ELECTROUSTIC
DISTRIBUTION OF CONNECTIVITY SOLUTIONS

Photovoltaic connectors

Product overview 2017/2018

PHOENIX CONTACT
INSPIRING INNOVATIONS

Photovoltaic connectors for DC and AC cabling

Are you looking for innovative and reliable connection technology for your photovoltaic panels, inverters or the complete photovoltaic system? Then Phoenix Contact is the right partner for you!

We offer the perfect and comprehensive solution for cabling your photovoltaic system.

DC

Web code: #0353

Find out more with the web code

You can find web codes in this brochure: a pound sign followed by a four-digit number combination.

Web code: #1234 (example)

This allows you to access information on our website quickly.

It could not be easier:

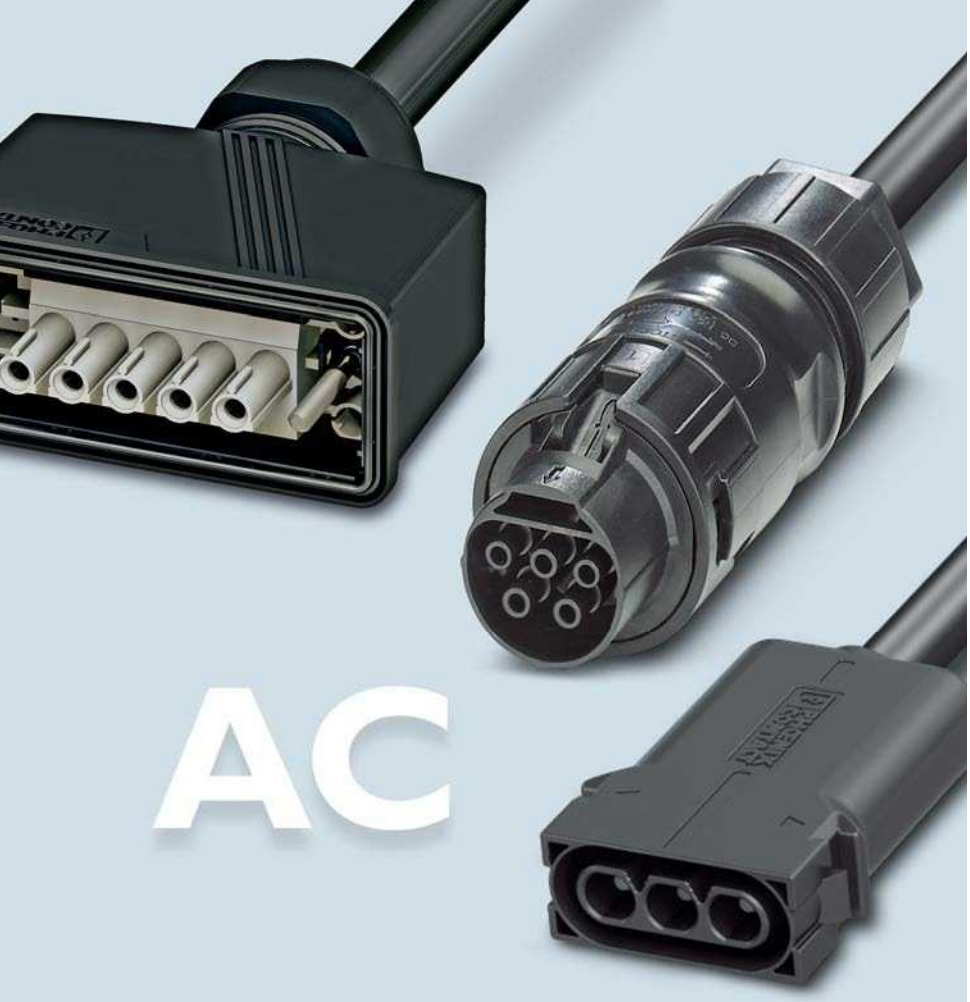
1. Go to the Phoenix Contact website
2. Enter # and the number combination in the search field
3. Get more information and product versions

#1234 **Search**

Or use the direct link:
phoenixcontact.net/webcode/#1234

DC connectors

- Currents up to 65 A
- Voltages up to 1500 V
- Conductor cross sections from 2.5 to 16 mm²
- Connection technology for building-integrated photovoltaics (BIPV)



AC connectors

- Currents up to 70 A
- Voltages up to 690 V
- Conductor cross sections from 1.5 to 16 mm²
- Circular and rectangular connectors
- Connection technology for micro inverters

Contents

The right connection technology for every application

Building-integrated photovoltaics (BIPV)

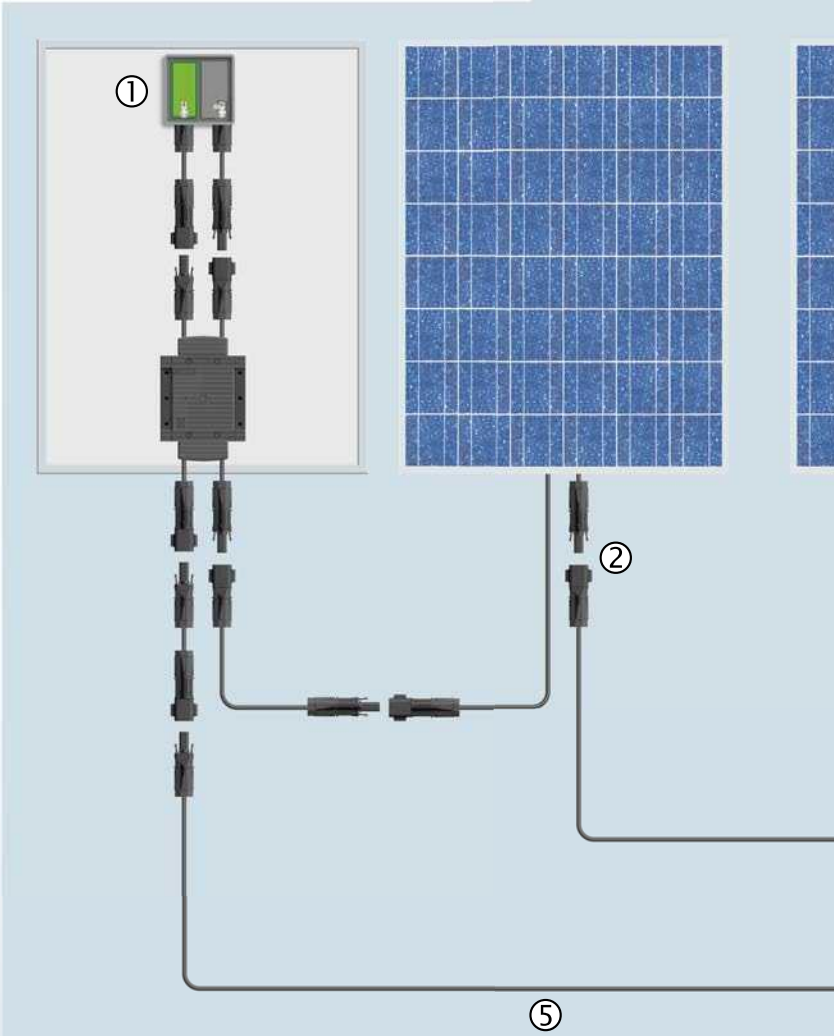
Rooftop systems

Free-standing systems

Product range overview
Photovoltaic connectors

We have the right connection solution for you – from connection technology for photovoltaic panels to DC connectors for field cabling and device connection for signals, data, and power.

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



Web code:
#0353

Seamless connection technology from the photovoltaic panel to the supply

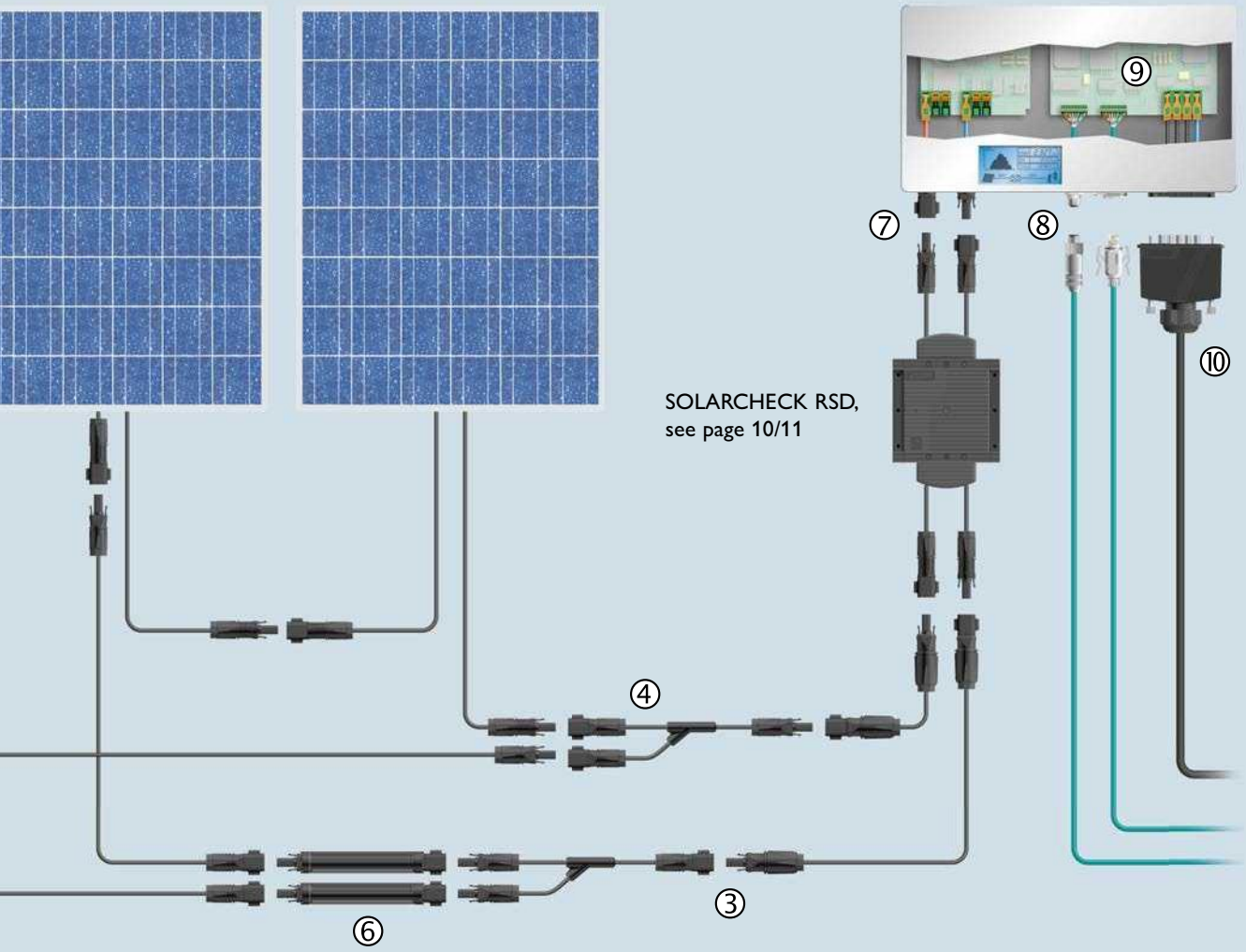
PCB terminal blocks for module junction boxes

DC connectors with crimp connection for machine processing

DC connectors with SUNCLIX spring connection for field cabling

DC distributor

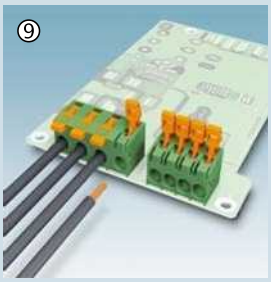
DC photovoltaic cables



DC fuse adapters

DC panel feed-throughs

Data and signal connectors



PCB connections

AC connectors

DC connection technology for photovoltaic panels

Using cost-optimized PCB terminal blocks without insulating bodies, you can connect circular and flat-ribbon conductors to the module junction box quickly and safely.

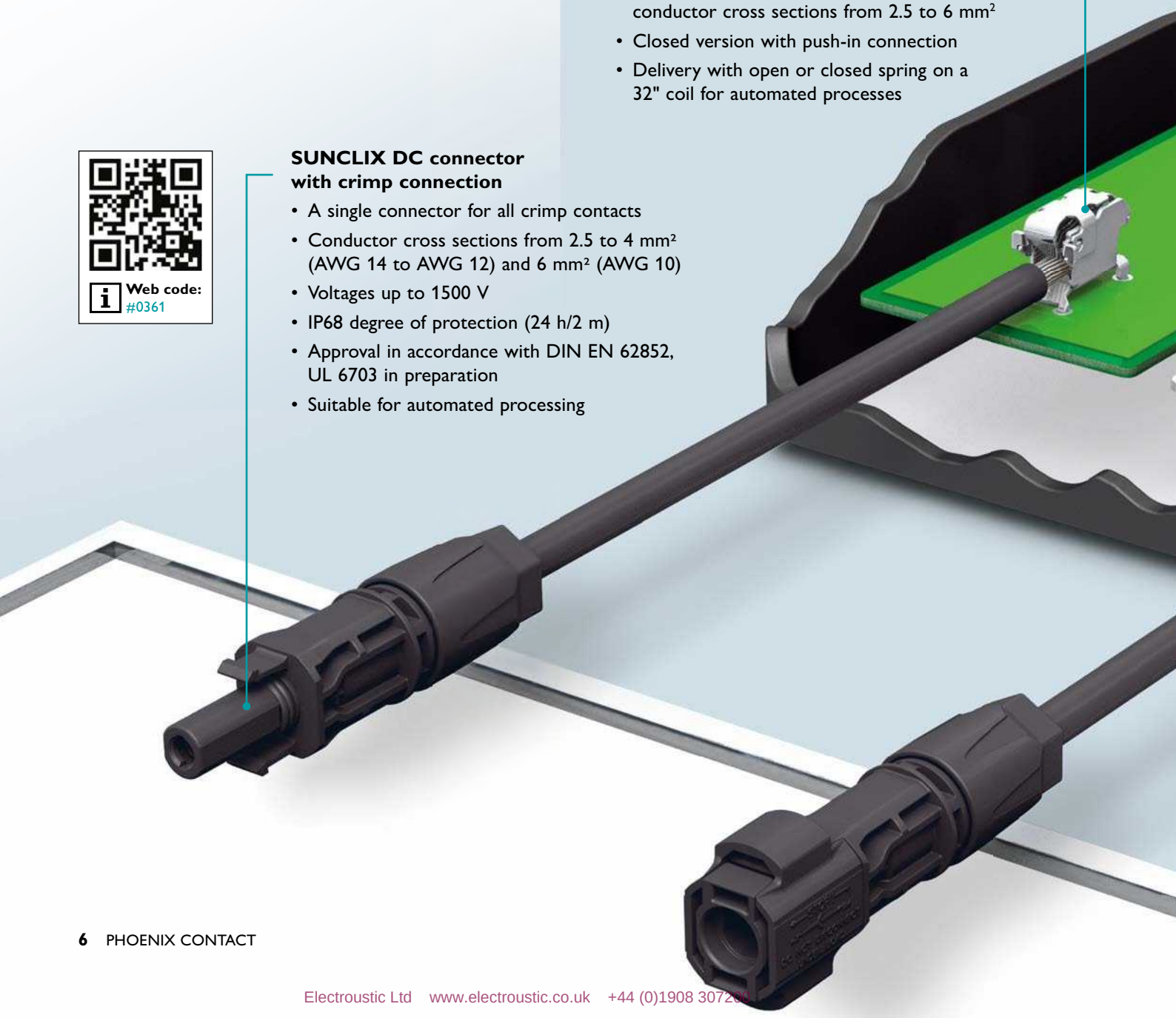
PTSPL 6 PCB terminal block with solder connection

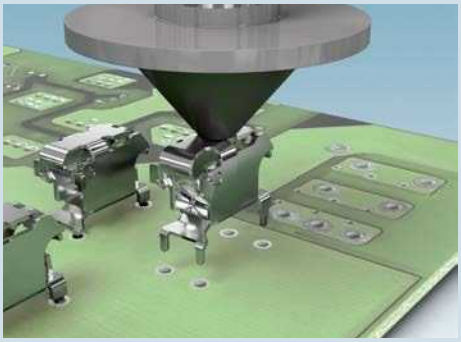
- Currents up to 41 A
- Designed for automated THR soldering processes
- Available with a solder pin length of 2.1 or 2.9 mm
- SUNCLIX spring connection for conductor cross sections from 2.5 to 6 mm²
- Closed version with push-in connection
- Delivery with open or closed spring on a 32" coil for automated processes

Web code: #0361

SUNCLIX DC connector with crimp connection

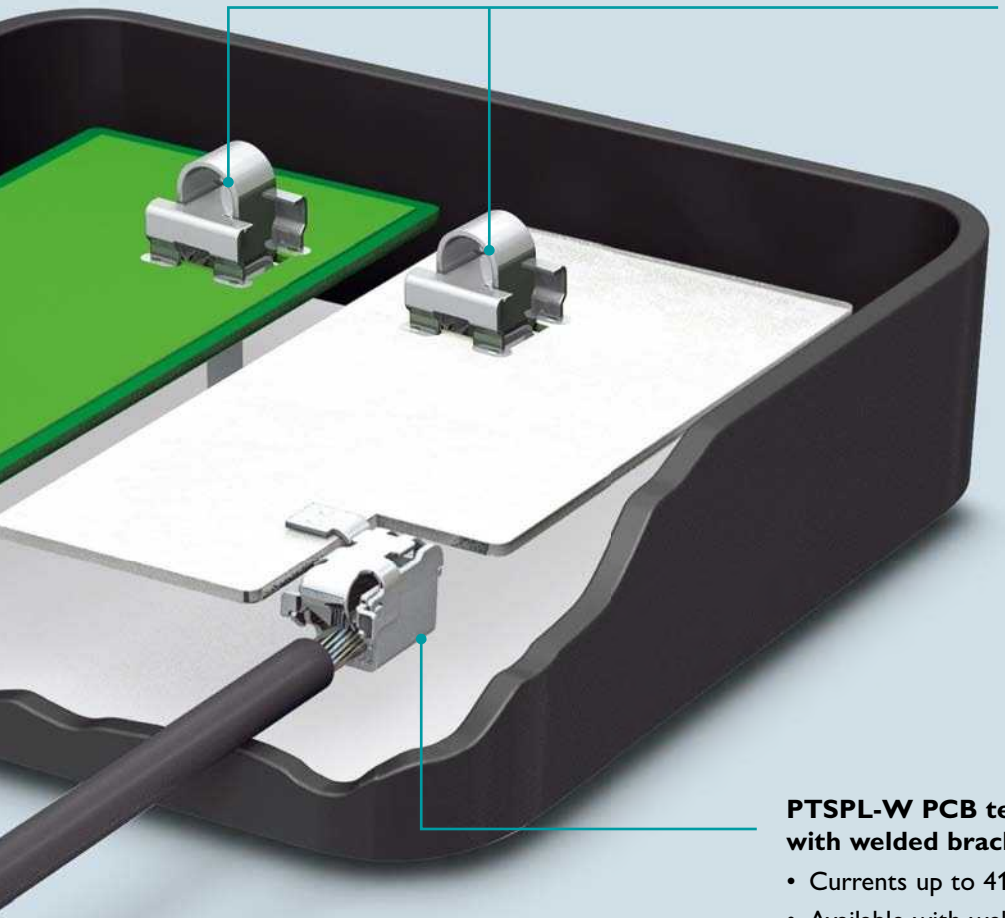
- A single connector for all crimp contacts
- Conductor cross sections from 2.5 to 4 mm² (AWG 14 to AWG 12) and 6 mm² (AWG 10)
- Voltages up to 1500 V
- IP68 degree of protection (24 h/2 m)
- Approval in accordance with DIN EN 62852, UL 6703 in preparation
- Suitable for automated processing





Optimized for SMT and THR mounting, thanks to integrated suction areas

Fast connection technology for circular and flat-ribbon conductors: insert the conductor, close the spring, and you're done



PT-SG 1 PCB terminal block for contacting flat-ribbon conductors

- Currents up to 41 A
- Flat-ribbon conductor: up to 8 x 0.1 to 2 mm²
- Suitable for fully automated PCB assembly
- THR item suitable for reflow soldering

PTSPL-W PCB terminal block with welded bracket

- Currents up to 41 A
- Available with welded bracket on the right or left for spot-welding procedures
- SUNCLIX spring connection for conductor cross sections from 2.5 to 6 mm²
- Delivery with closed spring in bulk or in the tray for automated processes

DC connection technology for field cabling

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

The one-piece DC connectors can be connected quickly and easily without using special tools thanks to spring technology. The unique spring technology ensures that contact to the conductors is always reliable and stable.

Fuse adapter

- Robust, easy-to-install fuse element for outdoor use
- High-quality Littelfuse fuse link
- Nominal currents of the fuse link: 6 to 30 A
- 1000 V/1500 V (EN) or 600 V/1000 V (UL) system voltage
- IP68 degree of protection (24 h/2 m)
- UL 6703 in preparation

Connectors with crimp connection

- For conductor cross sections from 2.5 to 6 mm²
- Voltages up to 1500 V
- IP68 degree of protection (24 h/2 m)
- Approval in accordance with DIN EN 50521 (UL 6703 in preparation)

Web code: #0543

Panel feed-throughs

- Pre-assembled or for assembly with crimp connection
- Voltages up to 1500 V
- Currents up to 40 A
- Approval in accordance with DIN EN 50521 (UL 6703 in preparation)

Connectors for field assembly

- Only two versions for conductor cross sections from 2.5 to 16 mm²
- Patented SUNCLIX spring connection
- Voltages up to 1100 V or 1500 V
- IP68 degree of protection (24 h/2 m)
- Approval in accordance with DIN EN 50521 and UL 6703

Y-distributor

- For the parallel connection of modules and strings
- Voltages up to 1100 V
- Customer-specific pre-assembly possible
- Choice of 4 or 6 mm² conductor cross section for the trunk line
- According to DIN EN 50521

SUNCLIX spring connection

Insert the stripped photovoltaic conductor

Press down the spring and snap it in place

Tighten the screw connection - you're done!

DC panel shutdown – Intelligent and autonomous

Photovoltaic rooftop systems generate DC voltages of up to 1000 volts and cannot be disconnected easily on the DC side. This presents a problem if the system is damaged. SOLARCHECK RSD automatically shuts down your system safely. You are protected from the risk of fatal electric shock during installation and maintenance or in dangerous situations.

Photovoltaic panel shutdown with Auto Rapid Shutdown

SOLARCHECK RSD analyzes the current and voltage conditions on the DC side in the system. Deviations from the normal state or shutdown of the inverter result in automatic shutdown of the photovoltaic panels. The system is restarted automatically when a technically safe environment is present.

New

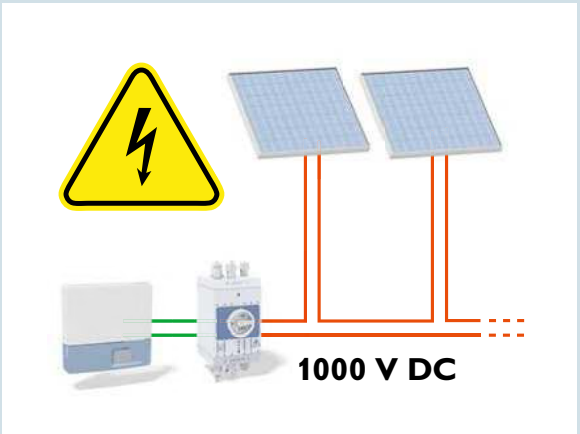
Web code: #0609

Auto Rapid Shutdown

Your advantages

- Safe connections which are stable over the long term, thanks to tried-and-tested SUNCLIX components
- Safety as a result of patented fault detection and safe photovoltaic panel shutdown
- Controlled restart via safe automatic start
- No additional communication is necessary via cables or wirelessly
- Easy to install in new and existing systems using existing DC cables
- Simple startup: no programming or manual set-up

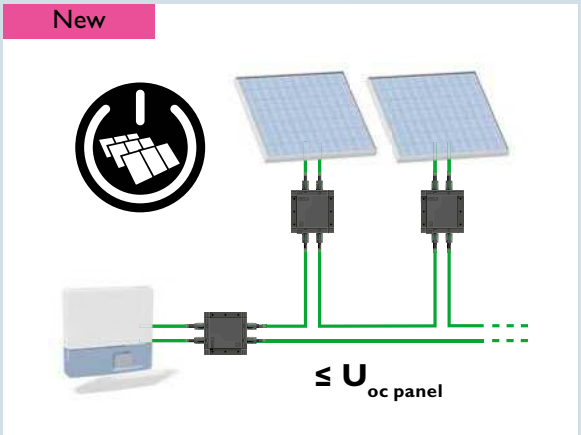
Intelligent photovoltaic panel shutdown with SOLARCHECK RSD



Danger to life without panel shutdown

The series connection of photovoltaic panels to strings generates voltages of up to 1000 volts. Disconnection at the inverter is not safe, as the DC cables continue to carry high voltages.

New

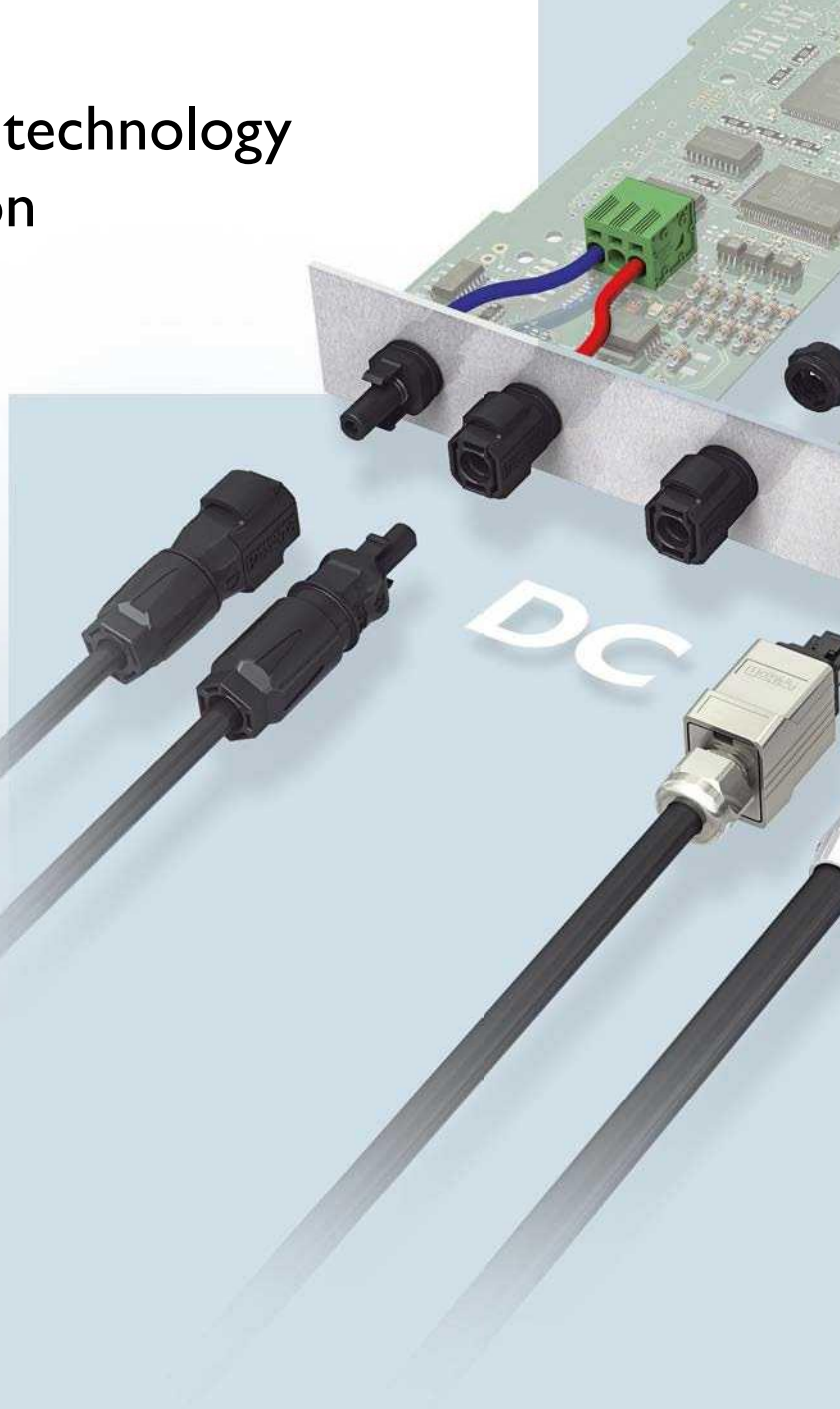


Electrical safety with panel shutdown

Each shutdown unit disconnects the corresponding photovoltaic panel from the string group. There is no risk of electric shock posed by the system.

AC and DC connection technology for the device connection

Phoenix Contact provides a comprehensive range for connection to inverters of all performance classes. Whether AC or DC, circular or rectangular, for signals, data or power – the connectors cover a wide range of requirements. Device connectors, PCB connection technology and accessories complete the comprehensive portfolio.



Web code: #0353

SUNCLIX DC connectors with spring connection

- Currents up to 65 A
- Voltages up to 1500 V
- Conductor cross section of 2.5 to 16 mm²
- IP66/IP68 degree of protection (24 h/2 m)

Signal and data connectors

- Copper and fiber optic-based data connectors
- M5 to M23 signal connectors, 3- to 19-pos.
- Inside of the device shielded by a circular conductor, 6 kV electric strength, easy routing
- Connector systems for assembly and pre-assembled connector systems
- Solutions for IP20, IP65/IP67, and IP69K

PLW 16 panel 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-in spring connection on the outside
- Fast push-in spring connection on the inside
- Currents up to 41 A
- Voltages up to 1000 V
- Conductor cross section of 2.5 to 16 mm²
- Can be sealed

PRC AC connectors with screw connection

- For 1-phase and 3-phase devices
- Currents up to 35 A
- Voltages up to 690 V
- Conductor cross section of 1.5 to 6 mm²
- IP68 degree of protection (24 h/2 m)
- Can be sealed

VARIOCON AC connectors with screw connection

- For 1-phase and 3-phase devices
- Currents up to 70 A
- Voltages up to 690 V
- Conductor cross section of 1.5 to 16 mm²
- IP65/IP68 degree of protection (24 h/2 m)

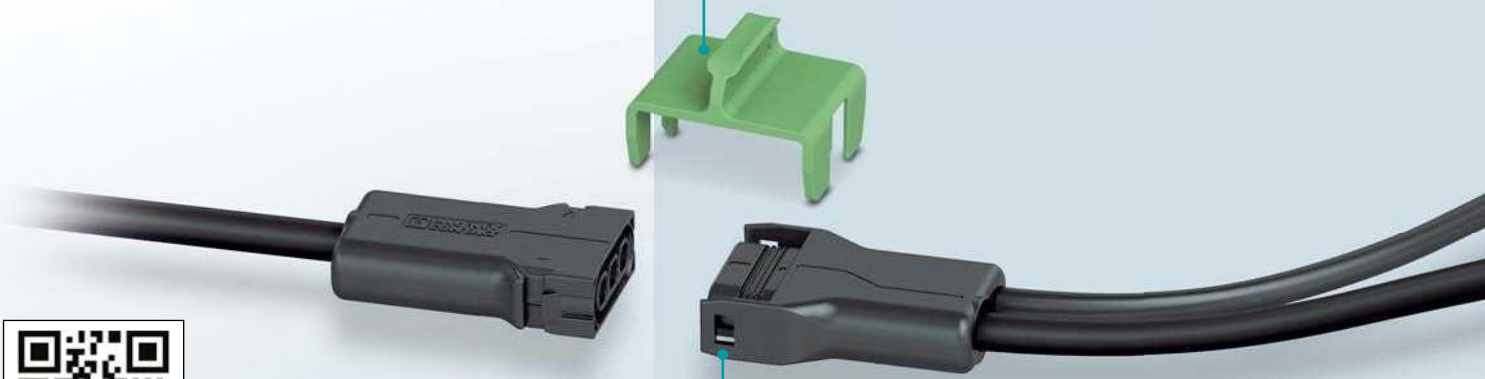
AC connection technology for micro inverters

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

SUNCLIX micon, the new connection system from Phoenix Contact, was developed to meet your requirements. This connection system is user-friendly and can be pre-assembled according to your requirements to enable "Plug and Play" at the installation site.

Unlocking tool

The locking mechanism on the connectors is extremely robust and prevents unintentional release. The lock is opened quickly and easily using the unlocking tool. Thanks to an additional latch, it does not fall out of the connector housing once it has been released.



Web code: #0354

AC-Y connectors

The AC-Y connector consists of two 3-position 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 protective 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 connector without any special tools. During installation, the IP protective caps are inserted as end caps on the last connector in order to protect the connector from atmospheric influences.

Main features

- Three-position, coded pin connector pattern (protection against polarity reversal)
- Maximum reliability, thanks to SUNCLIX contacts
- Trunk line:
  - Nominal currents up to 20 A
  - Voltages up to 600 V
- Drop line:
  - Nominal currents up to 5 A (use of micro inverters with 500 W output power possible)
- IP67 degree of protection
- Connection system for the AC and DC side of your micro inverters, from a single source
- Approval in accordance with UL 6703

DC connectors with spring connection

With the SUNCLIX DC connectors as a device connector or for field assembly, you can also achieve high performance and quality on the panel side.

Mains connectors

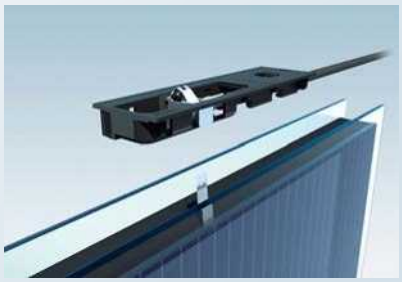
The mains connectors provide the connecting link between the photovoltaic system and mains. Depending on the system structure, the mains can be connected via the connector or coupling side of the AC-Y connector. The free cable end is either connected in a distributor box or fed into a service panel via a cable sleeve.

DC connection technology for building-integrated photovoltaics (BIPV)

Phoenix Contact is offering a particularly compact DC connection system, SUNCLIX mini, which is designed to meet the trend of producing energy using building-integrated photovoltaics. For a permanently secure and reliable connection from panel to inverter.

Web code: #0357

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 into the spring case, snap in the spring, and 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 building-integrated 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 mm²
- Spring connection

Miniature DC connectors for assembly

The compact design of the connectors enables concealed installation behind the photovoltaic panels or direct installation within the facade frames.

- Current: 15 A
- Voltage: 1000 V
- Conductor cross section: 2.5 mm²
- Compact design: Ø only 11 mm
- Pierce connection
- IP67 degree of protection
- Approval in accordance with DIN EN 50521

Compact DC string diode

The stable housing and flat design of the DC string diode protects the panels from return currents created as a result of shading. 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 mm²
- IP67 degree of protection
- Approval in accordance with DIN EN 50548 (VDE 126-3)

Technical data and ordering information

The following tables contain selected components together with their key technical properties. Thanks to integrated web codes, you can find more information about the products listed in our web portal.

DC connection technology for photovoltaic panels

Web code: #0361

PCB connection for photovoltaic applications




Description	Push-lock PCB terminal block with spring connection for circular conductors				Push-lock terminal block with spring connection and welded bracket		Push-lock terminal block with spring connection for flat-ribbon conductors	
	Solder pin length	Order No.	Solder pin length	Order No.	Version	Order No.	Solder pin length	Order No.
	2.1 mm	1704836	2.1 mm	1705081	Welded bracket right	1705624	2.1 mm	1841830
	2.9 mm	1704837	2.9 mm	1705085	Welded bracket left	1705625	2.9 mm	1841843
Design	Closed		Open		Closed		Closed	
Cross section	Max. 6 mm²							
Number of positions	1							
Nominal current	Max. 41 A							

Web code: #0674

SUNCLIX
DC connectors
For assembly
with crimp connection




Description	Housings for male (-) crimp connectors	Housings for female (+) crimp connectors	Contacts for crimp connection		Contacts for crimp connection	
Type	Pin (-)	Socket (+)	Pin contact		Socket contact	
Order No.	1622662	1622661	1704927	1704928	1704930	1704931
Cross section	-	-	2.5 / 4 mm² AWG 14/AWG 12	6 mm² AWG 10	2.5 / 4 mm² AWG 14/AWG 12	6 mm² AWG 10
External cable diameter	5 mm … 8 mm	5 mm … 8 mm	-	-	-	-
Rated voltage	1500 V (1000 V UL)	1500 V (1000 V UL)	-		-	
Nominal current	-	-	Max. 30 A		Max. 30 A	
Degree of protection	IP68 (24 h/2 m)	IP68 (24 h/2 m)	-		-	
Product information	Temperature range: -40 °C … +90 °C, protection class II, approval in accordance with UL 6703 and DIN EN 50521 (in preparation).		Pcs./Pkt.: 1000 pcs./roll		Pcs./Pkt.: 1000 pcs./roll.	

DC connection technology for field cabling

Web code: #0358

SUNCLIX DC connectors

For assembly with SUNCLIX spring connection

Type	Pin (-)	Socket (+)	Pin (-)	Socket (+)	Pin (-)	Socket (+)
Order No.	1774687	1774674	1789834	1789821	1790797	1790784
Cross section	2.5 mm² … 6 mm²		2.5 mm² … 6 mm²		6 mm² … 16 mm²	
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 … +85 °C, protection class II, approval in accordance with UL 6703 and DIN EN 50521.		Temperature range: -40 °C … +85 °C, protection class II, approval in accordance with DIN EN 50521.			

SUNCLIX

Description	Solar cable				Fuse adapter				Y-distributors (cable-based)		
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 rays, and wear; TÜV and VDE-certified cable in accordance with DIN EN 50618.				Fuse adapters for securing panels and devices in photovoltaic systems.				Connection set with branch line (4 mm²) for fast parallel interconnection of photovoltaic modules. Length of the individual cables: 120 mm each; other lengths possible on customer request.		
	Cross section	100 m ring	500 m drum	1000 m drum	Nominal voltage 1000 V	I_{nom}	1500 V	I_{nom}	Trunk line cross section	Design	Order No.
Order No.	2.5 mm²	1459509	1459540	1459566	1622788	6	1622787	5	4 mm²	Pin to 2x socket (-/++)	1795019
Order No.	4 mm²	1459511	1787700	1459579	1622153	8	1622146	7	4 mm²	Socket to 2x pin (+/--)	1795022
Order No.	6 mm²	1459524	1787713	1459582	1622154	10	1622147	10	6 mm²	Pin to 2x socket (-/++)	1787726
Order No.	10 mm²	1459537	1459553	1459595	1622155	12	1622148	11	6 mm²	Socket to 2x pin (+/--)	1787739
Order No.					1622156	15	1622149	13			
Order No.					1622157	20	1622150	17			
Order No.					1622158	25	1622151	23			
Order No.					1622159	28	1622152	25			
Degree of protection		–							IP66/IP68 (24 h/2 m)		
Ambient temperature (operating)		-40 °C … +90 °C							-40 °C … +85 °C		
Accessories					A spacer for improved heat dissipation is available as an option (see Accessories on page 20).						

SOLARCHECK RSD DC panel shutdown

Web code: #0609

SOLARCHECK RSD

	Shutdown unit	Startup unit, autonomous	Startup unit, externally supplied
Type	SCK-RSD-100	SCK-RSD-400	SCK-RSD-600
Order No.	2905029	2905030	2906273
Input voltage range	20 V DC ... 50 V DC	40 V DC ... 800 V DC	40 V DC ... 800 V DC
System voltage	≤ 1000 V DC	≤ 1000 V DC	≤ 1000 V DC
Max. input current	10 A	10 A	10 A

DC connection technology for the device connection

Web code: #0359

SUNCLIX DC device connectors
130 mm litz wire length; other lengths available on request

Type	Pin	Socket	Pin	Socket	Pin	Socket
Order No.	1805148	1805135	1805164	1805151	1805180	1805177
Cross section	2.5 mm²		4 mm²		6 mm²	
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 … +85 °C, approval in accordance with DIN EN 50521 and UL 6703 (in preparation), required accessories: 1775880.					

SUNCLIX DC device connectors
For user assembly

Description	Plastic housings		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 mm² / 4 mm² (AWG 14/AWG 12)		6 mm² (AWG 10)	
Rated voltage	1500 V					
Nominal current			Max. 40 A		Max. 40 A	
Degree of protection	IP66 / IP68 (24 h/2 m)					
Properties	Temperature range: -40 °C … +85 °C, approval in accordance with DIN EN 50521 and UL 6703 (in preparation), required accessories: 1775880.		Temperature range: -40 °C … +85 °C, approval in accordance with DIN EN 50521. Pcs./Pkt.: 1000 pcs./roll.			

Accessories and tools

Web code: #0362

Description	Fastening nut	Protective cap	Filler plug	Spacer
Order No.	1775880	1785430	1775631	1623253
Properties	Nut for securing the SUNCLIX device connectors to the housing.	IP67 protective cap for SUNCLIX connectors; transport protection for the pin connector pattern; for sealing and protecting unused device inputs and for transport protection.	Filler plug for SUNCLIX connectors, IP67 in the cable gland.	Spacer for fuse adapters ensure better heat dissipation if multiple fuses are bundled in one application.

Description	Crimping pliers	Mounting pliers	Test pin	SZF 1 screwdriver	Wirefox stripping tool
Order No.	1212755	1200137	1705589	1204517	1212511
Properties	For PV-CF(M) contacts 2.5, 4, and 6 mm² (AWG 14/12/10).	To snap the crimp contacts into the plastic housing. Suitable for conductor diameters of 4.2 … 6.0 mm.	SUNCLIX device connector, to check correct positioning of contacts during user assembly.	Actuation tool, for unlocking the SUNCLIX connectors as well as opening the SUNCLIX spring connection, also suitable for use as a flat-head screwdriver, size: 0.6 x 3.5 x 100 mm, 2-component handle, with non-slip grip.	For standard 2.5, 4, and 6 mm² solar cables, with 15 mm longitudinal stop, for SUNCLIX field connectors.

AC connection technology

Web code: #0356

PRC





Description		Field connectors	Device connectors	Device connectors	Device connectors	Test plugs
Order No.	3-pos.	1410661	1409219	1409220	1409221	1621326
Order No.	5-pos.	1410656	1409211	1409212	1409213	1621325
Conductor cross section		1.5 … 6 mm²	2.5 mm²	4 mm²	6 mm²	
Cable length			150 mm	150 mm	150 mm	
Screw connection			M25	M25	M25	
Connection method		Screw connection	Crimp connection	Crimp connection	Crimp connection	Screw connection

PRC





Description	Holders	Contacts	Protective cap	PRC crimping tool	Nut
Order No.	3-pos.: 1409218	2.5 mm²: 1409207		2.5 mm²: 1867419	1457937
Order No.	5-pos.: 1409206	4 mm²: 1409208		4 mm²: 1867419, 1205859	
Order No.		6 mm²: 1409209		6 mm²: 1205859	
Order No. device connector protective cap			1409237		
Order No. field connector protective cap			1409236		

Web code: #0365

PLUSCON device

Modular rectangular connectors for the AC connection




Description		Panel feed-through with screw connection and panel mounting frame	Panel feed-through with conductor connection	Field connector sleeve housing	Field connector contact inserts
Type	Order No.				
Design VC 2	4-pos.	1607745 + 1852985	1583877	1852948 + 1855107	1607467
Design VC 3	5-pos.	1607748 + 1852998	1583878	1852961 + 1855120	1607474
Crimp contacts	4 mm²		1761467		
Crimp contacts	10 mm²		1761470		
Crimp contacts	16 mm²		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

AC connection technology for micro inverters

Web code: #0354

SUNCLIX micon

Description	AC-Y connectors for PV micro inverters		Mains connectors for the coupling side of the AC-Y distributor		Mains connectors for the connector side of the AC-Y distributor	
Order No.	1706518		1706517		1706609	
Cross section	Trunk	AWG 12	AWG 12		AWG 12	
	Drop	AWG 18				
Cable length	Trunk	1150 mm	Trunk	1000 mm	Trunk	1000 mm
	Drop	500 mm				
Rated voltage	600 V					
Nominal current	Trunk	20 A	20 A		20 A	
	Drop	5 A				
Degree of protection	IP67		IP67		IP67	
Product information	Version for the North American market. Approval in accordance with UL 6703.					

Accessories

Description	Dust protective caps for protecting the pin connector patterns during transport		IP protective caps for safe operation of the connection system		Unlocking tool for releasing the connectors
Order No.	For connector	1706608	For connector	1706610	1706514
	For coupling	1706599	For coupling	1706515	
Degree of protection	IP20		IP67		
Properties	Biodegradable plastic, can be removed without an unlocking tool.		Can only be removed with an unlocking tool.		After releasing the connector, the tool does not fall off, instead it remains on the connector housing.

DC connection technology for building-integrated photovoltaics (BIPV)

Web code: #0357

SUNCLIX mini

Description	Miniature DC connectors for assembly		Single-position module junction box		Compact DC string diode	
Type	**Pin (-)**	**Socket (+)**	**Left**	**Right**	**With SUNCLIX mini connector**	**Without connector, free cable ends**
Order No.	1795336	1795323	1705132	1705131	1463065	1811239
Cross section	2.5 mm^2		2.5 mm^2		2.5 mm^2	
Rated voltage	1000 V		1000 V		1000 V	
Nominal current	15 A		15 A		5 A	
Product information	Protection class II, Ø 11 mm, degree of protection: IP67, temperature range: -40°C … +85°C, approval in accordance with DIN EN 50521.		The width of the module junction box can be adapted by the customer (width from 18.3 mm … 34.3 mm). Ribbon width: < 5 mm, 0.05 … 0.2 mm thick, temperature range: -40°C … +85 °C.		Protection class II, 100 x 38 x 11 mm (L x W x H), temperature range: -40 °C … +85 °C, approval in accordance with DIN EN 50548.	

COMBICON power

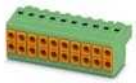
PCB terminal blocks and
PCB connectors for
power electronics up to 232 A




Description		Push-in PCB terminal block up to 6 mm²	Push-in PCB terminal block up to 16 mm²	Push-in PCB terminal block up to 35 mm²	PCB terminal block with screw connection up to 95 mm²
5-pos.	Order no.	1719341	1735817	1845373	1841898
Cross section		6 mm²	16 mm²	35 mm²	95 mm²
Pitch		7.5 mm	10 mm	15 mm	20 mm
Number of positions		1 – 12	1 – 9	1 – 5	1 – 5
IEC/UL rated voltage		1000 V/600 V	1000 V/600 V	1000 V/600 V	1000 V/600 V
IEC/UL nominal current		41 A/35 A	76 A/66 A	125 A/101 A	232 A/200 A
Note					Suitable for the connection of aluminum sector cables.

COMBICON control

PCB connectors for data and power
transmission in MCR technology

Description		Flat connector with push-in spring connection up to 1.5 mm²	TWIN bus connector with push-in spring connection up to 1.5 mm²	Flat connector with push-in spring connection up to 2.5 mm²	Connector with screw connection up to 2.5 mm²
5-pos.	Order no.	1952050	1713868	1732771	1812788
Cross section		1.5 mm²	1.5 mm²	2.5 mm²	2.5 mm²
Pitch		3.5 mm	5 mm	5 mm/5.08 mm	7.62 mm
Number of positions		2 – 20	2 – 20	2 – 18	2 – 12
IEC/UL rated voltage		160 V/150 V	320 V/250 V	320 V/250 V	1000 V/600 V
IEC/UL nominal current		8 A/8 A	10 A/8 A	12 A/10 A	16 A/18.5 A

COMBICON control / compact

PCB terminal blocks and
PCB connectors for
signal transmission in MCR technology




Description		PCB terminal block with push-in spring connection with 45° angle up to 1.0 mm²	PCB terminal block with push-in spring connection up to 2.5 mm²	PCB terminal block with push-in double spring 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.	1864312	1792892	1725341	1771059
Cross section		1.0 mm²	1.5 mm²	2.5 mm²	0.5 mm²
Pitch		3.5 mm	5 mm	5 mm	2.5 mm
Number of positions		2 – 16	2 – 12	2 – 16	2 – 8
IEC/UL rated voltage		160 V	400 V/300 V	400 V/300 V	160 V/150 V
IEC/UL nominal current		16 A	12 A/10 A	13.5 A/13.5 A	6 A/5 A

For more connectors, please visit phoenixcontact.com

PLUSCON circular

Circular connectors
for sensor/actuator applications




Description		M8 flush-type connector with halogen-free litz wires, front mounting	M12 flush-type connector with halogen-free litz wires, front mounting	M8 flush-type connector for wave soldering processes, one-piece, rear mounting	M12 flush-type connector for wave soldering processes, one-piece, rear mounting
Type	Order No.				
Pin	5-pos.	1440119	1520068	1424241	1551833
Socket	5-pos.	1440106	1520042	1424242	1441765
Number of positions		4/5	4/5	4/5	4/5
Rated voltage		30 V	60 V	30 V	60 V
Nominal current		2 A	4 A	2 A	4 A
Contact carrier material		PA 66	PA 66	PA 66	PA 66
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	Solder pins

PLUSCON circular

Circular connectors
for sensor/actuator applications




Description		M8 flush-type connector for reflow process, two-piece, rear mounting	M12 flush-type connector for reflow process, two-piece, rear mounting	M12 housing screw connection for reflow process, two-piece, rear mounting, standard	M12 flush-type connector for reflow process, two-piece, rear mounting
Type	Order No.				
Pin	5-pos.	1412506 (housing)	1411943	1414000/1414002 (Speedcon)	1551752
Socket	5-pos.	1412222	1411937	1414021/1414023 (Speedcon)	1542622
Number of positions		4/5	4/5		4/5
Rated voltage		30 V	60 V		60 V
Nominal current		2 A	4 A		4 A
Contact carrier material		PA 66	PA 66		PPA
Contact/contact surface material		Cu alloy/Au	Cu alloy/Au		Cu alloy/Au
Connection method		SMD solder connection	SMD solder connection	SMD solder connection	THR solder connection

PLUSCON data

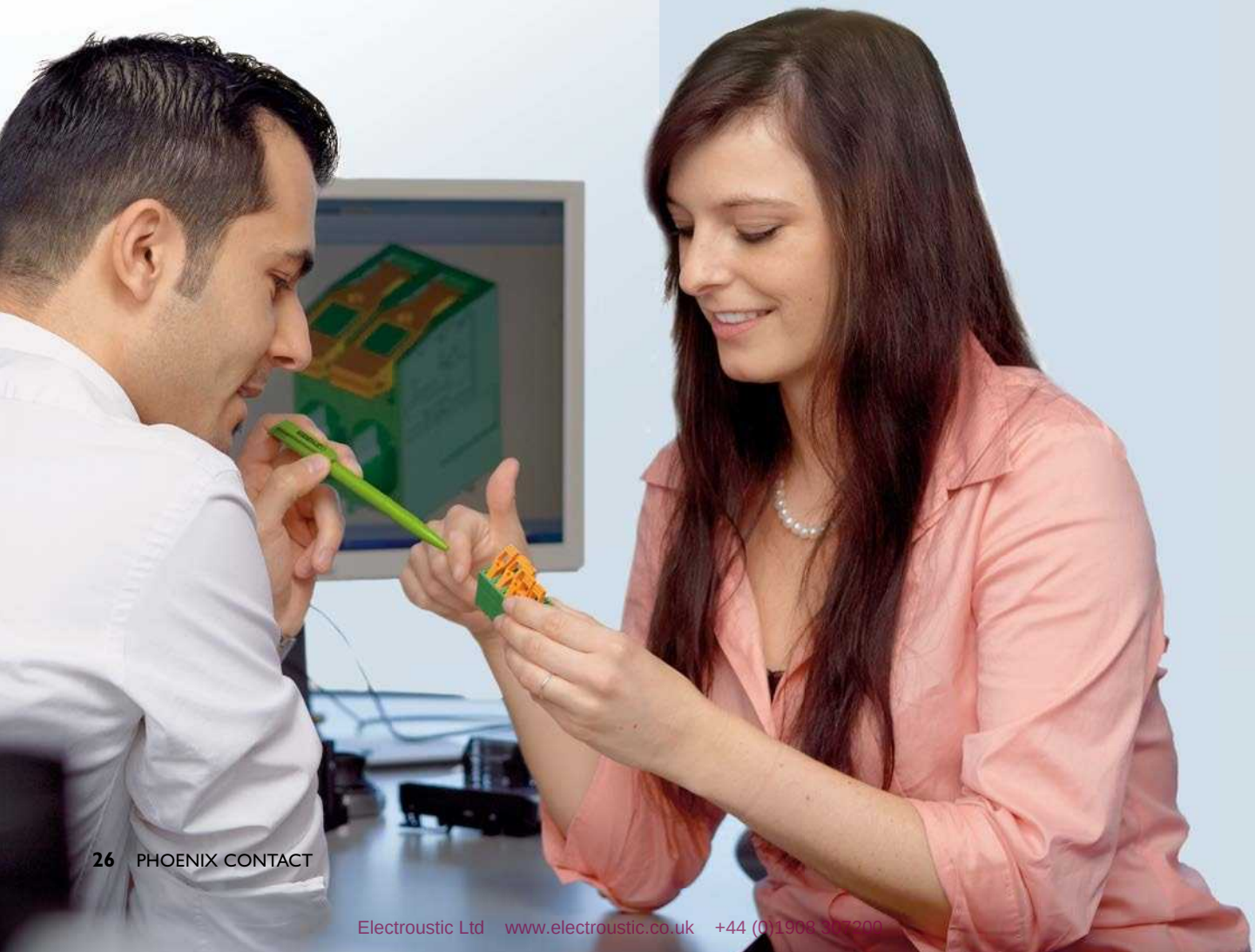
Connectors with standard interfaces
such as RJ45, USB and M12
for data transmission




Description		RJ45 socket inserts and panel mounting frames, for Freenet system	RJ45 socket inserts and panel mounting frames, for PCB connection	USB socket inserts and panel mounting frames, for flat-ribbon cable connection	M12 flush-type connector for wave soldering processes, one-piece
Socket insert	CAT5	1652936	1688586	1653854	
Socket insert	CAT6	1652949	1653090	1653867	
Panel mounting frame		1653744	1689446	1653744	
Flush-type connector	4-pos., socket				1551503
Flush-type 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-pos./8-pos.
Contact material		Cu alloy	Cu alloy	Cu alloy	Cu alloy
Connection method		IDC	Solder connection	Flat-ribbon cable connection	Solder pins

Customer-specific solutions

Variability takes many forms: Different geometries, printings and colors or individual packaging make numerous solutions possible. In addition to customer-specific adaptations, Phoenix Contact also makes custom-tailored innovations according to your needs. We provide you with support from the initial idea to development and production to quality assurance.



Marking
Individually printed cable assemblies according to your guidelines

Most variety
Molded connectors and connectors for assembly with cables or litz wires for direct circuit board assembly

Web code: #1170

Assembly
Individual cabling solutions based on circular and rectangular connectors

Your individual cabling solution

Assembly

Thanks to a multitude of designs, codings and pin assignments, we can bring you thorough solutions for transmitting signals, data and power. You can also receive assemblies with add-on components.

Marking

We print your cables according to your specific guidelines. We have the right technique for every need, whether printing directly on the cable or using wrap-around labels.

Labeling and packaging

You receive your separate cable assemblies in similarly separate packaging. On request, we will label these with your logo or with a barcode.

In dialog with customers and partners worldwide

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The wide variety of our innovative products makes it easy for our customers to find future-oriented solutions for different applications and industries. We especially focus on the fields of energy, infrastructure, process and factory automation.

You will find our complete product range at:

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