

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



1410387

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

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Connector, 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 | AF6BCC |
| 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 |

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

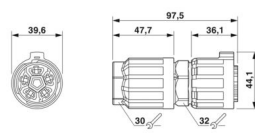
| | |
|----------------------------------|---|
| Conductor cross-section flexibel | 2.5 mm ² ... 6 mm ² |
| Conductor cross-section solid | 2.5 mm ² ... 6 mm ² |
| Connection cross section AWG | 14 ... 10 |
| Tightening torque Union nut | 15 Nm |

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 |
| Material Seal | NBR |
| 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 |
|-----------------------------|---------|

Environmental and real-life conditions

Ambient conditions

| | |
|---|------------------------------------|
| Degree of protection | IP66 IP68 (2 m / 24 h) IP69K |
| Impact strength | IK07 |
| Ambient temperature (operation) | -40 °C ... 100 °C |
| Temperature when conductor connected | -5 °C ... 50 °C |
| Ambient temperature (storage/transport) | -40 °C ... 80 °C |

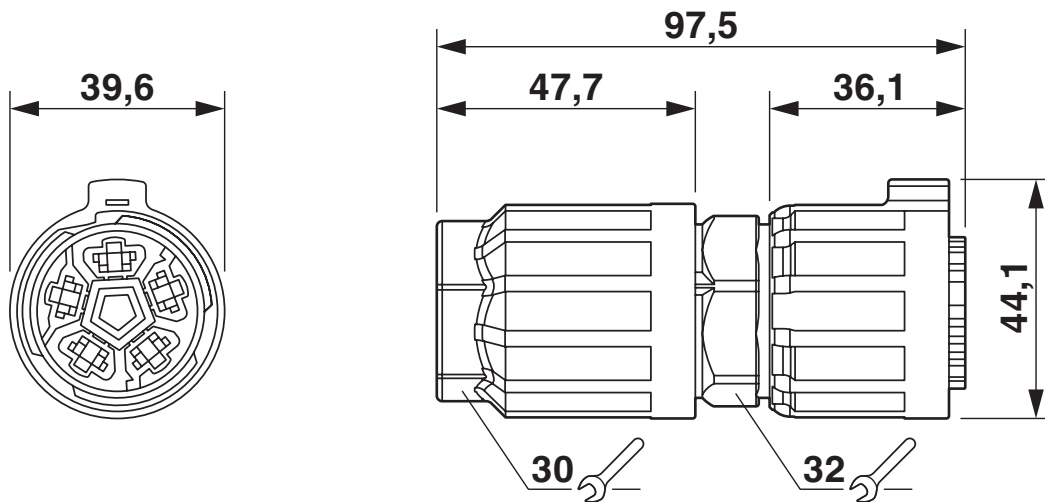
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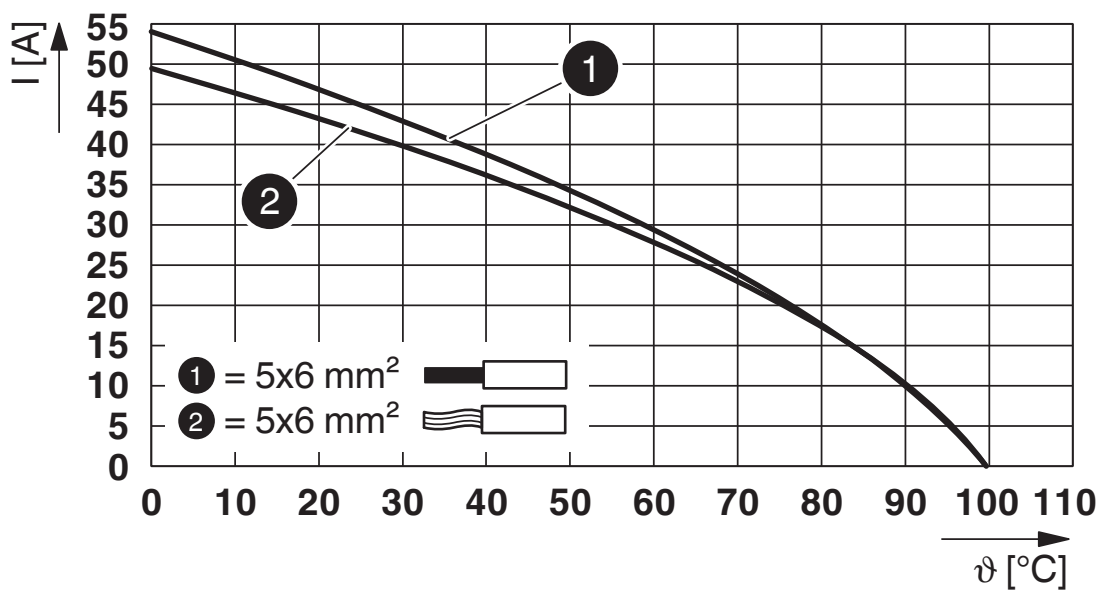
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Drawings

Dimensional drawing



Diagram



Derating diagram

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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



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 |
|-------|-----------------------|-----------------------|-------------------|-----------------------------|
| keine | | | | |
| | 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 |
|-------|-----------------------|-----------------------|-------------------|-----------------------------|
| keine | | | | |
| | 600 V | 20 A | - 12 | - |

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Classifications

ECLASS

| | |
|-------------|----------|
| ECLASS-13.0 | 27440605 |
| ECLASS-15.0 | 27440605 |

ETIM

| | |
|-----------|----------|
| ETIM 10.0 | EC002560 |
|-----------|----------|

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% |
|-------------------------------------|----------------------------|

EF3.1 Climate Change

| | |
|---------|---------------|
| CO2e kg | 1.129 kg CO2e |
|---------|---------------|

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