

## Connector - QPD P 3PE2,5 9-14 BK - 1582205

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



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: 9 mm ... 14 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 316934 |
| GTIN         | 4046356316934                                                                                           |

### 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>  |

# Connector - QPD P 3PE2,5 9-14 BK - 1582205

## 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                                                     | 9 mm ... 14 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           |

## Connector - QPD P 3PE2,5 9-14 BK - 1582205

### Technical data

#### Material data

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

#### Standards and Regulations

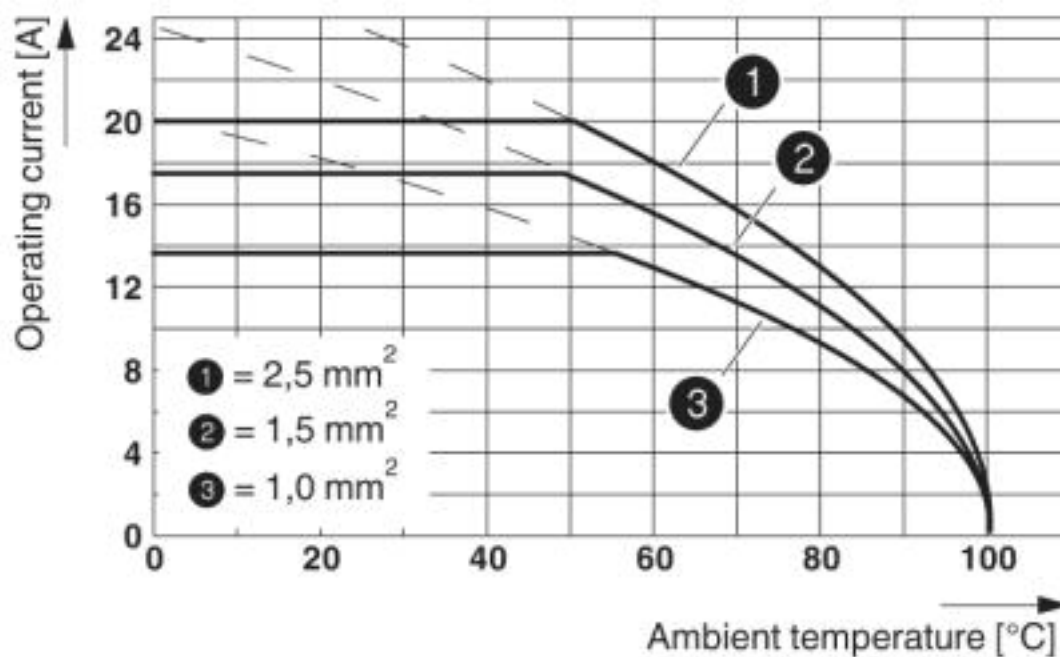
|                                        |    |
|----------------------------------------|----|
| Flammability rating according to UL 94 | V0 |
|----------------------------------------|----|

#### Environmental Product Compliance

|            |                                                                                                     |
|------------|-----------------------------------------------------------------------------------------------------|
|            | Lead 7439-92-1                                                                                      |
| China RoHS | Environmentally Friendly Use Period = 50                                                            |
|            | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

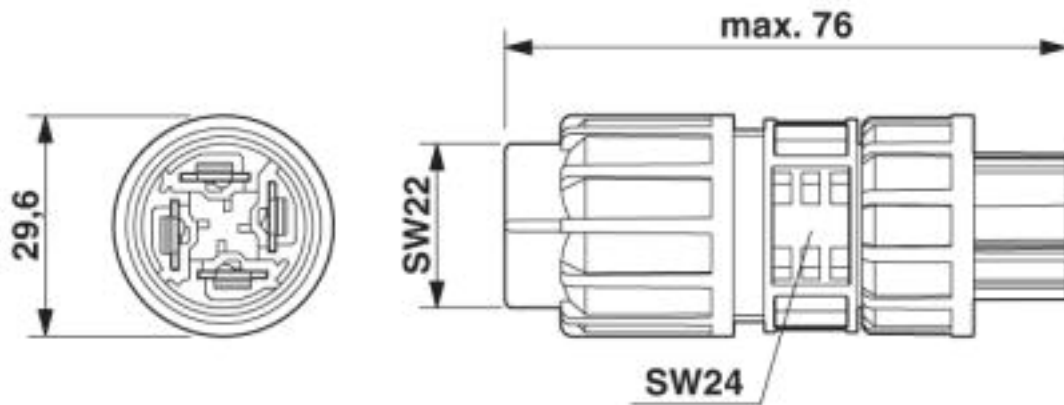
### Drawings

Diagram



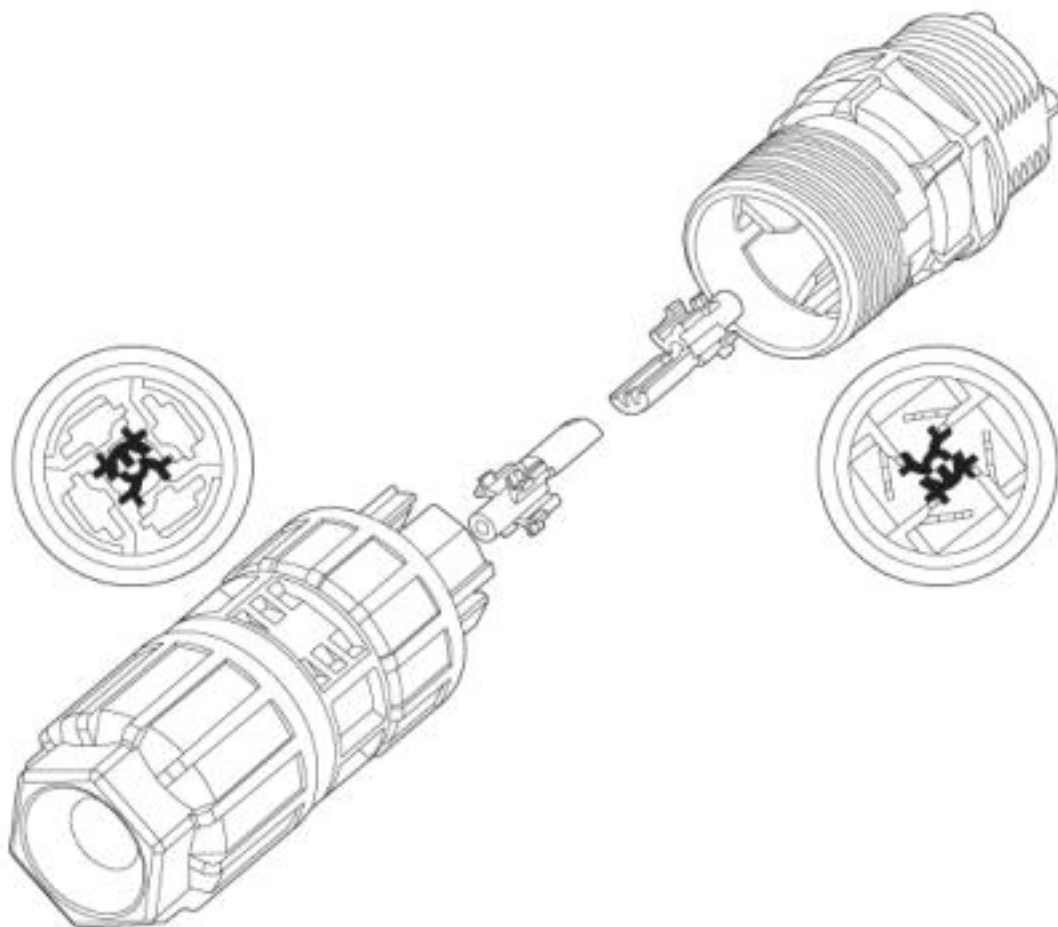
## Connector - QPD P 3PE2,5 9-14 BK - 1582205

Dimensional drawing



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

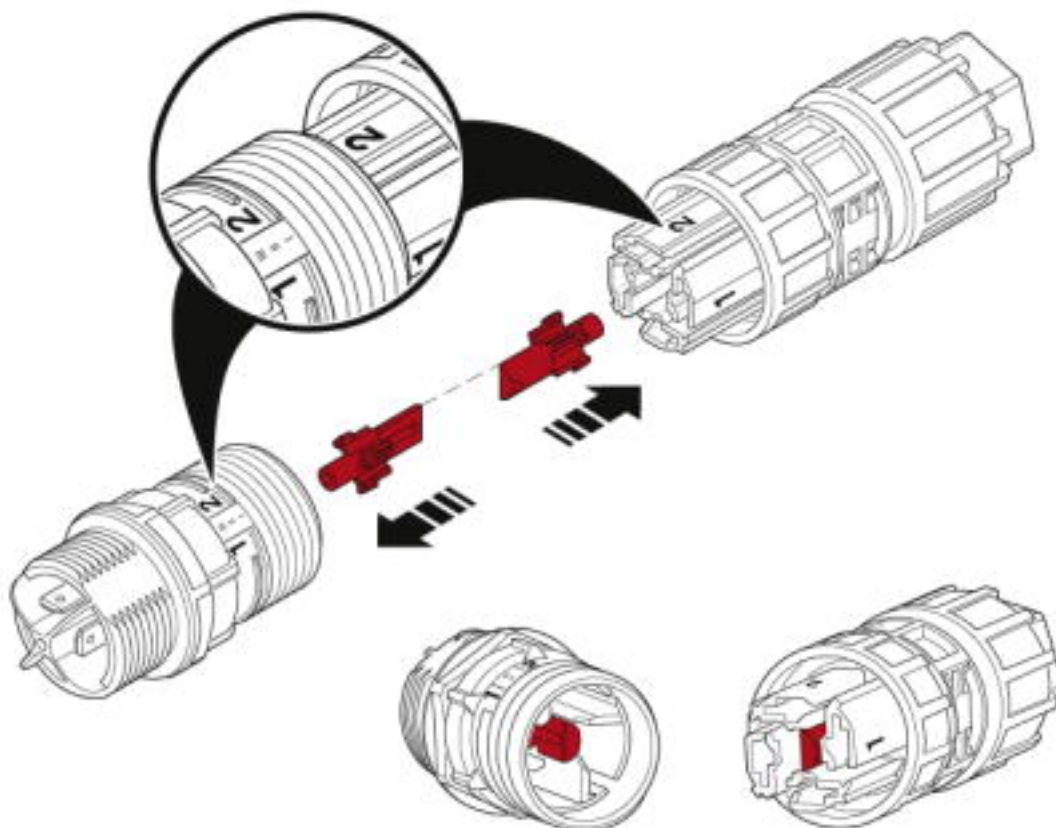
Schematic diagram



Coding of the QUICKON plug-in connection

## Connector - QPD P 3PE2,5 9-14 BK - 1582205

Schematic diagram



### 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 | 15 A                                                                                |                                                                                                                                                       |               |
| mm²/AWG/kcmil      | 14                                                                                  |                                                                                                                                                       |               |

# Connector - QPD P 3PE2,5 9-14 BK - 1582205

## Approvals

|                    |                                                                                   |                                                                                                                                                       |               |
|--------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| 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 | 15 A                                                                              |                                                                                                                                                       |               |
| mm²/AWG/kcmil      | 14                                                                                |                                                                                                                                                       |               |

|           |                                                                                   |                                                                                                                                                       |               |
|-----------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| 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 |
|------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|

|                        |                                                                                     |                                                                                                                                                                                                           |          |
|------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| 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 |  |
|-----|-------------------------------------------------------------------------------------|--------------------------|--|

Phoenix Contact 2020 © - all rights reserved  
<http://www.phoenixcontact.com>

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