

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



1017635

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

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), 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	ABLCBA
Product key	ABLCBA
GTIN	4055626500775
Weight per piece (including packing)	92.6 g
Weight per piece (excluding packing)	78.736 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/gb/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

## Insulation characteristics

Protection class	II
Degree of pollution	2

## Electrical properties

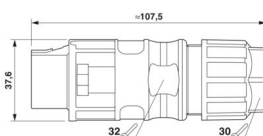
Rated voltage (III/2)	690 V
Nominal voltage ATD	690 V AC (III/2.00) in accordance with IEC 61984
	600 V AC (III/2.00) In accordance with UL 2238
	500 V DC (III/2.00) in accordance with IEC 61535, when mounted
Rated surge voltage (III/2)	8 kV
Rated surge voltage (III/3)	6 kV
Rated current	35 A (With 6 mm <sup>2</sup> conductor cross section in accordance with IEC 61984)
	32 A (with AWG 10, in accordance with UL 2237)
	32 A (With 6 mm <sup>2</sup> conductor cross section in accordance with IEC 61535)

## Connection data

### Conductor connection

Conductor cross section	1.5 mm <sup>2</sup> ... 6 mm <sup>2</sup>
-------------------------	---

## Dimensions

Dimensional drawing	
Width	37.6 mm
Height	37.6 mm

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



1017635

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

Length	107.5 mm
--------	----------

## Material specifications

Color (Housing)	black (RAL 9005)
Color of the housing part	black
Material Seal	EPDM (Cable seal)
	EPDM (Housing seal)
Material Housing	PPE
Material Contact carrier	PPE
Material Cable gland	PPE
Material Contact	CuZn (Contact material, Pb < 0.1)
Flammability rating according to UL 94	V0
Insulating material group	I / CTI 600
Contact surface material	silver-plated
O-ring material	EPDM

## Connector

Pull-out-force	150 N ±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 (in accordance with IEC 61249-2-21:2003- 11 Cl.3.1)

## Mechanical properties

### Mechanical data

Insertion/withdrawal cycles	2000
Insertion force	30 N ±10 N

## Environmental and real-life conditions

### Ambient conditions

Degree of protection (when plugged in)	IP66/IP68 (2 m / 24 h) IP69K
Degree of protection	IP66/IP68 (2 m / 24 h) IP69K
	IP66/IP68 (2 m / 24 h) IP69K
Category of shock impact	IK08 (-25°C)
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

Standards/specifications	IEC 61984:2008
	EN 61984:2008

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



1017635

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

	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

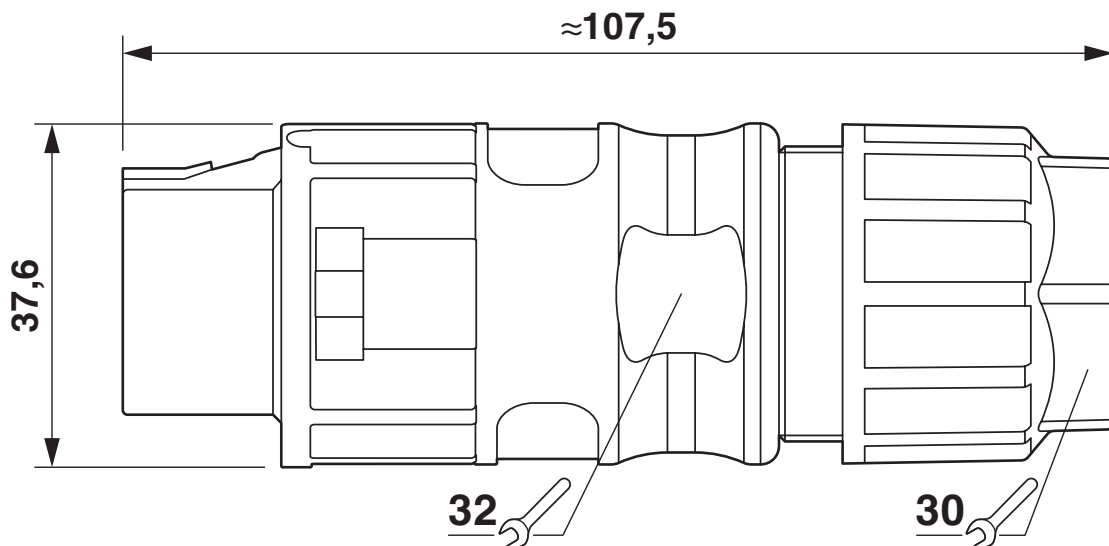
# PRC 3-FC-FS6 8-21 HR - Coupler connector

1017635

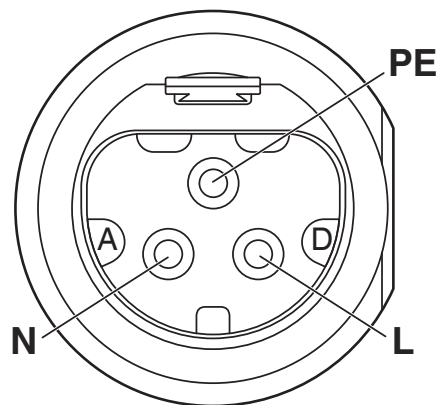
<https://www.phoenixcontact.com/gb/products/1017635>

## Drawings

Dimensional drawing



Schematic diagram



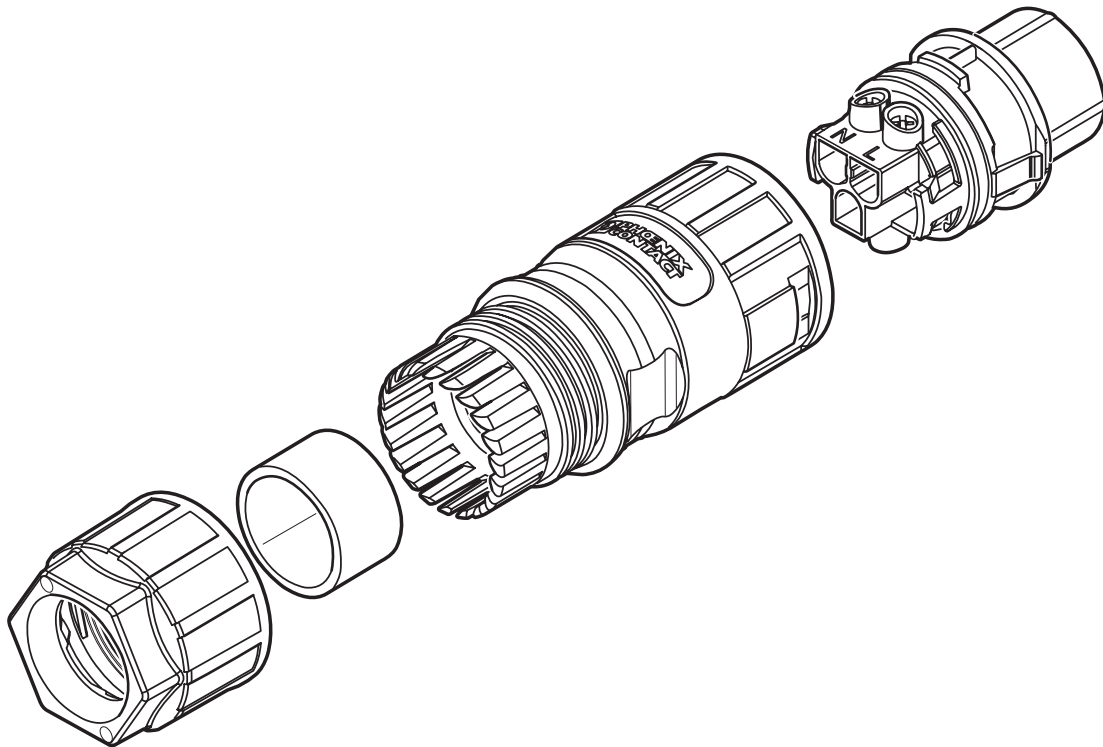
Connector pin assignment

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

1017635

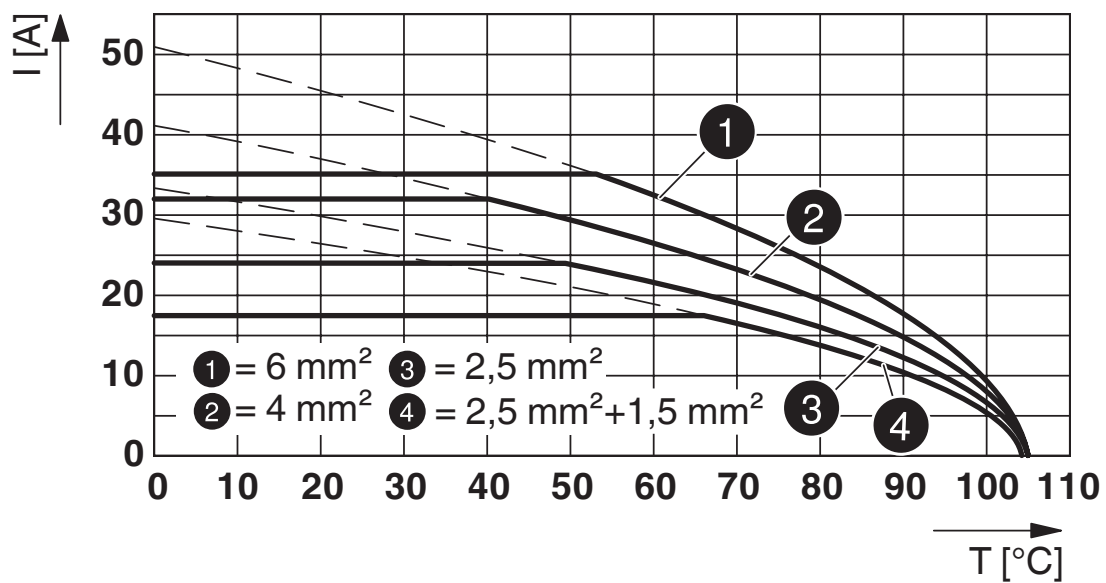
<https://www.phoenixcontact.com/gb/products/1017635>

Schematic diagram



Schematic design

Diagram



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





1017635


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


## Approvals


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


	<b>UL Listed</b> 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> 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> 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> 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> 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> 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> 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/gb/products/1017635>



**DNV**

Approval ID: TAE00002KM

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



1017635

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

## Classifications

### ECLASS

ECLASS-13.0	27440605
-------------	----------

### ETIM

ETIM 9.0	EC002560
----------	----------

### UNSPSC

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

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



1017635

<https://www.phoenixcontact.com/gb/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.)	Triphenyl phosphate(CAS: 115-86-6)
SCIP	5088a8aa-7abb-4c1e-85db-256bea1bffc

Phoenix Contact 2025 © - all rights reserved

<https://www.phoenixcontact.com>

PHOENIX CONTACT Ltd

Halesfield 13, Telford

Shropshire, TF7 4PG

01952 681700

[info@phoenixcontact.co.uk](mailto:info@phoenixcontact.co.uk)