

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



1017635

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

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Installation connector, Range of articles: PRC 35, Coupler connector, 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)	90.3 g
Weight per piece (excluding packing)	90.5 g
Customs tariff number	85366990
Country of origin	PL

## Technical data

### Notes

General	Variant for manual release
Safety note	
Safety note	<ul style="list-style-type: none"> <li>• <b>WARNING:</b> 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> <li>• <b>WARNING:</b> 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><b>WARNING:</b> 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> <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> <li>• When using the product in direct connection with third-party manufacturers, the user is responsible.</li> <li>• For operating voltages &gt; 50 V AC, conductive connector housings must be grounded</li> <li>• Ensure that the protective or functional ground has been properly connected.</li> <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> <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> <li>• Only use tools recommended by Phoenix Contact</li> <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> <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> <li>• Operate the connector only when it is fully plugged in.</li> <li>• Operate the connector only when it is fully plugged in and interlocked.</li> <li>• Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards.</li> </ul>

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- 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

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

## Insulation characteristics

Protection class	II
Degree of pollution	2

## Electrical properties

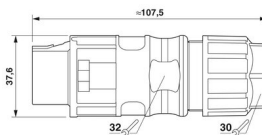
Rated voltage (III/2)	690 V
Nominal voltage ATD	690 V AC (III/2) in accordance with IEC 61984
	600 V AC (III/2) In accordance with UL 2238
	500 V DC (III/2) in accordance with IEC 61535, when mounted
Rated surge voltage (III/2)	8 kV
Rated current	35 A (With 6 mm <sup>2</sup> conductor cross section in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

Dimensional drawing	
Width	37.6 mm
Height	37.6 mm
Length	107.5 mm

## Connector

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Pull-out-force	150 N ±50 N
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## 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 ±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

Standards/specifications	IEC 61984:2008
	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

## Mounting

Connection method	Screw connection
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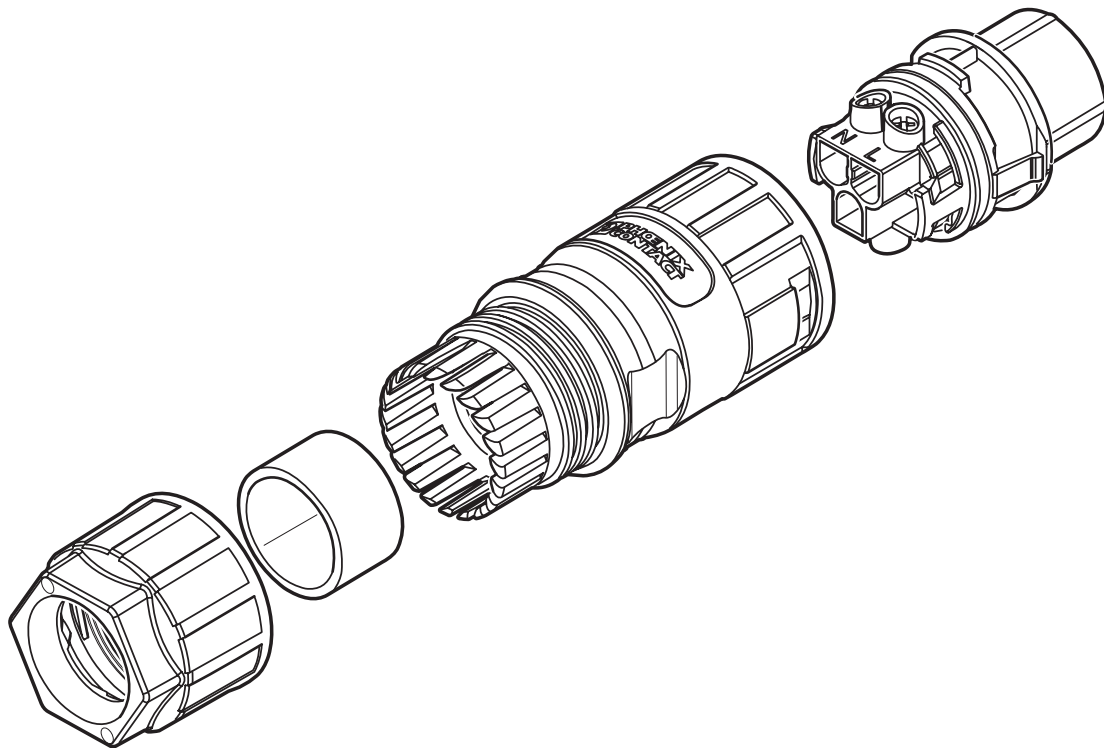
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## Drawings

### Schematic diagram



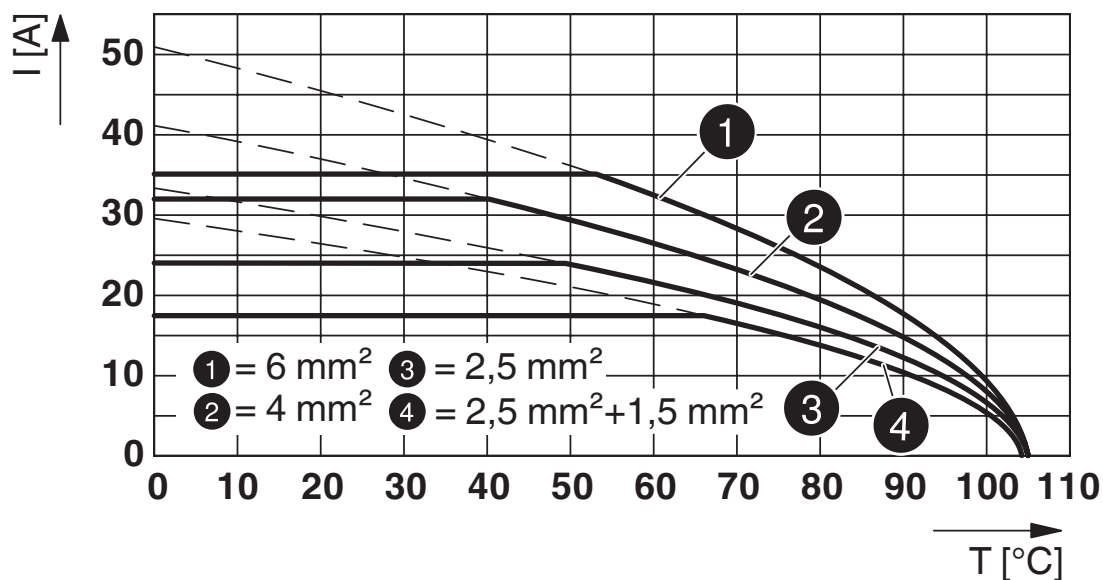
Schematic design

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

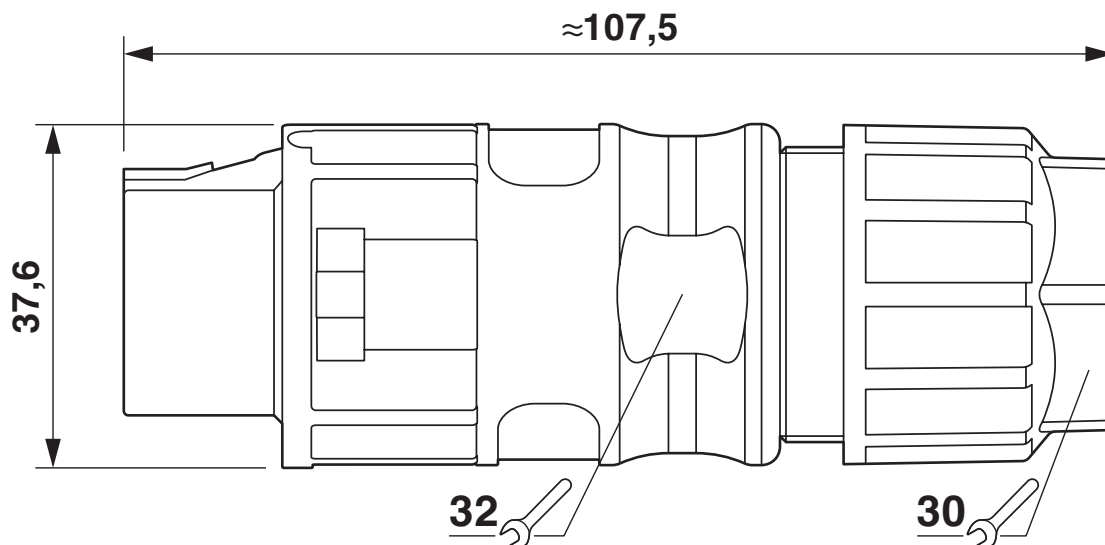
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Diagram



Dimensional drawing



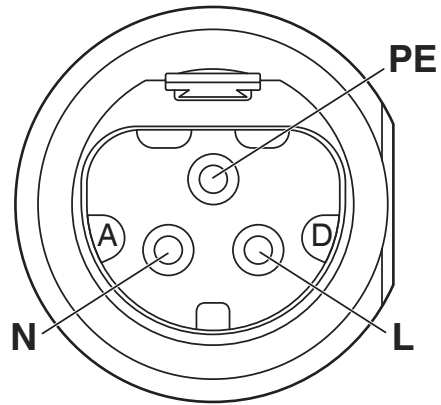
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Schematic diagram



Connector pin assignment

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## Approvals

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



### EAC

Approval ID: B.01687



### UL Listed

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



### cUL Listed

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	-



### cUL Listed

Approval ID: E468743-20190809

	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
	600 V	25 A	-	-



### UL Listed

Approval ID: E468743-20190809

	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
	600 V	32 A	-	-



### TÜV Rheinland

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	-	-



### TÜV Rheinland

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	-	-



### TÜV Rheinland

Approval ID: R 60168255 0001

	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$



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	500 V	32 A	-	-
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## Classifications

### ECLASS

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

### ETIM

ETIM 8.0	EC002635
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### UNSPSC

UNSPSC 21.0	39121400
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## Accessories

### PRC COVER F - Protective cap

1409236

<https://www.phoenixcontact.com/us/products/1409236>



Installation connector, Range of articles: PRC 35, Protective cap, housing material: PPE, color: black, rated voltage: 1000. Suitable for couplings (FS)

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### SZF 1-0,6X3,5 - Screwdriver

1204517

<https://www.phoenixcontact.com/us/products/1204517>



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip

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



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

## PRC FC RELEASE LATCH GY - Color-coding

1002292

<https://www.phoenixcontact.com/us/products/1002292>



Installation connector, Range of articles: PRC 35, Color-coding, housing material: PA 6.6-FR. If you are using the release latch, then the PRC approvals in accordance with IEC 61535 and 2PfG 1915 are not required

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## PRC FC RELEASE LATCH GN - Color-coding

1002290

<https://www.phoenixcontact.com/us/products/1002290>



Installation connector, Range of articles: PRC 35, Color-coding, housing material: PA 6.6-FR. If you are using the release latch, then the PRC approvals in accordance with IEC 61535 and 2PfG 1915 are not required

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

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



### PRC FC RELEASE LATCH BU - Color-coding

1002293

<https://www.phoenixcontact.com/us/products/1002293>



Installation connector, Range of articles: PRC 35, Color-coding, housing material: PA 6.6-FR. If you are using the release latch, then the PRC approvals in accordance with IEC 61535 and 2PfG 1915 are not required

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### SZF 0-0,4X2,5 - Screwdriver

1204504

<https://www.phoenixcontact.com/us/products/1204504>



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.4 x 2.5 x 75 mm, 2-component grip, with non-slip grip

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

1017635

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



## SF-PH 1-80 S-VDE - Screwdriver

1212693

<https://www.phoenixcontact.com/us/products/1212693>



Screwdriver, crosshead PH (lasered), insulated, size: PH 1 x 80, 2-component handle, with non-slip grip

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## UNIFOX-WRENCH - Screw pliers

1212835

<https://www.phoenixcontact.com/us/products/1212835>



Screw pliers, with fast adjustment, for wrench size 10 mm ... 36 mm, size: 260 mm

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



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

## PRC 3-FC-MS6 8-21 - Connector

1014498

<https://www.phoenixcontact.com/us/products/1014498>



Installation connector, Range of articles: PRC 35, Connector, 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: Pin, min. cable diameter: 8 mm, max. cable diameter: 21 mm. Ensures touch protection

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