

## Connector - QPD P 3PE2,5 6-10 BK - 1582202

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

### Your advantages

- ✓ Innovative and time saving - QUICKON fast connection for time saving of up to 80 % for on-site connection
- ✓ Convenient: quick and easy assembly without special tools
- ✓ Robust throughout: housing with IP68/IP69K and IK07 protection for a wide range of applications
- ✓ Safer connection thanks to polarization against mismatching and touch-proof protection according to DIN EN 0105
- ✓ Easy maintenance - the connectors enable fast device replacement and simplify startup thanks to pre-assembled cables

RoHS

### Key Commercial Data

|              |                                                                                                         |
|--------------|---------------------------------------------------------------------------------------------------------|
| Packing unit | 1 pc                                                                                                    |
| GTIN         | <br>4 046356 316927 |
| GTIN         | 4046356316927                                                                                           |

### Technical data

#### General

|                                       |                    |
|---------------------------------------|--------------------|
| Type                                  | QPD 4x2,5          |
| Color                                 | black              |
| Locking type                          | Screw locking      |
| Connection method                     | QUICKON connection |
|                                       | IDC connection     |
| Number of positions                   | 4                  |
| Note number of positions              | 3+PE               |
| Wrench size, union nut                | 22 mm              |
| Tightening torque, union nut          | 5 Nm               |
| Number of connections                 | 4                  |
| Conductor cross section flexible min. | 1 mm <sup>2</sup>  |

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## Technical data

### General

|                                       |                     |
|---------------------------------------|---------------------|
| Conductor cross section flexible max. | 2.5 mm <sup>2</sup> |
| Conductor cross section solid min.    | 1 mm <sup>2</sup>   |
| Conductor cross section solid max.    | 2.5 mm <sup>2</sup> |
| Conductor cross section AWG min.      | 16                  |
| Conductor cross section AWG max.      | 14                  |

### Cabel

|                                                                             |                                    |
|-----------------------------------------------------------------------------|------------------------------------|
| Structure of individual litz in acc. with VDE 0295 / smallest wire diameter | VDE 0295 class 1 to 6/min. 0.15 mm |
| Wire insulation material                                                    | PVC/PE/TPE/rubber                  |
| Wire diameter including insulation                                          | 2 mm ... 3.8 mm                    |
| External cable diameter                                                     | 6 mm ... 10 mm                     |
| Position marking                                                            | 1, 2, 3, PE                        |

### Ambient conditions

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

### Electrical characteristics

|                                |        |
|--------------------------------|--------|
| Nominal current I <sub>N</sub> | 20 A   |
| Rated current                  | 20 A   |
| Rated voltage (III/3)          | 690 V  |
| Rated voltage (III/2)          | 1000 V |
| Rated voltage (II/2)           | 1000 V |
| Rated surge voltage (III/3)    | 6 kV   |
| Rated surge voltage (III/2)    | 8 kV   |
| Rated surge voltage (II/2)     | 8 kV   |

### Mechanical characteristics

|                             |         |
|-----------------------------|---------|
| QUICKON connectability      | max. 10 |
| Insertion/withdrawal cycles | 50      |
| Category of shock impact    | IK07    |

### Material data

|                                        |               |
|----------------------------------------|---------------|
| Contact material                       | Cu            |
| Contact surface material               | silver-plated |
| Contact carrier material               | PA            |
| Insulating material                    | PA            |
| Flammability rating according to UL 94 | V0            |
| Overvoltage category                   | III           |

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### Technical data

#### Material data

|                     |   |
|---------------------|---|
| Degree of pollution | 3 |
|---------------------|---|

#### Standards and Regulations

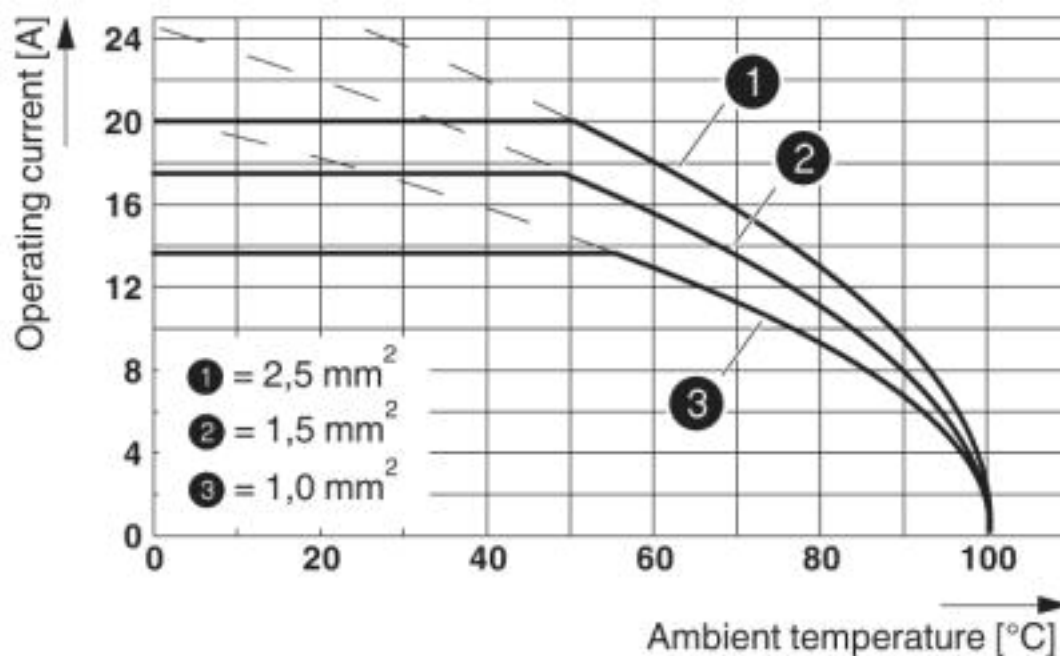
|                                        |    |
|----------------------------------------|----|
| Flammability rating according to UL 94 | V0 |
|----------------------------------------|----|

#### Environmental Product Compliance

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

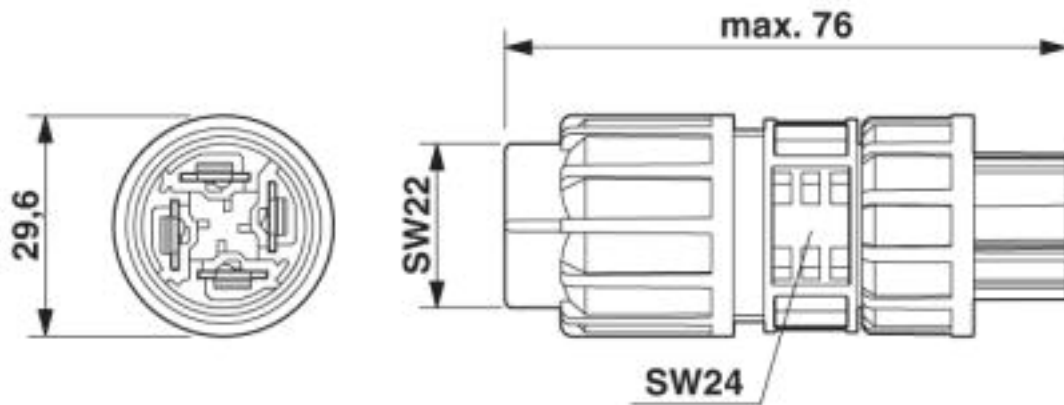
### Drawings

Diagram



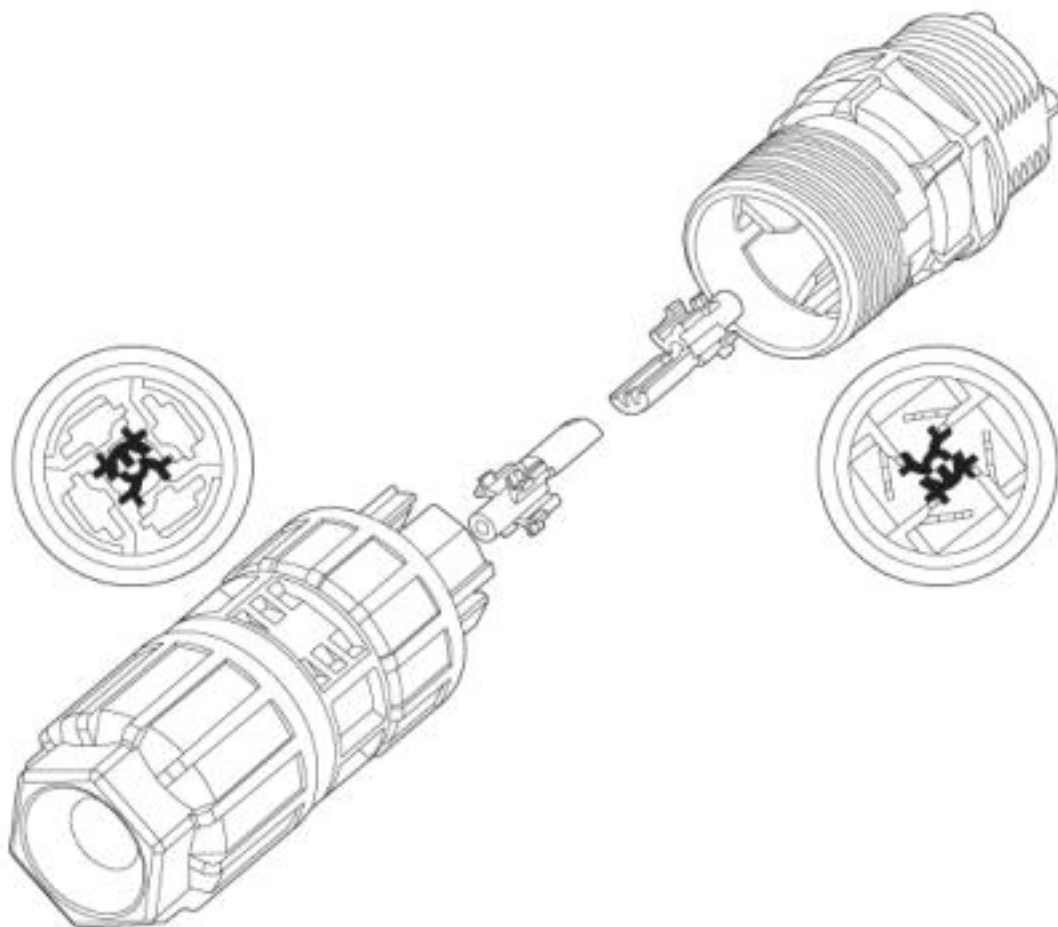
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Dimensional drawing



Dimensional drawing: connector, 2.5 mm<sup>2</sup>

Schematic diagram



Coding of the QUICKON plug-in connection

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### Approvals

#### Approvals

#### Approvals

UL Listed / cUL Listed / UL Listed / IECCE CB Scheme / cUL Listed / VDE Zeichengenehmigung / EAC / DNV GL / EAC

#### Ex Approvals

#### Approval details

|                    |                                                                                   |                                                                                                                                                       |               |
|--------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| UL Listed          |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | FILE E 468743 |
|                    |                                                                                   |                                                                                                                                                       |               |
| Nominal voltage UN |                                                                                   | 600 V                                                                                                                                                 |               |
| Nominal current IN |                                                                                   | 10 A                                                                                                                                                  |               |
| mm²/AWG/kcmil      |                                                                                   | 16                                                                                                                                                    |               |

|                    |                                                                                     |                                                                                                                                                       |               |
|--------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| cUL Listed         |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | FILE E 468743 |
|                    |                                                                                     |                                                                                                                                                       |               |
| Nominal voltage UN |                                                                                     | 600 V                                                                                                                                                 |               |
| Nominal current IN |                                                                                     | 10 A                                                                                                                                                  |               |
| mm²/AWG/kcmil      |                                                                                     | 16                                                                                                                                                    |               |

|           |                                                                                     |                                                                                                                                                       |               |
|-----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| UL Listed |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | FILE E 221474 |
|-----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|

|                 |                                                                                     |                                                           |           |
|-----------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------|-----------|
| IECEE CB Scheme |  | <a href="http://www.iecee.org/">http://www.iecee.org/</a> | DE1-58228 |
|-----------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------|-----------|

|            |                                                                                     |                                                                                                                                                       |               |
|------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| cUL Listed |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | FILE E 221474 |
|------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|

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### Approvals

|                        |                                                                                   |                                                                                                                                                                                                           |          |
|------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| VDE Zeichengenehmigung |  | <a href="http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx">http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx</a> | 40029149 |
| Nominal voltage UN     | 690 V                                                                             |                                                                                                                                                                                                           |          |
| Nominal current IN     | 20 A                                                                              |                                                                                                                                                                                                           |          |
| mm²/AWG/kcmil          | 1.5-2.5                                                                           |                                                                                                                                                                                                           |          |

|     |                                                                                   |                          |
|-----|-----------------------------------------------------------------------------------|--------------------------|
| EAC |  | RU C-<br>DE.AI30.B.01102 |
|-----|-----------------------------------------------------------------------------------|--------------------------|

|        |                                                                                   |                                                                                   |            |
|--------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------|
| DNV GL |  | <a href="https://approvalfinder.dnvgl.com/">https://approvalfinder.dnvgl.com/</a> | TAE00003J5 |
|--------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------|

|     |                                                                                     |                          |
|-----|-------------------------------------------------------------------------------------|--------------------------|
| EAC |  | RU C-<br>DE.BL08.B.00511 |
|-----|-------------------------------------------------------------------------------------|--------------------------|

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PHOENIX CONTACT GmbH & Co. KG  
Flachsmarktstr. 8  
32825 Blomberg  
Germany  
Tel. +49 5235 300  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.com>