

# QPD T 4PE6,0 2X12-20 BK - T distributor



1411417

<https://www.phoenixcontact.com/us/products/1411417>

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QUICKON T-distributor, black, 4+PE-pos., 2.5 mm<sup>2</sup> ... 6.0 mm<sup>2</sup>/690 V/40 A, for cable diameter of 12 mm ... 20 mm, with two QUICKON nuts

## 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	1411417
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF50
Product key	BF6DCC
Catalog page	Page 490 (C-2-2019)
GTIN	4046356932196
Weight per piece (including packing)	360.2 g
Weight per piece (excluding packing)	362 g
Customs tariff number	85366990
Country of origin	PL

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## Technical data

### Mounting

Mounting type	direct screw connection
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### Product properties

Product type	Power distributor
Product family	QPD
Type	T distributor
Number of positions	5
Connection profile	4+PE
Position marking	1, 2, 3, N, PE
Number of connections	3
No. of cable outlets	3
Coding	Coding profile

### Insulation characteristics

Overvoltage category	III
Degree of pollution	3

### Connection data

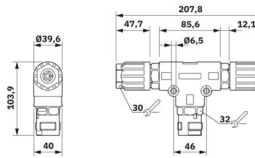
#### Connection technology

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

#### Conductor connection

Conductor cross section flexibel	2.5 mm <sup>2</sup> ... 6 mm <sup>2</sup>
Conductor cross section solid	2.5 mm <sup>2</sup> ... 6 mm <sup>2</sup>
Connection cross section AWG	14 ... 10
Tightening torque Union nut	15 Nm
Wrench size Union nut	30 mm

### Dimensions

Dimensional drawing	
Width	103.9 mm
Height	40 mm
Length	207.8 mm
Wrench size	30 mm

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Wrench size for mounting	30 mm
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## Electrical properties

Rated surge voltage (II/2)	8 kV
Rated surge voltage (III/2)	8 kV
Rated surge voltage (III/3)	6 kV
Rated current	40 A
Contact resistance	< 3 mΩ
rated voltage (II/2)	1000 V
rated voltage (III/2)	1000 V
Rated voltage (III/3)	690 V
Nominal voltage $U_N$	690 V AC 690 V DC
Nominal current $I_N$	40 A

## Mechanical properties

### Mechanical data

Insertion/withdrawal cycles	max. 50
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## Material specifications

Color	black (RAL 9005)
Material Housing	PA
Material Contact	Cu
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
External cable diameter	12 mm ... 20 mm
Wire diameter including insulation	2.95 mm ... 5 mm
Position marking	1, 2, 3, N, PE
Material wire insulation	PVC/PE/TPE/rubber

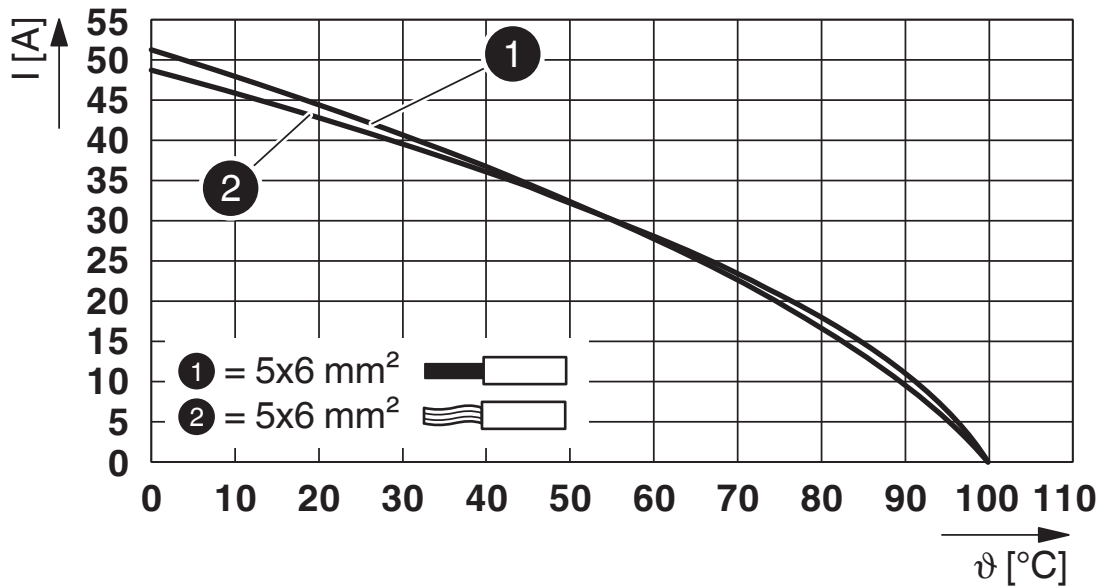
## Environmental and real-life conditions

### 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

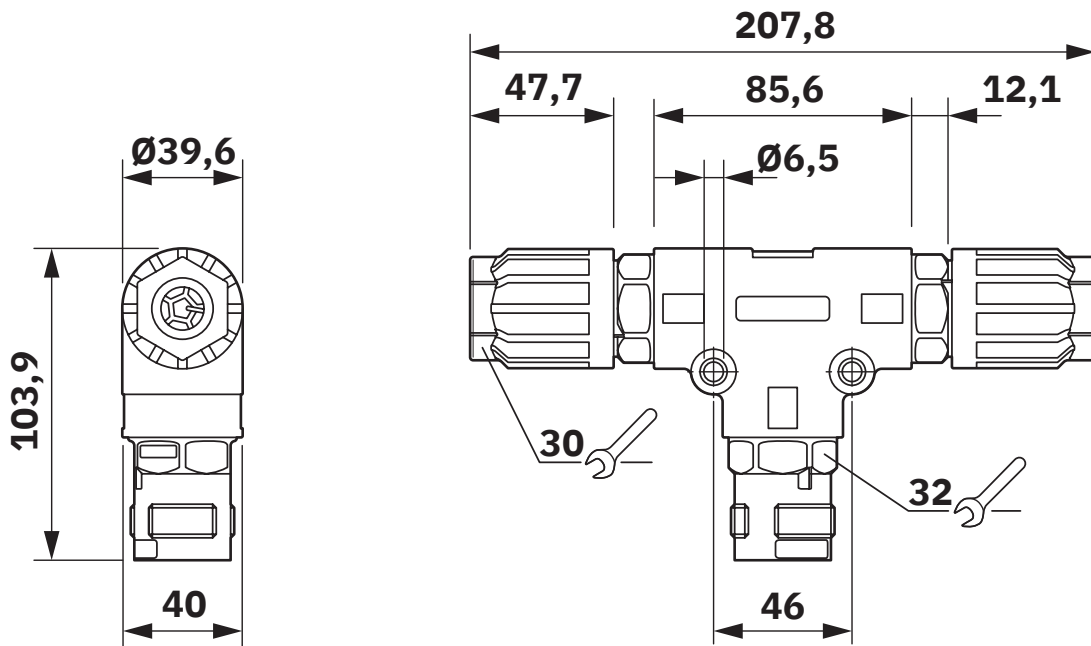
Drawings

Diagram



Derating diagram

Dimensional drawing



Dimensional drawing

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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1411417>



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



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



**DNV GL**  
Approval ID: TAE00003J5



**VDE Zeichengenehmigung**  
Approval ID: 40029149



**UL Listed**  
Approval ID: E468743

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



**cUL Listed**  
Approval ID: E468743

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

**cULus Listed**

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## Classifications

### ECLASS

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

### ETIM

ETIM 9.0	EC002567
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### UNSPSC

UNSPSC 21.0	39121400
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## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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### 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%
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## Mandatory accessories

### QPD P 4PE6,0 12-20 BK - Connector

1410387

<https://www.phoenixcontact.com/us/products/1410387>



Connector, product family: QPD, connection method: IDC connection, number of positions: 4+PE, 2.5 mm<sup>2</sup> ... 6 mm<sup>2</sup>, 690 V, 40 A, PA, black, with QUICKON nut, external cable diameter: 12 mm ... 20 mm

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### QPD P 4PE6,0 12-20 TL BK - Connector

1039565

<https://www.phoenixcontact.com/us/products/1039565>



Connector, product family: QPD, connection method: IDC connection, number of positions: 4+PE, 2.5 mm<sup>2</sup> ... 6 mm<sup>2</sup>, 690 V, 40 A, PA, black, with QUICKON nut, external cable diameter: 12 mm ... 20 mm



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## QPD N 4PE6,0 12-20 BK - Nut

1410406

<https://www.phoenixcontact.com/us/products/1410406>



QUICKON nut, black, 4+PE-pos., 2.5 mm<sup>2</sup> ... 6.0 mm<sup>2</sup>/690 V/40 A, for cables with a diameter of 12 mm ... 20 mm.

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## Accessories

### CP-QPD 5X6,0 - Coding profile

1411402

<https://www.phoenixcontact.com/us/products/1411402>



Coding profile, red, for insertion into the 5-pos. QUICKON dome and connector, can be positioned in 72° increments.

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## QPD QSK 5X6,0 - Protective cap

1411403

<https://www.phoenixcontact.com/us/products/1411403>

Protective cap, black plastic, for 5 x 2.5 mm<sup>2</sup> QPD connector, IP50.



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## QPD QSK BK 5X6,0 FS - Protective cap

1411400

<https://www.phoenixcontact.com/us/products/1411400>

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



# QPD T 4PE6,0 2X12-20 BK - T distributor



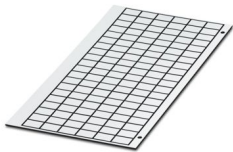
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## GPE 13X 9 WH - Engraving material

0806932

<https://www.phoenixcontact.com/us/products/0806932>



Engraving material, Sheet, white, unlabeled, can be labeled with: PLOTMARK, ENGRAVING UNIT, CMS-P1-PLOTTER, P1 ENGRAVING UNIT, mounting type: adhesive, lettering field size: 13 x 9 mm, Number of individual labels: 120

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## EMLP (13X9)R - Label

0819453

<https://www.phoenixcontact.com/us/products/0819453>



Label, Roll, white, unlabeled, can be labeled with: THERMOMARK E.300 (D)/600 (D), THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, lettering field size: 13 x 9 mm, Number of individual labels: 500

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## SEALING PLUG 14X22 RD - Closing cap

1400270

<https://www.phoenixcontact.com/us/products/1400270>

Closing cap, for threads pluggable, color: red



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## QPD W 4PE6,0 12-20 M25 0,5 BK - Panel feed-through

1410394

<https://www.phoenixcontact.com/us/products/1410394>



QUICKON panel feed-through, 4+PE-pos., 2.5 mm<sup>2</sup> ... 6.0 mm<sup>2</sup>/690 V/40 A, with QUICKON nut, black, for cable diameter of 12 mm ... 20 mm, M25 connection thread with 5 welded-on 6.0 mm<sup>2</sup> cable wires, 0.5 m long, cut flat at the end.

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## QPD W 4PE6,0 12-20 M25 1,0 BK - Panel feed-through

1410395

<https://www.phoenixcontact.com/us/products/1410395>



QUICKON panel feed-through, 4+PE-pos., 2.5 mm<sup>2</sup> ... 6.0 mm<sup>2</sup>/690 V/40 A, with QUICKON nut, black, for cable diameter of 12 mm ... 20 mm, M25 connection thread with 5 welded-on 6.0 mm<sup>2</sup> cable wires, 1.0 m long, cut flat at the end.

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## QPD C 4PE6,0 1X12-20 BK - Conductor connectors

1410416

<https://www.phoenixcontact.com/us/products/1410416>



QUICKON cable connector, with a QUICKON nut, black, 4+PE-pos., 2.5 mm<sup>2</sup> ... 6.0 mm<sup>2</sup>/690 V/40 A, for cable diameter of 12 mm ... 20 mm.

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## QPD C 4PE6,0 2X12-20 BK - Conductor connectors

1410412

<https://www.phoenixcontact.com/us/products/1410412>



QUICKON cable connector, black, 4+PE-pos., 2.5 mm<sup>2</sup> ... 6.0 mm<sup>2</sup>/690 V/40 A, for cable diameter of 12 mm ... 20 mm.

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## QPD T 4PE6,0 3X12-20 BK - T distributor

1411415

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QUICKON T-distributor, black, 4+PE-pos., 2.5 mm<sup>2</sup> ... 6.0 mm<sup>2</sup>/690 V/40 A, for cable diameter of 12 mm ... 20 mm, with three QUICKON nuts

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## QPD H 4PE6,0 4X12-20 BK - H distributor

1411425

<https://www.phoenixcontact.com/us/products/1411425>



QUICKON H-distributor, black, 4+PE-pos., 2.5 mm<sup>2</sup> ... 6.0 mm<sup>2</sup>/690 V/40 A, for cable diameter of 12 mm ... 20 mm, with a sealing bolt.

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