

# PV-C3F-S 2,5-6 (+) - Photovoltaic connector



1386381

<https://www.phoenixcontact.com/us/products/1386381>

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Photovoltaic connector, Range of articles: SUNCLIX, color: black, number of positions: 1, min. conductor cross-section: 2.5 mm<sup>2</sup>, max. conductor cross-section: 6 mm<sup>2</sup>, rated voltage: 1100 V DC, rated current: 35 A, Connection method: Spring-cage, min. cable diameter: 5.5 mm, max. cable diameter: 8 mm, Follow-up item to 1774674

## Your advantages

- Convenient, secure spring connection technology
- High yield, thanks to silver-plated contacts
- Convenient release without a special tool
- One-piece DC connector

## Commercial data

Item number	1386381
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	AB02
Product key	ABLBBA
GTIN	4063151762629
Weight per piece (including packing)	11.6 g
Weight per piece (excluding packing)	11.6 g
Customs tariff number	85359000
Country of origin	DE

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## Technical data

### Notes

Order information:	Follow-up item to 1774674
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### 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><li>• <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.</li><li>• The products are suitable for applications in plant, controller, and electrical device engineering.</li><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>• 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>• 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>• 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><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</li></ul>
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standards.

- Observe the minimum bending radius of the cable. Lay the cable without twisting it.

## Product properties

Product type	Photovoltaic connectors
Product family	SUNCLIX
Number of positions	1

## Insulation characteristics

Protection class	II
Degree of pollution	2

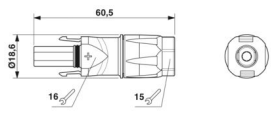
## Electrical properties

Rated voltage (III/2)	1100 V
Nominal voltage ATD	1100 V DC (III/2.00) in accordance with IEC 62852:2014/AMD1:2020
Rated surge voltage	12.8 kV
Rated surge voltage (II/2)	12 kV
Rated surge voltage (III/2)	12 kV
Rated surge voltage (III/3)	12.8 kV
Rated current (6.0 mm <sup>2</sup> )	35 A (in accordance with IEC 62852:2014/AMD1:2020)
Rated current (4.0 mm <sup>2</sup> )	30 A (in accordance with IEC 62852:2014/AMD1:2020)
Rated current (2.5 mm <sup>2</sup> )	20 A (in accordance with IEC 62852:2014/AMD1:2020)
Contact resistance	≤ 0.45 mΩ (when plugged in (without cable))

## Connection data

Connection method	Spring-cage
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## Dimensions

Dimensional drawing	
Width	19 mm
Height	19 mm
Length	60.9 mm

## Material specifications

Color	black
Color of the housing part	black
Material Housing	PPE
Material Seal	EPDM
Material Cable gland	PPE

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Material Contact	Cu alloy
Material Contact carrier	PA 6.6 (V0)
Flammability rating according to UL 94	V0
Insulating material group	III
Insulating material	mPPE
Contact surface material	Ag
O-ring material	EPDM

## Cable/line

External cable diameter	5.5 mm ... 8 mm
External cable diameter	5.5 mm ... 8 mm
Single wire, cross section	2.5 mm <sup>2</sup> 6 mm <sup>2</sup>
Stripping length of the individual wire	15 mm
Cable pull-out force	> 250 N

## Mechanical properties

### Mechanical data

Insertion/withdrawal cycles	100
Insertion force	45 N ±10 N
Withdrawal force	< 200 N (when locked)

## Environmental and real-life conditions

### Ambient conditions

Degree of protection (when plugged in)	IP66/IP68 (2 m / 24 h)
Degree of protection (not plugged in)	IP20
Degree of protection	IP66/IP68 (2 m / 24 h)
Ambient temperature (operation) (male connector/female connector)	-40 °C ... 85 °C (dependent on the derating curve)
Ambient temperature (assembly)	-5 °C ... 50 °C

## Standards and regulations

Standards/specifications	IEC 62852:2014/AMD1:2020
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# PV-C3F-S 2,5-6 (+) - Photovoltaic connector

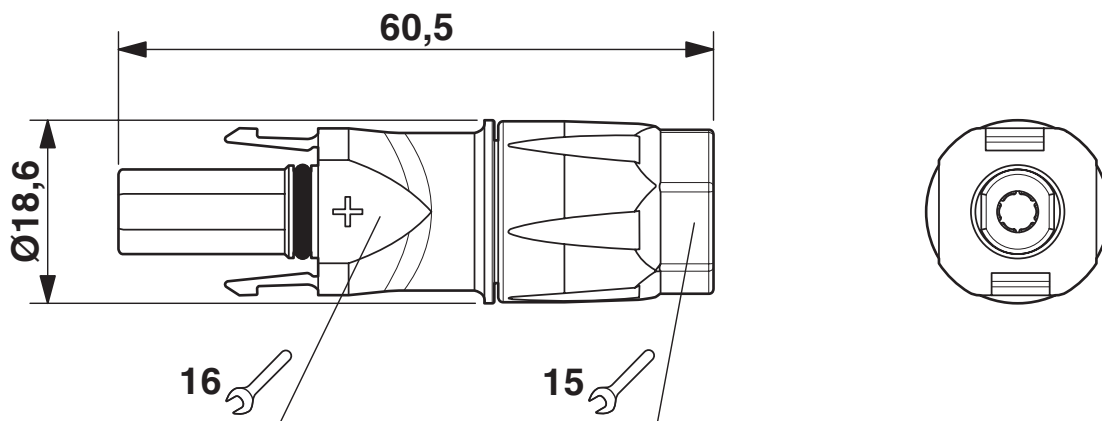
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## Drawings

Dimensional drawing



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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1386381>



**TÜV Rheinland**

Approval ID: R 60165497-0001

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## Classifications

### ECLASS

ECLASS-13.0	27440107
ECLASS-15.0	27440107

### ETIM

ETIM 10.0	EC002635
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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
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### 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	ecb97017-25d4-4eee-8ed8-12db55d6caaf

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