

PRC 3-FC-MS6 8-21 - Connector



1014498

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

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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 mm², max. conductor cross section: 6 mm², 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

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	1014498
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB03
Product key	ABLCBA
GTIN	4055626494807
Weight per piece (including packing)	91.2 g
Weight per piece (excluding packing)	89 g
Customs tariff number	85366990
Country of origin	PL

Technical data

Notes

Notes on operation	Ensures touch protection
Note on application	For assembly notes, please refer to the packing slip

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

PRC 3-FC-MS6 8-21 - Connector



1014498

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

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	05
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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
	500 V AC (III/2.00) in accordance with IEC 61535/2 PfG 1915
	600 V AC / DC (III/2.00) In accordance with UL 2238
	500 V DC (III/2.00) in accordance with IEC 61535
Rated current	35 A (With 6 mm ² conductor cross section in accordance with IEC 61984)
	32 A (With 6 mm ² conductor cross section in accordance with IEC 61535)
	21.4 A (With 6 mm ² 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 mm ² ... 6 mm ²
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Dimensions

Width	37.6 mm
Height	37.6 mm
Length	105 mm

External dimensions

PRC 3-FC-MS6 8-21 - Connector



1014498

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Outside diameter	8 mm ... 21 mm
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Material specifications

Color	black
Color of the housing part	black
Material	EPDM (Cable seal)
	EPDM (Housing seal)
	PPE (Housing)
	PPE (Contact carriers)
	PPE (Cable gland)
	CuZn (Contact material, Pb < 0.1)
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

Cable/line

External cable diameter	8 mm ... 21 mm
External cable diameter	8 mm ... 21 mm (For notes on cable clamping ranges, see packing slip)
Single wire, cross section	1.5 mm ² 6 mm ² 14 AWG 10 AWG
Stripping length of the individual wire	Lay PE conductor 8 mm leading
Halogen-free	yes

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	2000 (Test specification: IEC 60512-13-2)
Insertion force	30 N ±10 N (Test specification: IEC 60512-13-2)

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 (Depending on the current carrying capacity/derating curve)
Ambient temperature (storage/transport)	-40 °C ... 70 °C
Ambient temperature (assembly)	-5 °C ... 85 °C

PRC 3-FC-MS6 8-21 - Connector



1014498

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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

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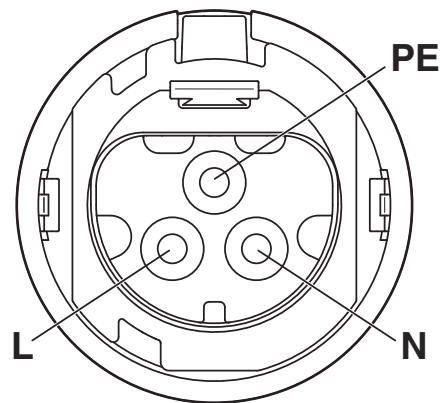
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Drawings

Schematic diagram



Connector pin assignment

PRC 3-FC-MS6 8-21 - Connector



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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1014498>



UL Listed

Approval ID: E221474-20150513



cUL Listed

Approval ID: E221474-20150513

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	600 V	25 A	12 - 10	-



cUL Listed

Approval ID: E468743-20190809

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section 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 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 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 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 mm^2
	500 V	32 A	-	-

DNV

Approval ID: TAE00002KM

PRC 3-FC-MS6 8-21 - Connector

1014498

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



PRC 3-FC-MS6 8-21 - Connector



1014498

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

Classifications

ECLASS

ECLASS-11.0	27440109
ECLASS-12.0	27440109
ECLASS-13.0	27440109

ETIM

ETIM 9.0	EC003569
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UNSPSC

UNSPSC 21.0	39121400
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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%

PRC 3-FC-MS6 8-21 - Connector

1014498

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Accessories

PRC COVER M - Protective cap

1409237

<https://www.phoenixcontact.com/us/products/1409237>



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

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-MS6 8-21 - Connector

1014498

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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

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

PRC 3-FC-MS6 8-21 - Connector

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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

1017635

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



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 mm², max. conductor cross section: 6 mm², 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

PRC 3-FC-MS6 8-21 - Connector

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

1410661

<https://www.phoenixcontact.com/us/products/1410661>



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 mm², max. conductor cross section: 6 mm², 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 release with a tool

PRC FC-M CODE-BU - Color coding

1014455

<https://www.phoenixcontact.com/us/products/1014455>



Color coding, Range of articles: PRC 35, housing material: PA 6.6-FR, color: blue, NOTE: For indoor use only

PRC 3-FC-MS6 8-21 - Connector

1014498

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PRC FC-M CODE-GY - Color coding

1014457

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Color coding, Range of articles: PRC 35, housing material: PA 6.6-FR, color: gray, NOTE: For indoor use only

PRC FC-M CODE-GN - Color coding

1014456

<https://www.phoenixcontact.com/us/products/1014456>



Color coding, Range of articles: PRC 35, housing material: PA 6.6-FR, color: green, NOTE: For indoor use only

PRC 3-FC-MS6 8-21 - Connector

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PRC FC-M CODE-BK - Color coding

1014496

<https://www.phoenixcontact.com/us/products/1014496>



Color coding, Range of articles: PRC 35, housing material: PA 6.6-FR, color: black, NOTE: For indoor use only

PRC FC-M CODE-RD - Color coding

1125097

<https://www.phoenixcontact.com/us/products/1125097>



Color coding, Range of articles: PRC 35, housing material: PA 6.6-FR, color: red, NOTE: For indoor use only

PRC 3-FC-MS6 8-21 - Connector

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PRC FC-M CODE-YE - Color coding

1125058

<https://www.phoenixcontact.com/us/products/1125058>



Color coding, Range of articles: PRC 35, housing material: PA 6.6-FR, color: yellow, NOTE: For indoor use only

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