



# SUNCLIX

## Connection technology for photovoltaics

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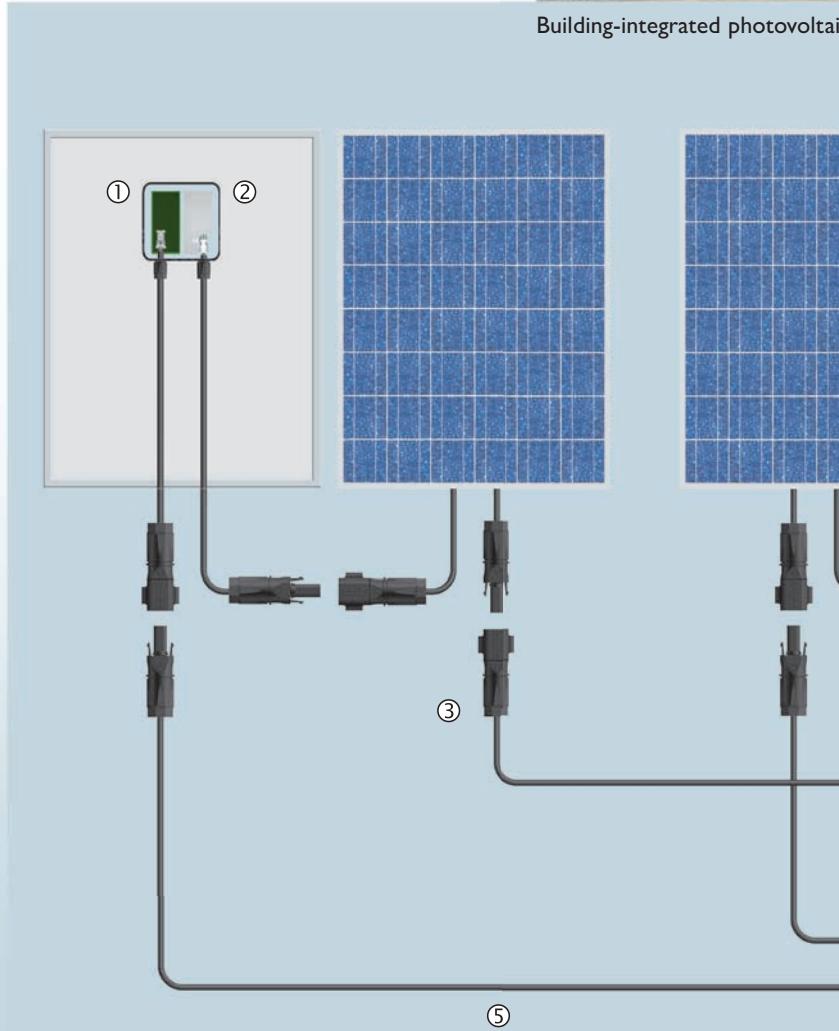
Are you looking for innovative and reliable connection technology for your PV modules, inverters or the complete PV system?

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



④ Y-distributor



⑤ PV cables



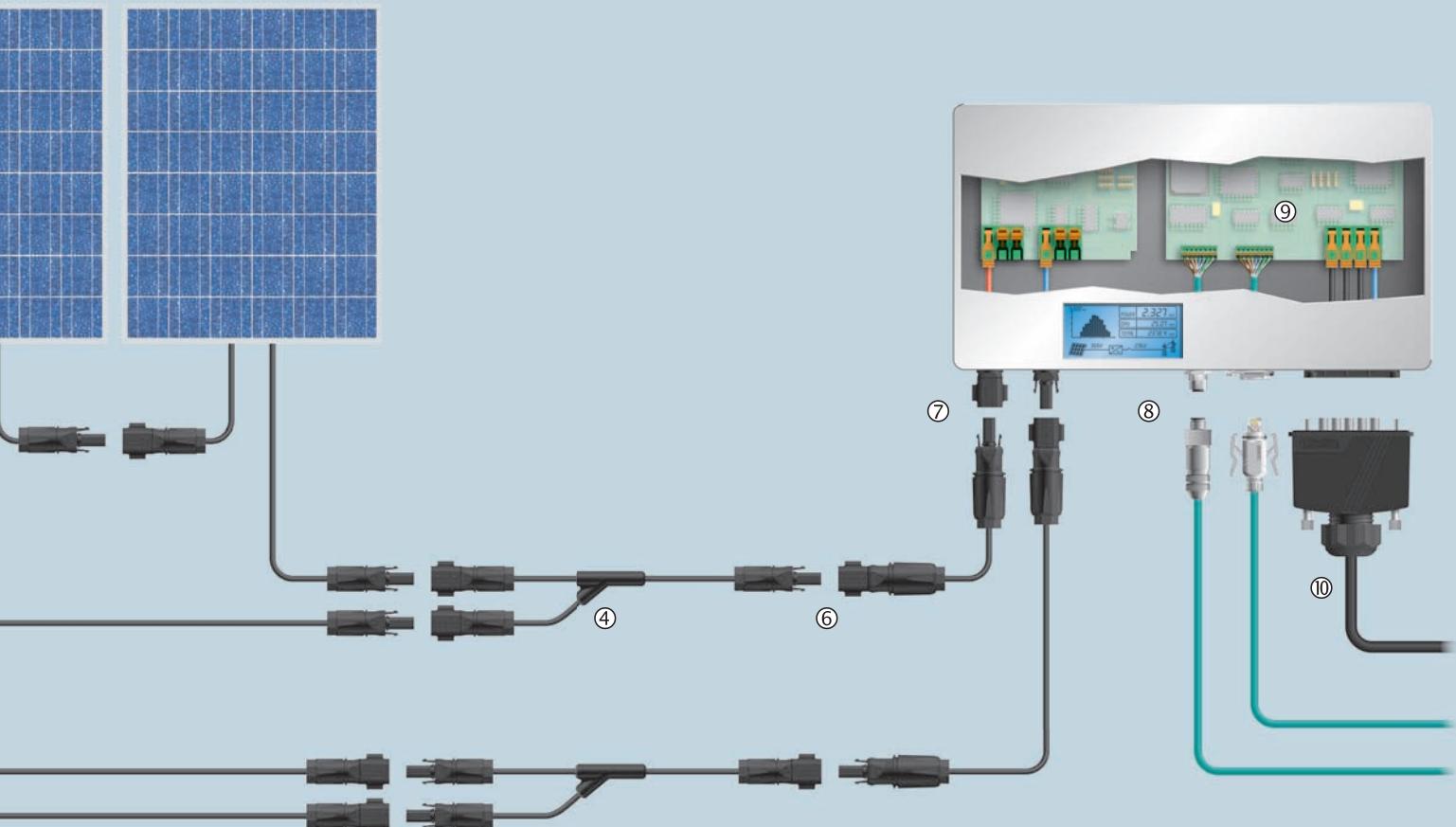
ics (BIPV)



Rooftop systems



Free-standing systems



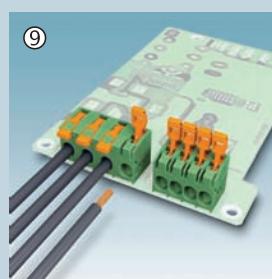
6 to 16 mm<sup>2</sup> DC plug-in connectors for field assembly



DC panel feed-throughs



Data and signal plug-in connectors



PCB connections



AC plug-in connectors

# Connection technology for photovoltaic modules

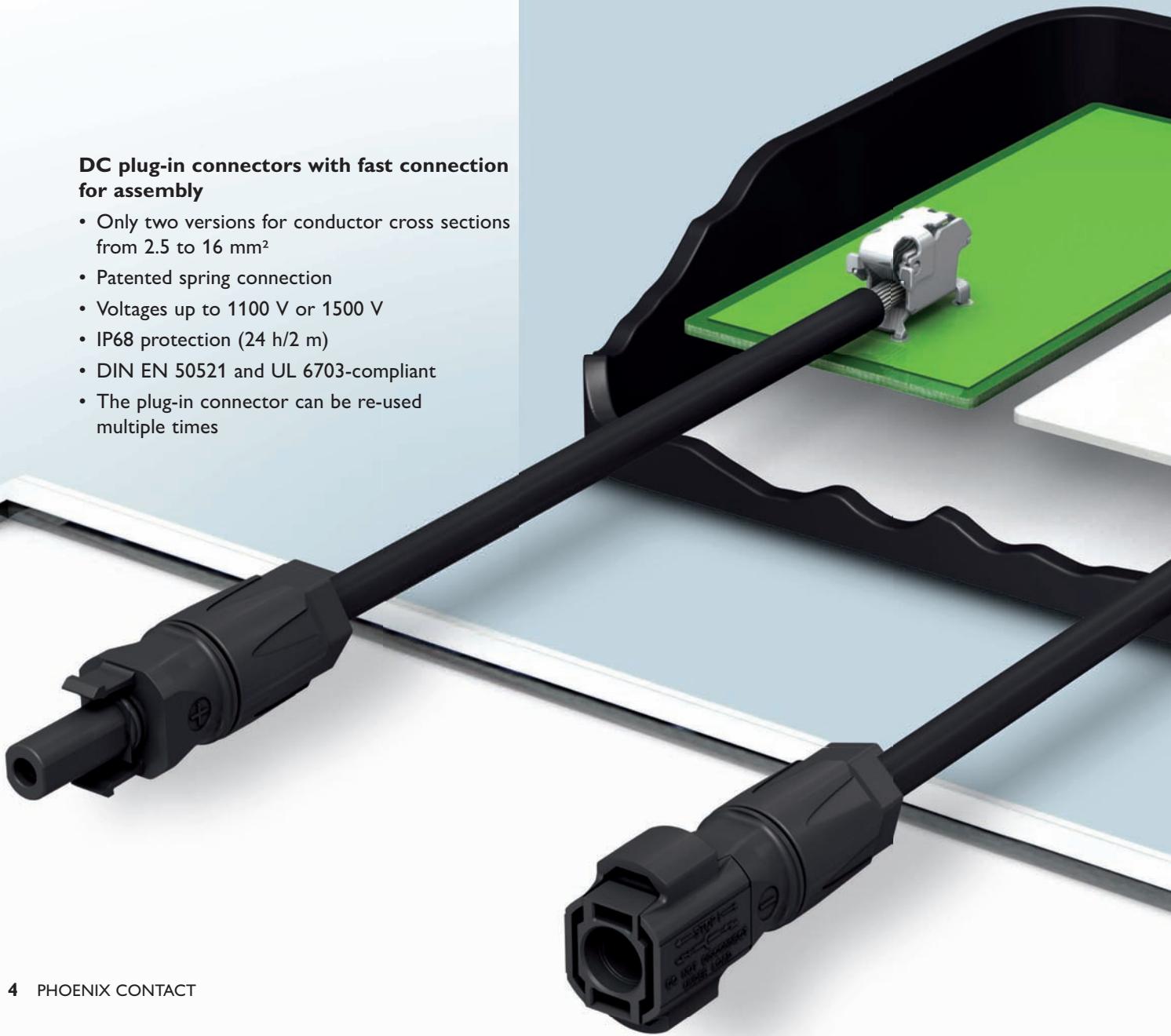
The push-lock connection provides many advantages when contacting photovoltaic modules. Regardless of whether it is as PCB components in the junction box or as a DC plug for module connection – the conductor connection is made quickly and reliably via spring-cage technology.

## 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>

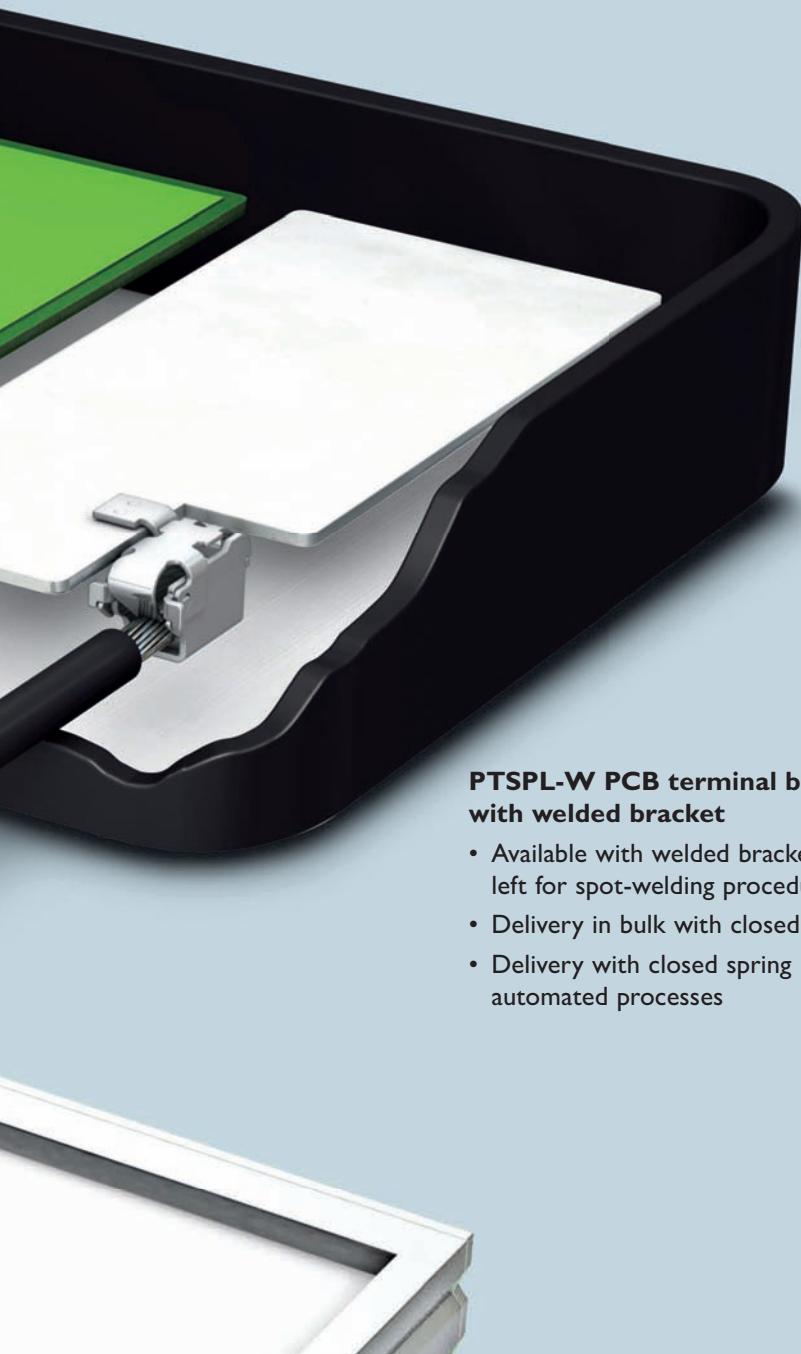


## Main features

- 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

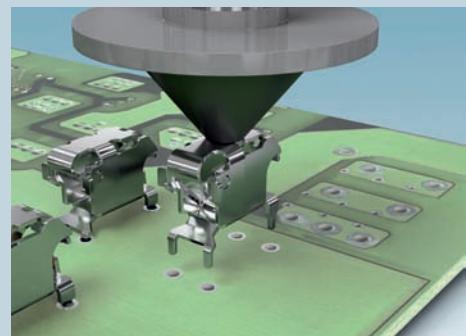
The PTSPL range consists of PCB terminal blocks and terminal blocks with welded brackets for cross sections of up to 6 mm<sup>2</sup> and a current carrying capacity of up to 41 A.

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

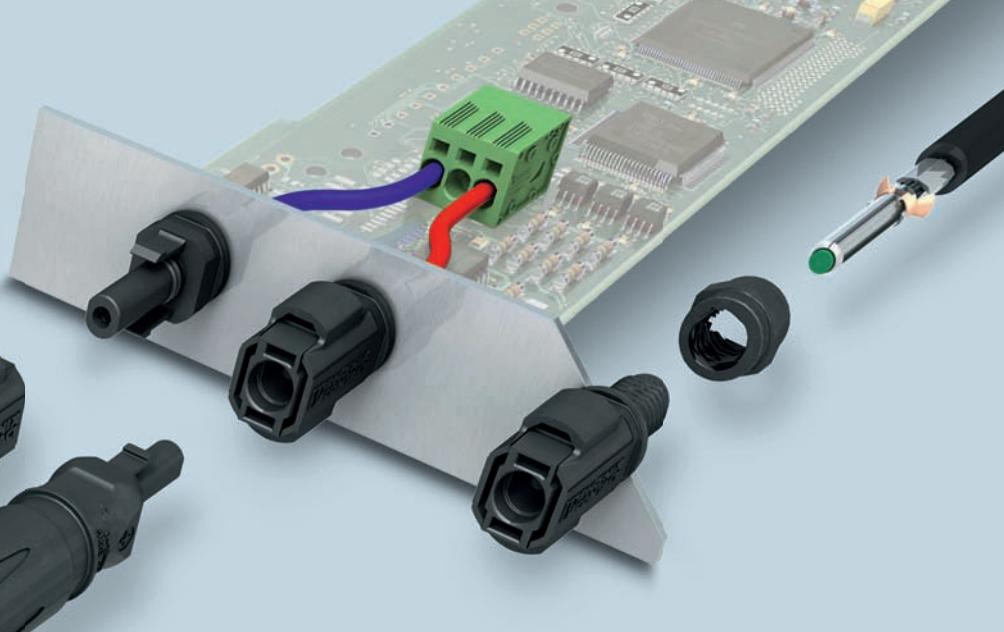
- For parallel connection of modules and strings
- Voltages up to 1100 V
- Customer-specific pre-assembly possible
- Choice of 4 and 6 mm<sup>2</sup> conductor cross section for the trunk line
- In accordance with DIN EN 50521



① Insert the stripped PV conductor

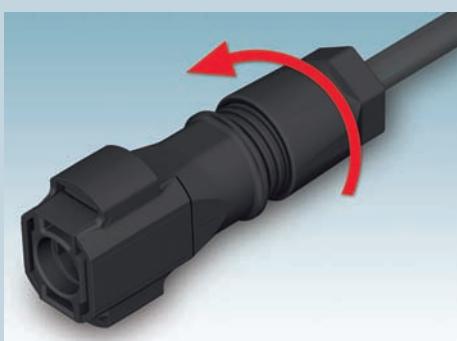
## DC panel feed-throughs

- 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

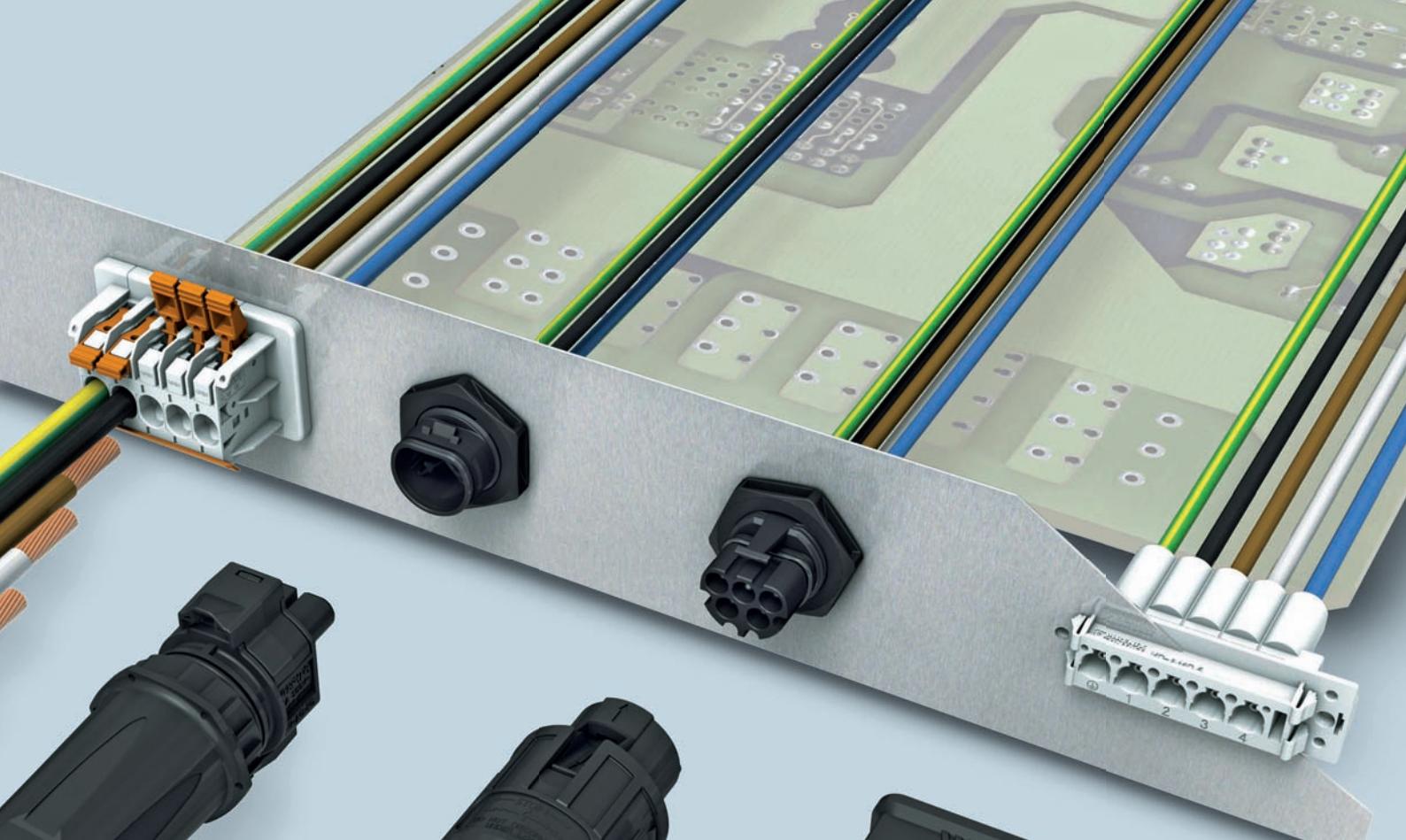
### **PLW 16 feed-through terminal block with push-lock spring connection**

- 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



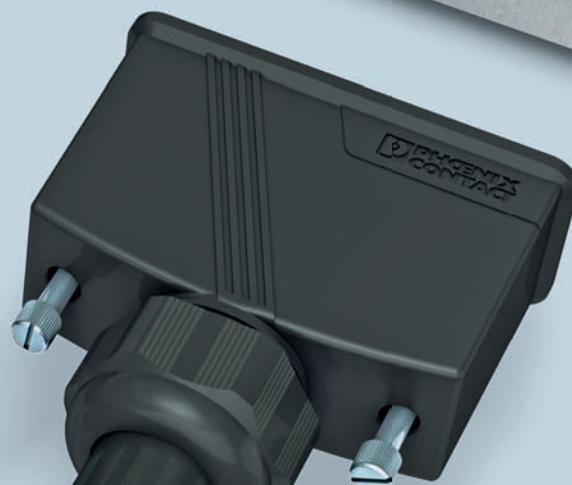
### **SUNCLIX AC circular plug-in connector with spring connection**

- 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

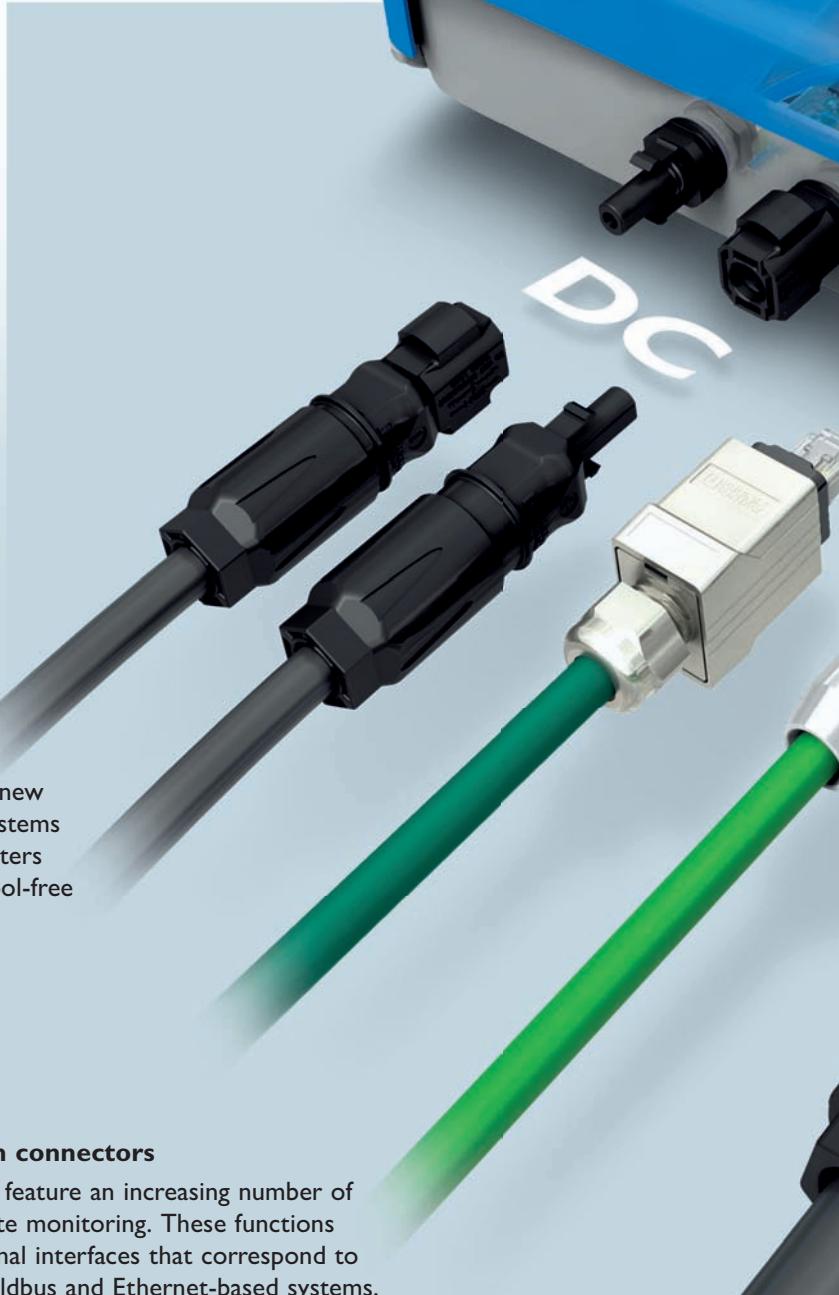


#### **VC rectangular plug-in connector with screw connection**

- 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.

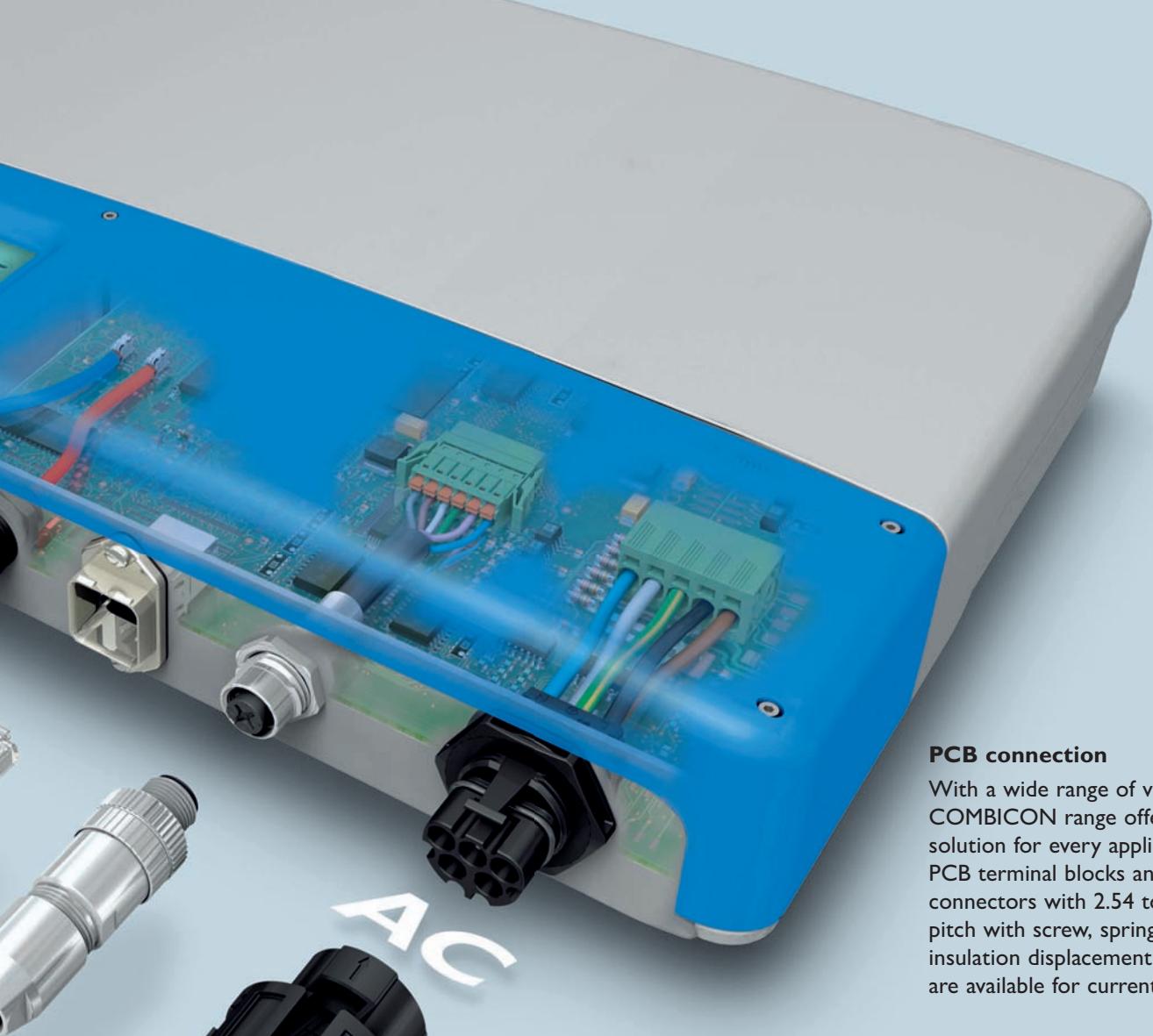


## DC plug-in connectors

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.



## 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.

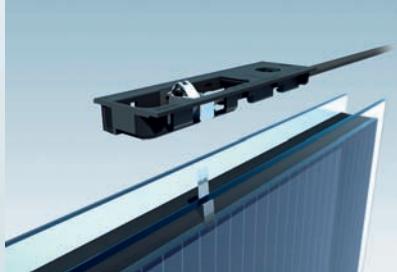


# Miniature plug-in system for building-integrated photovoltaics (BIPV)

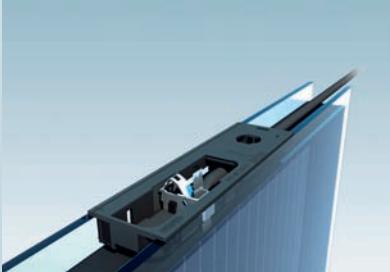
For the trend of producing energy from building-integrated photovoltaics, Phoenix Contact is offering the SUNCLIX mini, a particularly compact DC connection system for permanently reliable and stable connection from the module to the inverter.



## 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

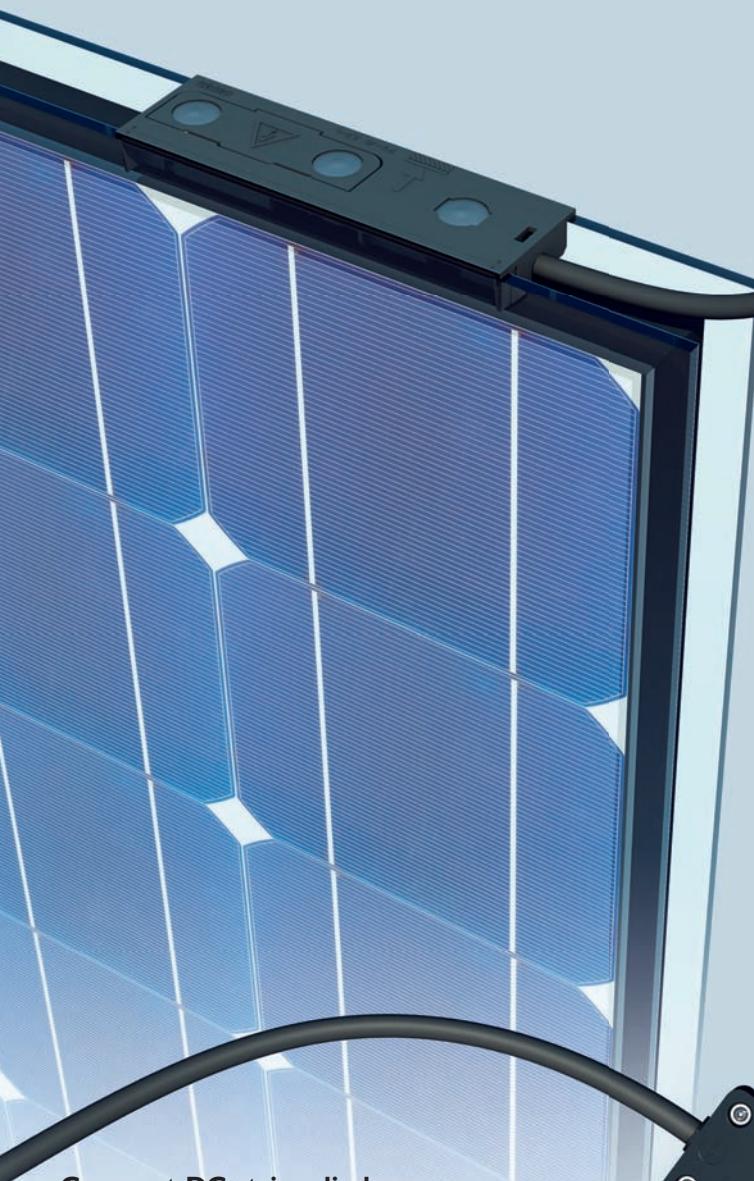


4. Fill the module junction box with sealant using the special openings one after the other

## 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



## 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)

## 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

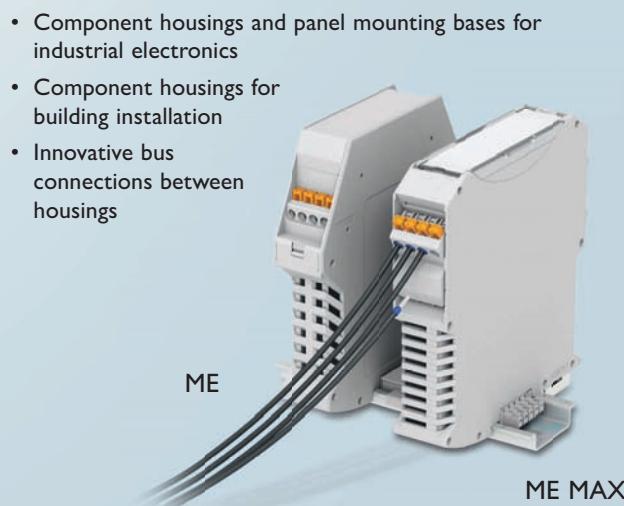


# Device connection technology for signals, data, and power

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



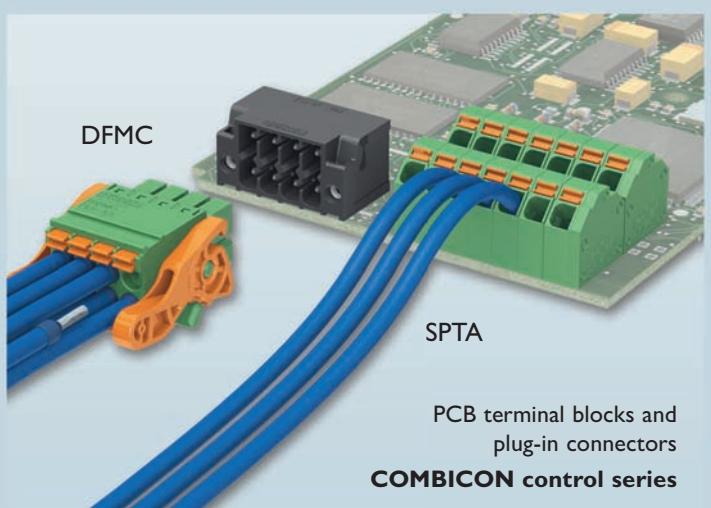
Housing systems with connection technology

## 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



Circular plug-in connectors  
**PLUSCON circular series**



PCB terminal blocks and plug-in connectors  
**COMBICON control series**



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

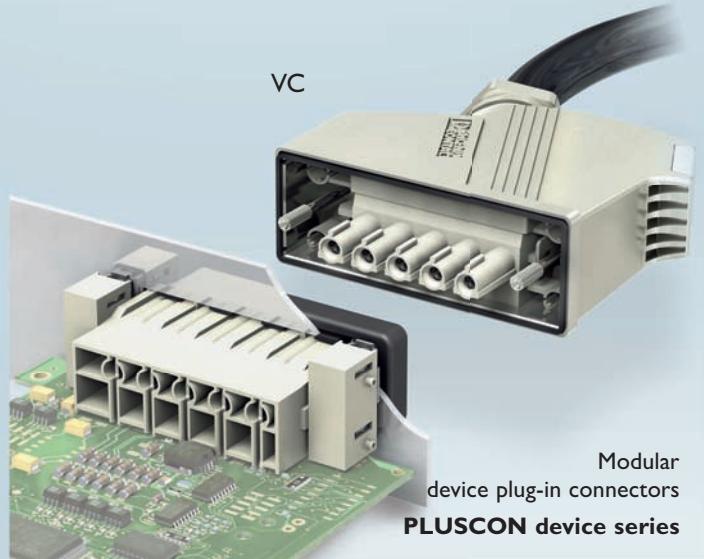
- PCB terminal blocks and plug-in connectors for network technology and bus communication
- Plug-in connectors and panel feed-throughs for RJ45, USB, D-SUB, and M12 interfaces with IP65/IP67 protection



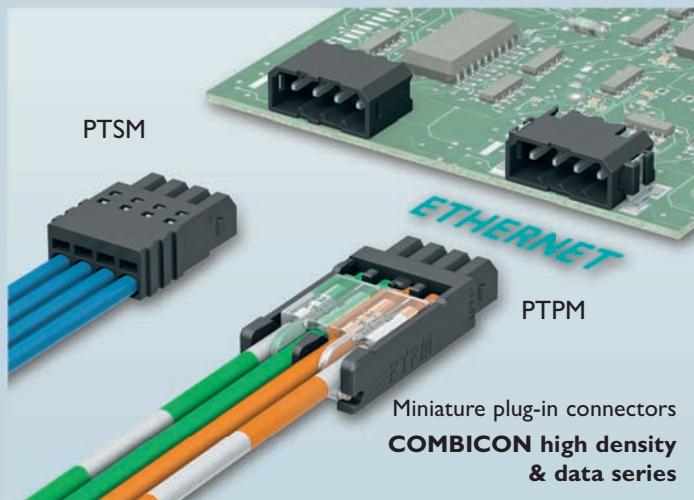
Data plug-in connectors  
**PLUSCON data series**

## POWER

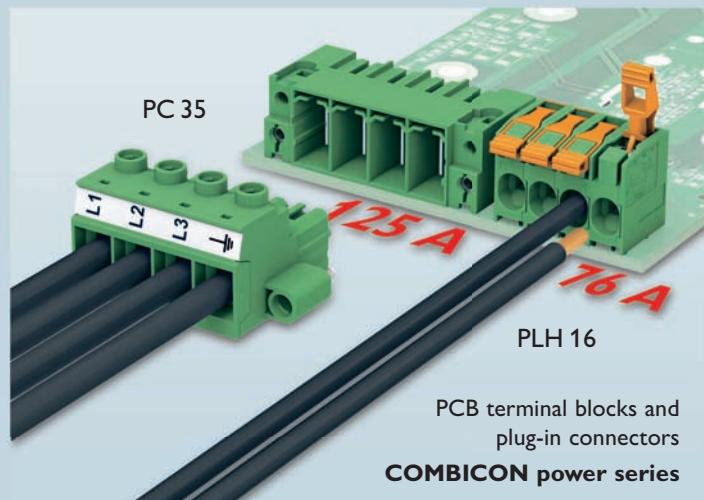
- PCB terminal blocks and plug-in connectors for up to 125 A of power
- Modular plug-in connectors in different sizes with screw and crimp connection for power of up to 70 A with IP67 protection



Modular device plug-in connectors  
**PLUSCON device series**



Miniature plug-in connectors  
**COMBICON high density & data series**



PCB terminal blocks and plug-in connectors  
**COMBICON power series**

# 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> <b>DC plug-in connectors</b> 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		with SUNCLIX mini plug-in connectors	w/o plug-in connector, free cable ends
Type	Pin (-)	Socket (+)	Left	Right			
Order No.	1795336	1795323	1705132	1705131	1463065	1463065	1811239
Cross section	2.5 mm <sup>2</sup>		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	5 A	
Nominal current	1000 V		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 1775880		Temperature range: -40°C to +85°C, certified in accordance with DIN EN 50521 required accessory 1775880		Temperature range: -40°C to +85°C, certified in accordance with DIN EN 50521 required accessory 1775880	

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 1775880		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 mm <sup>2</sup>	1459509	1459540	1459566	4 mm <sup>2</sup>	Pin to 2x socket (-++)	1795019	Order No.	1780464	1780451	
4 mm <sup>2</sup>	1459511	1787700	1459579	4 mm <sup>2</sup>	Socket to 2x pin (+/-)	1795022	Cross section		10 mm <sup>2</sup>	
6 mm <sup>2</sup>	1459524	1787713	1459582	6 mm <sup>2</sup>	Pin to 2x socket (-++)	1787726	Rated voltage		1100 V	
10 mm <sup>2</sup>	1459537	1459553	1459595	6 mm <sup>2</sup>	Socket to 2x pin (+/-)	1787739	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.	1775880	1785430	1775631	1204517	1212511

## Connection technology for PCBs

PCB connection for PV applications PTSPL series					
<b>Description</b>	<b>Push-lock PCB terminal block with spring connection</b>				
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
<b>Version</b>	Closed	Opened		<b>Closed</b>	
<b>Cross section</b>	max. 6 mm <sup>2</sup>				
<b>Number of positions</b>	1				
<b>Nominal current</b>	max. 41 A				

## Connection technology for microinverters

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

## SUNCLIX micon accessories

			
<b>Description</b>	<b>Dust protection caps for protecting the pin connector pattern during transport</b>	<b>IP protective caps for safe operation of the connection system</b>	<b>Contact removal tool for releasing the plug-in connections</b>
<b>Order No.</b>	For plug For coupling	1706608 1706599	1706610 1705615
<b>Degree of protection</b>	IP20		
<b>Properties</b>	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)
<b>Order No.</b>	1446142	1406548	1406547	1457937
<b>Conductor cross section</b>	2.5 – 6 mm <sup>2</sup>	2.5 mm <sup>2</sup>	4 mm <sup>2</sup>	-
<b>Cable length</b>	-	100 mm	100 mm	-
<b>Screw connection</b>	-	M25	M25	M25
<b>Connection method</b>	SUNCLIX spring connection	Crimp connection	Crimp connection	-

### PRC



Description	Field plug	Device plug	Device plug	Device plug	Nut (WAF 34)
<b>Order No.</b>	3-pos.	1409217	1409219	1409220	1457937
	5-pos.	1409205	1409211	1409212	1409213
<b>Conductor cross section</b>	1.5 – 6 mm <sup>2</sup>	2.5 mm <sup>2</sup>	4 mm <sup>2</sup>	6 mm <sup>2</sup>	-
<b>Cable length</b>	-	100 mm	100 mm	100 mm	-
<b>Screw connection</b>	-	M25	M25	M25	M25
<b>Connection method</b>	Screw connection	Crimp connection	Crimp connection	Crimp connection	-

## IP-protected rectangular plug-in connector

### PLUSCON device

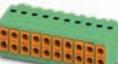
Modular connector system  
for AC connection



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
<b>Type</b>	Order No.			
<b>Design VC 2</b>	4-pos.	1607745 + 1852985	1583877	1583880
<b>Design VC 3</b>	5-pos.	1607748 + 1852998	1583878	1424368
<b>Crimp contacts</b>	4 mm <sup>2</sup>	-	1761467	-
<b>Crimp contacts</b>	10 mm <sup>2</sup>	-	1761470	-
<b>Crimp contacts</b>	16 mm <sup>2</sup>	-	1761483	-
<b>Rated voltage</b>		690 V	690 V	690 V
<b>Nominal current</b>		63 A	70 A	70 A
<b>Number of positions</b>		4 – 7	4 – 5	4 – 7
<b>Contact/contact surface material</b>		Cu alloy/Ag	Cu alloy/Ag	Cu alloy/Ag
<b>Connection method</b>		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 mm <sup>2</sup>	Push-in PCB terminal block up to 10 mm <sup>2</sup>	Push-lock PCB terminal block with lever-type actuation up to 16 mm <sup>2</sup>	Push-lock/push-in feed-through terminal block up to 16/6 mm <sup>2</sup>
5-pos. Order No.	1719341	1735817	1770490	1821083
<b>Cross section</b>	6 mm <sup>2</sup>	16 mm <sup>2</sup>	16 mm <sup>2</sup>	16/6 mm <sup>2</sup>
<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 mm <sup>2</sup>	Flat plug-in connector with push-in spring connection up to 1.5 mm <sup>2</sup>	Flat plug-in connector with push-in spring connection up to 2.5 mm <sup>2</sup>	Inverted plug-in connector with screw connection up to 2.5 mm <sup>2</sup>
5-pos. Order No.	1713868	1952050	1732771	1858905
<b>Cross section</b>	1.5 mm <sup>2</sup>	1.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>
<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 mm <sup>2</sup>	PCB terminal block with push-in spring connection up to 2.5 mm <sup>2</sup>	PCB terminal block with push-in spring-double connection up to 2.5 mm <sup>2</sup>	PCB terminal block with push-in spring connection for SMD application up to 0.5 mm <sup>2</sup>
5-pos. Order No.	1751503	1792892	1725341	1771059
<b>Cross section</b>	1.5 mm <sup>2</sup>	1.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>	0.5 mm <sup>2</sup>
<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



<b>Description</b>	M8 flush-type plug-in connectors with halogen-free litz wires, front mounting	M12 flush-type plug-in connectors with halogen-free litz wires, front mounting	M12 flush-type plug-in connectors for wave soldering processes, two-piece, rear mounting	M12 flush-type plug-in connectors, for reflow processes, two-piece, rear mounting
<b>Type</b> <b>Pin</b>	Order No. 5-pos.	1440119	1520068	1436602
<b>Socket</b>	5-pos.	1440106	1520042	1436563
<b>Number of positions</b>	4/5	4/5	4/5	4/5
<b>Rated voltage</b>	30 V	60 V	60 V	60 V
<b>Nominal current</b>	2 A	4 A	4 A	4 A
<b>Contact carrier material</b>	PA 66	PA 66	PA 66	PPA
<b>Contact/contact surface material</b>	Cu alloy/Au	Cu alloy/Au	Cu alloy/Au	Cu alloy/Au
<b>Connection method</b>	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



<b>Description</b>	RJ45 socket inserts and panel mounting frame, for Freenet system	RJ45 socket inserts and panel mounting frame, for PCB connection	USB socket inserts and panel mounting frames, for flat-ribbon cable connection	M12 flush-type plug-in connectors for wave soldering processes, one-piece
<b>Socket insert</b>	CAT5	1652936	1688586	1653854
<b>Socket insert</b>	CAT6	1652949	1653090	1653867
<b>Panel mounting frame</b>		1653744	1689446	1653744
<b>Flush-type plug-in connector</b>	4-pos., socket			1551503
<b>Flush-type plug-in connector</b>	8-pos., socket			1553860
<b>Rated voltage</b>	50 V	150 V	30 V	250 V
<b>Nominal current</b>	1 A	1.5 A	1 A	4 A
<b>Number of positions</b>	8	8	4	4/8-pos.
<b>Contact material</b>	Cu alloy	Cu alloy	Cu alloy	Cu alloy
<b>Connection method</b>	IDC	Solder connection	Flat-ribbon cable connection	Solder pins



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