



# **SUNCLIX**

Connection technology  
for photovoltaics

# Connection technology for photovoltaics

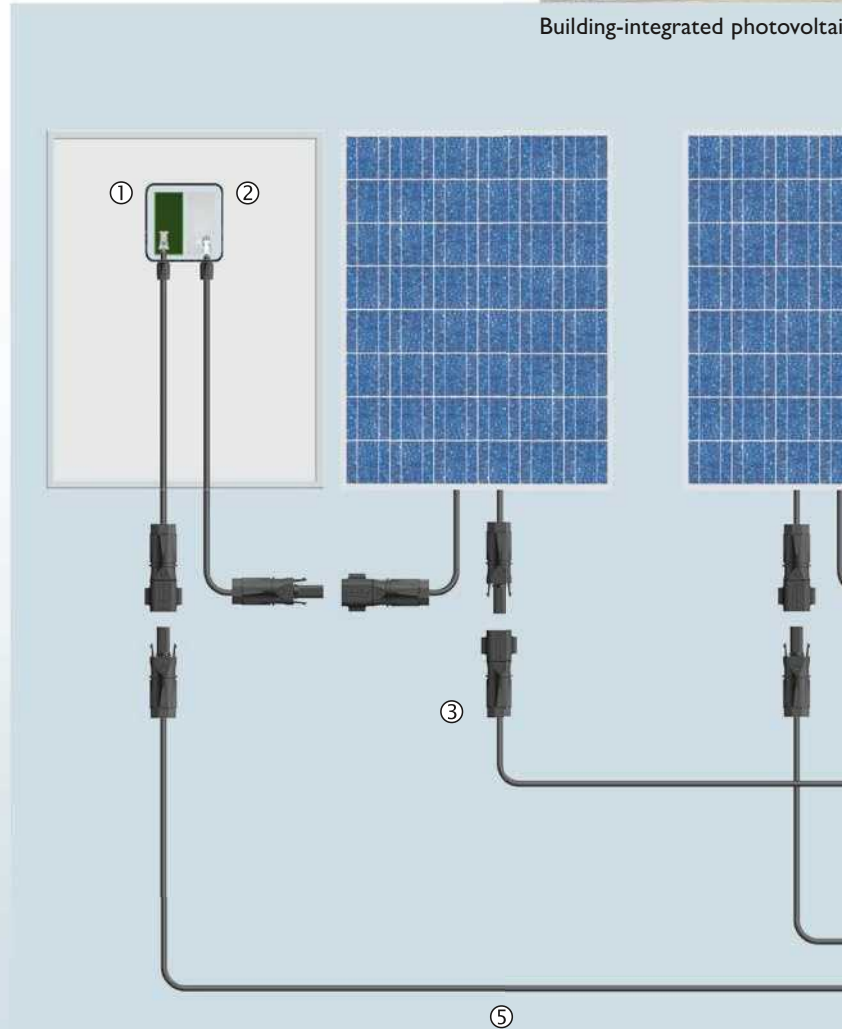
Are you looking for innovative and reliable connection technology for your PV modules, inverters or the complete PV system?

We have the right connection solution for you – from connection technology for PV modules through DC plug-in connectors for field cabling to device connection for signals, data, and power.

The tailored, high-quality components contribute to the long-term and increased availability of your system.



Building-integrated photovoltaics



## Consistent connection technology – from the PV module to the supply



① Push-lock PCB terminal block with spring connection



② Push-lock terminal block with spring connection and welded bracket



③ 2.5 to 6 mm² DC plug-in connectors for field assembly



④ Y-distributor



⑤ PV cables





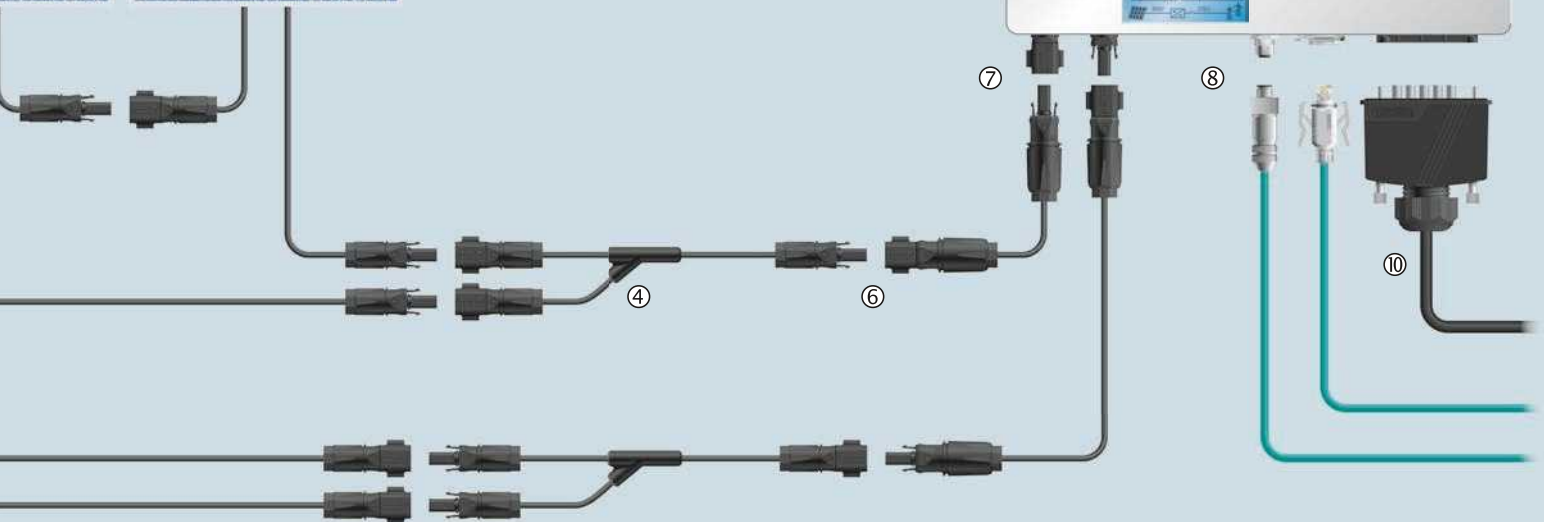
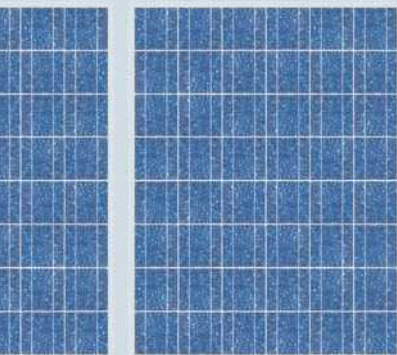
ics (BIPV)



Rooftop systems



Free-standing systems



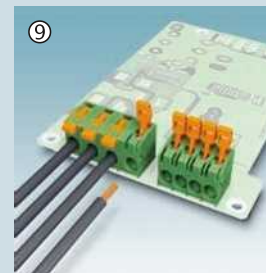
6 to 16 mm<sup>2</sup> DC plug-in connectors for field assembly



DC panel feed-throughs



Data and signal plug-in connectors



PCB connections



AC plug-in connectors

# Connection technology for photovoltaic modules

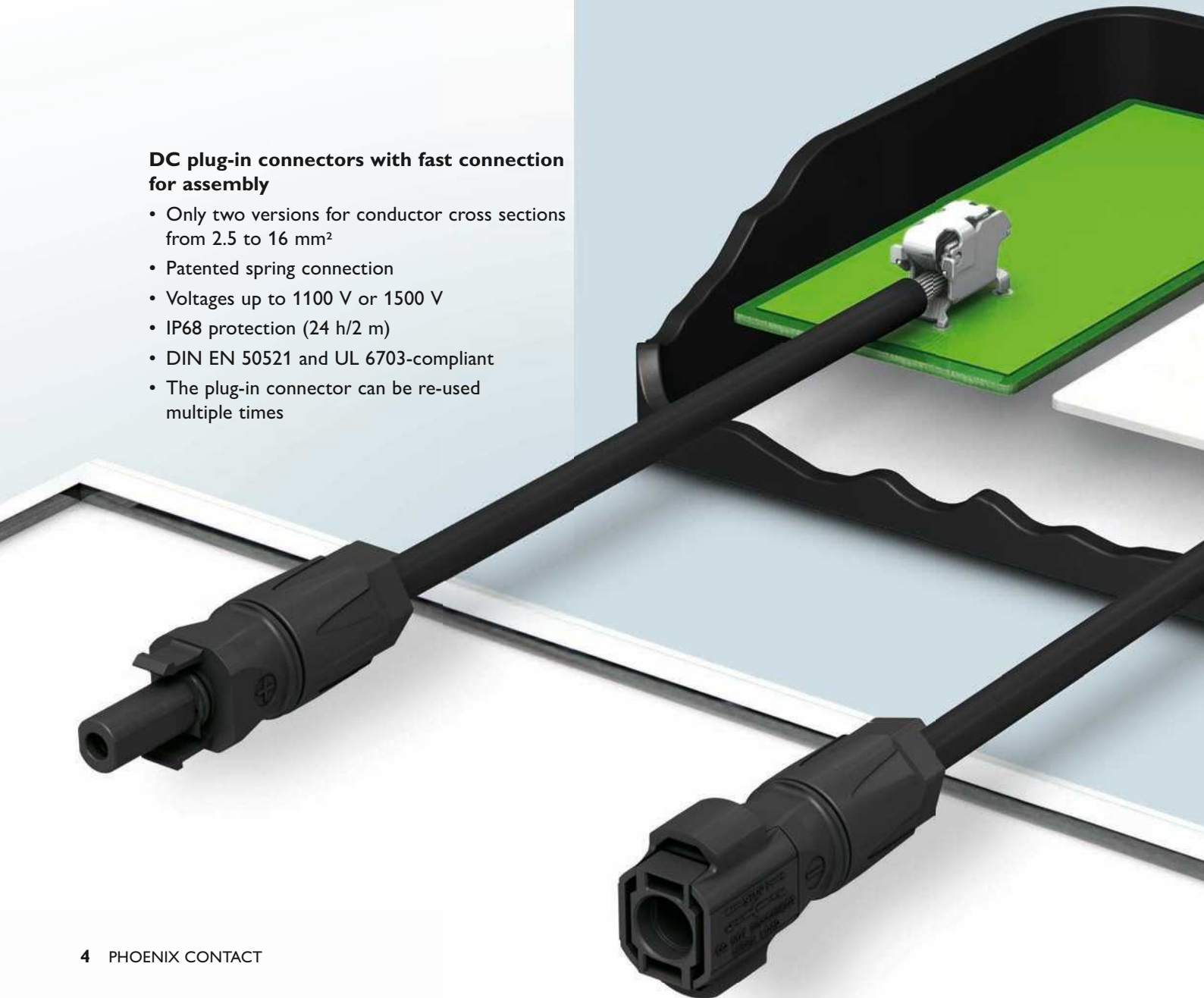
The push-lock connection provides many advantages when contacting photovoltaic modules. Regardless of whether it is as PCB components in the junction box or as a DC plug for module connection – the conductor connection is made quickly and reliably via spring-cage technology.

## DC plug-in connectors with fast connection for assembly

- Only two versions for conductor cross sections from 2.5 to 16 mm<sup>2</sup>
- Patented spring connection
- Voltages up to 1100 V or 1500 V
- IP68 protection (24 h/2 m)
- DIN EN 50521 and UL 6703-compliant
- The plug-in connector can be re-used multiple times

## PTSPL 6 PCB terminal block with solder connection

- Designed for THR soldering processes
- Fully automated assembly of PCB is possible
- Available in two solder pin lengths (2.1 and 2.9 mm)
- Closed version with push-in connection
- For conductor cross sections from 2.5 up to 6 mm<sup>2</sup>

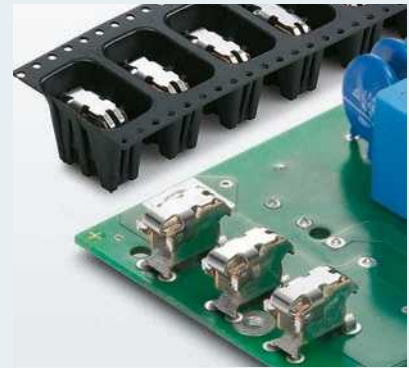


### Main features

- Cost-effective spring connection without insulating body
- Compact design for conductor cross sections up to 6 mm<sup>2</sup>
- Comfortable and reconnectable conductor connection
- Great deal of freedom in terms of insulation coordination, as there is no insulating body

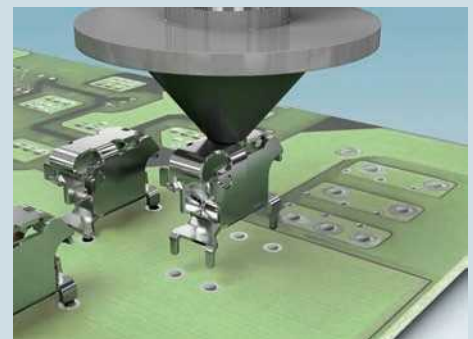
The PTSPL range consists of PCB terminal blocks and terminal blocks with welded brackets for cross sections of up to 6 mm<sup>2</sup> and a current carrying capacity of up to 41 A.

The PTSPL 6 PCB terminal block is ideal for use in SMT processes, thanks to THR-soldering capability and delivery in taped form. Alternatively, contacting can be carried out via welding on lead frames in the case of PTSPL-W.



### PTSPL-W PCB terminal block with welded bracket

- Available with welded bracket right or left for spot-welding procedures
- Delivery in bulk with closed springs
- Delivery with closed spring in tray for automated processes



Optimized for SMT and THR mounting due to integrated suction areas



Insert the stripped conductor, snap in the spring, and you're done!



# DC connection technology

When installing PV systems, there is now a more efficient way of wiring cables of various lengths from the module through to the inverter – with the SUNCLIX connection system from Phoenix Contact.

The one-piece DC plug-in connectors can be connected quickly and easily by means of spring technology without using special tools. The unique spring technology ensures a permanently reliable and stable contact to the conductors.

To minimize power loss, use the plug-in connectors for conductors up to 16 mm<sup>2</sup>.



## Y-distributor

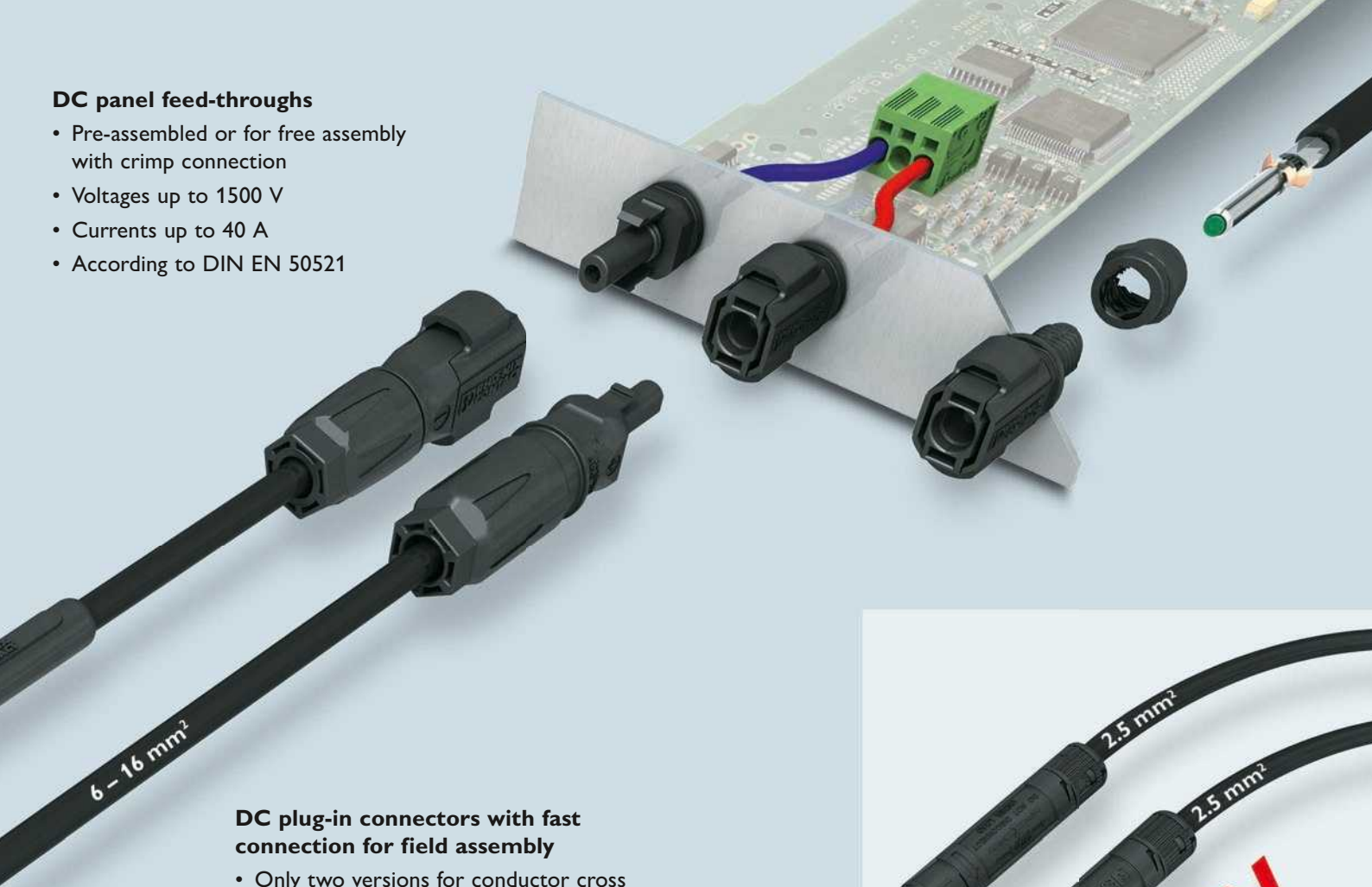
- For parallel connection of modules and strings
- Voltages up to 1100 V
- Customer-specific pre-assembly possible
- Choice of 4 and 6 mm<sup>2</sup> conductor cross section for the trunk line
- In accordance with DIN EN 50521



① Insert the stripped PV conductor

### DC panel feed-throughs

- Pre-assembled or for free assembly with crimp connection
- Voltages up to 1500 V
- Currents up to 40 A
- According to DIN EN 50521



### DC plug-in connectors with fast connection for field assembly

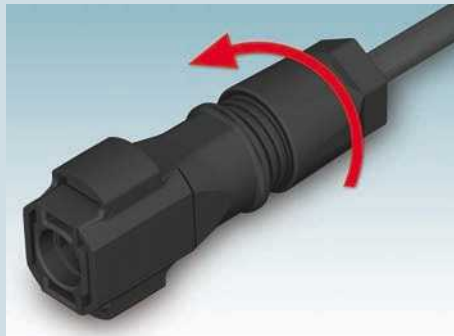
- Only two versions for conductor cross sections from 2.5 to 16 mm<sup>2</sup>
- Patented spring connection
- Voltages up to 1100 V or 1500 V
- IP68 protection (24 h/2 m)
- DIN EN 50521 and UL 6703-compliant
- The plug-in connector can be re-used multiple times



### Miniature DC plug-in connectors for field assembly

- Particularly compact design – only 11 mm diameter
- Suitable for conductor cross sections of 2.5 mm<sup>2</sup>
- Fast connection, thanks to pierce technology
- Currents up to 15 A
- Voltages up to 1000 V
- IP67 degree of protection
- According to DIN EN 50521

For further information, see pages 14/15.



② Press down on the spring and snap in

③ Tighten the screw connection and you're done!

# AC connection technology

Regardless of whether it is a feed-through terminal block or IP-protected plug-in connectors, Phoenix Contact provides a comprehensive range for AC connection to inverters of all performance classes.

## Main features

- AC connection technology for 1-phase and 3-phase devices
- Innovative spring connection technology or universal screw connection
- Connection technology for indoor and outdoor devices
- UV resistant
- Can be sealed

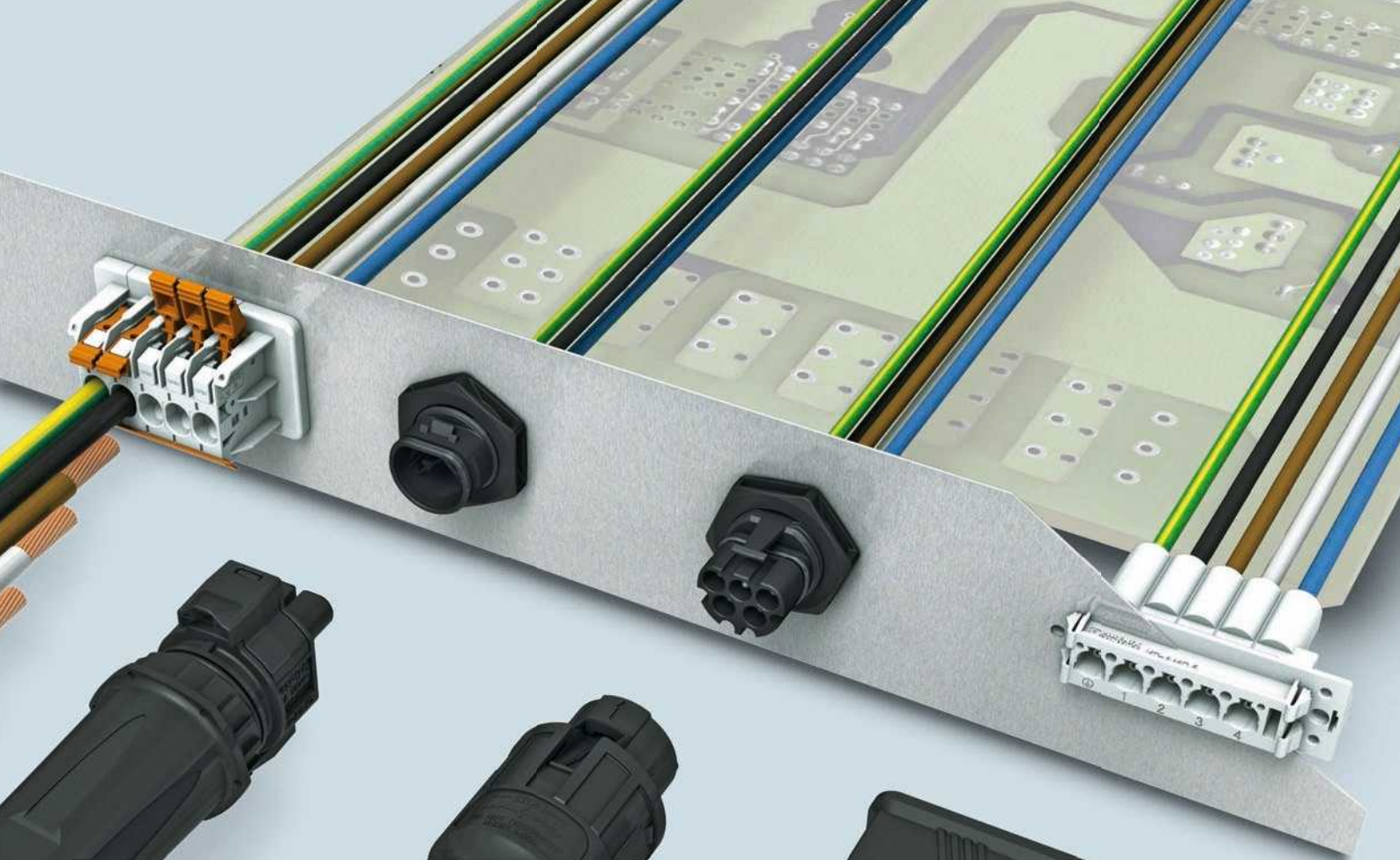
## PLW 16 feed-through terminal block with push-lock spring connection

- For 1-phase and 3-phase devices
- Easy connection and removal of conductors using a push-lock connection on the outside
- Fast push-in connection on the inside
- Conductor cross section from 2.5 up to 25 mm<sup>2</sup>
- Currents up to 41 A
- Voltages up to 1000 V

## SUNCLIX AC circular plug-in connector with spring connection

- For 1-phase devices
- Conductor cross section from 2.5 up to 6 mm<sup>2</sup>
- Currents up to 25 A
- Voltages up to 300 V
- IP65/IP68 protection





**PRC circular plug-in connector  
with screw connection**

- For 1-phase and 3-phase devices
- Conductor cross section from 1.5 up to 6 mm<sup>2</sup>
- Currents up to 35 A
- Voltages up to 600 V
- IP65/IP68 protection

**VC rectangular plug-in  
connector with screw  
connection**

- For 1-phase and 3-phase devices
- Conductor cross section from 1.5 up to 16 mm<sup>2</sup>
- Currents up to 70 A
- Voltages up to 690 V
- IP65/IP68 protection

# Connection technology for inverters and string combiner boxes

For the safe transmission of signals, data, and power, Phoenix Contact offers plug-in connectors and housing feed-throughs designed to meet the highest demands. All components are made from high-quality, rugged materials. They have undergone intensive laboratory testing and ensure a permanently reliable and stable connection of your devices.

## DC plug-in connectors

The SUNCLIX DC plug-in system opens up new savings potential for the installation of PV systems and the integration of DC interfaces in inverters and string combiner boxes. Thanks to the tool-free spring connection, the connection time of DC plug-in connectors for conductors up to 16 mm<sup>2</sup> is significantly reduced.

## Signal and data plug-in connectors

State-of-the-art inverters feature an increasing number of functions – such as remote monitoring. These functions require both data and signal interfaces that correspond to the latest standards of fieldbus and Ethernet-based systems. Whether fiber optics or copper-based plug-in connectors – the PLUSCON data and PLUSCON circular product ranges always offer the right solution.





#### **PCB connection**

With a wide range of versions, the COMBICON range offers the right solution for every application. PCB terminal blocks and plug-in connectors with 2.54 to 15 mm pitch with screw, spring, crimp, and insulation displacement connection are available for currents up to 125 A.

#### **AC plug-in connectors**

The plug-in connectors from the Phoenix Contact program are particularly well-suited for feeding energy into the power grid. The series offers multi-position circular plug-in connectors and rectangular plug-in connectors with a connection cross section of up to 16 mm<sup>2</sup> and a current carrying capacity of up to 70 A.



# AC connection system for microinverters

Are you looking for an innovative, universal, and easy-to-install connection technology for your microinverters?

SUNCLIX micon – the new connection system from Phoenix Contact was developed to meet your requirements. It is particularly user friendly and can be pre-assembled according to your requirements to enable plug & play at the installation site.

## AC-Y connectors

The AC connectors consist of two 3-pos. connections, which are connected to each other via the trunk line without the risk of polarity reversal. In addition to accommodating the trunk line, the coupling side also accommodates the drop line, which serves as a connection to the inverter.



## Protective caps

Dust protection caps, made from biodegradable plastic, protect the pin connector pattern from contamination during transport. When it comes to installation, they can be easily removed from the plug without any special tools. During installation, the IP protective caps are inserted as an end cap on the last connector, in order to protect the plug from atmospheric influences.



## Contact removal tool

The locking mechanism of the plug-in connector is extremely robust, prevents unintentional release, and can be easily and quickly opened with the contact removal tool. Thanks to an additional latch, it does not fall out of the plug housing once it has been released.

### Main features

- Three-position, coded pin connector pattern (protection against polarity reversal)
- Maximum reliability, thanks to SUNCLIX contacts
- Trunk line:
  - Voltages up to 600 V
  - Nominal currents of max. 20 A
- Drop line:
  - Nominal currents up to 5 A (use of microinverters with 500 W output power possible)
- IP67 degree of protection
- Connection system for the AC and DC side of your microinverter, from a single source



### DC plug-in connectors

With the SUNCLIX DC plug-in connector as a device plug or for field assembly, you can also impress with performance and quality on the module side.

### Mains connector plug

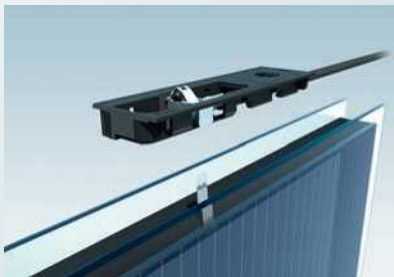
The mains connector plugs provide the connecting link between the PV system and mains. Depending on the system structure, the mains can be connected via the plug or coupling side of the AC-Y connector. The free cable end is either connected in a distributor box or fed into an incoming main feeder box via a cable sleeve.



# Miniature plug-in system for building-integrated photovoltaics (BIPV)

For the trend of producing energy from building-integrated photovoltaics, Phoenix Contact is offering the SUNCLIX mini, a particularly compact DC connection system for permanently reliable and stable connection from the module to the inverter.

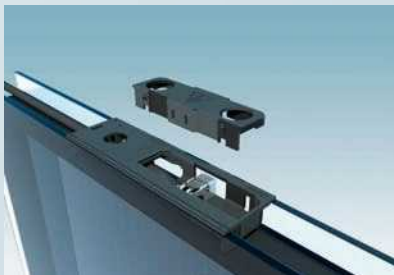
## Installation of the module junction box



1. Position the module junction box above the ribbon



2. Remove the adhesive strip and position the module junction box on the edges of the glass



3. Insert the ribbon in the spring case and snap in the spring. Close the connection area with the cover



4. Fill the module junction box with sealant using the special openings one after the other



### Single-position module junction box

One module junction box is used per ribbon (right and left module junction box). Both module junction boxes are integrated into the facade module and sealed with sealant.

- Current: 15 A
- Voltage: 1000 V DC
- Qualified ribbon:  
Width: 5 mm/thickness: 0.05 to 0.2 mm
- Conductor cross section: 2.5 mm<sup>2</sup>
- Spring connection

### Miniature DC plug-in connectors for assembly

The compact design of the plug-in connectors enables concealed installation behind the PV modules or direct installation within the facade profile.

- Current: 15 A
- Voltage: 1000 V
- Conductor cross section: 2.5 mm<sup>2</sup>
- Compact design: Ø only 11 mm
- Pierce connection
- IP67 degree of protection
- According to DIN EN 50521

### Compact DC string diode

Return currents can occur in PV modules as a result of shading in different strings. The stable housing and flat design of the DC string diode protects the modules from return currents. The optimized design ensures effective heat dissipation and, as a result, the long service life of the components.

- Current: 5 A
- Voltage: 1000 V
- Reverse voltage: 2200 V
- Conductor cross section: 2.5 mm<sup>2</sup>
- IP67 degree of protection
- VDE approval in accordance with DIN EN 50548 (VDE 126-3)

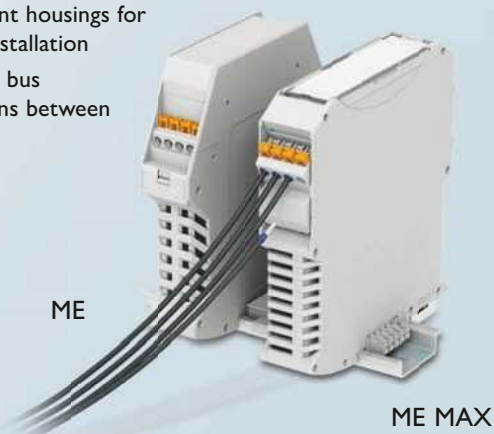
# Device connection technology for signals, data, and power

You'll always find the right connection for your devices – from the PCB connection through IP6X-protected housing feed-throughs to plug-in connectors with fast connection for assembly.

Plastic housing for your electronics completes the product range.

## Housing systems

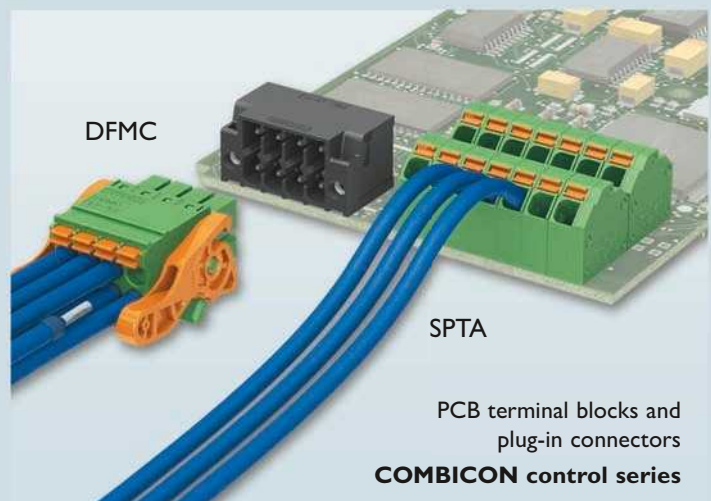
- Component housings and panel mounting bases for industrial electronics
- Component housings for building installation
- Innovative bus connections between housings



Housing systems with  
connection technology

## SIGNAL

- PCB terminal blocks and plug-in connectors with 2.00 to 7.62 mm pitch for wave soldering, reflow soldering, and press-in mounting
- M5 to M27 flush-type plug-in connectors with solder connection or punched-on individual litz wires with IP65/IP67 protection
- Plug-in connectors for assembly in M8 and M12 with IDC, spring-cage, pierce or screw connection with IP65/67 degree of protection







The Phoenix Contact product range for device connection technology consists of well over 50,000 products. The right connection is therefore available for virtually all industrial applications – whether for signal, data or power transmission.

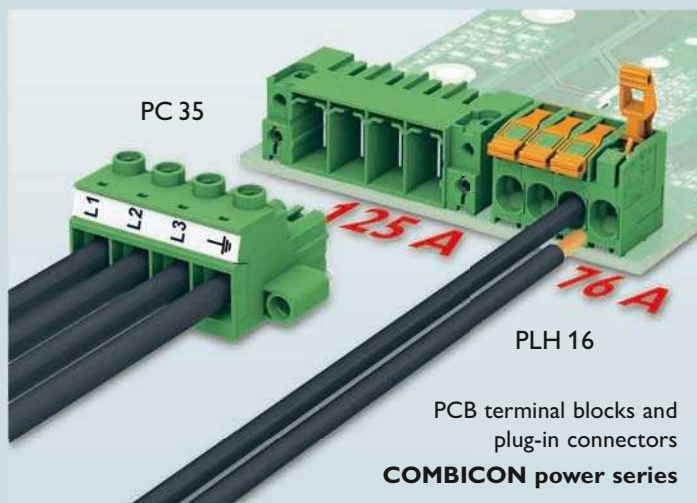
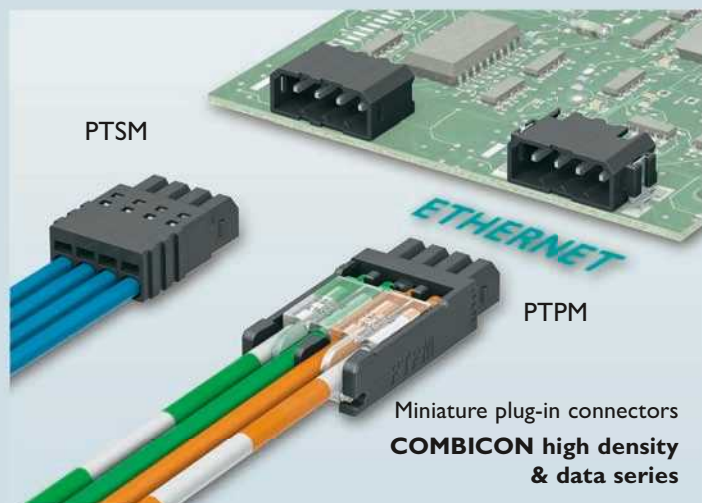
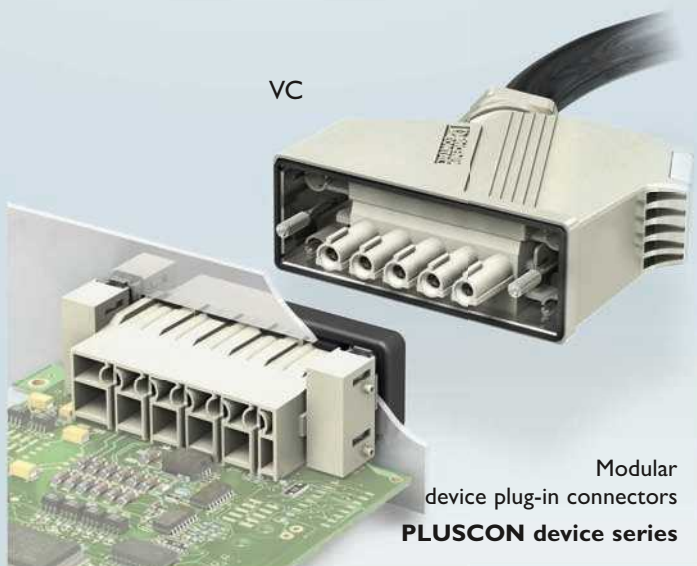
## Data

- PCB terminal blocks and plug-in connectors for network technology and bus communication
- Plug-in connectors and panel feed-throughs for RJ45, USB, D-SUB, and M12 interfaces with IP65/IP67 protection



## POWER

- PCB terminal blocks and plug-in connectors for up to 125 A of power
- Modular plug-in connectors in different sizes with screw and crimp connection for power of up to 70 A with IP67 protection







# Technical data and ordering information




The following product lists contain selected components together with their key technical properties. More detailed information as well as numerous other possible solutions can be found in our complete catalog.

Simply visit us at:  
[phoenixcontact.net/products](http://phoenixcontact.net/products)

## DC connection technology for PV modules and field cabling

<b>SUNCLIX</b> DC plug-in connectors for field assembly						
Type	Pin (-)	Socket (+)	Pin (-)	Socket (+)	Pin (-)	Socket (+)
Order No.	1774687	1774674	1789834	1789821	1790797	1790784
Cross section	2.5 – 6 mm <sup>2</sup>		2.5 – 6 mm <sup>2</sup>		6 – 16 mm <sup>2</sup>	
Rated voltage	1100 V		1500 V		1500 V	
Nominal current	max. 40 A		max. 40 A		max. 65 A	
Degree of protection	IP65/68 (24 h/2 m)		IP66/68 (24 h/2 m)		IP66/68 (24 h/2 m)	
Product information	Temperature range: -40°C to +85°C, protection class II, certified according to UL 6703 and DIN EN 50521		Temperature range: -40°C to +85°C, protection class II, certified according to DIN EN 50521		Temperature range: -40°C to +85°C, protection class II, certified according to DIN EN 50521	

## Miniature plug-in system for building-integrated photovoltaics (BIPV)

<b>SUNCLIX mini</b>						
Description	Miniature DC plug-in connectors for assembly		Single-position module junction box		Compact DC string diode	
Type	Pin (-)	Socket (+)	Left	Right	with SUNCLIX mini plug-in connectors	w/o plug-in connector, free cable ends
Order No.	1795336	1795323	1705132	1705131	1463065	1811239
Cross section	2.5 mm <sup>2</sup>		2.5 mm <sup>2</sup>		2.5 mm <sup>2</sup>	
Rated voltage	15 A		15 A		5 A	
Nominal current	1000 V		1000 V		1000 V	
Product information	Protection class II, Ø 11 mm, degree of protection IP67, temperature range: -40°C to +85°C, certified in accordance with DIN EN 50521		The width of the module junction box can be adapted by the customer (width from 18.3 mm to 34.3 mm). Ribbon: < 5 mm width, 0.05 – 0.2 mm thickness, temperature range: -40°C to +85°C		Protection class II, 100 x 38 x 11 mm (LxWxH), temperature range: -40°C to +85°C, certified in accordance with DIN EN 50548	

## DC connection technology for devices

### SUNCLIX

#### DC device plug-in connector

With 130 mm litz wire;  
other lengths available on request

Type	Pin	Socket	Pin	Socket	Pin	Socket
Order No.	1805148	1805135	1805164	1805151	1805180	1805177
Cross section	2.5 mm <sup>2</sup>		4 mm <sup>2</sup>		6 mm <sup>2</sup>	
Rated voltage	1500 V		1500 V		1500 V	
Nominal current	Max. 27.5 A		max. 40 A		max. 40 A	
Degree of protection	IP65/66/68 (24 h/2 m)		IP65/66/68 (24 h/2 m)		IP65/66/68 (24 h/2 m)	
Properties	Temperature range: -40°C to +85°C, certified in accordance with DIN EN 50521 required accessory <a href="#">1775880</a>		Temperature range: -40°C to +85°C, certified in accordance with DIN EN 50521 required accessory <a href="#">1775880</a>		Temperature range: -40°C to +85°C, certified in accordance with DIN EN 50521 required accessory <a href="#">1775880</a>	




Other versions available on request

#### SUNCLIX DC device plug-in connector

For user assembly




Description	Plastic housing		Contacts for crimp connection		Contacts for crimp connection	
Type	Pin	Socket	Pin	Socket	Pin	Socket
Order No.	1704925	1704926	1704927	1704930	1704928	1704931
Cross section	-		2.5 – 4 mm <sup>2</sup>		6 mm <sup>2</sup>	
Rated voltage	1500 V		-		-	
Nominal current	-		max. 40 A		max. 40 A	
Degree of protection	IP68 (24 h/2 m)		-		-	
Properties	Temperature range: -40°C to +85°C, certified in accordance with DIN EN 50521 required accessory <a href="#">1775880</a>		Temperature range: -40°C to +85°C, certified in accordance with DIN EN 50521		Temperature range: -40°C to +85°C, certified in accordance with DIN EN 50521	

## SUNCLIX accessories




										
Description	Solar cable				Y-distributor			DC test plug		
Product information	Tin-plated single litz wires, suitable for permanent and flexible installation; double insulation, voltage 1800 V DC, insulating and sheath material offers excellent resistance to weather, UV, and wear; TÜV and VDE-certified PV1-F cable				Connection set with branch line for fast parallel interconnection of photovoltaic modules. Length of single cables 120 mm each			Test plug with tool-free release for test applications with high insertion/withdrawal cycles. Cable length 1500 mm		
	Cross section	100 m ring	500 m drum	1000 m drum	Cross section	Version	Order No.	Type	Pin (-)	Socket (+)
	2.5 mm²	<a href="#">1459509</a>	<a href="#">1459540</a>	<a href="#">1459566</a>	4 mm²	Pin to 2x socket (-/++)	<a href="#">1795019</a>	Order No.	<a href="#">1780464</a>	<a href="#">1780451</a>
	4 mm²	<a href="#">1459511</a>	<a href="#">1787700</a>	<a href="#">1459579</a>	4 mm²	Socket to 2x pin (+/-)	<a href="#">1795022</a>	Cross section	10 mm²	
	6 mm²	<a href="#">1459524</a>	<a href="#">1787713</a>	<a href="#">1459582</a>	6 mm²	Pin to 2x socket (-/++)	<a href="#">1787726</a>	Rated voltage	1100 V	
	10 mm²	<a href="#">1459537</a>	<a href="#">1459553</a>	<a href="#">1459595</a>	6 mm²	Socket to 2x pin (+/-)	<a href="#">1787739</a>	Nominal current	max. 40 A	
Degree of protection	-				IP66/IP68 (24 h/2 m)			IP20		
Ambient temperature (operation)	-40°C to +90°C				-40°C to +85°C			-20°C to +55°C		

Description	Fastening nut	Protective cap	Filler plug	SZF 1 screwdriver	Wirefox stripping tool
Order No.	<a href="#">1775880</a>	<a href="#">1785430</a>	<a href="#">1775631</a>	<a href="#">1204517</a>	<a href="#">1212511</a>

## Connection technology for PCBs

PCB connection for PV applications PTSPL series							
	Description						
	Push-lock PCB terminal block with spring connection				Push-lock terminal block with spring connection and welded bracket		
		Solder pin length	Order No.	Solder pin length	Order No.	Version	Order No.
		2.1	1704836	2.1	1705081	Welded bracket right	1705624
	2.9	1704837	2.9	1705085	Welded bracket left	1705625	
Version	Closed		Opened		Closed		
Cross section	max. 6 mm²						
Number of positions	1						
Nominal current	max. 41 A						

## Connection technology for microinverters

SUNCLIX micon						
Description	AC Y-connector for PV microinverters		Mains connector plug for the coupling side of the AC Y-distributor		Mains connector plug for the plug side of the AC Y-distributor	
Order No.	1706518		1706517		1706609	
Cross section	Trunk	12 AWG	12 AWG		12 AWG	
	Drop	18 AWG	-		-	
Cable length	12 AWG	1150 mm	12 AWG	1000 mm	12 AWG	1000 mm
	18 AWG	500 mm				
Rated voltage	600 V					
Nominal current	12 AWG	5 A	20 A		20 A	
	18 AWG	12 A	-		-	
Degree of protection	IP67		IP67		IP67	
Properties	Version for the North American market					

## SUNCLIX micon accessories

					
Description	Dust protection caps for protecting the pin connector pattern during transport		IP protective caps for safe operation of the connection system		Contact removal tool for releasing the plug-in connections
Order No.	For plug	1706608	For plug	1706610	1706414
	For coupling	1706599	For coupling	1705615	-
Degree of protection	IP20		IP67		-
Properties	Biodegradable plastic, can be pulled off without contact removal tool		Can only be removed with contact removal tool		After releasing the plug-in connection, the tool does not drop out, instead it remains on the plug housing



## IP-protected circular plug-in connectors for power electronics

### SUNCLIX AC



Description	Plug-in connector	Device plug-in connector	Device plug-in connector	Nut (WAF 34)
Order No.	1446142	1406548	1406547	1457937
Conductor cross section	2.5 – 6 mm <sup>2</sup>	2.5 mm <sup>2</sup>	4 mm <sup>2</sup>	-
Cable length	-	100 mm	100 mm	-
Screw connection	-	M25	M25	M25
Connection method	SUNCLIX spring connection	Crimp connection	Crimp connection	-

### PRC



Description	Field plug	Device plug	Device plug	Device plug	Nut (WAF 34)
Order No.	3-pos. 5-pos.	1409217 1409205	1409219 1409211	1409220 1409212	1409221 1409213
Conductor cross section	1.5 – 6 mm <sup>2</sup>	2.5 mm <sup>2</sup>	4 mm <sup>2</sup>	6 mm <sup>2</sup>	-
Cable length	-	100 mm	100 mm	100 mm	-
Screw connection	-	M25	M25	M25	M25
Connection method	Screw connection	Crimp connection	Crimp connection	Crimp connection	-

## IP-protected rectangular plug-in connector

### PLUSCON device





Modular connector system  
for AC connection







Description	Panel feed-through with screw connection and panel mounting frame	Panel feed-through with conductor connection	Field plug sleeve housing	Field plug contact inserts
Type	Order No.			
Design VC 2	4-pos.	1607745 + 1852985	1583877	1583880
Design VC 3	5-pos.	1607748 + 1852998	1583878	1424368
Crimp contacts	4 mm <sup>2</sup>	-	1761467	-
Crimp contacts	10 mm <sup>2</sup>	-	1761470	-
Crimp contacts	16 mm <sup>2</sup>	-	1761483	-
Rated voltage	690 V	690 V	-	690 V
Nominal current	63 A	70 A	-	70 A
Number of positions	4 – 7	4 – 5	-	4 – 7
Contact/contact surface material	Cu alloy/Ag	Cu alloy/Ag	-	Cu alloy/Ag
Connection method	Solder connection	Crimp connection	-	Screw connection

For more plug-in connectors, please visit [phoenixcontact.com](http://phoenixcontact.com)





## AC/DC PCB connection

<b>COMBICON power</b> PCB terminal blocks and plug-in connectors for power electronics up to 125 A					
<b>Description</b>		Push-in PCB terminal block up to 6 mm²	Push-in PCB terminal block up to 10 mm²	Push-lock PCB terminal block with lever-type actuation up to 16 mm²	Push-lock/push-in feed-through terminal block up to 16/6 mm²
5-pos.	Order No.	1719341	1735817	1770490	1821083
<b>Cross section</b>		6 mm²	16 mm²	16 mm²	16/6 mm²
<b>Pitch</b>		7.5 mm	10 mm	10 mm	-
<b>Number of positions</b>		2 – 12	2 – 9	2 – 8	3 – 5
<b>IEC/UL rated voltage</b>		1000 V/600 V	1000 V/600 V	1000 V/600 V	1000 V/600 V
<b>IEC/UL nominal current</b>		41 A/35 A	76 A/66 A	76 A/51 A	41 A/-
<b>Remark</b>		1-pos. on request	1-pos. on request	1-pos. on request	UL/CUL on request

<b>COMBICON control</b> PCB plug-in connector for data and power transmission in measurement and control technology					
<b>Description</b>		TWIN bus plug with push-in spring connection up to 1.5 mm²	Flat plug-in connector with push-in spring connection up to 1.5 mm²	Flat plug-in connector with push-in spring connection up to 2.5 mm²	Inverted plug-in connector with screw connection up to 2.5 mm²
5-pos.	Order No.	1713868	1952050	1732771	1858905
<b>Cross section</b>		1.5 mm²	1.5 mm²	2.5 mm²	2.5 mm²
<b>Pitch</b>		5 mm	3.5 mm	5 mm/5.08 mm	7.62 mm
<b>Number of positions</b>		2 – 20	2 – 20	2 – 18	2 – 12
<b>IEC/UL rated voltage</b>		320 V/250 V	160 V/150 V	320 V/250 V	630 V/250 V
<b>IEC/UL nominal current</b>		10 A/8 A	8 A/8 A	12 A/10 A	12 A/12 A

<b>COMBICON control/compact</b> PCB terminal blocks and plug-in connectors for signal transmission in measurement and control technology					
<b>Description</b>		PCB terminal block with push-in spring connection with 35° pitch up to 1.5 mm²	PCB terminal block with push-in spring connection up to 2.5 mm²	PCB terminal block with push-in spring-double connection up to 2.5 mm²	PCB terminal block with push-in spring connection for SMD application up to 0.5 mm²
5-pos.	Order No.	1751503	1792892	1725341	1771059
<b>Cross section</b>		1.5 mm²	1.5 mm²	2.5 mm²	0.5 mm²
<b>Pitch</b>		3.81 mm	5 mm	5 mm	2.5 mm
<b>Number of positions</b>		2 – 12	2 – 12	2 – 16	2 – 8
<b>IEC/UL rated voltage</b>		160 V/300 V	400 V/300 V	400 V/300 V	160 V/150 V
<b>IEC/UL nominal current</b>		9 A/10 A	12 A/10 A	13.5 A/13.5 A	6 A/5 A

For more plug-in connectors, please visit [phoenixcontact.com](http://phoenixcontact.com)



## IP6X connection technology for signals, data, and AC

### PLUSCON circular

Circular plug-in connectors  
for sensor/actuator applications



Description					
Type	Order No.				
Pin	5-pos.	1440119	1520068	1436602	1551752
Socket	5-pos.	1440106	1520042	1436563	1542622
Number of positions		4/5	4/5	4/5	4/5
Rated voltage		30 V	60 V	60 V	60 V
Nominal current		2 A	4 A	4 A	4 A
Contact carrier material		PA 66	PA 66	PA 66	PPA
Contact/contact surface material		Cu alloy/Au	Cu alloy/Au	Cu alloy/Au	Cu alloy/Au
Connection method		Individual litz wires	Individual litz wires	Solder pins	THR solder connection

### PLUSCON data

Plug-in connectors with standard  
interfaces such as RJ45, USB, and  
M12 for data transmission



Description					
Socket insert	CAT5	1652936	1688586	1653854	
Socket insert	CAT6	1652949	1653090	1653867	
Panel mounting frame		1653744	1689446	1653744	
Flush-type plug-in connector	4-pos., socket				1551503
Flush-type plug-in connector	8-pos., socket				1553860
Rated voltage		50 V	150 V	30 V	250 V
Nominal current		1 A	1.5 A	1 A	4 A
Number of positions		8	8	4	4/8-pos.
Contact material		Cu alloy	Cu alloy	Cu alloy	Cu alloy
Connection method		IDC	Solder connection	Flat-ribbon cable connection	Solder pins



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