

# The frame for your masterpiece

Electronics housings and connection technology  
for embedded systems

# Masterworks of intelligent automation

High-performance, easily adaptable embedded systems with high availability became more than just unseen mini-computers long ago. In decentralized automation structures, they fulfill an assortment of control, regulation and communication functions. Thanks to the rapid increase in the performance of integrated software and hardware, embedded systems play a key role in the efficient use of autonomous functions in relation to complex complete systems.



Automated teller machines, ATM



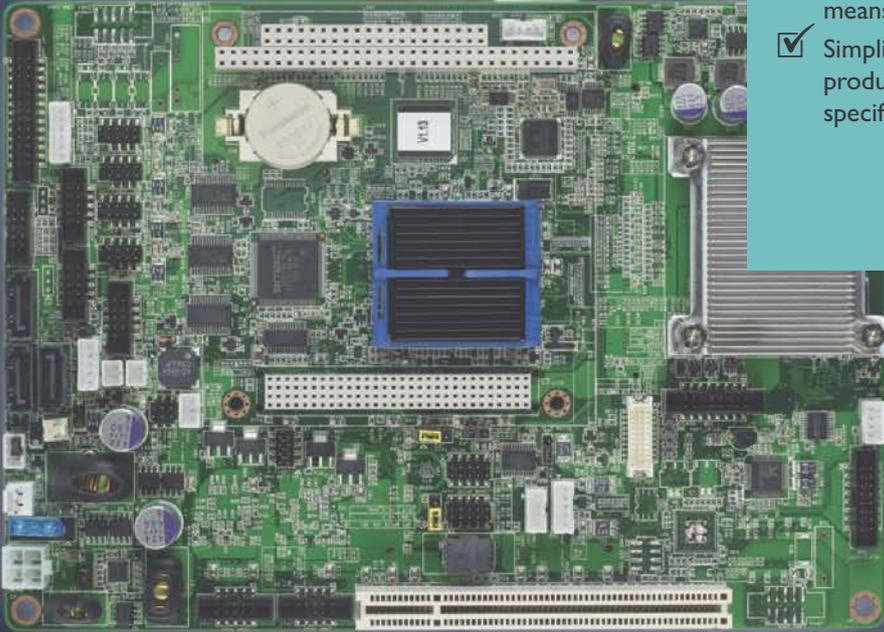
Building automation



Transportation

## Your advantages

- ✓ Simple procurement and selection, thanks to housing and connection technology and system components geared to each other
- ✓ Efficient and convenient handling during installation, commissioning, servicing or maintenance, thanks to innovative connection technologies
- ✓ Stable and reliable operation of equipment in the same high quality from very small to large series
- ✓ Simple and fast design-in process and selection by means of online configuration for housing systems
- ✓ Simplification of design-in and assembly in the production process, thanks to a housing range specified according to the standard form factor



Medical technology



Renewable energies



Automation technology

# Electronics housings and connection technology for embedded systems

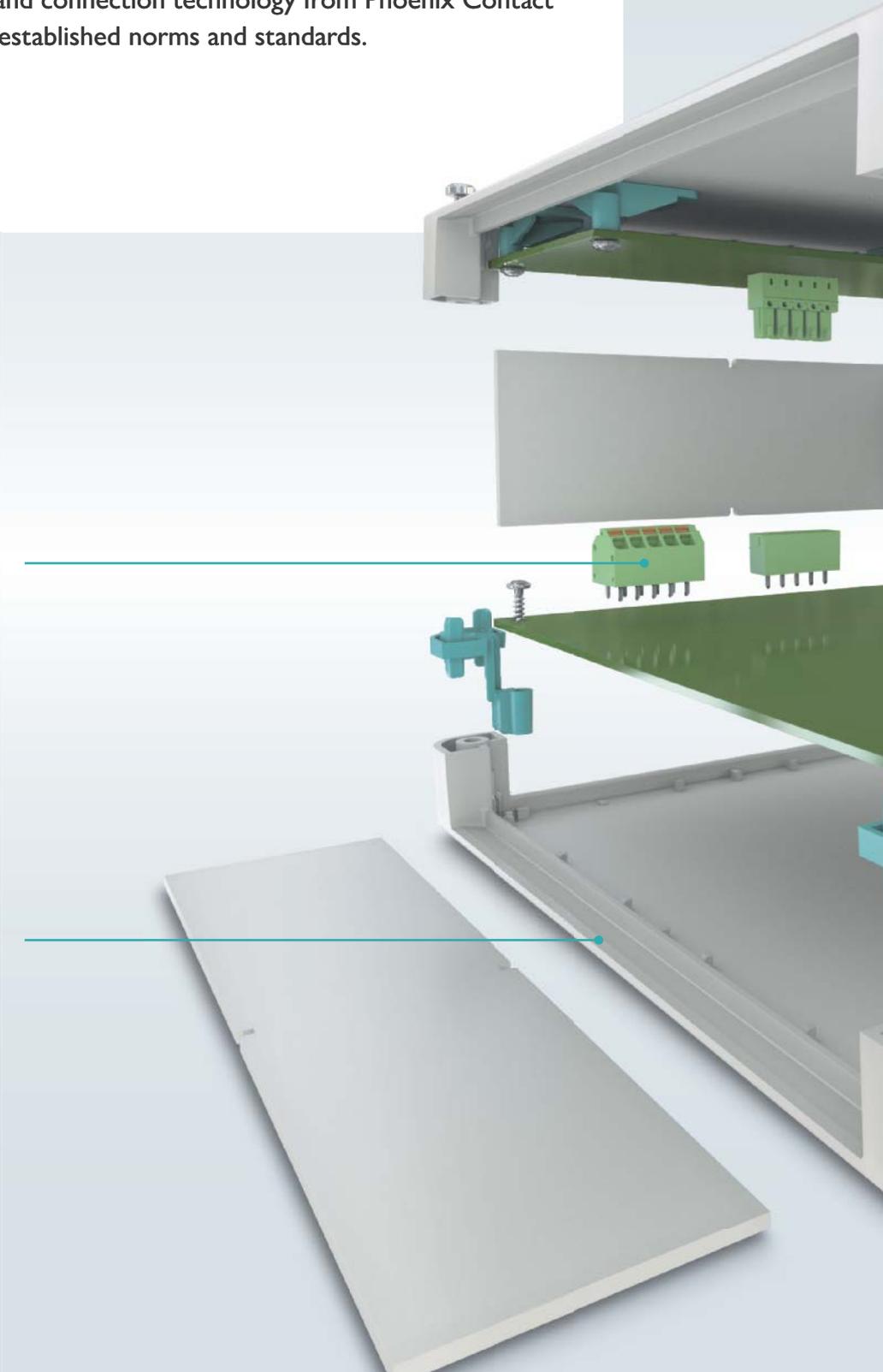
In high-performance embedded systems, software and hardware have perfect interaction. The sensitive electronics need reliable protection and have to be integrated into the communication network using interfaces for signals, data, and power. The high requirements for response times and failsafe performance require high-quality components. Electronics housings and connection technology from Phoenix Contact offer countless solutions based on established norms and standards.

## PCB terminal blocks and PCB connectors

Pluggable and solderable PCB connections with a variety of pitches enable efficient wiring of several printed-circuit boards.

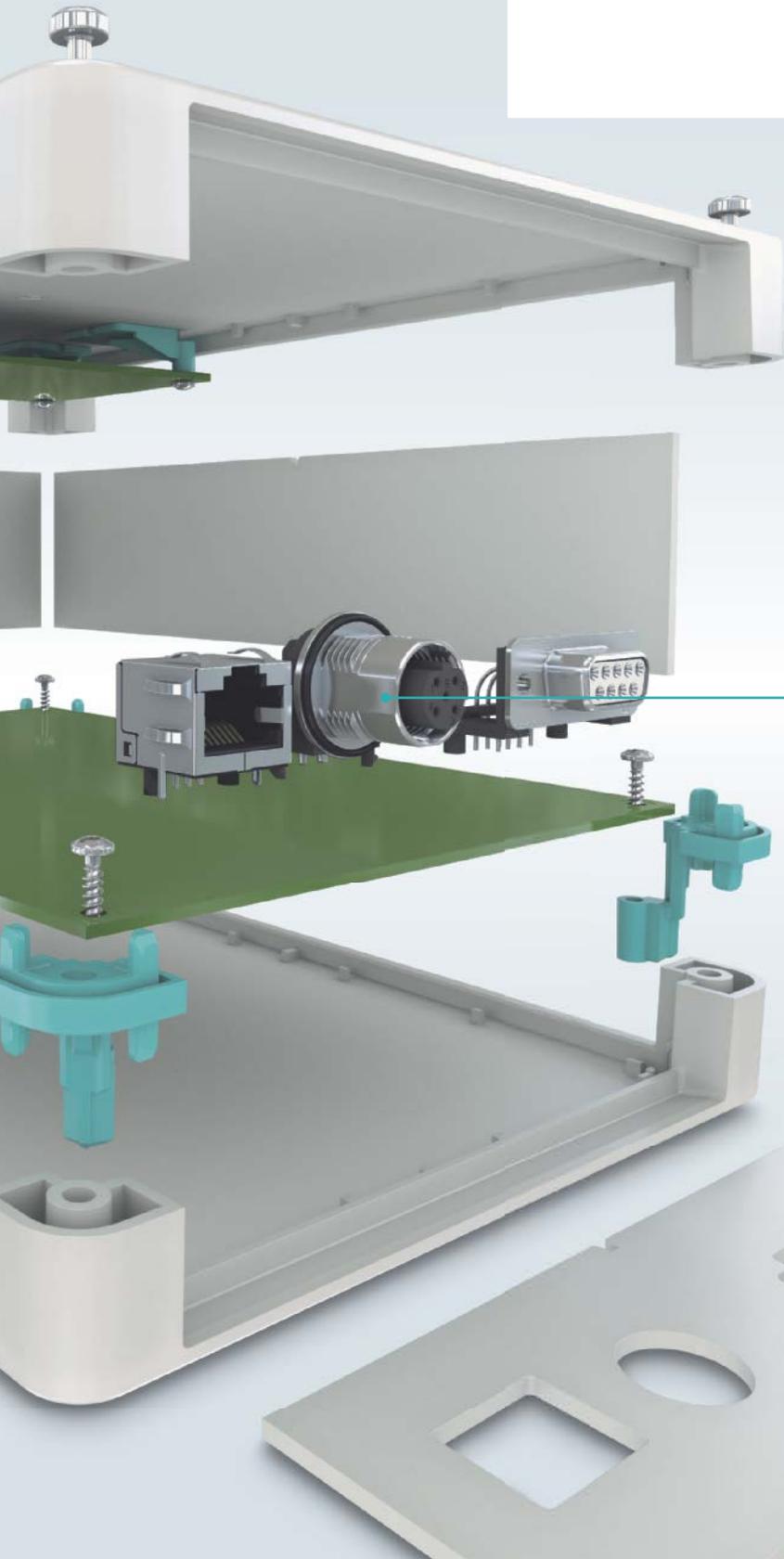
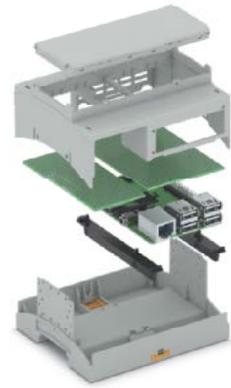
## Electronics housings UCS series

Standard-compliant electronics housings provide flexible solutions for protecting and customizing your electronics.



## DIN rail housings for Raspberry Pi computers

The RPI-BC DIN rail housing is designed to hold Raspberry Pi computers. In addition to a Raspberry Pi board, other PCBs can be accommodated inside the housing in order to integrate additional components and circuits.



## Device and cable connectors

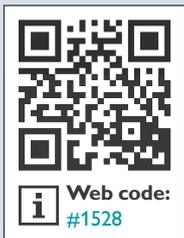
Standardized device and cable connectors transmit signals, data, and power between centralized and decentralized automation components.

## Mechanical processing

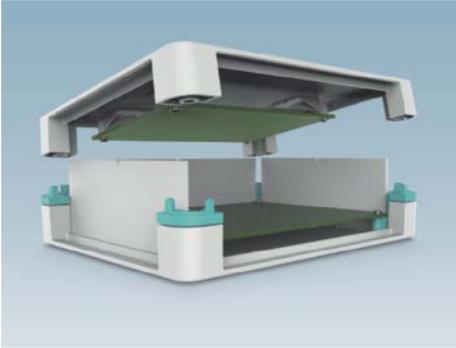
Manufacturing of customer-specific cutouts on each side of the housing.

# UCS universal electronics housings for embedded systems

The universal electronics housings from the UCS series are the ideal solution for embedded systems. The IP40 housings reliably protect PCBs in standard form factor from external influences. Removable side panels enable modular housing solutions in individual heights.

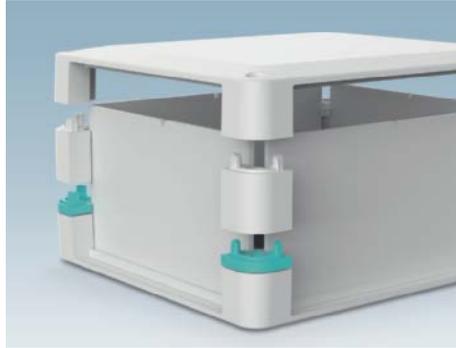


## Advantages at a glance



### Simple PCB mounting

Integrated or flexible PCB holders for variable electronics solutions



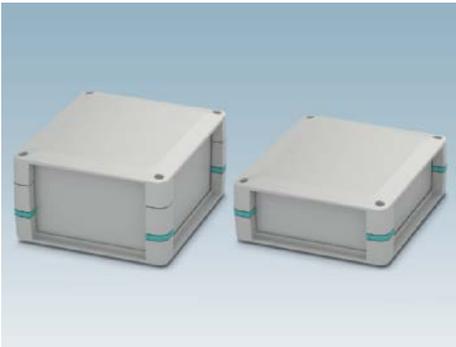
### Design-oriented

Colored functional corners for appealing look and feel



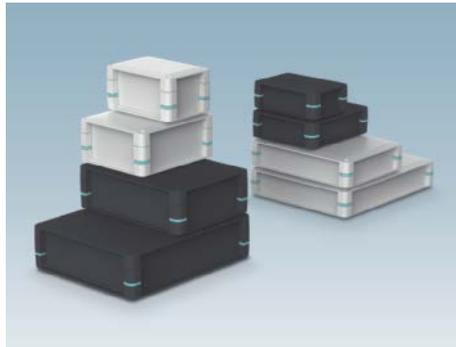
### Numerous versions

Modular system for highest adaptivity and simple storage



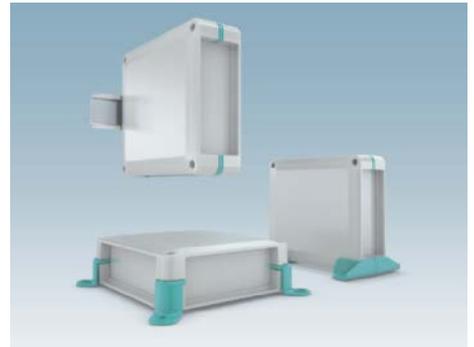
### Uniform side panels

Aluminum or plastic side panels available in two heights and five lengths



### Standardized form factors

Housing half shells with four different surface areas



### Flexible use

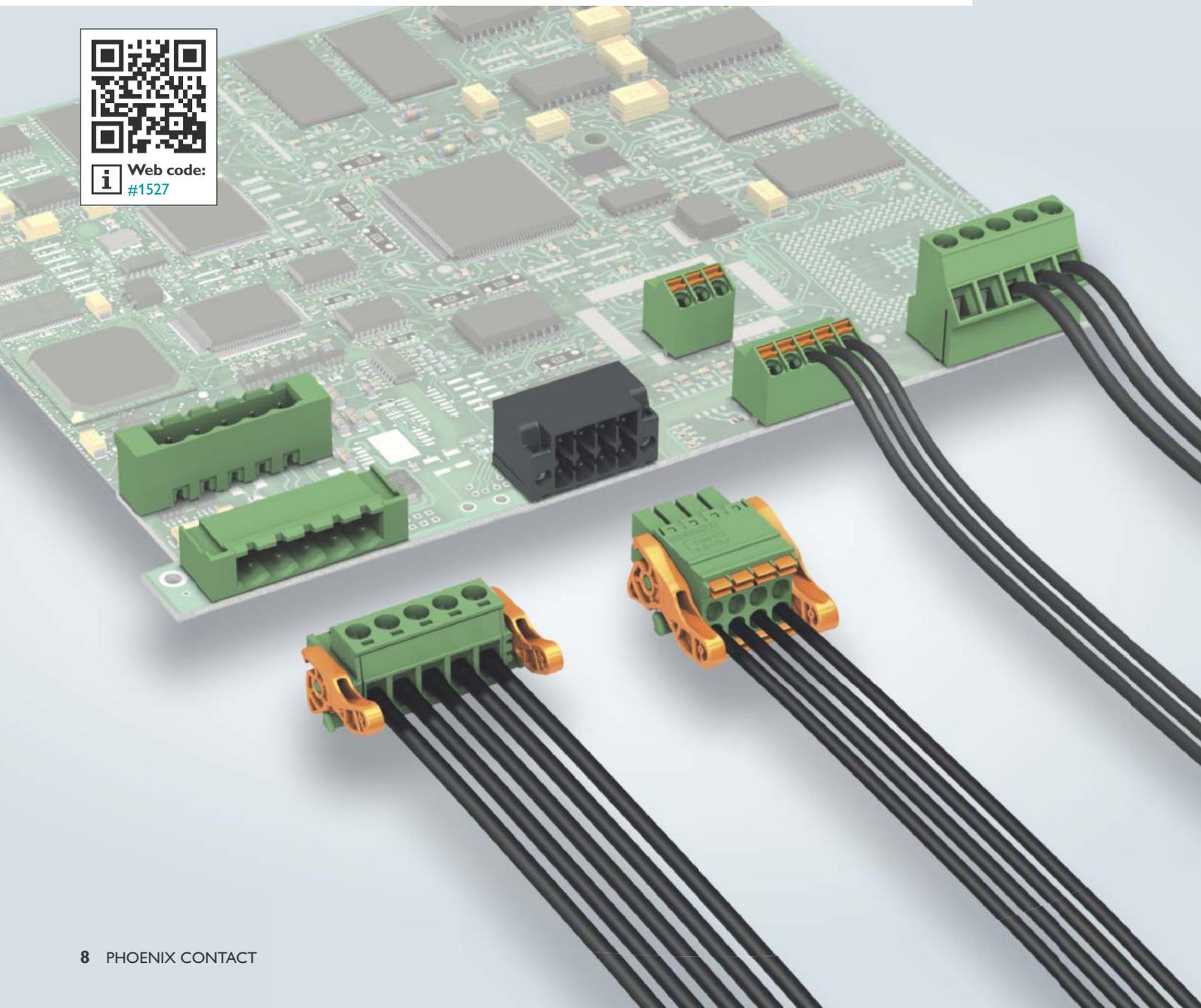
Feet and mounting inserts enable use in desktop, wall or DIN rail applications

# PCB terminal blocks, connectors and panel feed-through terminal blocks

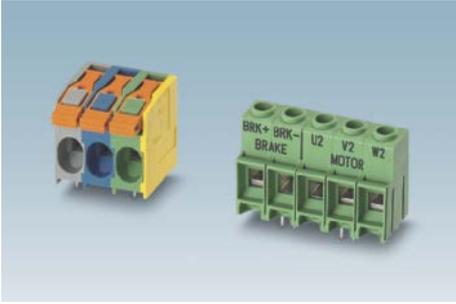
Whether you use a screw connection or Push-in spring connection, as a PCB terminal block or connector, the comprehensive COMBICON product range offers the right IP20 connection technology for your embedded system. Use this for quickly and easily designing the transmission of signals, data, and power.



Web code:  
#1527

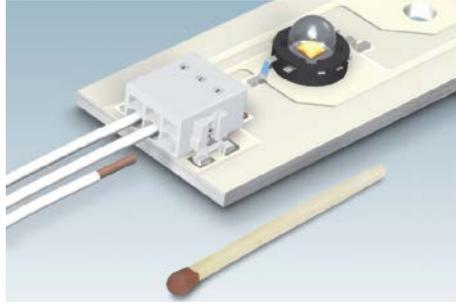


# Advantages at a glance



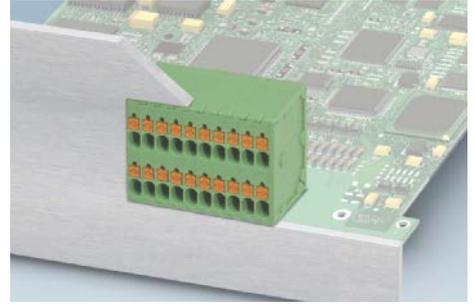
## Individual markings

Printing, marking and color-coding



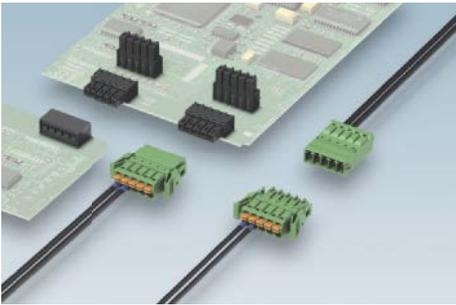
## Compact design

Largest possible clamping space at small component size



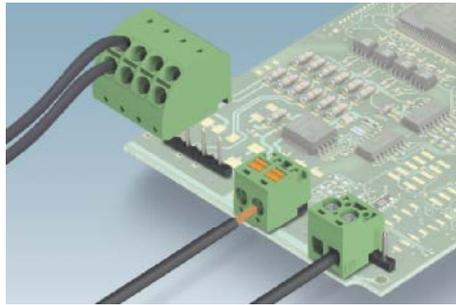
## Easy integration into the front of the device

Unique design and flush end of housing



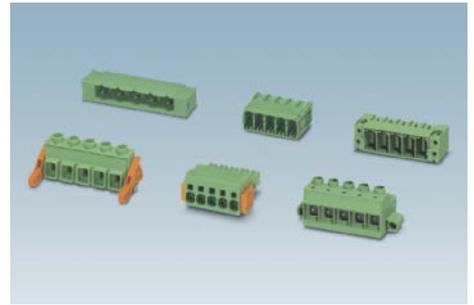
## Numerous possible combinations

Inverted connectors and headers for contact-protected PCB outputs and flying leads



## Cost-optimized pin strips

Straight and angled pin strips for wave and reflow soldering processes



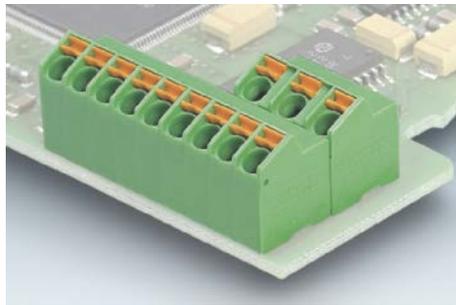
## Innovative locking systems

Screw flange, latching flange, Click and Lock, Lock and Release locking



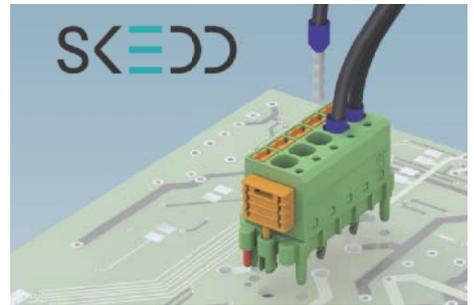
## Mechanical coding

Mismatching is prevented, thanks to special coding tabs and coding profiles



## Multi-row assignment

Sloped conductor exit enables high packing density on the PCB



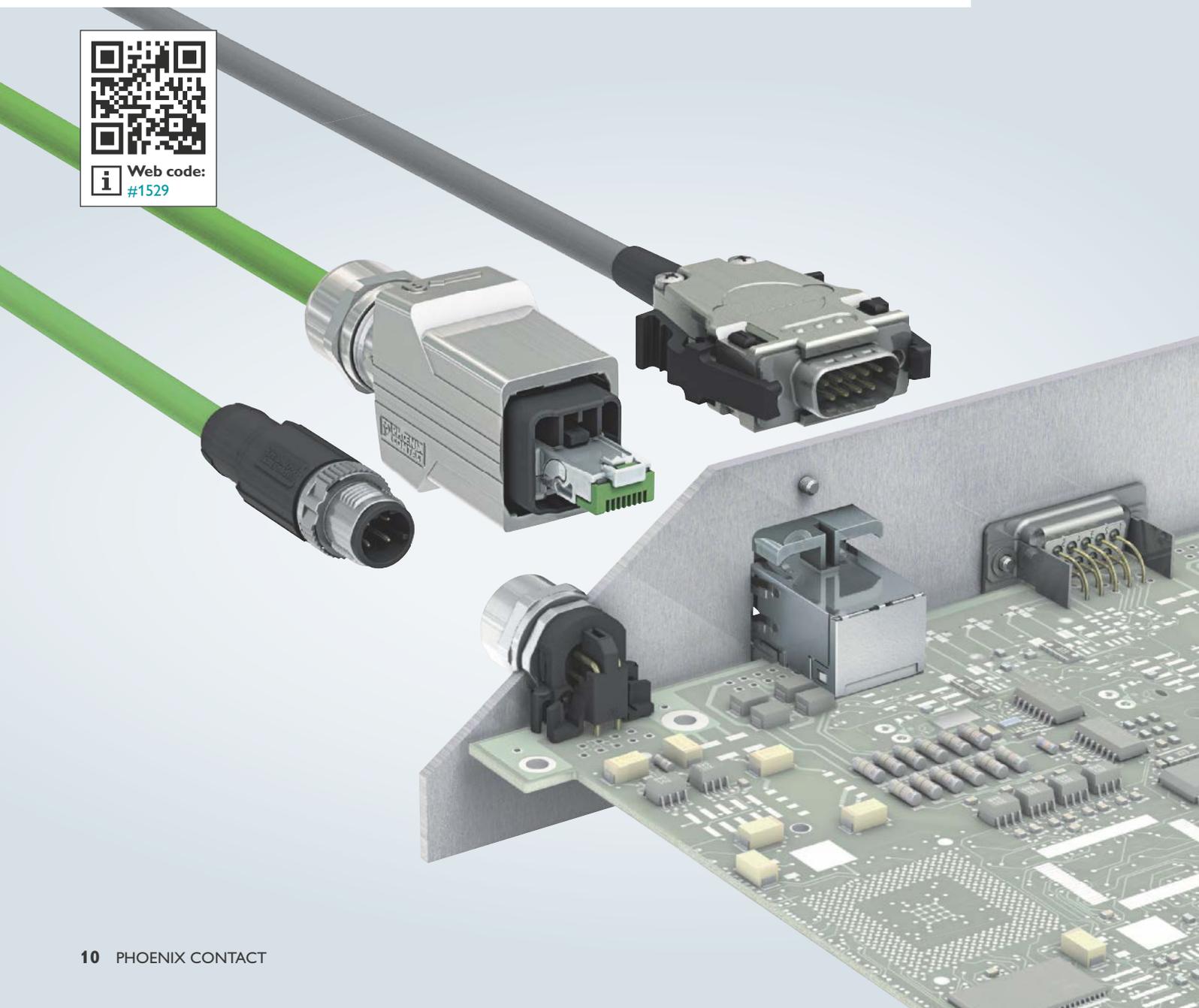
## Tool-free direct connection technology

SKEDD technology for reduced material and process costs

# Unique variety for signals, data, and power

Versatile M5 to M12 circular connectors and data connectors: the comprehensive connector range from Phoenix Contact offers a huge variety of solutions for industrial and semi-industrial applications.

The wide selection of designs and pin connector patterns enables comprehensive connection solutions for devices with data rates up to 10 Gbps. They can also be used to connect signals up to 17 positions and for supplying power up to 630 V and 16 A in the smallest installation space.

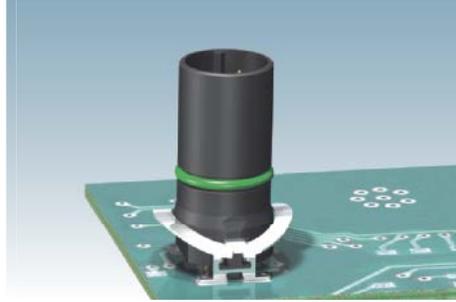


## Advantages at a glance



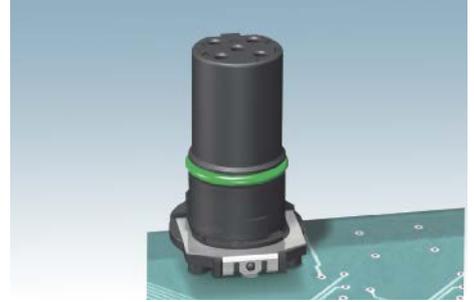
### Maximum mechanical stability

One and two-piece M8/M12 circular connectors for wave soldering processes



### Efficient soldering processes

Two-piece M8/M12 circular connectors for SMT processes



### Simple process integration

Two-piece M8/M12 circular connectors for THR processes



### Reliable seals

Protection for device electronics up to IP67 when not plugged in



### Reliable transmission

Thanks to 360° shield connection and fieldbus-specific cables



### Fieldbus-specific coding

Protection against mismatching, thanks to colored and mechanical, fieldbus-specific codings



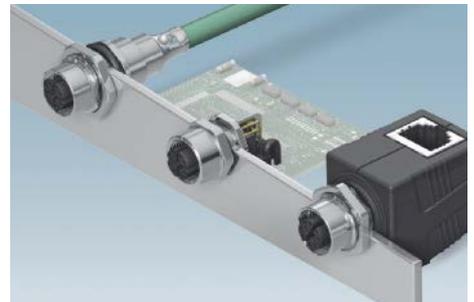
### Fast data transmission

Data rates up to 10 Gbps and components that meet the CAT6<sub>A</sub> standard



### Wide range of plugs

RJ45 to USB and D-SUB to M12



### Flexible device connection

Versatile housing feed-throughs for devices and control cabinets

## In dialog with customers and partners worldwide

Phoenix Contact is a globally present, Germany-based market leader. Our group is synonym for future-oriented components, systems, and solutions in the fields of electrical engineering, electronics, and automation. A global network across more than 100 countries, and 15,000 employees ensure a close proximity to our customers, which we believe is particularly important.

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:  
[phoenixcontact.com](http://phoenixcontact.com)

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