PRC 3-FC-FS6 8-12 - Coupler connector

1410658

https://www.phoenixcontact.com/us/products/1410658

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Coupler connector, Range of articles: PRC 35, design: Can only be released with a tool, housing material: PPE, color: black, number of positions: 3, min. conductor cross section: 1.5 mm^2, max. conductor cross section: 6 mm^2, 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: 12 mm. Variant for release with a tool

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	1410658
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	AB03
Product key	ABLCBA
Catalog page	Page 76 (NTK-2014)
GTIN	4046356904254
Weight per piece (including packing)	82.8 g
Weight per piece (excluding packing)	72.9 g
Customs tariff number	85366990
Country of origin	PL

Technical data

Notes

General	Variant for release with a tool

Safety note

Safety note	• 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.
	• 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.
	WARNING: The connectors may not be plugged in or disconnected under load. Ignoring the warning or improper use may damage persons and/or property.
	• Assembled products may not be manipulated or improperly opened.
	• 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 phoenixcontact.com/products).
	• When using the product in direct connection with third-party manufacturers, the user is responsible.
	• For operating voltages > 50 V AC, conductive connector housings must be grounded
	• Ensure that the protective or functional ground has been properly connected.
	• 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
	• Observe the corresponding technical data. You will find information: o On the product o On the packing label o In the supplied documentation o Online at phoenixcontact.com/products under the product
	• Only use tools recommended by Phoenix Contact
	• The installation notes/Design In documents online on the download page at phoenixcontact.com/products must be observed for this product.
	• 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 phoenixcontact.com/products
	• Operate the connector only when it is fully plugged in.
	• Operate the connector only when it is fully plugged in and interlocked.
	• Ensure that when laying the cable, the tensile load on the 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	Can only be released with a tool
Number of positions	3
Connection profile	2+PE
Coding	AD

Insulation characteristics

Protection class	II
Degree of pollution	2

Electrical properties

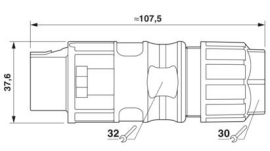
Rated voltage (III/2)	690 V
Nominal voltage ATD	690 V AC in accordance with IEC 61984
	500 V AC in accordance with IEC 61535/2 PfG 1915
	600 V AC In accordance with UL 2238
Rated surge voltage (III/2)	8 kV
Rated current	35 A (With 6 mm² conductor cross section in accordance with IEC 61984)
	32 A (With 6 mm² conductor cross section in accordance with IEC 61535)
	21.4 A (With 6 mm² conductor cross section and 85 °C in accordance with 2 PfG 1915)
	32 A (with AWG 10, in accordance with UL 2237)

Connection data

Conductor connection

Conductor cross section	1.5 mm² ... 6 mm²

Dimensions

Dimensional drawing	
Width	37.6 mm
Height	37.6 mm
Length	107.5 mm

External dimensions

Outside diameter	8 mm ... 12 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 alloy
Contact surface material	silver-plated
Contact carrier material	PPE
O-ring material	EPDM
Material for screw connection	PPE

Connector

Pull-out-force	150 N ±50 N

Cable/line

External cable diameter ()	8 mm ... 12 mm
External cable diameter	8 mm ... 12 mm
Single wire, cross section	1.5 mm² 6 mm²
Stripping length of the individual wire	12 mm (Lay PE conductor 8 mm leading)
Halogen-free	yes

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	100
Insertion force	30 N ±10 N

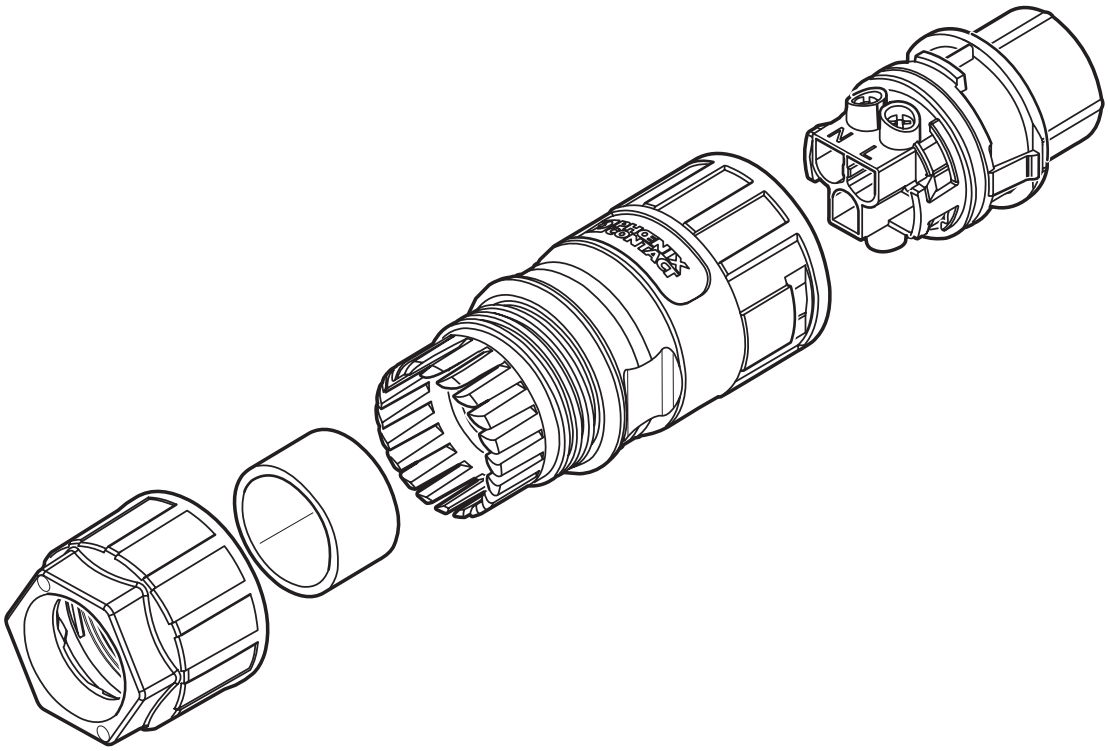
Environmental and real-life conditions

Ambient conditions

Degree of protection (when plugged in)	IP66 / IP68 (2m / 24h) / IP69K
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	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

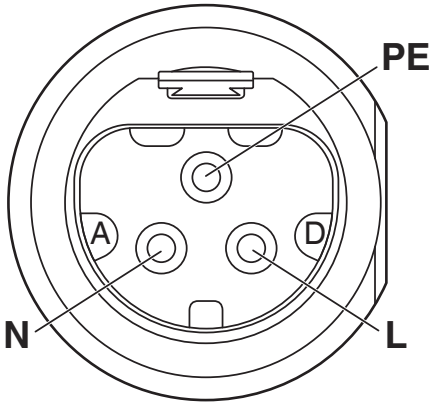
Drawings

Schematic diagram



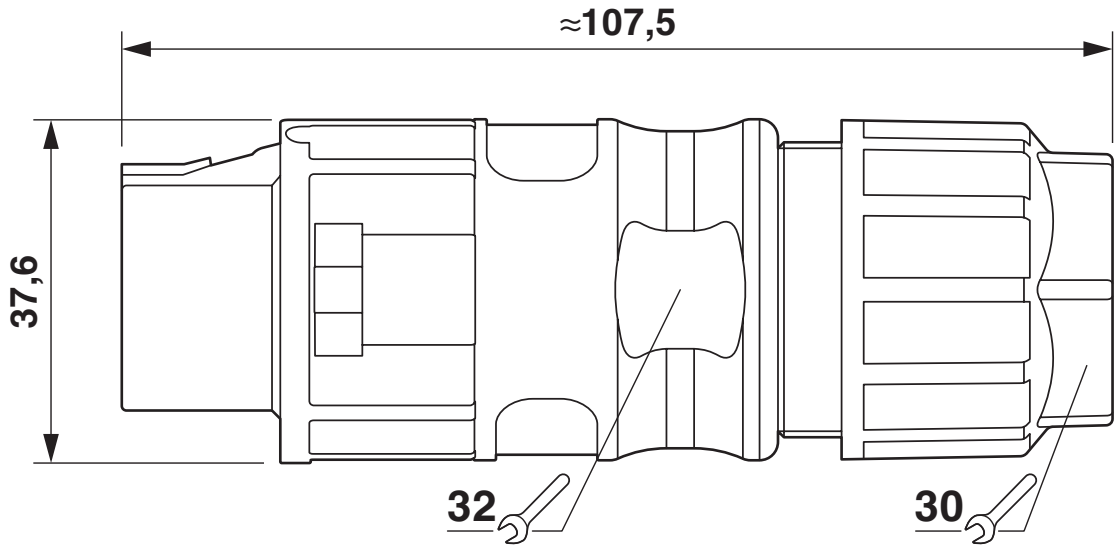
Schematic design

Schematic diagram



Connector pin assignment

Dimensional drawing



Classifications

ECLASS

ECLASS-11.0	27440102

ETIM

ETIM 8.0	EC002635

UNSPSC

UNSPSC 21.0	39121400

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%

Accessories

PRC COVER F - Protective cap

1409236

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



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

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

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

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

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-MS6 8-21 - Connector

1014498

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



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^2, max. conductor cross section: 6 mm^2, 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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