

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 documentation. Our general terms of use for downloads are valid.



Coupler connector, Range of articles: PRC 35, design: Release with tool or by hand (see accessories), housing material: PPE, color: black, number of positions: 3, min. conductor cross section: 1.5 mm<sup>2</sup>, max. conductor cross section: 6 mm<sup>2</sup>, rated voltage: 690 V AC, rated current: 35 A, Connection method: Screw connection, Contact connection type: Socket, min. cable diameter: 8 mm, max. cable diameter: 21 mm, Variant for manual release

Your advantages

- Up to 75% smaller in size than industrial connectors with the same rating
- Locking mechanism can be unlocked manually or using a tool
- Suitable for applications in atmospheres containing salt and in direct sunlight
- Ideal for indoor and outdoor use due to weatherproof materials

Commercial data

|                                      |               |
|--------------------------------------|---------------|
| Item number                          | 1017635       |
| Packing unit                         | 1 pc          |
| Minimum order quantity               | 1 pc          |
| Sales key                            | AB03          |
| Product key                          | ABLCBA        |
| GTIN                                 | 4055626500775 |
| Weight per piece (including packing) | 92.6 g        |
| Weight per piece (excluding packing) | 90.5 g        |
| Customs tariff number                | 85366990      |
| Country of origin                    | PL            |

## Technical data

### Notes

|                     |                                                      |
|---------------------|------------------------------------------------------|
| Order information:  | Variant for manual release                           |
| Note on application | For assembly notes, please refer to the packing slip |

### Safety note

|             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Safety note | <ul style="list-style-type: none"> <li>• WARNING: Commission properly functioning products only. The products must be regularly inspected for damage. Decommission defective products immediately. Replace damaged products. Repairs are not possible.</li> </ul>                                                                                                                                                                                                                    |
|             | <ul style="list-style-type: none"> <li>• WARNING: Only electrically qualified personnel may install and operate the product. They must observe the following safety notes. The qualified personnel must be familiar with the basics of electrical engineering. They must be able to recognize and prevent danger. The relevant symbol on the packaging indicates that only personnel familiar with electrical engineering are allowed to install and operate the product.</li> </ul> |
|             | <p>WARNING: The connectors may not be plugged in or disconnected under load. Ignoring the warning or improper use may damage persons and/or property.</p>                                                                                                                                                                                                                                                                                                                            |
|             | <ul style="list-style-type: none"> <li>• Assembled products may not be manipulated or improperly opened.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                  |
|             | <ul style="list-style-type: none"> <li>• Only use mating connectors that are specified in the technical data of the standards listed (e.g. the ones listed in the product accessories online at <a href="https://www.phoenixcontact.com/products">phoenixcontact.com/products</a>).</li> </ul>                                                                                                                                                                                       |
|             | <ul style="list-style-type: none"> <li>• When using the product in direct connection with third-party manufacturers, the user is responsible.</li> </ul>                                                                                                                                                                                                                                                                                                                             |
|             | <ul style="list-style-type: none"> <li>• For operating voltages &gt; 50 V AC, conductive connector housings must be grounded</li> </ul>                                                                                                                                                                                                                                                                                                                                              |
|             | <ul style="list-style-type: none"> <li>• Ensure that the protective or functional ground has been properly connected.</li> </ul>                                                                                                                                                                                                                                                                                                                                                     |
|             | <ul style="list-style-type: none"> <li>• VDE 0100/1.97 § 411.1.3.2 and DIN EN 60 204/11.98 § 14.1.3 are applicable when combining several circuits in a cable and/or connector</li> </ul>                                                                                                                                                                                                                                                                                            |
|             | <ul style="list-style-type: none"> <li>• Observe the corresponding technical data. You will find information:                             <ul style="list-style-type: none"> <li>o On the product</li> <li>o On the packing label</li> <li>o In the supplied documentation</li> <li>o Online at <a href="https://www.phoenixcontact.com/products">phoenixcontact.com/products</a> under the product</li> </ul> </li> </ul>                                                           |
|             | <ul style="list-style-type: none"> <li>• Only use tools recommended by Phoenix Contact</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                    |
|             | <ul style="list-style-type: none"> <li>• The installation notes/Design In documents online on the download page at <a href="https://www.phoenixcontact.com/products">phoenixcontact.com/products</a> must be observed for this product.</li> </ul>                                                                                                                                                                                                                                   |
|             | <ul style="list-style-type: none"> <li>• Use a protective cap to protect connectors that are not in use. The suitable accessories are available online in the accessory section of the product at <a href="https://www.phoenixcontact.com/products">phoenixcontact.com/products</a></li> </ul>                                                                                                                                                                                       |
|             | <ul style="list-style-type: none"> <li>• Operate the connector only when it is fully plugged in.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                          |
|             | <ul style="list-style-type: none"> <li>• Operate the connector only when it is fully plugged in and interlocked.</li> </ul>                                                                                                                                                                                                                                                                                                                                                          |
|             | <ul style="list-style-type: none"> <li>• Ensure that when laying the cable, the tensile load on the</li> </ul>                                                                                                                                                                                                                                                                                                                                                                       |

# PRC 3-FC-FS6 8-21 HR - Coupler connector



1017635  
<https://www.phoenixcontact.com/us/products/1017635>

|  |                                                                                                                                                                                                                                        |
|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | connectors does not exceed the upper limit specified in the standards.                                                                                                                                                                 |
|  | • Observe the minimum bending radius of the cable. Lay the cable without twisting it.                                                                                                                                                  |
|  | • The connector warms up in normal operation. Depending on the ambient conditions, the surface of the connector can continue to warm up. In this case, the user is responsible for posting warnings (e.g. DIN EN ISO 13732-1:2008-12). |

## Product properties

|                     |                                                |
|---------------------|------------------------------------------------|
| Product type        | Installation connector                         |
| Product family      | PRC 35                                         |
| Type                | Release with tool or by hand (see accessories) |
| Number of positions | 3                                              |
| Connection profile  | 2+PE                                           |
| Coding              | AD                                             |

## Data management status

|                  |    |
|------------------|----|
| Article revision | 07 |
|------------------|----|

## Insulation characteristics

|                     |    |
|---------------------|----|
| Protection class    | II |
| Degree of pollution | 2  |

## Electrical properties

|                             |                                                                        |
|-----------------------------|------------------------------------------------------------------------|
| Rated voltage (III/2)       | 690 V                                                                  |
| Nominal voltage ATD         | 690 V AC (III/2.00) in accordance with IEC 61984                       |
|                             | 600 V AC (III/2.00) In accordance with UL 2238                         |
|                             | 500 V DC (III/2.00) in accordance with IEC 61535, when mounted         |
| Rated surge voltage (III/2) | 8 kV                                                                   |
| Rated current               | 35 A (With 6 mm² conductor cross section in accordance with IEC 61984) |
|                             | 32 A (with AWG 10, in accordance with UL 2237)                         |
|                             | 32 A (With 6 mm² conductor cross section in accordance with IEC 61535) |

## Connection data

### Conductor connection

|                         |                   |
|-------------------------|-------------------|
| Conductor cross section | 1.5 mm² ... 6 mm² |
|-------------------------|-------------------|

## Dimensions

|                     |  |
|---------------------|--|
| Dimensional drawing |  |
|---------------------|--|

# PRC 3-FC-FS6 8-21 HR - Coupler connector



1017635

<https://www.phoenixcontact.com/us/products/1017635>

|        |          |
|--------|----------|
| Width  | 37.6 mm  |
| Height | 37.6 mm  |
| Length | 107.5 mm |

## Material specifications

|                                        |               |
|----------------------------------------|---------------|
| Color                                  | black         |
| Color of the housing part              | black         |
| Flammability rating according to UL 94 | V0            |
| Insulating material group              | I / CTI 600   |
| Seal material                          | EPDM          |
| Housing material                       | PPE           |
| Cable seal material                    | EPDM          |
| Contact material                       | Cu            |
| Contact surface material               | silver-plated |
| Contact carrier material               | PPE           |
| O-ring material                        | EPDM          |
| Material for screw connection          | PPE           |

## Connector

|                |                  |
|----------------|------------------|
| Pull-out-force | 150 N $\pm$ 50 N |
|----------------|------------------|

## Cable/line

|                                         |                                       |
|-----------------------------------------|---------------------------------------|
| External cable diameter                 | 8 mm ... 21 mm                        |
| External cable diameter                 | 8 mm ... 21 mm                        |
| Single wire, cross section              | 1.5 mm <sup>2</sup> 6 mm <sup>2</sup> |
| Stripping length of the individual wire | Lay PE conductor 8 mm leading         |
| Halogen-free                            | yes                                   |

## Mechanical properties

### Mechanical data

|                             |                 |
|-----------------------------|-----------------|
| Insertion/withdrawal cycles | 2000            |
| Insertion force             | 30 N $\pm$ 10 N |

## Environmental and real-life conditions

### Ambient conditions

|                                         |                                                     |
|-----------------------------------------|-----------------------------------------------------|
| Degree of protection (when plugged in)  | IP66 / IP68 (2m / 24h) / IP69K                      |
| Degree of protection                    | IP66 / IP68 (2m / 24h) / IP69K                      |
|                                         | IP66 / IP68 (2m / 24h) / IP69K                      |
| Ambient temperature (operation)         | -40 °C ... 105 °C (dependent on the derating curve) |
| Ambient temperature (storage/transport) | -40 °C ... 70 °C                                    |
| Ambient temperature (assembly)          | -5 °C ... 85 °C                                     |

## Standards and regulations

|                |
|----------------|
| IEC 61984:2008 |
|----------------|

# PRC 3-FC-FS6 8-21 HR - Coupler connector

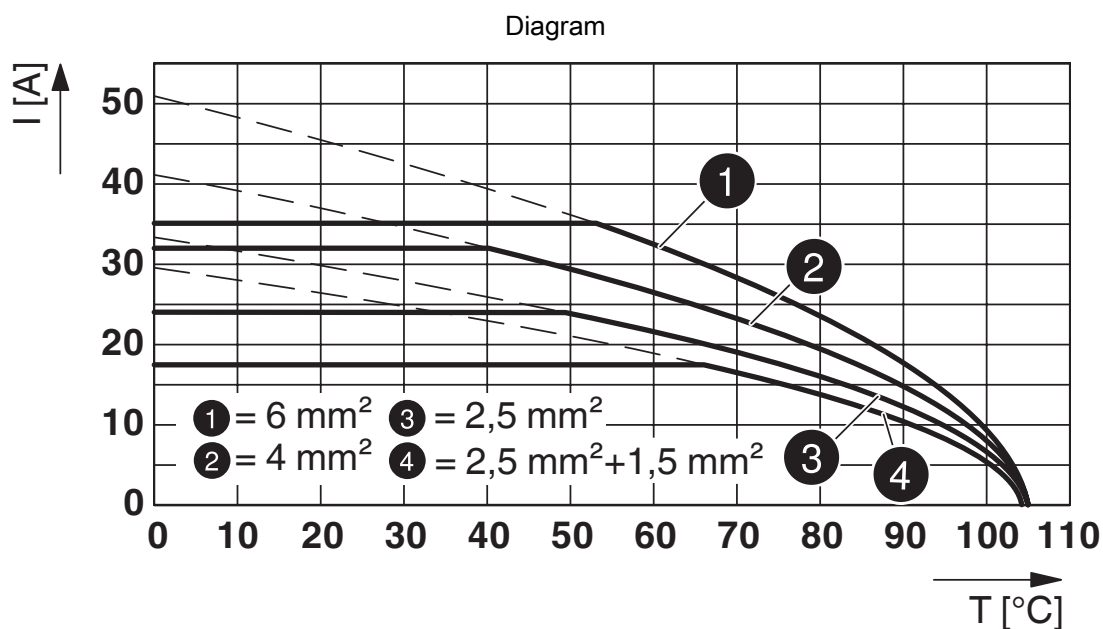


1017635

<https://www.phoenixcontact.com/us/products/1017635>

|                          |                                     |
|--------------------------|-------------------------------------|
| Standards/specifications | EN 61984:2008                       |
|                          | DIN EN IEC 61535:2020               |
|                          | IEC 61535:2019                      |
|                          | 2 PfG 1915/03.2015                  |
|                          | UL 2237 Ed.1:2021-01-08             |
|                          | CSA C22.2 No. 182.3-16 Ed.2:2019-01 |

## Drawings

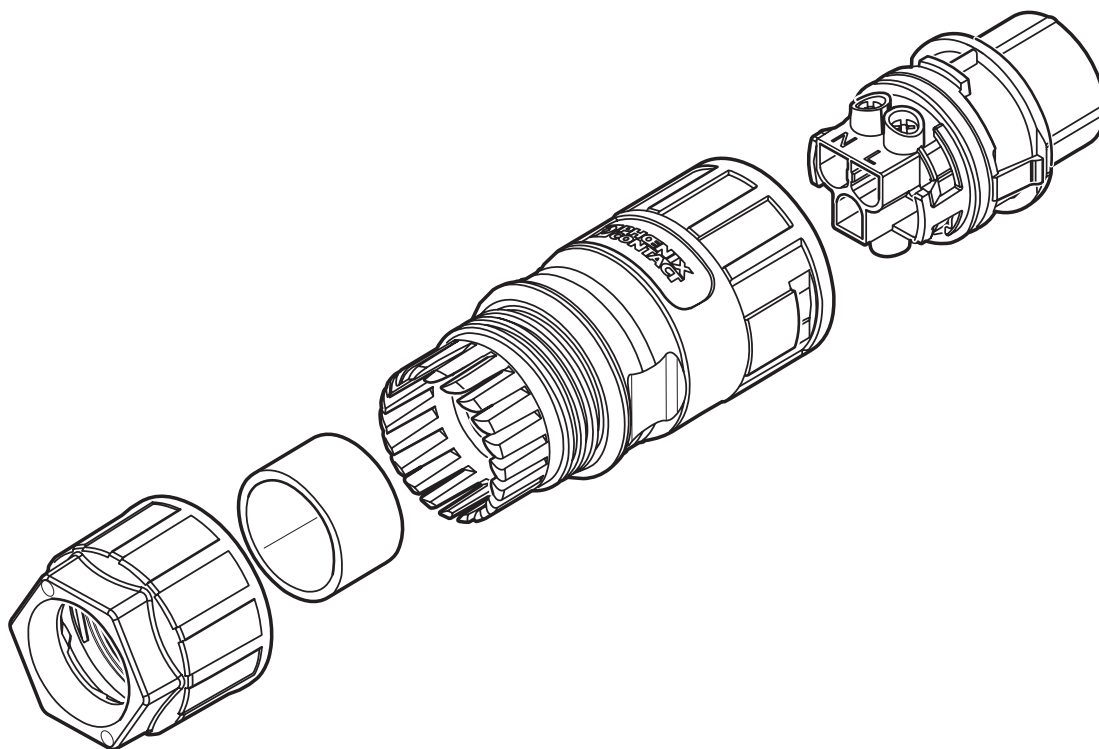


# PRC 3-FC-FS6 8-21 HR - Coupler connector

1017635

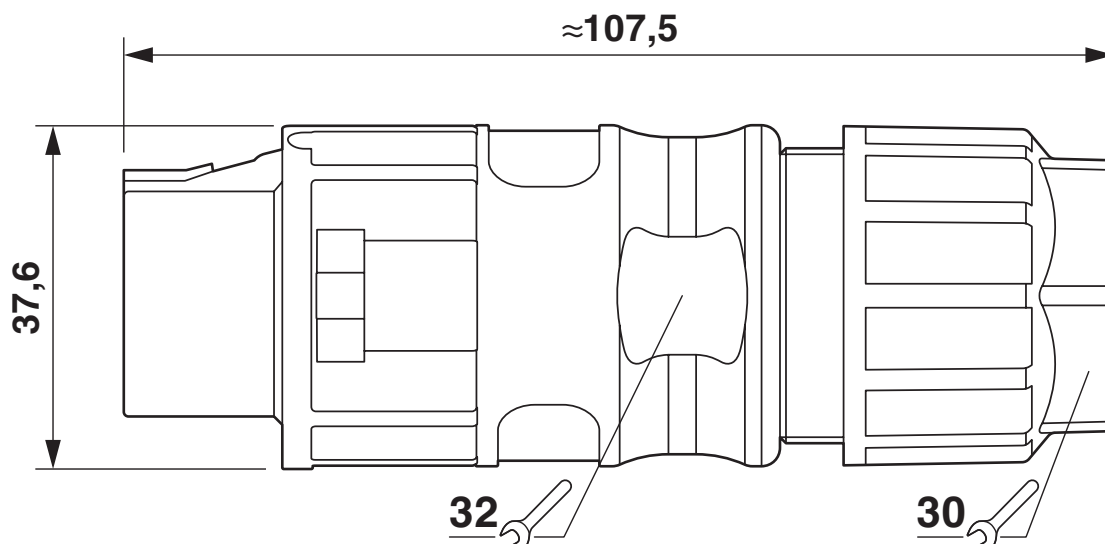
<https://www.phoenixcontact.com/us/products/1017635>

Schematic diagram



Schematic design

Dimensional drawing



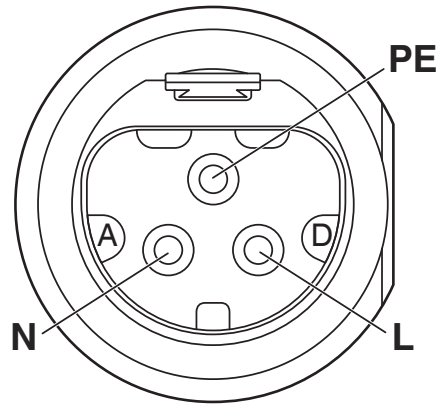
# PRC 3-FC-FS6 8-21 HR - Coupler connector

1017635

<https://www.phoenixcontact.com/us/products/1017635>



Schematic diagram



Connector pin assignment



# PRC 3-FC-FS6 8-21 HR - Coupler connector



1017635

<https://www.phoenixcontact.com/us/products/1017635>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1017635>

|                                                                                   |                                                   |                       |                   |                             |
|-----------------------------------------------------------------------------------|---------------------------------------------------|-----------------------|-------------------|-----------------------------|
|  | <b>UL Listed</b><br>Approval ID: E221474-20150513 |                       |                   |                             |
|                                                                                   | Nominal voltage $U_N$                             | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
|                                                                                   | 600 V                                             | 35 A                  | -                 | 14 - 10                     |

|                                                                                   |                                                    |                       |                   |                             |
|-----------------------------------------------------------------------------------|----------------------------------------------------|-----------------------|-------------------|-----------------------------|
|  | <b>cUL Listed</b><br>Approval ID: E221474-20150513 |                       |                   |                             |
|                                                                                   | Nominal voltage $U_N$                              | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
|                                                                                   | 600 V                                              | 35 A                  | 14 - 10           | -                           |

|                                                                                    |                                                    |                       |                   |                             |
|------------------------------------------------------------------------------------|----------------------------------------------------|-----------------------|-------------------|-----------------------------|
|  | <b>cUL Listed</b><br>Approval ID: E468743-20190809 |                       |                   |                             |
|                                                                                    | Nominal voltage $U_N$                              | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
|                                                                                    | 600 V                                              | 25 A                  | -                 | -                           |

|                                                                                     |                                                   |                       |                   |                             |
|-------------------------------------------------------------------------------------|---------------------------------------------------|-----------------------|-------------------|-----------------------------|
|  | <b>UL Listed</b><br>Approval ID: E468743-20190809 |                       |                   |                             |
|                                                                                     | Nominal voltage $U_N$                             | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
|                                                                                     | 600 V                                             | 32 A                  | -                 | -                           |

|                                                                                     |                                                      |                       |                   |                             |
|-------------------------------------------------------------------------------------|------------------------------------------------------|-----------------------|-------------------|-----------------------------|
|  | <b>TÜV Rheinland</b><br>Approval ID: R 60168292 0001 |                       |                   |                             |
|                                                                                     | Nominal voltage $U_N$                                | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
|                                                                                     | 690 V                                                | 35 A                  | -                 | -                           |

|                                                                                     |                                                 |                       |                   |                             |
|-------------------------------------------------------------------------------------|-------------------------------------------------|-----------------------|-------------------|-----------------------------|
|  | <b>TÜV Rheinland</b><br>Approval ID: R 60117908 |                       |                   |                             |
|                                                                                     | Nominal voltage $U_N$                           | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
|                                                                                     | 500 V                                           | 21.4 A                | -                 | -                           |

|                                                                                     |                                                      |                       |                   |                             |
|-------------------------------------------------------------------------------------|------------------------------------------------------|-----------------------|-------------------|-----------------------------|
|  | <b>TÜV Rheinland</b><br>Approval ID: R 60168255 0001 |                       |                   |                             |
|                                                                                     | Nominal voltage $U_N$                                | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
|                                                                                     | 500 V                                                | 32 A                  | -                 | -                           |

# PRC 3-FC-FS6 8-21 HR - Coupler connector



1017635

<https://www.phoenixcontact.com/us/products/1017635>

**DNV**

Approval ID: TAE00002KM

# PRC 3-FC-FS6 8-21 HR - Coupler connector



1017635

<https://www.phoenixcontact.com/us/products/1017635>

## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-11.0 | 27440102 |
| ECLASS-12.0 | 27440116 |
| ECLASS-13.0 | 27440116 |

### ETIM

|          |          |
|----------|----------|
| ETIM 9.0 | EC002635 |
|----------|----------|

### UNSPSC

|             |          |
|-------------|----------|
| UNSPSC 21.0 | 39121400 |
|-------------|----------|

# PRC 3-FC-FS6 8-21 HR - Coupler connector



1017635

<https://www.phoenixcontact.com/us/products/1017635>

## 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% |
|-------------------------------------|----------------------------|

Phoenix Contact 2024 © - all rights reserved  
<https://www.phoenixcontact.com>

Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)