

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

1410387

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Connector, product family: QPD, connection method: IDC connection, number of positions: 4+PE, 2.5 mm² ... 6 mm², 690 V, 40 A, PA, black, with QUICKON nut, external cable diameter: 12 mm ... 20 mm

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 maintenance – the connectors enable fast device replacement and preassembled cables simplify startup

Commercial data

Item number	1410387
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF50
Product key	BF6BCC
Catalog page	Page 487 (C-2-2017)
GTIN	4046356929608
Weight per piece (including packing)	101.7 g
Weight per piece (excluding packing)	101.5 g
Customs tariff number	85366990
Country of origin	PL

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Technical data

Product properties

Product type	Installation connector
Product family	QPD
Type	QPD 5x6,0
Number of positions	5
Connection profile	4+PE
Position marking	1, 2, 3, N, PE
Number of connections	5
Number of connections per position	1

Insulation characteristics

Overvoltage category	III
Degree of pollution	3

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	< 4 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

Connection data

Connection technology

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

Conductor connection

Conductor cross section flexibel	2.5 mm ² ... 6 mm ²
Conductor cross section solid	2.5 mm ² ... 6 mm ²
Connection cross section AWG	14 ... 10
Tightening torque Union nut	15 Nm

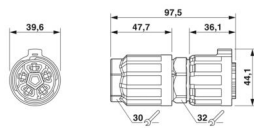
Dimensions

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Dimensional drawing	
Width	39.6 mm
Height	44.1 mm
Length	97.5 mm
Diameter	44.1 mm

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

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	max. 50
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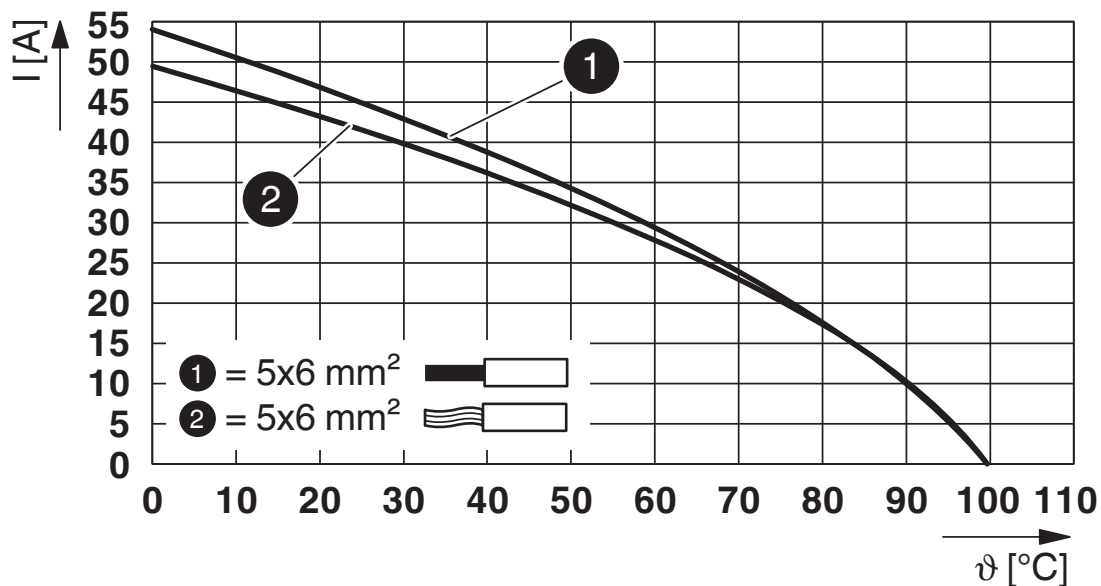
Environmental and real-life conditions

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 ... 80 °C

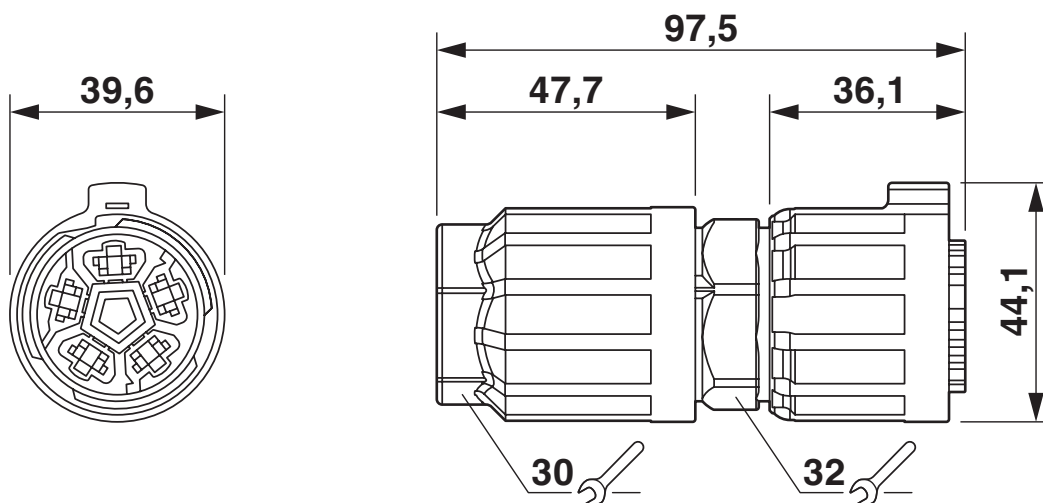
Drawings

Diagram



Derating diagram

Dimensional drawing



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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1410387>



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	27440605
ECLASS-13.0	27440605
ECLASS-12.0	27440605

ETIM

ETIM 9.0	EC002560
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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
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 W 4PE6,0 12-20 M25 0,5 BK - Panel feed-through

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QUICKON panel feed-through, 4+PE-pos., 2.5 mm² ... 6.0 mm²/690 V/40 A, with QUICKON nut, black, for cable diameter of 12 mm ... 20 mm, M25 connection thread with 5 welded-on 6.0 mm² cable wires, 0.5 m long, cut flat at the end.

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

1410395

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QUICKON panel feed-through, 4+PE-pos., 2.5 mm² ... 6.0 mm²/690 V/40 A, with QUICKON nut, black, for cable diameter of 12 mm ... 20 mm, M25 connection thread with 5 welded-on 6.0 mm² cable wires, 1.0 m long, cut flat at the end.

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

1410416

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QUICKON cable connector, with a QUICKON nut, black, 4+PE-pos., 2.5 mm² ... 6.0 mm²/690 V/40 A, for cable diameter of 12 mm ... 20 mm.

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

1410412

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QUICKON cable connector, black, 4+PE-pos., 2.5 mm² ... 6.0 mm²/690 V/40 A, for cable diameter of 12 mm ... 20 mm.

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

1411417

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QUICKON T-distributor, black, 4+PE-pos., 2.5 mm² ... 6.0 mm²/690 V/40 A, for cable diameter of 12 mm ... 20 mm, with two QUICKON nuts

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

1411415

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QUICKON T-distributor, black, 4+PE-pos., 2.5 mm² ... 6.0 mm²/690 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

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QUICKON H-distributor, black, 4+PE-pos., 2.5 mm² ... 6.0 mm²/690 V/40 A, for cable diameter of 12 mm ... 20 mm, with a sealing bolt.

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

1410396

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QUICKON panel feed-through, 4+PE-pos., 2.5 mm² ... 6.0 mm²/690 V/40 A, without QUICKON nut, black, M25 connection thread with 5 welded-on 6.0 mm² cable wires, 0.5 m long, cut flat at the end.

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

1410397

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QUICKON panel feed-through, 4+PE-pos., 2.5 mm² ... 6.0 mm²/690 V/40 A, without QUICKON nut, black, M25 connection thread with 5 welded-on 6.0 mm² cable wires, 1.0 m long, cut flat at the end.

QPD H 4PE6,0 BK - H distributor

1411426

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QUICKON H-distributor, black, 4+PE-pos., 2.5 mm² ... 6.0 mm²/690 V/40 A, without QUICKON nut.

Accessories

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CP-QPD 5X6,0 - Coding profile

1411402

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

QPD QSK 5X6,0 - Protective cap

1411403

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Protective cap, black plastic, for 5 x 2.5 mm² QPD connector, IP50.

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QPD PSK 5X6,0 - Protective cap

1411404

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Protective cap, transparent plastic, for 5x 6.0 mm² QPD QUICKON connection, IP50.

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

1039565

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

1410406

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QUICKON nut, black, 4+PE-pos., 2.5 mm² ... 6.0 mm²/690 V/40 A, for cables with a diameter of 12 mm ... 20 mm.

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