

Photovoltaic connectors

Product overview 2026

Photovoltaic connectors for DC and AC cabling

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

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





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Find out more with the web code

For detailed information, use the web codes provided in this brochure. Simply enter # and the four-digit number in the search field on our website.

 **Web code: #1234** (example)

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

The right connection for every application

The efficiency, reliability, and safety of components are crucial for the profitability of an investment. Connectors and accessories from Phoenix Contact for the cabling of photovoltaic systems are tailored to your application. Whether DC, AC, or hybrid applications: Secure the return on your investment with SUNCLIX, PRC, and VARIOCON connectors.



SUNCLIX series DC connectors

- Voltages up to 1,500 V
- Currents up to 60 A
- Conductor cross-sections from 2.5 to 16 mm²
- SUNCLIX spring connection
- Crimp connection
- Degree of protection IP66/IP68 (24 h/2 m)



 Web code:
#1628

PRC series AC connectors

- Connection technology for string and micro inverters
- Voltages up to 690 V
- Currents up to 35 A
- Conductor cross-sections from 1.5 to 6 mm²
- Screw and crimp connection
- PRC: Degree of protection IP66/IP68 (24 h/2 m)/IP69K



Ground-mounted systems

Installing the maximum possible number of PV panels in the shortest possible time: This requires preassembled connectors and connectors with fast-connection technology.



Rooftop systems

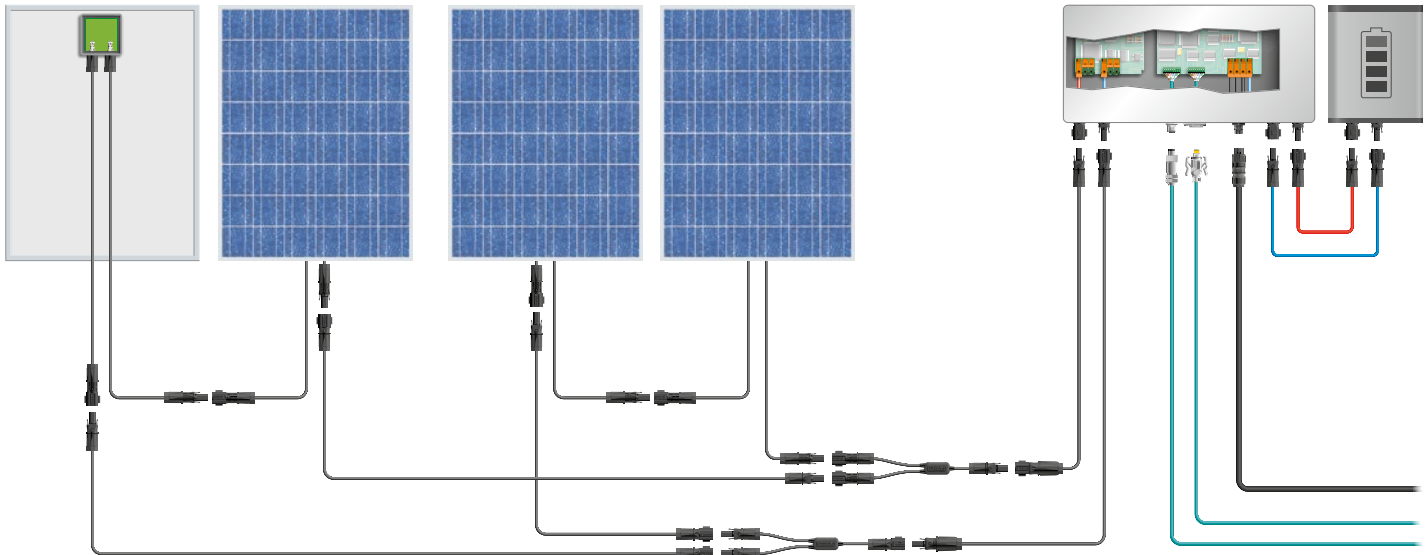
Compact DC connectors are ideal for cramped installation conditions. With the SUNCLIX spring connection, wiring is easy and reliable – without special tools.

Product range overview of photovoltaic connectors

Consistent connection technology from the photovoltaic panel to feed-in

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

The coordinated, high-quality components make a sustainable contribution to your long-term high system availability.



Safety and reliability at market-oriented terms – the Phoenix Contact connection technology portfolio for the international solar market

Generating electrical energy from photovoltaic systems is vital for the power supply of today and tomorrow. This development began with market incentive programs in various regions, but was primarily driven by the Electricity Feed Act in Germany. The potential rates of return from photovoltaic systems were the main motivation for investors to enter this market.

Quality in the details ensures reliability in the system

Today, photovoltaics is a mainstay of the power supply in a growing number of global economies. This means that the electricity must be generated at the lowest possible cost, while ensuring that power is supplied reliably and continuously. Using components with a balanced cost-benefit ratio was and continues to be crucial for the basic return on investment of a

photovoltaic system. The lowest initial investment is worthless if the calculated capital return does not materialize over the service life of the project due to loss of efficiency or failure. However, as soon as photovoltaics becomes relevant to the system, where the economy and the public depend on its reliable function, the failsafe performance of components, and therefore their quality, plays an increasingly important role.

Phoenix Contact has a clear policy of never compromising on quality. Confidence in our company and our products is the foundation for all our business. This is also reflected in our connection technology portfolio for the solar market. Innovative products, sophisticated designs, high-quality materials with long-term stability, and excellent service ensure safety and

customer satisfaction. Market-oriented and competitive terms complement this approach.

Product overview



PCB terminal blocks without insulating bodies

For fast and secure connection of module junction boxes.



DC connectors with crimp connection

For field-side connection of your PV panels.



DC connectors with SUNCLIX spring connection

For field-side connection to the device.



Cable-based DC distributors

For fast parallel interconnection of photovoltaic panels.



DC panel feed-throughs

For device connection, preassembled or designed for assembly.



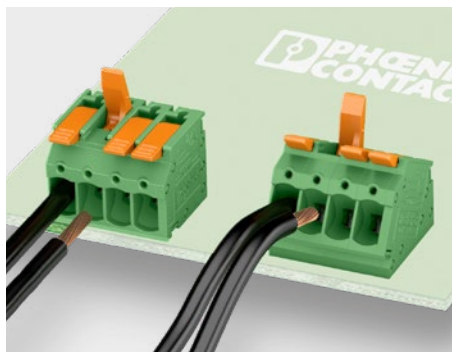
AC connectors

For grid-side connection.



Data and signal connectors

Copper and fiber-optic-based data connectors and signal connectors, M5 to M23, 3- to 19-pos.



PCB terminal blocks and PCB connectors

For transmitting signals, data, or power.

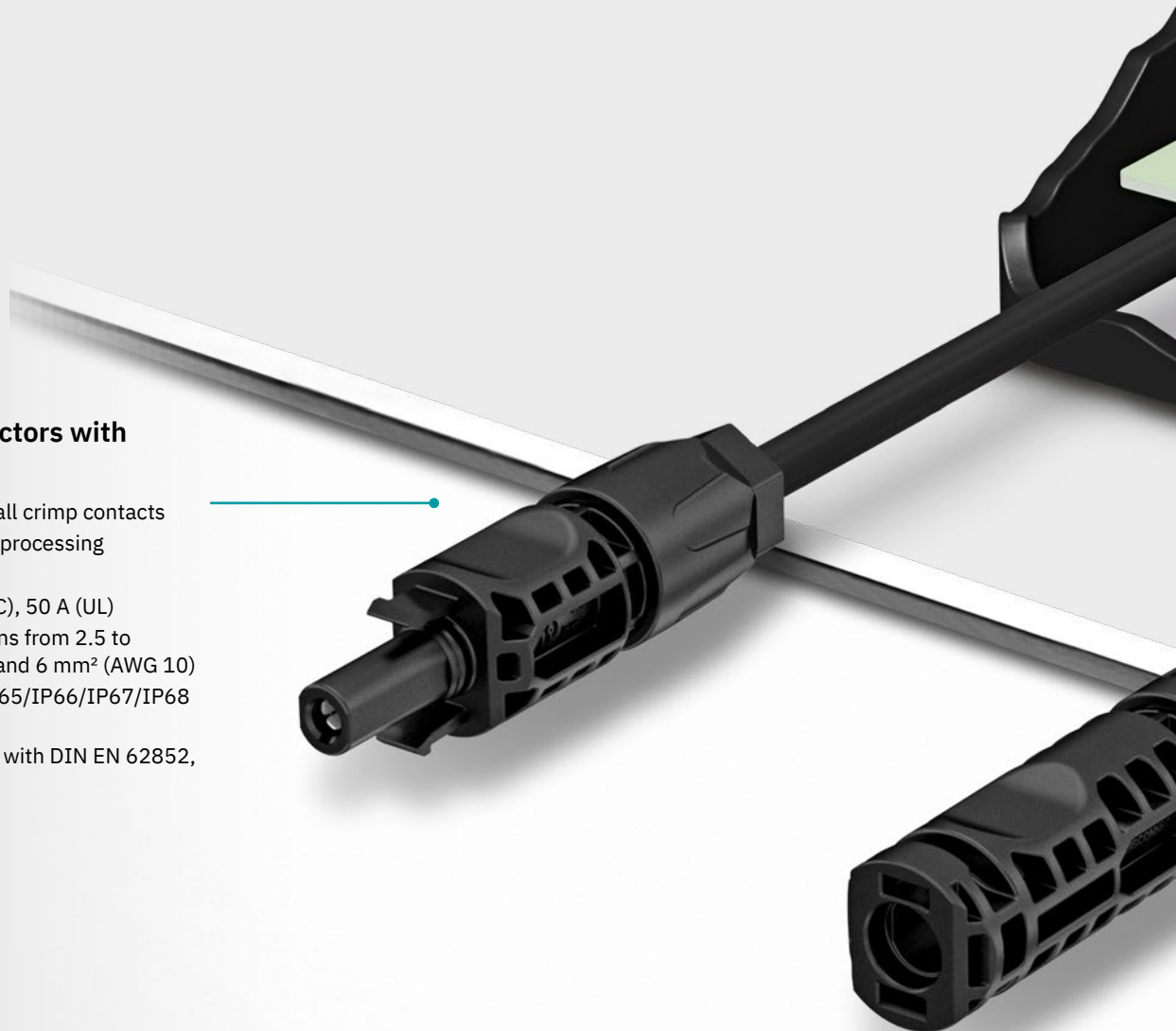
DC connection technology for PV panels

Using cost-optimized PCB terminal blocks without insulating bodies, you can connect flexible cables to your module junction box quickly and safely. SUNCLIX connectors with crimp connection are ideal for connecting solar panels on the field side and cable assemblies. They are designed for automated processing and meet established international standards.



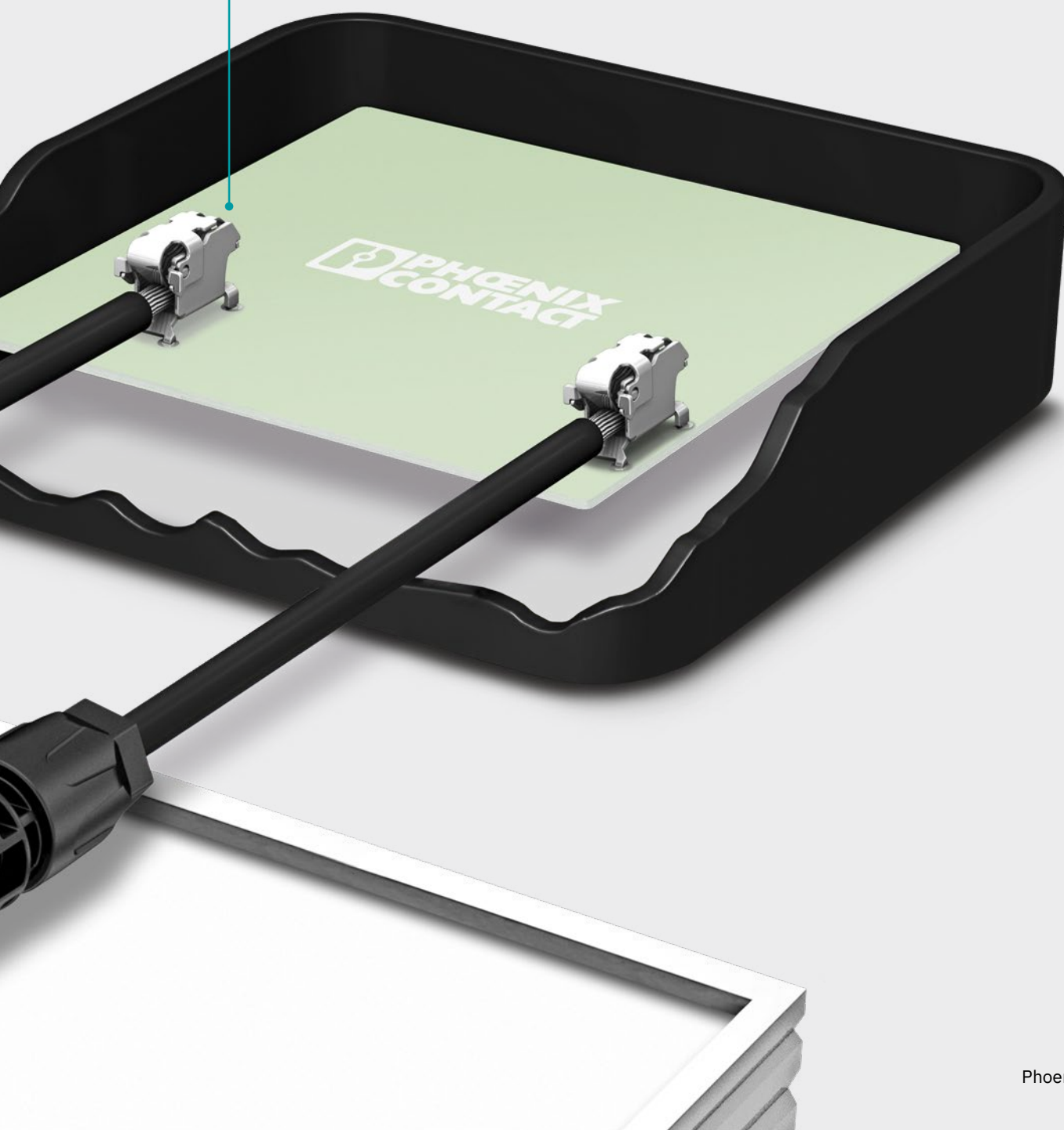
SUNCLIX DC connectors with crimp connection

- Just one connector for all crimp contacts
- Suitable for automated processing
- Voltages up to 1,500 V
- Currents up to 40 A (IEC), 50 A (UL)
- Conductor cross-sections from 2.5 to 4 mm² (AWG 14 to 12) and 6 mm² (AWG 10)
- Degree of protection IP65/IP66/IP67/IP68 (24 h/2 m)
- Approval in accordance with DIN EN 62852, UL 6703



PTSPL 6 PCB terminal block with solder connection

- Designed for automated THR soldering processes
- Available with 2.1 and 2.9 mm solder pin lengths
- Closed version with Push-in connection
- Supplied with open or closed spring on 32 mm reel for automated processes
- Currents up to 41 A
- Push-in spring connection for conductor cross-sections from 2.5 to 6 mm²



DC connection technology for field cabling

Wire your photovoltaic system efficiently, safely, and reliably from the module through to the inverter – with the SUNCLIX connection system from Phoenix Contact.

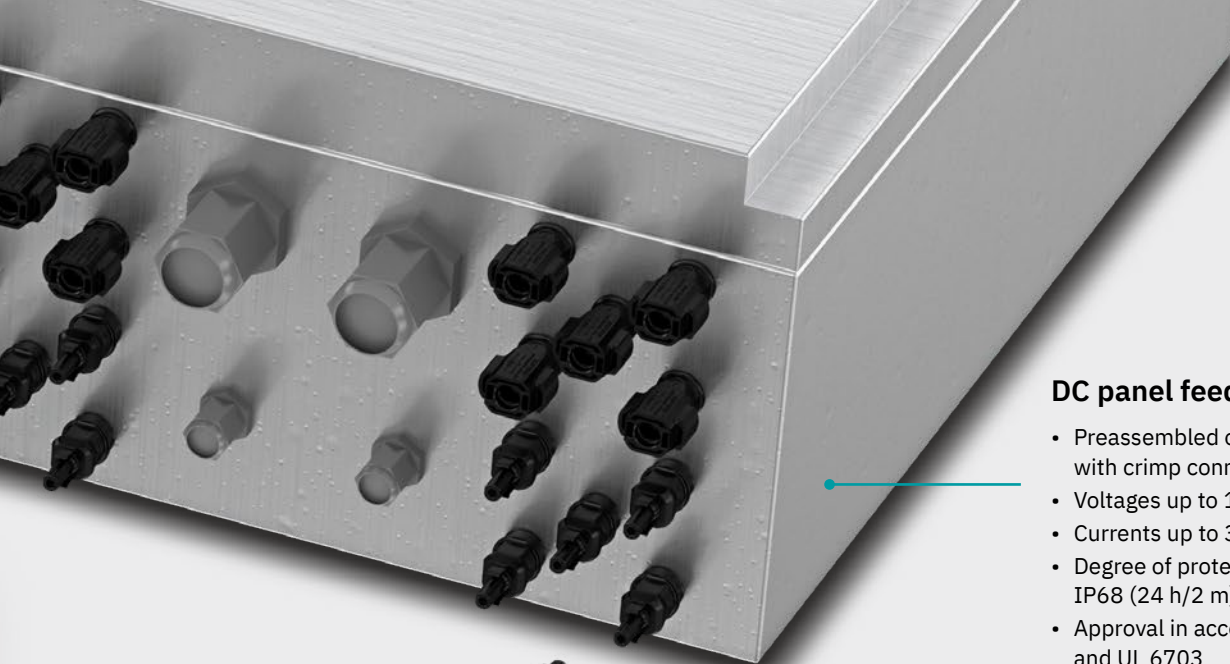
The one-piece DC connectors can be connected quickly and easily without using special tools. The unique spring technology ensures permanently reliable and stable conductor contacting.

A comprehensive range of accessories allows the demands placed on quick and safe system installation to be met in accordance with current normative requirements.



DC connectors with crimp connection

- Voltages up to 1,500 V
- Currents up to 40 A (IEC), 50 A (UL)
- For conductor cross-sections from 2.5 to 6 mm²
- Degree of protection IP65/IP66/IP67/IP68 (24 h/2 m)
- Approval in accordance with IEC 62852 and UL 6703



DC panel feed-throughs

- Preassembled or designed for assembly with crimp connection
- Voltages up to 1,500 V
- Currents up to 38 A (IEC), 50 A (UL)
- Degree of protection IP65/IP66/IP67/IP68 (24 h/2 m)
- Approval in accordance with IEC 62852 and UL 6703



DC distributors

- For parallel connection of modules and strings
- Customer-specific preassembly possible
- Optimized for voltages up to 1,500 V
- Currents up to 35 A
- Approval in accordance with 2PFG 1913/04.2011 and IEC 62852

DC connectors for field assembly

- Patented SUNCLIX spring connection
- Voltages up to 1,500 V
- Currents up to 60 A
- Just two versions cover conductor cross-sections from 2.5 to 16 mm²
- Degree of protection IP65/IP66/IP67/IP68 (24 h/2 m)
- Approval in accordance with IEC 62852 and UL 6703

SUNCLIX spring connection

1. Insert the stripped photovoltaic conductor
2. Press down the spring and snap it into place
3. Tighten the screw connection – and you're done!



AC and DC connection technology for device connection

Phoenix Contact provides a comprehensive range for connection to devices in 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.

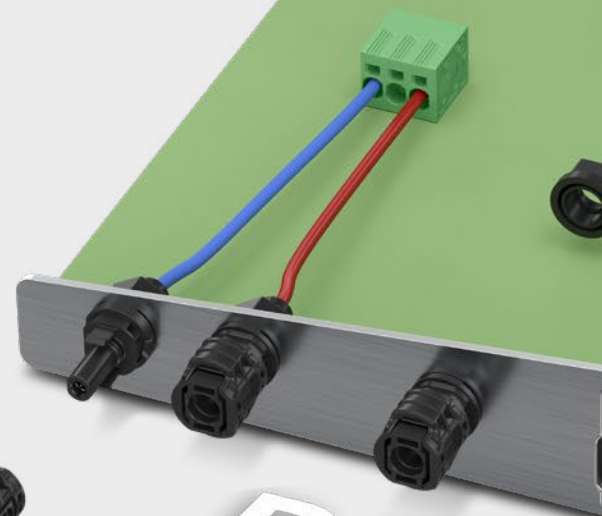


SUNCLIX DC connectors with spring connection

- Patented SUNCLIX spring connection
- Voltages up to 1,500 V
- Currents up to 60 A
- Just two versions cover conductor cross-sections from 2.5 to 16 mm²
- Degree of protection IP65/IP66/IP67/IP68 (24 h/2 m)
- Approval in accordance with IEC 62852 and UL 6703

Signal and data connectors

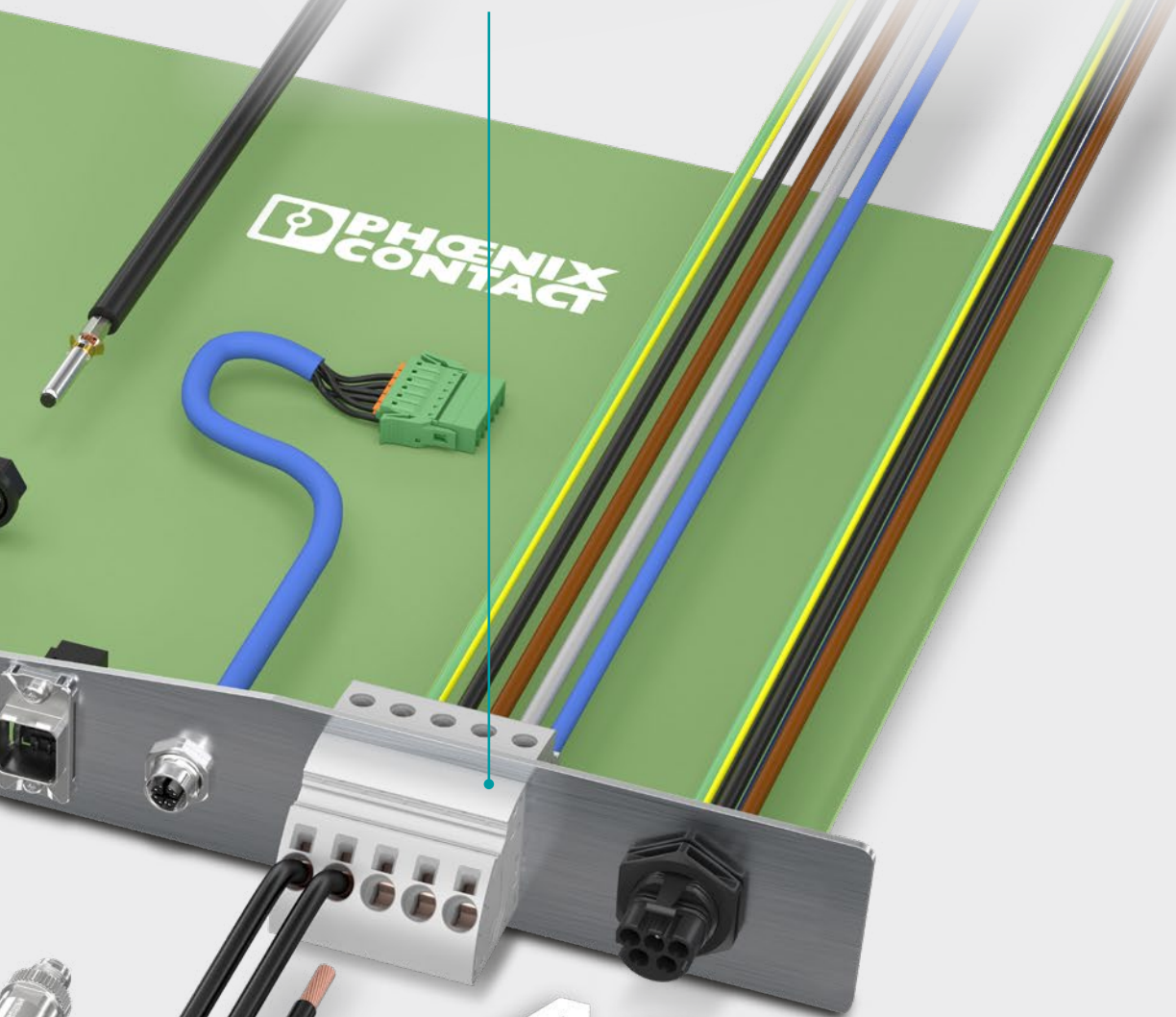
- Copper and fiber optic-based data connectors
- M5 to M23 signal connectors, 3- to 19-pos.
- Shielded with a round conductor within the device, 6 kV electric strength, easy routing
- Preassembled connector systems and connector systems designed for assembly
- Solutions for IP20, IP65/IP67, and IP69K



DC

PWO 16-UW/S panel feed-through terminal block with Push-in connection

- Easy connection and removal of conductors with a tool-free, time-saving Push-in connection on the outside
- The screw connection with tension sleeve on the inside
- Voltages up to 1,000 V
- Currents up to 76 A
- Conductor cross-section from 1.5 to 16 mm²



AC

PRC AC connectors with screw connection

- For 1-phase and 3-phase devices
- Can be sealed
- Voltages up to 690 V
- Currents up to 35 A
- Conductor cross-section from 1.5 to 6 mm²
- Degree of protection IP66/IP68 (24 h/2 m)/IP69

Installation system for photovoltaic system technology

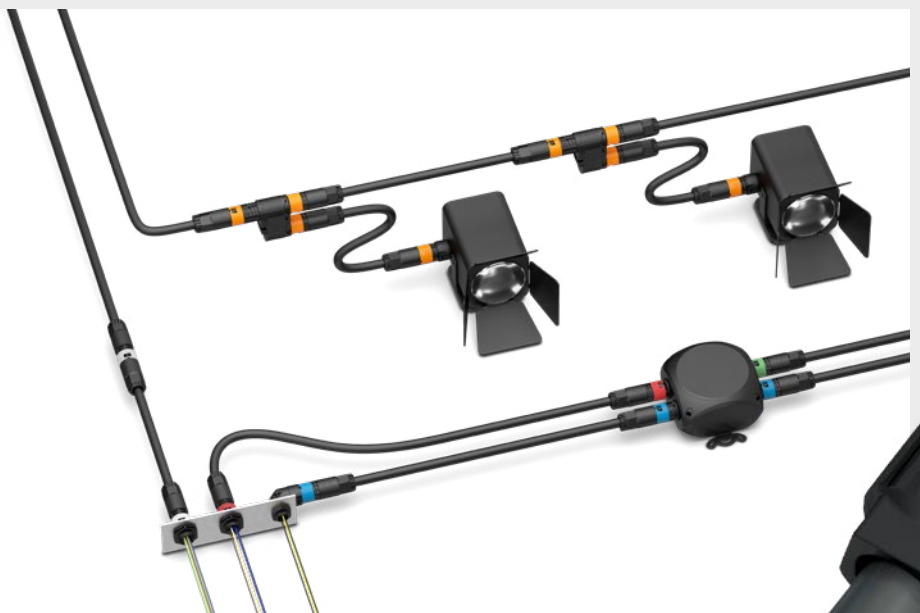
PRC series installation connectors are ideally suited for compact and safe power transmission in PV installations. The device and field connectors, distributors, and cable assemblies are made of special plastics. They allow countless connection solutions for micro and string inverters, as well as for tracking systems and battery storage systems. Furthermore, products in the PRC 20 series enable a structured and secure installation of the entire infrastructure, such as lighting, monitoring, and signal transmission. The comprehensive range of accessories and customer-specific versions provide additional flexibility.



Reliable power distribution even under extreme conditions

Robust and reliable: the PRC 20 and PRC 35 installation connectors enable a wide range of connection solutions in building, industrial, and outdoor applications. Whether in transportation infrastructure, power generation, e-mobility, intralogistics, or industrial production – the installation connectors ensure effective power transmission.

Web code: #2885

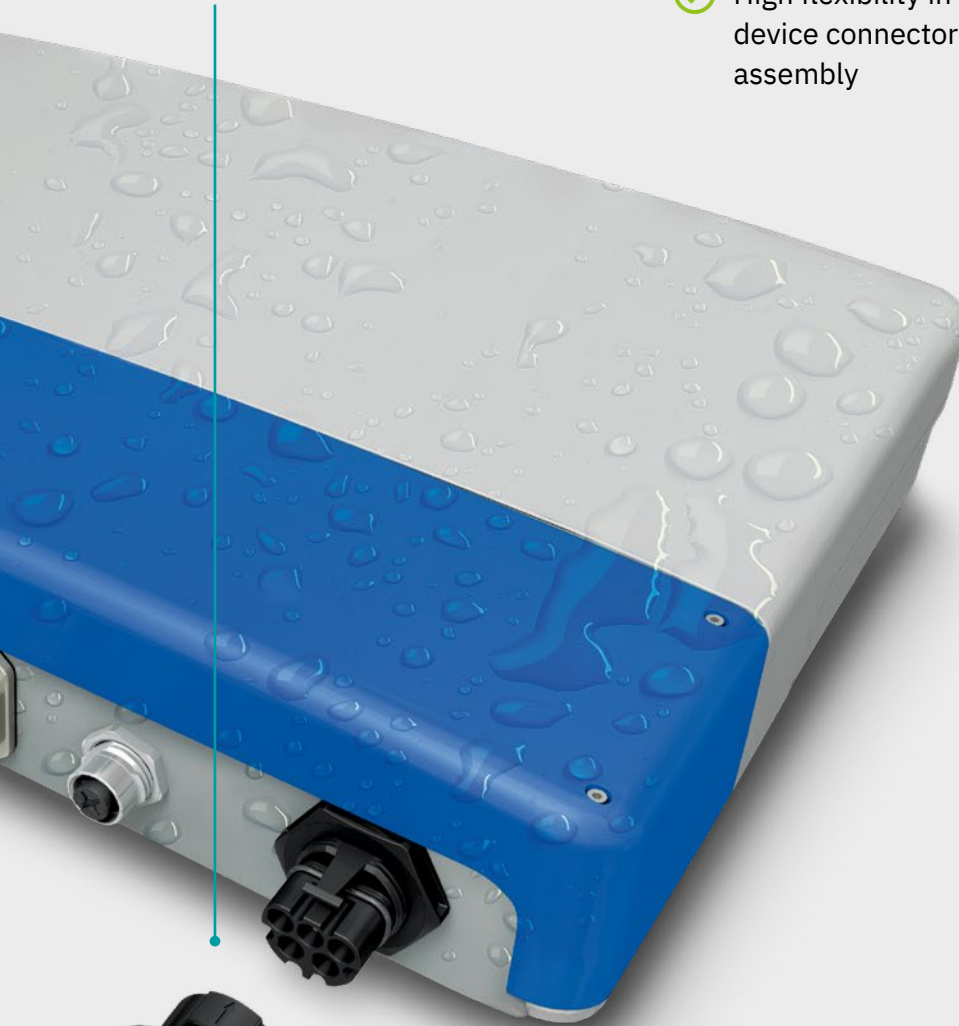


Your advantages

- ✓ 3- and 5-pos. versions, enabling a high power density in a compact design
- ✓ Developed and certified for indoor and outdoor applications with degrees of protection up to IP69K
- ✓ Unplugged device connectors also feature a longitudinal water tightness of IPX5 degree of protection
- ✓ High flexibility in the design-in process with preassembled device connectors and device connectors designed for assembly

AC device connectors

3-pos. and 5-pos. versions with attached litz wires or for self-assembly








AC connectors with screw connection

Connectors or couplings, 3-pos. and 5-pos. versions, with screw connection for cables with an outside diameter of 8 to 21 mm



DC connection technology for PV panels





| PCB terminal blocks without insulating bodies | | | | | Web code: #0724 | |
|---|---|-------------------------|---|-------------------------|-----------------|--|
| PCB connection for photovoltaic applications |  | |  | | | |
| Description | PCB terminal blocks with Push-in spring connection for tin-plated circular conductors or conductors with ferrules | | | | | |
| | Solder pin length | Item no. | Solder pin length | Item no. | | |
| | 2.1 mm | 1704836 | 2.1 mm | 1705081 | | |
| | 2.9 mm | 1704837 | 2.9 mm | 1705085 | | |
| Version | Closed | | Open | | | |
| Number of positions | 1 | | | | | |
| Cross-section | Max. 6 mm ² | | | | | |






| Housings and contacts | | | | | | | Web code: #0674 | | |
|--|--|---|--|--|--|--|--|--|--|
| SUNCLIX DC connectors designed for assembly, with crimp connection |  | |  | |  | |  |  | |
| Description | Housing for crimp connector, male (-) | Housing for crimp connector, female (+) | Male (-) crimp connector with unlocking function | Contacts for crimp connection | | Contacts for crimp connection (bulk goods in poly bag) | | | |
| Type | Male (-) | Female (+) | Male (-) | Male | Female | Male | Female | | |
| Item no. | 1050770 | 1050771 | 1196766 | 1457398 1050768 1457400 1050766 | 1478435 1050769 1478436 1050767 | 1196770 1196772 1196768 1196771 | 1196767 1196774 1196769 1196775 | | |
| Cross-section | - | - | - | 2.5/4 mm ² / 6 mm ² (14 AWG / 12 AWG / 10 AWG) | 2.5/4 mm ² / 6 mm ² (14 AWG / 12 AWG / 10 AWG) | 2.5/4 mm ² / 6 mm ² (14 AWG / 12 AWG / 10 AWG) | 2.5/4 mm ² / 6 mm ² (14 AWG / 12 AWG / 10 AWG) | | |
| External cable diameter | 5 mm ... 8 mm | 5 mm ... 8 mm | 5 mm ... 8 mm | - | - | - | - | | |
| Rated voltage | 1500 V (1500 V UL) | 1500 V (1500 V UL) | 1500 V (1500 V UL) | - | | - | | | |
| Rated current | - | - | - | Max. 35 A Max. 40 A | | Max. 38 A (IEC) Max. 50 A (UL) | Max. 26 ... 32 A (IEC) Max. 30 ... 35 A (UL) | | |
| Degree of protection | IP68 (24 h / 2 m) | IP68 (24 h / 2 m) | IP68 (24 h / 2 m) | - | | - | | | |
| Product information | Temperature range: -40°C ... +85°C, protection class II, approval in accordance with UL 6703 and IEC 62852 | | | Approval in accordance with UL 6703 and IEC 62852 Pcs./Pkt.: 1000 / 3000 pcs. per roll | | Approval in accordance with IEC 62852 and UL 6703 Pcs./Pkt.: 50 / 250 pcs. in a poly bag | | | |





DC connection technology for field cabling

| Connectors  Web code: #0358 | | | | | | |
|---|--|-------------------------|--|-------------------------|--|-------------------------|
| SUNCLIX DC connectors, designed for assembly, with SUNCLIX spring connection |  | |  | |  | |
| Description | Field connectors with spring-cage connection | | | | | |
| Type | Male (-) | Female (+) | Male (-) | Female (+) | Male (-) | Female (+) |
| Item no. | 1386384 | 1386381 | 1020775 | 1020776 | 1284632 | 1284634 |
| Cross-section | 2.5 mm ² ... 6 mm ² | | 2.5 mm ² ... 6 mm ² | | 6 mm ² ... 16 mm ² | |
| Rated voltage | 1100 V | | 1500 V | | 1500 V | |
| Rated current | Max. 35 A | | Max. 35 A (IEC) / 50 A (UL) | | Max. 60 A (IEC) | |
| Degree of protection | IP66 / IP68 (24 h / 2 m) | | IP66 / IP68 (24 h / 2 m) | | IP66 / IP68 (2 h / 2 m) | |
| Product information | Temperature range: -40°C ... +85°C, protection class II, approval in accordance with IEC 62852 | | Temperature range: -40°C ... +85°C, protection class II, approval in accordance with UL 6703 and IEC 62852 | | Temperature range: -40°C ... +85°C, protection class II, approval in accordance with IEC 62852 | |




DC connection technology for device connection

| Preassembled DC device connectors | | | | | | |  Web code: #0359 |
|---|--|-------------------------|--|-------------------------|---|-------------------------|---|
| SUNCLIX DC device connectors, 130 mm litz wire length, other lengths available on request |  | |  | |  | | |
| Description | Device plugs | | | | | | |
| Type | Male | Female | Male | Female | Male | Female | |
| Item no. | 1158446 | 1158445 | 1158449 | 1158447 | 1158451 | 1158448 | |
| Cross-section | 2.5 mm ² | | 4 mm ² | | 6 mm ² | | |
| Rated voltage | 1500 V | | 1500 V | | 1500 V | | |
| Rated current | Max. 26 A | | Max. 32 A | | Max. 38 A | | |
| Degree of protection | IP65 / IP66 / IP68 (24 h / 2 m) | | IP65 / IP66 / IP68 (24 h / 2 m) | | IP65 / IP66 / IP68 (24 h / 2 m) | | |
| Product information | Temperature range: -40°C ... +85°C, approval in accordance with IEC 62852, required accessories: 1146092 | | | | | | |

| DC device connectors designed for assembly | | | | | | | |  Web code: #0359 |
|--|--|-------------------------|---|--|--|--|--|---|
| |  | |  |  | |  | | |
| Description | Housing | | Wall mount | Contacts | | Contacts (bulk goods in poly bag) | | |
| Type | Female | Male | – | Female | Male | Male | Female | |
| Item no. | 1133364 | 1133365 | 1146092 | 1478435 1050769 1478436 1050767 | 1457398 1050768 1457400 1050766 | 1196770 1196772 1196768 1196771 | 1196767 1196774 1196769 1196775 | |
| Cross-section | – | | | 2.5 mm ² / 4 mm ² / 6 mm ² (14 AWG / 12 AWG / 10 AWG) | | | | |
| Rated voltage | 1500 V | | | – | | | | |
| Rated current | – | | | 2.5 mm ² ... 4 mm ² : max. 32 A (ICE) / 35 A (UL) 6.0 mm ² : max. 38 A (ICE) / 50 A (UL) | | | | |
| Degree of protection | IP66 / IP68 (24 h/2 m) | | | – | | | | |
| Product information | Temperature range: -40°C ... +85°C, approval in accordance with IEC 62852 and UL 6703, required accessories: 1146092 | | Wall mount for securing the device plugs in the housing | Approval in accordance with IEC 62852 and UL 6703 Pcs./Pkt.: 1000 / 3000 pcs. per roll | | Approval in accordance with IEC 62852 and UL 6703 Pcs./Pkt.: 50 / 250 pcs. in a poly bag | | |

| Accessories | | | |  Web code: #0362 |
|---------------------|---|--|---|--|
| |  | |  |  |
| Description | Filler plug | | Filler plug | Protective cap |
| Item no. | 1775631 | | 1623478 | 1785430 |
| Product information | Filler plug for SUNCLIX connectors, IP67 in the cable gland, 1000 V | | Filler plug for SUNCLIX connectors, IP67 in the cable gland, 1500 V | IP67 protective cap for SUNCLIX connectors, transport protection for the pin connector pattern, for sealing and protecting unused device inputs and for transport protection |

DC connection technology for field cabling

| Connection systems | |  Web code: #0358 |
|---------------------------------|---|--|
| SUNCLIX |  |  |
| Description | DC distributor, cable-based | Adapter set SUNCLIX / MC4 |
| Product information | Connection set with branch line (6 mm ²) for fast parallel interconnection of photovoltaic modules. Length of each individual cable 120 mm, other lengths available upon request. | Connection of SUNCLIX connectors to type MC4 connectors from Stäubli without voiding the product warranty or guarantee for the MC4 connectors. |
| Item no. | 1030649 | 1030650 |
| Version | – | Set of 1x string SUNCLIX male to MC4 female and 1x string from SUNCLIX female to MC4 male (as per product image) |
| Trunk line cross-section | 6 mm ² | |
| Rated voltage | 1500 V | 1500 V |
| Rated current | 38 A in accordance with IEC 62852 | Up to 38 A in accordance with IEC 62852 / UL 6703 |
| Degree of protection | IP68 (1 h / 1 m) | IP68 (1 h / 1 m) |
| Ambient temperature (operation) | -40°C ... +85°C | -40°C ... +85°C |


| Panel feed-throughs | | | | | | | | | |
|-------------------------|---|-------------------------|-------------------------|--|-------------------------|---|-------------------------|-------------------------|---|
| |  | | |  | |  | | | |
| Description | Device plugs with crimp connection | | | Contact carriers | | Contacts | | | |
| | | | | With nut | Without nut | | | | |
| Item no. 3-pos. | 1409219 | 1409220 | 1409221 | 1409218 | 1627608 | 1409207 | 1409208 | 1409209 | |
| Item no. 5-pos. | 1409211 | 1409212 | 1409213 | 1409206 | 1627609 | | | | |
| Conductor cross-section | 2.5 mm ² | 4.0 mm ² | 6.0 mm ² | – | – | 2.5 mm ² | 4.0 mm ² | 6.0 mm ² | |
| Cable length | 150 mm | | | – | – | – | – | – | – |
| Rated voltage | 690 V | | | 690 V | | – | – | – | – |
| Rated current | 24 A | 32 A | 35 A | – | – | 24 A | 32 A | 35 A | |
| Screw connection | M25 | | | – | – | – | – | – | – |







| Installation connectors | | | | |
|-----------------------------|--|---|--|---|
| |  |  |  |  |
| Description | Coupling, 3-pos. | Coupling, 5-pos. | Connector, 3-pos. | Connector, 5-pos. |
| Item no. 8.0 mm ... 21.0 mm | 1410661 | 1410656 | 1014498 | 1014530 |
| Conductor cross-section | 1.5 mm ² ... 6.0 mm ² | | | |
| Rated voltage | 690 V | | | |
| Rated current | 35 A | | | |
| Connection method | Screw connection | | | |
| Insertion cycles | Approx. 100 | | Approx. 2000 | |
| Product information | Approvals in accordance with IEC 61984, IEC 61535, 2 PfG 1915, UL 2238, UL 2237, DNV GL 7-2. | | | |


PRC series AC connection technology





| Accessories | | | | |
|--------------------|---|---|---|---|
| |  |  |  |  |
| Description | Protective cap for connector | Protective cap for coupling | Coding ring for connector | Nut for device plug |
| Item no. | 1409237 | 1409236 | 1014496 | 1457937 |

PRC 20 product overview

| Panel feed-throughs | | | | | | | |
|-----------------------|--------|---|---|---|---|---|---|
| | |  |  |  |  |  |  |
| Field of application | | AC | | AC without PE | | DC | |
| Connection technology | | Screw | Crimp | Screw | Crimp | Screw | Crimp |
| 2-pos. | Female | 1313275 | 1468364 | - | - | 1313277 | 1468368 |
| | Male | 1313274 | 1468362 | - | - | 1313276 | 1468365 |
| 3-pos. | Female | 1313300 | 1468374 | - | - | 1313304 | 1468376 |
| | Male | 1313299 | 1468373 | - | - | 1313302 | 1468375 |
| 4-pos. | Female | 1308634 | 1468384 | 1309414 | 1468391 | - | - |
| | Male | 1308633 | 1468360 | 1309413 | 1468390 | - | - |
| 5-pos. | Female | 1308652 | 1468393 | - | - | 1309418 | 1468400 |
| | Male | 1308648 | 1468392 | - | - | 1309417 | 1468399 |

| Installation connectors | | | | | | | |
|-------------------------|--------|---|---|---|---|---|---|
| | |  |  |  |  |  |  |
| Field of application | | AC | | AC without PE | | DC | |
| Connection technology | | Screw | Crimp | Screw | Crimp | Screw | Crimp |
| 2-pos. | Female | 1313288 | 1468403 | - | - | 1313291 | 1468409 |
| | Male | 1313285 | 1468402 | - | - | 1313290 | 1468408 |
| 3-pos. | Female | 1313316 | 1468419 | - | - | 1313318 | 1468422 |
| | Male | 1313314 | 1468417 | - | - | 1313317 | 1468420 |
| 4-pos. | Female | 1308640 | 1468442 | 1309416 | 1468449 | - | - |
| | Male | 1308639 | 1468441 | 1309415 | 1468448 | - | - |
| 5-pos. | Female | 1308661 | 1468453 | - | - | 1309421 | 1468460 |
| | Male | 1308660 | 1468451 | - | - | 1309419 | 1468459 |

| Power distributors | | | | | | | | |
|----------------------|--|--|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | |  | | | | | | |
| Field of application | | AC | AC without PE | DC | Bus | Signal | Hybrid | SELV |
| 2-pos. | | 1526179 | | 1526180 | 1526181 | - | - | 1526184 |
| 3-pos. | | 1526186 | | 1526188 | 1526190 | 1526191 | - | - |
| 4-pos. | | 1526192 | 1526195 | - | 1526194 | 1526193 | - | - |
| 5-pos. | | 1526196 | | 1526200 | - | 1526197 | 1526199 | - |

| PRC 20 accessories | | | | | |
|--------------------|--|---|---|---|---|
| | |  |  |  |  |
| Product type | | IP protective cap | | Dust protection cap | |
| For | | PRC 20 with pin contact | PRC 20 with female contact | PRC 20 with pin contact | PRC 20 with female contact |
| | | 1312598 | 1312600 | 1037239 | 1037253 |

| Bus | | Signal | | Hybrid | | SELV | |
|---------|---------|---------|---------|---------|---------|---------|---------|
| Screw | Crimp | Screw | Crimp | Screw | Crimp | Screw | Crimp |
| 1313280 | 1468370 | - | - | - | - | 1313283 | 1468372 |
| 1313278 | 1468369 | - | - | - | - | 1313281 | 1468371 |
| 1313312 | 1468383 | 1313309 | 1468380 | - | - | - | - |
| 1313310 | 1468381 | 1313306 | 1468378 | - | - | - | - |
| 1308638 | 1468389 | 1308636 | 1468387 | - | - | - | - |
| 1308637 | 1468388 | 1308635 | 1468385 | - | - | - | - |
| - | - | 1308656 | 1468396 | 1308659 | 1468398 | - | - |
| - | - | 1308654 | 1468394 | 1308658 | 1468397 | - | - |



| Bus | | Signal | | Hybrid | | SELV | |
|---------|---------|---------|---------|---------|---------|---------|---------|
| Screw | Crimp | Screw | Crimp | Screw | Crimp | Screw | Crimp |
| 1313293 | 1468412 | - | - | - | - | 1313295 | 1468414 |
| 1313292 | 1468410 | - | - | - | - | 1313294 | 1468416 |
| 1313325 | 1468426 | 1313321 | 1468424 | - | - | - | - |
| 1313323 | 1468425 | 1313320 | 1468423 | - | - | - | - |
| 1308646 | 1468446 | 1308642 | 1468444 | - | - | - | - |
| 1308644 | 1468445 | 1308641 | 1468443 | - | - | - | - |
| - | - | 1308663 | 1468455 | 1308665 | 1468458 | - | - |
| - | - | 1308662 | 1468454 | 1308664 | 1468457 | - | - |

| PRC 20 signal connectors | | | |
|--------------------------|--------------------|---------|------------------------|
| | | | |
| Product type | Panel feed-through | | Installation connector |
| Field of application | Signal | | |
| Connection technology | Crimp | | |
| 5-pos. + PE | Female | 1636042 | 1636030 |
| | Male | 1636039 | 1636028 |
| 6-pos. + PE | Female | 1636044 | 1636031 |
| | Male | 1636043 | 1636034 |



| PRC 20 crimp contacts | | |
|-----------------------|---------------------|--------------------|
| | | |
| | PRC 20... | PRC 20/M17... |
| | 0.5 mm² ... 2.5 mm² | 0.25 mm² ... 1 mm² |
| Female | 1468462 | 1243216 |
| Male | 1468461 | 1243215 |

Tools

Tools for PRC series AC device connectors

| | | |
|-------------------------|---|---|
| |  |  |
| Description | Screw pliers | Crimping pliers |
| Conductor cross-section | – | 0.14 mm ² ... 6.0 mm ² , 26 ... 10 AWG |
| Type | UNIFOX-WRENCH | CRIMPFOX-TC MP-6 |
| Item no. | 1212835 | 1202888 |






Tools for SUNCLIX series DC connectors

| | | |
|---------------------|--|--|
| |  |  |
| Description | Crimping pliers | WIREFOX stripping tool |
| Item no. | 1212755 | 1212511 |
| Product information | For PV-CF(M) contacts 2.5, 4 and 6 mm ² (14/12/10 AWG). | For standard 2.5, 4, and 6 mm ² solar cables, with 15 mm longitudinal stop, for SUNCLIX field connectors. |

Tool for SUNCLIX DC connectors with crimp connection





| | |
|---|--|
| Mounting and release tool for SUNCLIX crimp module connectors |  |
| Description | PV-A-C-DC-TOOL |
| Item no. | 1069522 |

Device connectors

| Device connections for data | | | | |  Web code: #0515 |
|---|---|---|--|---|---|
| Data connectors with standard interfaces such as RJ45, USB, and M12 for data transmission |  |  |  |  | |
| Description | RJ45 female inserts and panel-mount frames, for Freenet system | RJ45 female inserts and panel-mount frames, for PCB connection | USB socket inserts and panel-mount frames, for flat-ribbon cable connection | M12 device connectors for wave soldering processes, one-piece | |
| Female insert CAT5 | 1652936 | | 1653854 | – | |
| Female insert CAT6 | 1418984 | 1653090 | 1653867 | – | |
| Panel-mount frame | 1653744 | 1689446 | 1653744 | – | |
| Flush-type connector 4-pos., female | – | | | 1551503 | |
| Flush-type connector 8-pos., female | – | | | 1553860 | |
| Number of positions | 8 | 8 | 4 | 4-pos. / 8-pos. | |
| Rated voltage | 50 V | 150 V | 30 V | 250 V | |
| Nominal current | 1 A | 1.5 A | 1 A | 4 A | |
| Contact material | Cu alloy | Cu alloy | Cu alloy | Cu alloy | |
| Connection method | IDC | Solder connection | Flat-ribbon cable connection | Solder pins | |

You will find further housings, such as our push-pull connections, in our brochure “M5 to M12 circular connectors” (order no.: 52003132) in the Section “Solder connection, PCB mounting, for reflow and wave soldering processes”.

Device connectors



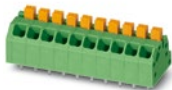

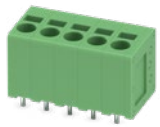
| Device connections for signals | | Web code: #0515 | | | |
|--|---|---|---|--|---|
| Circular connectors for sensor/actuator applications | |  |  |  |  |
| Description | M8 device connectors with halogen-free litz wires | M12 device connectors with halogen-free litz wires | M8 device connectors, one-piece | M12 device connectors, one-piece | |
| Soldering process | | | Wave soldering | Wave soldering | |
| Mounting type | Front mounting | Front mounting | Rear mounting | Rear mounting | |
| Male 5-pos. | 1440119 | 1520068 | 1424242 | 1441765 | |
| Female 5-pos. | 1440106 | 1520042 | 1424241 | 1441778 | |
| 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 6.6 | PA 6.6 | PA 6.6 | PA 6.6 | |
| 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 | |





Device connectors

| Device connections for signals | | Web code: #0515 | | | | |
|--|--------------------------------|---|---|--|---|---|
| Circular connectors for sensor/actuator applications | |  |  |  |  |  |
| Description | M8 device connectors, two-part | M12 device connectors, two-part | M12 housing screw connection, two-part | M12 device connectors, two-part | M12 housing screw connection, two-part | |
| Soldering process | Reflow process | | | | | |
| Mounting type | Rear mounting | Rear mounting | Rear mounting, standard | Rear mounting | Rear mounting, standard | |
| Male | 5-pos. | – | 1411943 | 1414000/ 1107993 (push-pull) | 1432350 | 1027661 (push-pull) |
| Female | 5-pos. | 1412222/ Housing 1412506 | 1411937 | 1414021/ 1454492 (push-pull) | 1432363 | 1249212 (push-pull) |
| Number of positions | 4 / 5 | – | – | 4 / 5 | – | |
| Rated voltage | 30 V | 60 V | – | 60 V | – | |
| Nominal current | 2 A | 4 A | – | 4 A | – | |
| Contact carrier material | PA 6.6 | PA 6.6 | – | PA 6T/6.6 | – | |
| 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 | THR solder connection | |






You will find further housings, such as our push-pull connections, in our brochure “M5 to M12 circular connectors” (order no.: 52003132) in the Section “Solder connection, PCB mounting, for reflow and wave soldering processes”.





PCB terminal blocks

| PCB terminal blocks, signals, and power | | | |  Web code: #0391 |
|---|---|---|--|---|
| |  |  |  |  |
| Description | Push-in spring connection, horizontal to the PCB for SMD applications | Push-in spring connection, angled (45°) to the PCB | Push-in spring connection, horizontal to the PCB | Push-in spring connection, vertical to the PCB |
| Product family | PTSM 0,5/..-H SMD | SPTAF 1/..-LL | PTS 1,5/.. | SPT 2,5/..-V |
| Product example Item no. | 1771059 | 1864312 | 1792892 | 1991121 |
| Number of positions | 2 ... 8 | 2 ... 16 | 2 ... 12 | 2 ... 12 |
| Nominal cross-section | 0.5 mm ² | 1.0 mm ² | 1.5 mm ² | 2.5 mm ² |
| Pitch | 2.5 mm | 3.5 mm | 5 mm | 5.0 mm |
| Voltage IEC / UL ¹⁾²⁾ | 160 V / 150 V | 160 V / 300 V | 400 V / 300 V | 400 V / 300 V |
| Current IEC / UL ¹⁾ | 6 A / 5 A | 13.5 A / 7 A | 16 A / 10 A | 24 A / 20 A |
| Product information | SMD soldering | – | – | – |

| | | | | |
|----------------------------------|---|---|--|---|
| |  |  |  |  |
| Description | Push-in spring connection, horizontal to the PCB for THR applications | Push-in spring connection, angled (45°) to the PCB for THR applications | Push-in spring connection, vertical to the PCB for THR applications | Push-in spring connection, angled (45°) to the PCB for THR applications |
| Product family | SPT-THR 1,5/..-H | SPTA-THR 1,5/.. | SPT-THR 2,5/..-V | SPTA-THR 2,5/.. |
| Product example Item no. | 1822781 | 1071205 | 1135349 | 1366007 |
| Number of positions | 2 ... 12 | 2 ... 12 | 2 ... 12 | 2 ... 12 |
| Nominal cross-section | 1.5 mm ² | 1.5 mm ² | 4 mm ² | 4 mm ² |
| Pitch | 3.5 / 3.81 mm | 5.08 mm | 5.0 mm | 5.0 mm |
| Voltage IEC / UL ¹⁾²⁾ | 160 V / 300 V | 320 V / 300 V | 400 V / 300 V | 400 V / 300 V |
| Current IEC / UL ¹⁾ | 17.5 A / 10 A | 17.5 A / 10 A | 32 A / 20 A | 32 A / 20 A |
| Product information | THR soldering | THR soldering | THR soldering | THR soldering |

PCB terminal blocks








| PCB terminal blocks, power | | | |  Web code: #0391 |
|----------------------------------|---|---|--|---|
| |  |  |  |  |
| Description | Push-in spring connection, vertical to the PCB | Push-in spring connection, angled (60°) to the PCB | Lever Push-in connection, horizontal to the PCB | Screw connection, horizontal to the PCB |
| Product family | SPT 5/..-V | SPTA 5/.. | LPT 6/.. | MKDS 10 HV/.. |
| Product example Item no. | 1719341 | 1819118 | 1098170 | 1709717 |
| Number of positions | 1 ... 12 | 1 ... 12 | 1 ... 8 | 2 ... 9 |
| Nominal cross-section | 6 mm ² | 6 mm ² | 6 mm ² | 16 mm ² |
| Pitch | 7.5 mm | 7.5 mm | 7.5 mm | 10.16 mm |
| Voltage IEC / UL ¹⁾²⁾ | 1000 V / 600 V | 1000 V / 600 V | 1000 V / 600 V | 1000 V / 600 V |
| Current IEC / UL ¹⁾ | 41 A / 36 A | 41 A / 33 A | 41 A / 40 A | 76 A / 60 A |
| Product information | Also available in vertical and angled connection direction. | Can be bridged, for connecting individual positions. | Also available in angled connection direction. | Unlimited 600 V UL approval with compact zigzag pinning. |

| |  |  |  |  |
|----------------------------------|---|---|---|---|
| Description | Push-in spring connection, horizontal to the PCB | Lever Push-in connection, horizontal to the PCB | Push-in spring connection, vertical to the PCB | Screw connection, horizontal to the PCB |
| Product family | SPT 16/..-H | LPT 16/.. | SPT 35/..-V | MKDSP 50/.. |
| Product example Item no. | 1735817 | 1119814 | 1845373 | 1856155 |
| Number of positions | 1 ... 9 | 1 ... 8 | 1 ... 5 | 1 ... 5 |
| Nominal cross-section | 16 mm ² | 16 mm ² | 35 mm ² | 70 mm ² |
| Pitch | 10 mm | 10 mm | 15 mm | 17.5 mm |
| Voltage IEC / UL ¹⁾²⁾ | 1000 V / 600 V | 1000 V / 600 V | 1000 V / 600 V | 1000 V / 600 V |
| Current IEC / UL ¹⁾ | 76 A / 66 A | 76 A / 66 A | 125 A / 101 A | 192 A / 160 A |
| Product information | Also available in vertical and angled connection direction. | Also available with 15 mm pitch with 1000 V UL approval. | – | Suitable for connecting aluminum conductors. |





¹⁾ Use Groups A – G in accordance with UL

²⁾ IEC rated insulation voltage with overvoltage category III/pollution degree 2






PCB connectors

| Board-to-board connectors | | | |  Web code: #2492 |
|-----------------------------|---|---|--|---|
| |  | NEW  |  |  |
| Description | Board-to-board connectors with ScaleX contact system | | | Board-to-board connectors with standard pin connector pattern |
| | FP 0,8 shielded | FP 0,8 shield-free | FP 0,8 unshielded (AOI) | |
| Product family | FP 0,8/..-SH | FP 0,8/..-SL | FP 0,8/.. | FR 1,27/... |
| Product example Item no. | 1043786 | 1569578 | 1061725 | 1373826 |
| Number of positions | 12 ... 80 | 12 ... 80 | 12 ... 80 | 6 ... 100 |
| Pitch | 0.8 mm | 0.8 mm | 0.8 mm | 1.27 mm |
| Nominal current per contact | 1.7 A | 1.7 A | 1.7 A | 2.3 A |
| Data transmission rate | ≤52 Gbps | ≤52 Gbps | ≤52 Gbps | ≤28 Gbps |
| Stack heights | 6 mm ... 21 mm | 6 mm ... 21 mm | 6 mm ... 21 mm | 8 mm ... 13.8 mm |
| PCB arrangement | Mezzanine, orthogonal, and coplanar | Mezzanine, orthogonal, and coplanar | Mezzanine, orthogonal, and coplanar | Mezzanine, orthogonal, and coplanar |
| Product information |  |  |  | - |


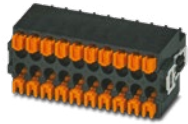
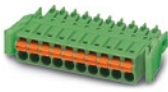
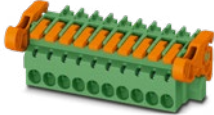





PCB connectors

| Board-to-board connectors | |  Web code: #2492 | | |
|-----------------------------|---|---|--|--|
| |  |  |  NEW | |
| Description | Flat-ribbon version with standard pin connector pattern | Single-beam board-to-board connectors, rigid and floating version | | |
| Product family | FR 1,27/...-CA | FS 0,635/...-R ... | FS 0,635/...-F ... | |
| Product example | Item no. 1498845 | 1332120 | 1439169 | |
| Number of positions | 12 ... 80 | 20 ... 80 | 20 ... 80 | |
| Pitch | 1.27 mm | 0.635 mm | 0.635 mm | |
| Nominal current per contact | 1.4 A | 0.5 A | 0.5 A | |
| Data transmission rate | – | ≤30 Gbps | ≤40 Gbps | |
| Stack heights | – | 6 mm ... 16.6 mm | 8 mm ... 12.6 mm | |
| PCB arrangement | Flat-ribbon cable connection | mezzanine | mezzanine | |
| Product information | – | – | 0.7 mm floating tolerance in X and Y direction | |

Panel feed-throughs

| High-current feed-through terminal blocks, power | | | |  Web code: #0456 |
|--|---|---|--|---|
| |  |  |  |  |
| Description (outside / inside) | Push-in spring connection | Screw connection / screw and bolt connection | T-LOX knee-lever connection / bolt connection | T-LOX knee-lever connection / bolt connection |
| Product family | PWO 16-UW / PWO 16-POT | UW 25 | TW 50 | TW 95 |
| Product example Item no. | 1844390 | 3073377 | 1708749 | 1708756 |
| Number of positions | 1-pos. alignable | 1-pos. alignable | 1 ... 6 | 1 ... 6 |
| Nominal cross-section | 16 mm ² | 25 mm ² | 50 mm ² | 95 mm ² |
| Panel thickness | 1 mm ... 6 mm | 1 mm ... 6 mm | 1 mm ... 5 mm | 1 mm ... 5 mm |
| Voltage IEC / UL ^{1) 2)} | 1000 V / 600 V | 630 V / 600 V | 1000 V / 600 V | 1000 V / 600 V |
| Current IEC / UL ¹⁾ | 76 A / 66 A | 101 A / 112.5 A | 150 A / 150 A | 232 A / 200 A |
| Product information | POT versions suitable for molding, tool-free, time-saving Push-in connection. | Suitable for connecting aluminum conductors. | Suitable for connecting aluminum conductors. | Suitable for connecting aluminum conductors. |

PCB connectors

| PCB connectors, signals, and power | | | |  Web code: #0425 |
|------------------------------------|---|---|---|---|
| |  |  |  |  |
| Description | Push-in spring connection with latching flange | Push-in spring connection with latching flange | Lever Push-in connection with lock-and-release locking system | Lever Push-in connection |
| Product family | DFMC 0,5/...-ST-RF | FMC 1,5/...-ST-RF | LPC 1,5/...-ST-LR | LPC 2,5/...-ST |
| Product example Item no. | 1715737 | 1952050 | 1849227 | 1110584 |
| Number of positions | 2 ... 16 | 2 ... 16 | 2 ... 16 | 2 ... 20 |
| Nominal cross-section | 0.5 mm ² (20 AWG) | 1.5 mm ² (16 AWG) | 1.5 mm ² (16 AWG) | 2.5 mm ² (12 AWG) |
| Pitch | 2.54 | 3.5 mm | 3.81 mm | 5.08 mm |
| Voltage IEC / UL ^{1) 2)} | 160 V / 150 V | 160 V / 150 V | 160 V / 150 V | 320 V / 300 V |
| Current IEC / UL ¹⁾ | 6 A / 6 A | 8 A / 8 A | 8 A / 8 A | 16 A / 16 A |
| |  |  |  |  |
| Description | Lever Push-in connection with center flange | Energy bus system with insulation displacement connection technology | Lever Push-in connection | Screw connection with screw flange |
| Product family | LPC 6/...-STL | PC 6/...-ST-BUS | LPC 16 HC/...-ST | PC 35 HC/...-STF |
| Product example Item no. | 1716942 | 1044738 | 1716818 | 1762628 |
| Number of positions | 2 ... 6 | 2 ... 3 | 1 ... 6 | 2 ... 6 |
| Nominal cross-section | 6 mm ² (8 AWG) | 16 mm ² (6 AWG) | 16 mm ² (4 AWG) | 35 mm ² (2 AWG) |
| Pitch | 7.62 mm | 7.62 mm | 10.16 mm | 15.0 mm |
| Voltage IEC / UL ^{1) 2)} | 1000 V / 600 V | 1000 V / 600 V | 1000 V / 600 V | 1000 V / 600 V |
| Current IEC / UL ¹⁾ | 41 A / 35 A | 32 A / 30 A | 76 A / 66 A | 125 A / 115 A |

¹⁾ Use Groups A – G in accordance with UL

²⁾ IEC rated insulation voltage with overvoltage category III/pollution degree 2

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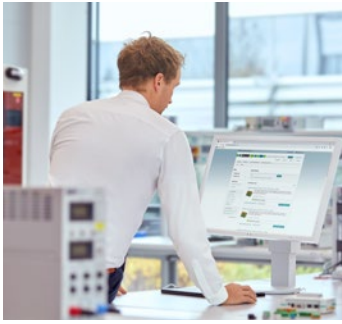
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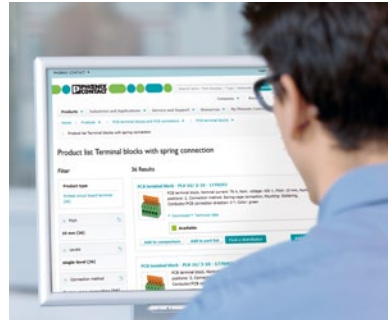
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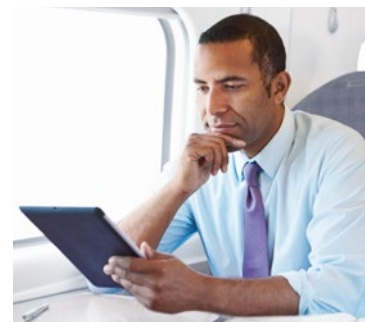
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