690 V, 20 A, black, With three QUICKON nuts, external cable diameter: 6 mm ... 10 mm

# Conductor connectors - QPD C3PE2,5 1X6-10 BK



1423991

<https://www.phoenixcontact.com/pc/products/1423991>

## H distributor

H distributor - QPD H3PE2,5 4X6-10 BK - 1423971

<https://www.phoenixcontact.com/pc/products/1423971>



H distributor, QUICKON connection, number of positions: 3+PE, 1 mm<sup>2</sup> ... 2.5 mm<sup>2</sup>, 690 V, 20 A, black, with four QUICKON nuts, external cable diameter: 6 mm ... 10 mm

---

Phoenix Contact 2023 © - all rights reserved

<https://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG

Flachsmarktstraße 8

D-32825 Blomberg

+49 (0) 5235-3 00

[info@phoenixcontact.com](mailto:info@phoenixcontact.com)