

# QPD H3PE2,5 BK - H distributor

1423973

<https://www.phoenixcontact.com/us/products/1423973>



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H distributor, product family: QPD, connection method: IDC connection/ QUICKON fast connection, number of positions: 3+PE, 1 mm<sup>2</sup> ... 2.5 mm<sup>2</sup>, 690 V, 20 A, PA, black, without QUICKON nut, coding: Coding profile

## 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
- Flexible and compact - by connecting connections internally, H and T-distributors can be used to branch master cables or they can be used as star distributors

## Commercial data

|                                      |                     |
|--------------------------------------|---------------------|
| Item number                          | 1423973             |
| Packing unit                         | 1 pc                |
| Minimum order quantity               | 1 pc                |
| Sales key                            | BF50                |
| Product key                          | BF6DBB              |
| Catalog page                         | Page 481 (C-2-2019) |
| GTIN                                 | 4055626365916       |
| Weight per piece (including packing) | 186.3 g             |
| Weight per piece (excluding packing) | 185 g               |
| Customs tariff number                | 85444290            |
| Country of origin                    | PL                  |

# QPD H3PE2,5 BK - H distributor

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## Technical data

### Product properties

|                                    |                   |
|------------------------------------|-------------------|
| Product type                       | Power distributor |
| Product family                     | QPD               |
| Type                               | H-distributor     |
| Number of positions                | 4                 |
| Connection profile                 | 3+PE              |
| Position marking                   | 1, 2, 3, PE       |
| Number of connections              | 4                 |
| Number of connections per position | 1                 |
| No. of cable outlets               | 4                 |
| Coding                             | Coding profile    |

### Data management status

|                  |    |
|------------------|----|
| Article revision | 04 |
|------------------|----|

### Insulation characteristics

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

### Connection data

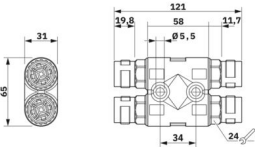
#### Connection technology

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

#### Conductor connection

|                                  |                   |
|----------------------------------|-------------------|
| Conductor cross section flexibel | 1 mm² ... 2.5 mm² |
| Conductor cross section solid    | 1 mm² ... 2.5 mm² |
| Connection cross section AWG     | 16 ... 14         |
| Tightening torque Union nut      | 10 Nm             |
| Wrench size Union nut            | 22 mm             |

### Dimensions

|                     |                                                                                      |
|---------------------|--------------------------------------------------------------------------------------|
| Dimensional drawing |  |
| Width               | 65 mm                                                                                |
| Height              | 31 mm                                                                                |
| Length              | 121 mm                                                                               |

## Electrical properties

|                             |          |
|-----------------------------|----------|
| Rated surge voltage (II/2)  | 6 kV     |
| Rated surge voltage (III/2) | 6 kV     |
| 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 (RAL 9005)  |
| Material Housing                       | PA                |
| Material Contact surface               | silver-plated     |
| Flammability rating according to UL 94 | V0                |
| Material wire insulation               | PVC/PE/TPE/rubber |

## Cable/line

|                                                                             |                                    |
|-----------------------------------------------------------------------------|------------------------------------|
| Structure of individual litz in acc. with VDE 0295 / smallest wire diameter | VDE 0295 class 1 to 6/min. 0.15 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                                |

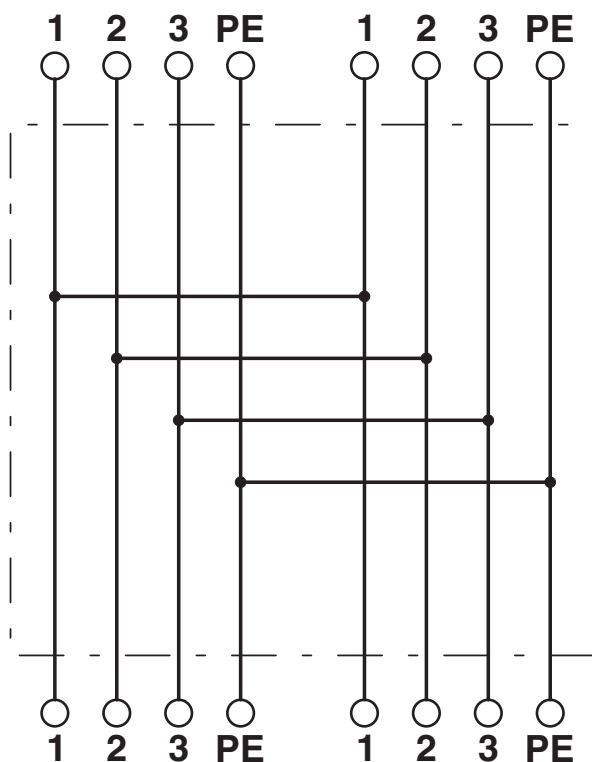
## Environmental and real-life conditions

## Ambient conditions

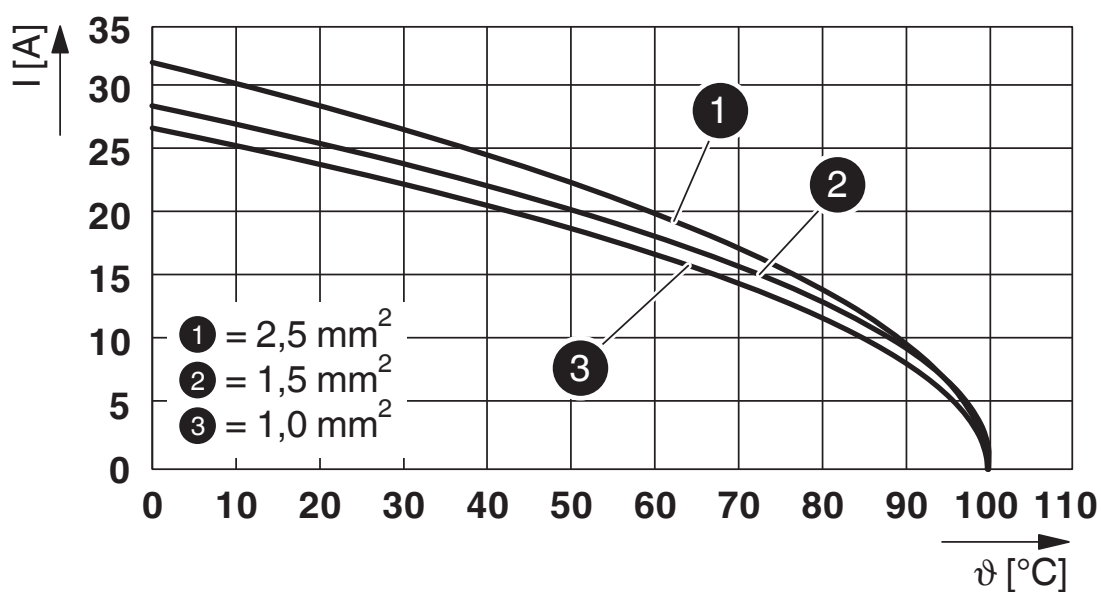
|                                         |                                         |
|-----------------------------------------|-----------------------------------------|
| Degree of protection                    | IP66                                    |
|                                         | IP68 (2 m / 24 h)                       |
|                                         | IP69K (Distance from the nozzle 150 mm) |
| Impact strength                         | IK07 (-25 °C)                           |
| Ambient temperature (operation)         | -40 °C ... 100 °C                       |
| Temperature when conductor connected    | -5 °C ... 50 °C                         |
| Ambient temperature (storage/transport) | -40 °C ... 100 °C                       |

## Drawings

Circuit diagram



Diagram



Derating diagram

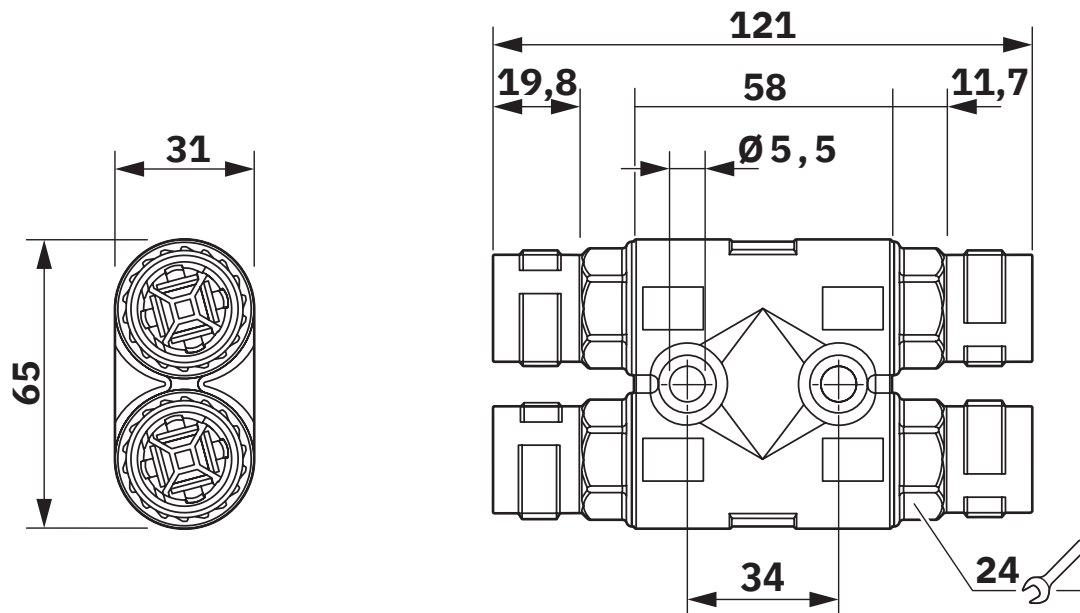
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Dimensional drawing



Dimensional drawing

# QPD H3PE2,5 BK - H distributor

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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1423973>



**IECEE CB Scheme**  
Approval ID: DE1-65875



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



**UL Listed**  
Approval ID: E468743



**cUL Listed**  
Approval ID: E468743

|                          | VDE Zeichengenehmigung |                       |                   |                      |
|--------------------------|------------------------|-----------------------|-------------------|----------------------|
|                          | Approval ID: 40029149  |                       |                   |                      |
|                          | Nominal voltage $U_N$  | Nominal current $I_N$ | Cross section AWG | Cross section $mm^2$ |
| Only flexible conductors | 400 V                  | 20 A                  | -                 | 1.5 - 2.5            |
| Only rigid conductors    | 690 V                  | 20 A                  | -                 | 1.5 - 2.5            |

**cULus Listed**

# QPD H3PE2,5 BK - H distributor



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## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-11.0 | 27440603 |
| ECLASS-13.0 | 27440603 |
| ECLASS-12.0 | 27440603 |

### ETIM

|          |          |
|----------|----------|
| ETIM 9.0 | EC002567 |
|----------|----------|

### UNSPSC

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

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.)     | No substance above 0.1 wt%               |

# QPD H3PE2,5 BK - H distributor



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## Mandatory accessories

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

1423987

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



Connector, product family: QPD, connection method: IDC connection, number of positions: 3+PE, 1 mm<sup>2</sup> ... 2.5 mm<sup>2</sup>, 690 V, 20 A, PA, black, with QUICKON nut, coding: Coding profile, external cable diameter: 6 mm ... 10 mm

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### QPD P3PE2,5 9-14 BK - Connector

1423988

<https://www.phoenixcontact.com/us/products/1423988>



Connector, product family: QPD, connection method: IDC connection, number of positions: 3+PE, 1 mm<sup>2</sup> ... 2.5 mm<sup>2</sup>, 690 V, 20 A, PA, black, with QUICKON nut, coding: Coding profile, external cable diameter: 9 mm ... 14 mm

## QPD H3PE2,5 BK - H distributor

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

1423993

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



Nut, product family: QPD, connection method: IDC connection, 1 mm<sup>2</sup> ... 2.5 mm<sup>2</sup>, 690 V, 20 A, PA, black, external cable diameter: 6 mm ... 10 mm

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### QPD N2,5 9-14 BK - Nut

1423994

<https://www.phoenixcontact.com/us/products/1423994>



Nut, product family: QPD, connection method: IDC connection, 1 mm<sup>2</sup> ... 2.5 mm<sup>2</sup>, 690 V, 20 A, PA, black, external cable diameter: 9 mm ... 14 mm

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## Accessories

## QPD H3PE2,5 BK - H distributor

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## CP QPD 4X2,5 - Coding profile

1425950

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



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

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## QPD QSK 5X1,5 - Protective cap

1414758

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



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

## QPD H3PE2,5 BK - H distributor

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

1414728

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

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



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## QPD W3PE2,5 M25 0,5 BK - Panel feed-through

1423983

<https://www.phoenixcontact.com/us/products/1423983>



Panel feed-through, product family: QPD, connection method: Single wires (Welded-on), number of positions: 3+PE, M25, Pin, 1 mm<sup>2</sup> ... 2.5 mm<sup>2</sup>, 690 V, 20 A, PA, black, without QUICKON nut, coding: coded, 2.5 mm<sup>2</sup>, wires cut flat at the end, cable length: 0.5 m

## QPD H3PE2,5 BK - H distributor

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## QPD W3PE2,5 M25 1,0 BK - Panel feed-through

1423984

<https://www.phoenixcontact.com/us/products/1423984>



Panel feed-through, product family: QPD, connection method: Single wires (Welded-on), number of positions: 3+PE, M25, Pin, 1 mm<sup>2</sup> ... 2.5 mm<sup>2</sup>, 690 V, 20 A, PA, black, without QUICKON nut, coding: coded, 2.5 mm<sup>2</sup>, wires cut flat at the end, cable length: 1 m

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## QPD W3PE2,5 M25 FC BK - Panel feed-through

1423986

<https://www.phoenixcontact.com/us/products/1423986>



Panel feed-through, product family: QPD, connection method: Spade connection, number of positions: 3+PE, M25, Pin, 1 mm<sup>2</sup> ... 2.5 mm<sup>2</sup>, 690 V, 20 A, PA, black, without QUICKON nut, coding: coded, 2.5 mm<sup>2</sup>

## QPD H3PE2,5 BK - H distributor

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## QPD W3PE2,5 M25 DT BK - Panel feed-through

1423985

<https://www.phoenixcontact.com/us/products/1423985>



Panel feed-through, product family: QPD, connection method: Push-in connection, number of positions: 3+PE, M25, Pin, 1 mm<sup>2</sup> ... 2.5 mm<sup>2</sup>, 400 V, 20 A, PA, black, without QUICKON nut, coding: coded, 2.5 mm<sup>2</sup>

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

1423991

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



Conductor connector, product family: QPD, connection method: IDC connection, number of positions: 3+PE, 1 mm<sup>2</sup> ... 2.5 mm<sup>2</sup>, 690 V, 20 A, PA, black, with one QUICKON nut, coding: Coding profile, external cable diameter: 6 mm ... 10 mm

## QPD H3PE2,5 BK - H distributor

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## QPD C3PE2,5 1X9-14 BK - Conductor connector

1423992

<https://www.phoenixcontact.com/us/products/1423992>



Conductor connector, product family: QPD, connection method: IDC connection, number of positions: 3+PE, 1 mm<sup>2</sup> ... 2.5 mm<sup>2</sup>, 690 V, 20 A, PA, black, with one QUICKON nut, coding: Coding profile, external cable diameter: 9 mm ... 14 mm

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

1424047

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



T distributor, product family: QPD, connection method: IDC connection, number of positions: 3+PE, 1 mm<sup>2</sup> ... 2.5 mm<sup>2</sup>, 690 V, 20 A, PA, black, With two QUICKON nuts, coding: Coding profile, external cable diameter: 6 mm ... 10 mm

## QPD H3PE2,5 BK - H distributor

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## QPD T3PE2,5 2X9-14 BK - T distributor

1424048

<https://www.phoenixcontact.com/us/products/1424048>



T distributor, product family: QPD, connection method: IDC connection, number of positions: 3+PE, 1 mm<sup>2</sup> ... 2.5 mm<sup>2</sup>, 690 V, 20 A, PA, black, With two QUICKON nuts, coding: Coding profile, external cable diameter: 9 mm ... 14 mm

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## QSS 22 - Socket wrench

1670206

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



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

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