PV-C4M-S 2,5-6 (-) - Connector

1020775

https://www.phoenixcontact.com/us/products/1020775

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Connector, Range of articles: SUNCLIX, housing material: PPE, color: black, number of positions: 1, min. conductor cross section: 2.5 mm^2, max. conductor cross section: 6 mm^2, rated voltage: 1500 V DC, rated current: 35 A, Connection method: Spring-cage, Contact connection type: Pin, min. cable diameter: 5 mm, max. cable diameter: 8 mm

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	1020775
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	AB02
Product key	ABLBBA
GTIN	4055626511283
Weight per piece (including packing)	19.73 g
Weight per piece (excluding packing)	19.602 g
Customs tariff number	85359000
Country of origin	IN

Technical data

Notes

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.
	• 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.
	• For operating voltages > 50 V AC, conductive connector housings must be grounded
	• Ensure that the protective or functional ground has been properly connected.
	• 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
	• 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.

Product properties

Product type	Photovoltaic connector
Product family	SUNCLIX
Number of positions	1

Insulation characteristics

Protection class	II
Degree of pollution	2

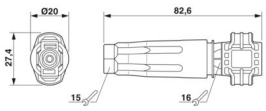
Electrical properties

Rated voltage (II/2)	1000 V
Rated voltage (III/2)	1500 V
Nominal voltage ATD	1500 V DC (III/2.00) in accordance with IEC 62852:2014/AMD1:2020
	1500 V DC in accordance with UL 6703
Rated surge voltage	16 kV
Rated surge voltage (II/2)	12 kV
Rated surge voltage (III/2)	12 kV
Rated surge voltage (III/3)	16 kV
Rated current (6.0 mm²)	35 A (in accordance with IEC 62852:2014-11)
Rated current (4.0 mm²)	30 A (in accordance with IEC 62852:2014-11)
Rated current (2.5 mm²)	20 A (in accordance with IEC 62852:2014-11)
Rated current	30 A (in accordance with UL 6703)
	35 A (in accordance with UL 6703)
	50 A (in accordance with UL 6703)
Contact resistance	0.45 mΩ
Contact resistance	≤ 0.45 mΩ (when plugged in (without cable))

Connection data

Connection method	Spring-cage
Stripping length	15 mm

Dimensions

Dimensional drawing	
Width	20 mm
Height	27.4 mm
Length	82.6 mm

Material specifications

Color	black
Color of the housing part	black
Material	PPE
Flammability rating according to UL 94	V0
Insulating material group	II
Insulating material	mPPE
Housing material	PPE
Cable seal material	EPDM
Contact material	Cu
Contact surface material	Ag
Contact carrier material	PA 6.6 V0
O-ring material	Elastosil LR 3065/50

Cable/line

Cable type	in accordance with IEC 62930
External cable diameter ()	5 mm ... 8 mm
External cable diameter	5 mm ... 8 mm
Single wire, cross section	2.5 mm² 6 mm² 14 AWG 10 AWG
Stripping length of the individual wire	15 mm
Cable pull-out force	> 80 N

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	100
Insertion force	45 N ±10 N
Withdrawal force	250 N ±50 N (when locked)

Environmental and real-life conditions

Ambient conditions

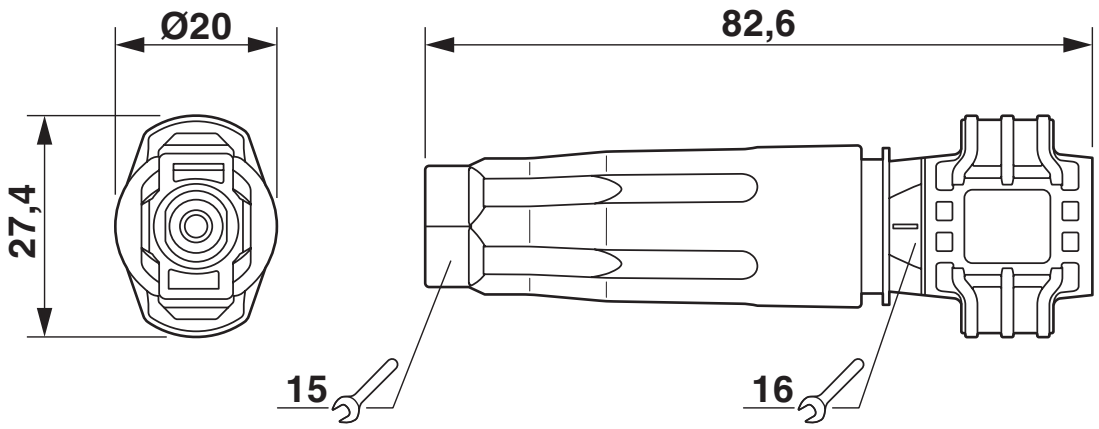
Degree of protection (when plugged in)	IP66 / IP68 (2 m / 24 h)
Degree of protection (not plugged in)	IP20
Degree of protection	IP66 / IP68 (2 m / 24 h)
Ambient temperature (operation)	-40 °C ... 85 °C (dependent on the derating curve)
Ambient temperature (assembly)	-5 °C ... 50 °C

Standards and regulations

Standards/specifications	IEC 62852:2014/AMD1:2020

Drawings

Dimensional drawing



Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1020775

UL Recognized
Approval ID: E477377-20180202

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	1500 V	50 A	- 10	-

TÜV Rheinland
Approval ID: R60169305 0001

Classifications

ECLASS

ECLASS-11.0	27440102
ECLASS-12.0	27440116
ECLASS-13.0	27440116

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

PV-C PROTECTION CAP - Protective cap

1785430

https://www.phoenixcontact.com/us/products/1785430



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

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

QUICK WIREFOX 6 SC - Stripping pliers

1207637

https://www.phoenixcontact.com/us/products/1207637



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

WIREFOX-D SR 6-1 - Stripping tool

1212511

https://www.phoenixcontact.com/us/products/1212511



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

PV-C-PLUG-HV - Filler plug

1623478

https://www.phoenixcontact.com/us/products/1623478



Filler plug, Range of articles: SUNCLIX, housing material: PA 6

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