

## Connector - PRC 3-FC-MS6 16-21 - 1014531

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Circular connectors (cable-side), Range of articles: PRC, Connector, 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>, nom. voltage: 690 V AC, rated current: 35 A, Connection method: Screw connection, Type of contact: Pin, min. cable diameter: 16 mm, max. cable diameter: 21 mm

### 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



### Key Commercial Data

Packing unit	1 pc
GTIN	 4 055626 494531
GTIN	4055626494531

### Technical data

#### General data

Number of positions	3
Protection class	II
Color	black
Locking type	Snap-in locking
Insertion/withdrawal cycles	2000
Degree of protection (when plugged in)	IP66 / IP68 (2m / 24h) / IP69K
Width	37.6 mm
Height	37.6 mm
Length	105 mm

#### Connection data

Rated current	35 A (With 6 mm <sup>2</sup> conductor cross section in accordance with IEC 61984)
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# Connector - PRC 3-FC-MS6 16-21 - 1014531

## Technical data

### Connection data

	32 A (With 6 mm <sup>2</sup> conductor cross section in accordance with IEC 61535)
	35 A (With 6 mm <sup>2</sup> /AWG 10, in accordance with UL 2238)
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 voltage (III/2)	690 V
Stripping length	12 mm
Torque	max. 1 Nm (Contact screw)
Type of contact	Pin
Stripping length of the sheath	50 mm
Conductor cross section flexible, with ferrule without plastic sleeve min.	1.5 mm <sup>2</sup>
Conductor cross section flexible, with ferrule without plastic sleeve max.	6 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve min.	1.5 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve max.	6 mm <sup>2</sup>
Conductor cross section solid min.	1.5 mm <sup>2</sup>
Conductor cross section solid max.	6 mm <sup>2</sup>
Conductor cross section flexible min.	4 mm <sup>2</sup>
Conductor cross section flexible max.	6 mm <sup>2</sup>
Connection method	Screw connection
Degree of protection	IP66 / IP68 (2m / 24h) / IP69K
Stripping length of the individual wire	12 mm (Lay PE conductor 8 mm leading)
Cable diameter 1	16 mm ... 21 mm

### Material data

Contact material	Cu alloy
Contact surface material	silver-plated
Contact carrier material	PPE
Housing material	PPE
Seal material	EPDM
O-ring material	EPDM
Cable seal material	EPDM
Cable gland material	PPE
Color of the housing part	black
Knurl material	PPE

### Standards and Regulations

Halogen-free	yes
Flammability rating according to UL 94	V0
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>

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## Technical data

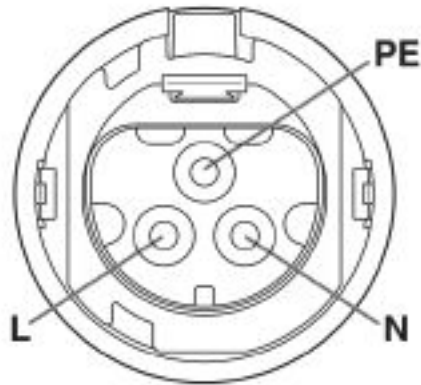
### Standards and Regulations

	<ul style="list-style-type: none"> <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> </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 connectors does not exceed the upper limit specified in the standards.</li> </ul>
	<ul style="list-style-type: none"> <li>• Observe the minimum bending radius of the cable. Lay the cable without twisting it.</li> </ul>
	<ul style="list-style-type: none"> <li>• 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).</li> </ul>

## Drawings

# Connector - PRC 3-FC-MS6 16-21 - 1014531

Schematic diagram



Connector pin assignment

## Classifications

eCl@ss

eCl@ss 10.0.1	27440109
eCl@ss 8.0	27440102
eCl@ss 9.0	27440103

ETIM

ETIM 5.0	EC002061
ETIM 6.0	EC002061

## Approvals

Approvals

Approvals

UL Listed / cUL Listed / EAC / cULus Listed

Ex Approvals

## Approval details

UL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> E221474-20150513
Nominal voltage UN	600 V	
Nominal current IN	35 A	

# Connector - PRC 3-FC-MS6 16-21 - 1014531

## Approvals

mm²/AWG/kcmil	10
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cUL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> E221474-20150513
Nominal voltage UN		600 V
Nominal current IN		25 A
mm²/AWG/kcmil		12-10

EAC		B.01687
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cULus Listed		
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## Accessories

### Accessories

#### Protective cover

Protective cap - PRC COVER M - 1409237



Protective cover, Range of articles: PRC, Protective cap, housing material: PPE, color: black. Suitable for connectors (MS)

#### Screwdriver tools

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

## Connector - PRC 3-FC-MS6 16-21 - 1014531

### Accessories

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

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Philips screwdriver - SF-PH 1-80 S-VDE - 1212693



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

### Universal tools

Tool - UNIFOX-WRENCH - 1212835



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

### Additional products

Coding element - PRC FC-M CODE-BU - 1014455



Circular connectors (cable-side), Range of articles: PRC, Coding element, housing material: PA 6.6-FR, color: blue

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Coding element - PRC FC-M CODE-GY - 1014457



Circular connectors (cable-side), Range of articles: PRC, Coding element, housing material: PA 6.6-FR, color: gray

## Connector - PRC 3-FC-MS6 16-21 - 1014531

### Accessories

Coding element - PRC FC-M CODE-GN - 1014456



Circular connectors (cable-side), Range of articles: PRC, Coding element, housing material: PA 6.6-FR, color: green

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Coding element - PRC FC-M CODE-BK - 1014496



Circular connectors (cable-side), Range of articles: PRC, Coding element, housing material: PA 6.6-FR, color: black

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