

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (http://phoenixcontact.com/download)



Photovoltaic connector, Range of articles: PV-CF-S, Connector, housing material: PPE, 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 current: 27 A, Connection method: Spring-cage, Type of contact: Socket



## Key Commercial Data

Packing unit	50 рс
Minimum order quantity	50 pc
GTIN	4 0 4 6 3 5 6 4 8 0 2 0 8
GTIN	4046356480208

## Technical data

#### Dimensions

External cable diameter	5.5 mm 8 mm
Ambient conditions	
Degree of protection (when plugged in)	IP66 / IP68 (2 m / 24 h)
Ambient temperature (energian)	

Degree of protection (when plugged in)	1F00 / 1F00 (2 111 / 24 11)
Ambient temperature (operation)	-40 °C 85 °C
Ambient temperature (assembly)	-25 °C 50 °C

General

Design	Socket
Tightening torque nut	2 Nm ±0.1 Nm
Insertion force	45 N ±10 N
Disconnect force	250 N ±50 N (when locked)
Pull-out force of cable >= disconnect force	> 330 N
Insertion/withdrawal cycles	100
Degree of pollution	3
Degree of protection	IP66 / IP68 (2 m / 24 h)
Number of positions	1
Current	35 A

09/12/2020 Page 1 / 6



# Technical data

### General

Rated surge voltage (III/3)	12.8 kV
pluggable	Yes
Rated voltage	1100 V
Rated current (2.5 mm <sup>2</sup> )	27 A
Rated current (4.0 mm <sup>2</sup> )	35 A
Rated current (6.0 mm <sup>2</sup> )	40 A
Nominal cross section	6 mm <sup>2</sup>
Protection class	Ш

#### Material

Color	black
Insulating material	mPPE
Contact material	Cu
Contact surface material	Ag
Flammability rating according to UL 94	V0

### Connection data

Connection method	Spring-cage
Connection capacity	2.5 mm <sup>2</sup> 6 mm <sup>2</sup>
Contact resistance with connected conductor	$\leq$ 0.45 m $\Omega$
Stripping length	15 mm
Cable type	H1Z2Z2-K lines

### Standards and Regulations

Halogen-free	yes
Flammability rating according to UL 94	V0
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.
	• The products are suitable for applications in plant, controller, and electrical device engineering.
	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.

09/12/2020 Page 2 / 6



# Technical data

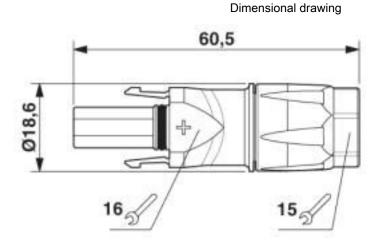
## Standards and Regulations

<ul> <li>For operating voltages &gt; 50 V AC, conductive connector housings must be grounded</li> </ul>
Ensure that the protective or functional ground has been properly connected.
<ul> <li>Observe the corresponding technical data. You will find information:</li> <li>o On the product</li> <li>o On the packing label</li> <li>o In the supplied documentation</li> <li>o Online at phoenixcontact.com/products under the product</li> </ul>
• 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
• 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).
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.

## **Environmental Product Compliance**

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

# Drawings



 $\bigcirc$ 



# Classifications

## eCl@ss

eCl@ss 10.0.1	27440109
eCl@ss 4.0	27260700
eCl@ss 4.1	27260700
eCl@ss 5.0	27260700
eCl@ss 5.1	27260700
eCl@ss 6.0	27260700
eCl@ss 7.0	27440102
eCl@ss 8.0	27440102
eCl@ss 9.0	27440103

### ETIM

ETIM 3.0	EC001121
ETIM 4.0	EC001121
ETIM 5.0	EC002635
ETIM 6.0	EC002061

### UNSPSC

UNSPSC 6.01	30211810
UNSPSC 7.0901	39121409
UNSPSC 11	39121409
UNSPSC 12.01	39121409
UNSPSC 13.2	39121413
UNSPSC 18.0	39121413
UNSPSC 19.0	39121413
UNSPSC 20.0	39121413
UNSPSC 21.0	39121413

# Approvals

### Approvals

#### Approvals

EAC / EAC / TÜV Rheinland / TÜV Rheinland

#### Ex Approvals

Approval details



# Approvals

EAC	EAC		B.01687
EAC	EAC		B.01687
TÜV Rheinland	TOPPortuge	http://www.certipedia.com	R 60126961
TÜV Rheinland	TUVnavnik Connect	http://www.certipedia.com	R 60126961
Nominal voltage UN		1100 V	
Nominal current IN		27 A	
mm²/AWG/kcmil		2.5	

### Accessories

#### Accessories

Photovoltaic connector

Protective cap - PV-C PROTECTION CAP - 1785430



Photovoltaic connector, Range of articles: SUNCLIX, Protective cap, color: black. self-sealing, without interlock, set consisting of: 1 protective cap for connector side and 1 protective cap for coupling side

Filler plugs - PV-C PLUG - 1775631



Photovoltaic connector, Range of articles: SUNCLIX, Filler plugs, color: black

Screwdriver tools



## Accessories

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, 2component grip, with non-slip grip

Stripping tool

Stripping pliers - QUICK WIREFOX 6 SC - 1207637



Stripping tool for short-circuit proof conductors, stripping range: 1.5 up to 6 mm<sup>2</sup>, wire cutting up to 6 mm<sup>2</sup> cable stopper up to 18 mm<sup>2</sup>

Stripping tool - WIREFOX-D SR 6-1 - 1212511



Stripping tool, for standard 2.5, 4, and 6 mm<sup>2</sup> solar cables, with 15 mm length stop, for SUNCLIX field connectors

Phoenix Contact 2020 © - all rights reserved http://www.phoenixcontact.com

PHOENIX CONTACT GmbH & Co. KG Flachsmarktstr. 8 32825 Blomberg Germany Tel. +49 5235 300 Fax +49 5235 3 41200 http://www.phoenixcontact.com

# **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Solar Connectors / Photovoltaic Connectors category:

Click to view products by Phoenix Contact manufacturer:

Other Similar products are found below :

<u>1740699-7</u> <u>1971861-4</u> <u>1971131-4</u> <u>1971858-3</u> <u>1971861-3</u> <u>PV-090508-F03</u> <u>PV-090508-M10</u> <u>PV-CM-S 2 5-6 (-)</u> <u>2270184-3</u> <u>2270154-2</u> <u>2270226-4</u> <u>PV-090508-M06-N</u> <u>1987558-2</u> <u>PV-090506-F03</u> <u>UTXPM</u> <u>UTXPF</u> <u>UTXCMB6AM</u> <u>1627092</u> <u>1017635</u> <u>1017636</u> <u>1-2306314-1</u> <u>1-</u> <u>2306314-2</u> <u>1302440201</u> <u>1303450000</u> <u>PV-STICK+ VPE10</u> <u>2-1971862-2</u> <u>H4CMC6DM</u> <u>1705996</u> <u>1705995</u> <u>1971858-2</u> <u>5-2306317-2</u> <u>1704926</u> <u>H4CFC4DIS</u> <u>H4CFC4DC</u> <u>H4CFC4DM</u> <u>H4CFC6DM</u> <u>H4CFM2DI</u> <u>H4CFM6DI</u> <u>H4CMC2DI</u> <u>H4CMC6DM</u> <u>H4CMM6DI</u> <u>H4CMC4DMS</u> H4CMC4DIS H4PF H4PM HGLUI PWJ-03BMMB-LL8001 UTXCFA0AM UTXCFA4BMH UTXCMA0AM UTXCMA4AM