

# Device connections for building automation

Building Intelligence with smart device connection technology



#### Device connection trends in Smart Buildings

Building Intelligence is also changing device connection. In Smart Buildings, different applications need to be networked in a distributed way. To achieve this, standardized device connections are required so that the individual building systems and their applications can communicate with each other quickly and easily. Phoenix Contact solutions enable you to secure your long-term competitive edge in building automation.

**i** Web code: #2917

#### Your advantages

- Smart networking: thanks to corresponding data connectors
- Comprehensive product portfolio: everything from a single source
- Better than the standard: individual device designs
- Shorter development times: with excellent services

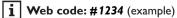


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### Find out more with the web code

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.



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

## Easier work for everyone – thanks to smart device connections

You value quality, safety, and technological progress. With the intuitive connection and housing systems from Phoenix Contact, your devices are optimally equipped for the needs and requirements of your customers, today and in the future. Phoenix Contact solutions enable you to secure your long-term competitive edge in building automation. On the following pages, you will always find the right solution for a wide range of applications.







1 HVAC technology



2 Communication technology



3 Shading and facade



4 Building control



5 Charging points



6 Fire protection technology



7 Energy management



8 Elevator technology



9 Photovoltaics and energy storage



10 Lighting technology



**11** Safety technology

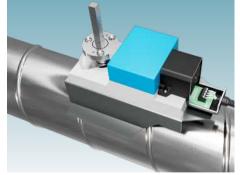
#### Networking HVAC technology made easy

As part of the technical building utilities, heating, ventilation, and air conditioning systems have a huge influence on the functionality, efficiency, and comfort of a building. PCB connections and electronics housings from Phoenix Contact ensure the safe transmission of signals, data, and power, as well as reliable process automation.









#### Solutions for confined spaces

PCB terminal blocks from the SPT and SPTA product series are suitable for small wiring spaces. The THR versions enable process-reliable and cost-effective assembly.



### Solutions for difficult to reach sensors

With the COMBICON PCB connectors from the PTS series, you can connect devices easily and conveniently, even in difficult to reach applications.



### Solutions for compact system controls/DDC

The electronics housings from the BC modular series offer even more flexibility and functionality, from Push-in connection to device operation via touch display.

## High availability of monitoring and safety technology easily guaranteed

In order to ensure permanent and safe building operation, the monitoring and safety technology must be easy to install and maintain. Phoenix Contact offers numerous solutions for safety-critical applications in building technology, such as camera and access control systems, escape door controls, and intrusion detection systems.

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Reliability for emergency lights COMBICON PCB connectors from the

PTS CLIP series with Push-in connection technology are particularly suitable for emergency lights.



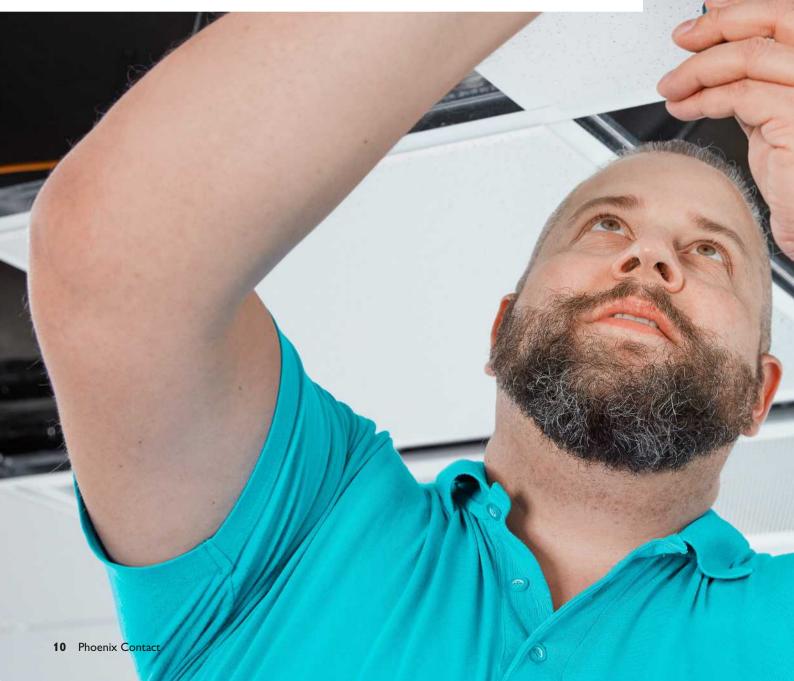
Durability for surveillance cameras

When it comes to the transmission of signals and data, you can rely on the high quality and durability of Phoenix Contact connection technology.

Phoenix Contact 9

#### Precision for fire protection technology

High degree of safety and precise communication: device connection solutions from Phoenix Contact not only make it easier for you to install devices and systems in fire alarm systems, but also ensure the transmission of life-saving information and signals.







### Connect smoke alarms easily and safely

Phoenix Contact offers standard and customer-specific connection solutions for fast maintenance and revision.



### High quality for smoke extraction systems

The SPT and SPTA series versions for the reflow process ensure the cost-effective assembly of your components.



### Easy cascading of smoke extraction controls

Modular electronics housings with DIN rail connector are particularly suitable for cascading modules. This saves you time-consuming cabling effort.

#### Future-proof building communication

Networking all trades on the different interfaces provides the basis for permanent and efficient building operation. That is why device manufacturers around the world value smart solutions and the excellent level of service provided by Phoenix Contact.





#### Diversity for gateways

In order for the communication between trades to work, gateways must serve different interfaces such as RJ45, SPE, coaxial, HDMI, USB, or D-SUB.



#### New technologies for switches

At Phoenix Contact, we focus on new technologies. Single Pair Ethernet (SPE) can be used to cover distances of up to 1,000 m in building technology applications using copper cables.

#### Solutions for smart energy management

Energy efficiency is a real economic success factor. Climate protection is a more global issue than ever before, and one that companies must actively address. Phoenix Contact offers a broad portfolio for smart energy management solutions.





Make installation and revision easier for your customers with fast, intuitive Push-in connections and data connectors.



#### Flexible design for energy measurement and management systems

The ME-IO system housing optimally satisfies the individual requirements of energy and management systems.

#### Smart design of building controls

In Smart Buildings of the future, intelligent and networked IoT devices are the basis for efficient and carbon-neutral operation. Phoenix Contact already supports you in the design-in phase of your development projects with tools, excellent services, and the crucial components. This is how your solutions meet the requirements of tomorrow.



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### Perfection for two-piece room operating units

For applications with two-piece housings, the PTS CLIP series enables quick and easy device installation.



### Smart features for building controls

The BC modular housing series offers everything that modern building controls require, from touch displays to high-speed data connections.

#### Consistent solutions for lighting systems

Demanding tasks in warehouses or outdoor areas require robust yet easy-to-install connectors. With Phoenix Contact, you always have a strong partner for your solution by your side.







Luminaires with high demands

With the PRC product series, Phoenix Contact offers a smart portfolio for luminaire manufacturers who do not settle for anything but the best.



LED module connection in a minimum amount of space

With the PTSM series, it couldn't be easier to install LED modules – even in confined spaces.

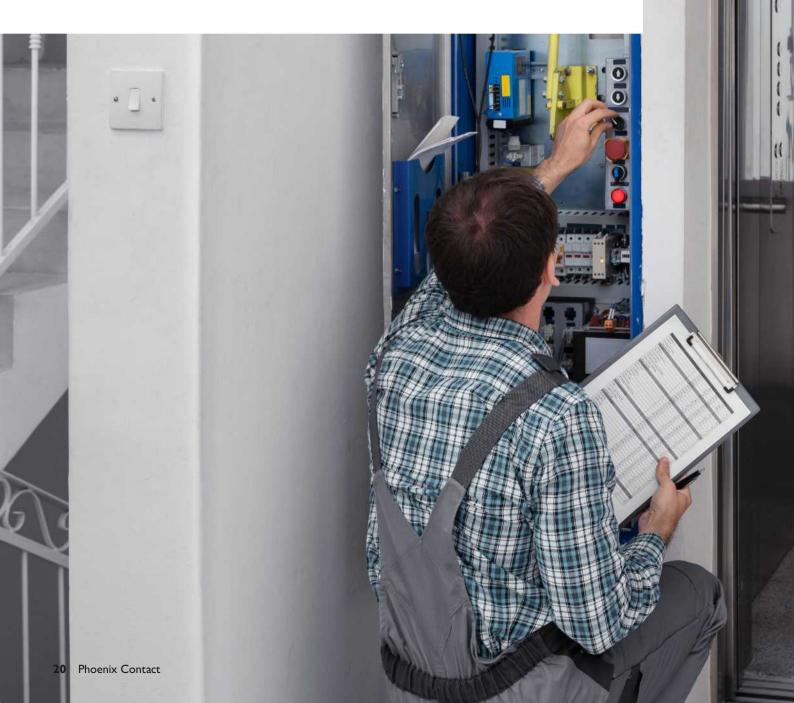


Modular housings for light controls

The new BC modular electronics housings offer even more flexibility, sophisticated design, and functionality for light controls.

## Reaching new heights of technology with the elevator

Whether an existing or new building, it goes without saying that you value high quality and reliability in the manufacture of your devices and components. With modern connection technology and electronics housings from Phoenix Contact, your solutions are always at the cutting edge of technology – today and in the future!









### Elevator control in a compact design

By combining modern lever or Push-in connection technology with BC electronics housings, solutions are available for the challenges presented in confined spaces.

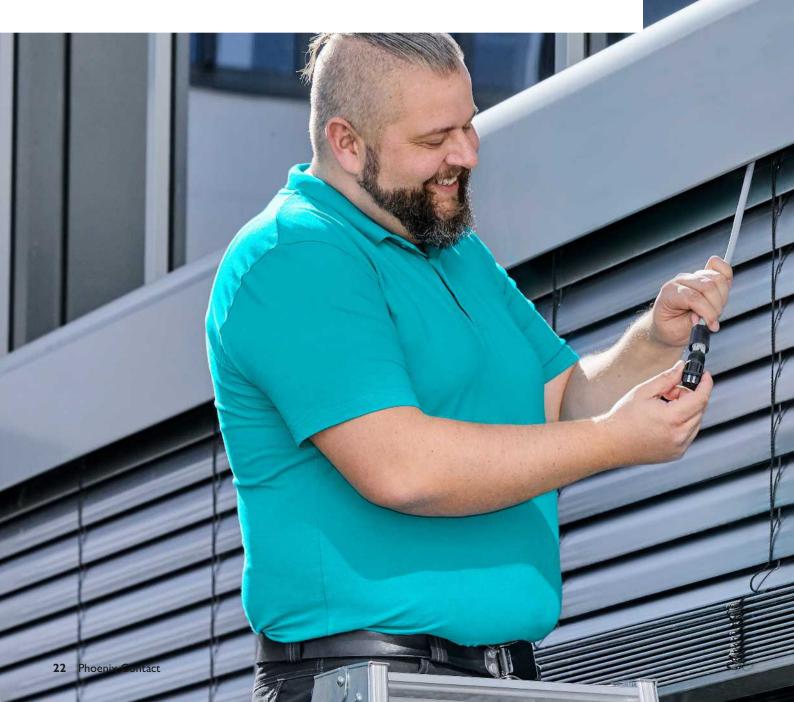


### Fast and safe connection of frequency converters

With the modern spring connection technologies of the SPTA or LPTA series, frequency converters can be wired with long-term stability in no time at all.

#### Shade always perfectly regulated

With the right positioning of the slats, natural light enters the room without heating it up too much. Your shading systems contribute to the comfort and energy efficiency of buildings every single day. Phoenix Contact supports you with smart device connections and modular electronics housings for indoor and outdoor use.





### Window covering controls and actuators in smart design

By combining Push-in connection technology with BC electronics housings, controls can be installed in unbeatable time.

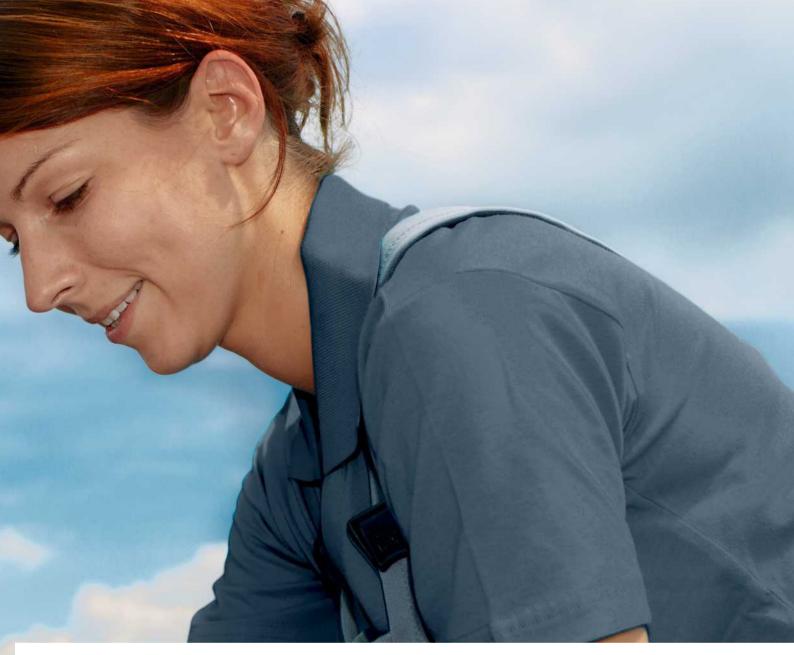


### Compact connections for window covering drives

The SPTA series versions for the reflow process ensure the cost-effective assembly of your SMI modules for window covering drives.

## Clever connection solutions for photovoltaic and energy storage systems

From the photovoltaic panel and the string combiner box to the inverter: Phoenix Contact offers numerous connection solutions that are perfectly tailored to the requirements of photovoltaic systems and energy storage systems. These were designed with durability and quick and easy installation in mind.





### Flexibility for photovoltaic panel connection

Cable photovoltaic systems easily and reliably with SUNCLIX connectors. The versions with crimp connection are ideal for automated manufacturing processes.



### Connection convenience for inverters

Install modules quickly, conveniently, and safely for voltages up to 1,500 V, even in confined connection situations.



### Variety of solutions for energy systems

Connection solutions for energy storage and hybrid inverters for efficient integration of solar systems and maximizing self-consumption.

## Installation, startup, and maintenance of charging points made easy

The modular design of electronics housings and tool-free lever Push-in connection technology ensure the easy installation, startup, and maintenance of your components.







### Power distribution for home charging stations

With installation connectors from the PRC series, home charging stations can be connected in no time at all. With high degrees of protection up to IP69, reliable power distribution is ensured even under demanding environmental conditions.



### Variety of solutions for charge controllers

The ME-IO family of electronics housings optimally adapts to the technical requirements. It integrates Push-in connection technology, bus connectors, or a touch display in a modern look.

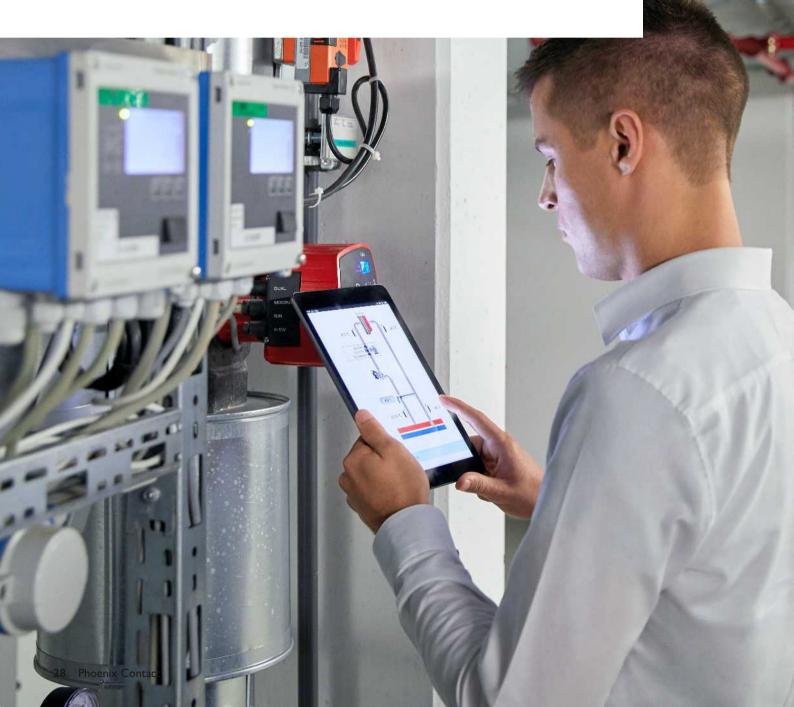


### Fast connection for home charging stations

With the LPT and LPC product series, intuitive and fast installations are possible – conductor connection is completely tool-free.

#### Our portfolio in detail

Smart device connections make work easier for everyone – from electrically skilled persons to the operating company. PCB connections and electronics housings from Phoenix Contact ensure the safe transmission of signals, data, and power, as well as reliable automation.



#### Product overview



#### PCB terminal blocks

Reliable conductor connection for transmitting signals, data, and power.





#### PCB connectors

Reliable connectors for conductor connection on the PCB.

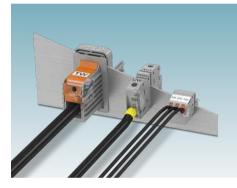




#### Board-to-board connectors

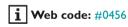
Safe data transmission between PCBs up to 20 Gbps.

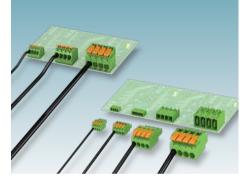




High-current feed-through terminal blocks

Panel feed-throughs for power connections up to 232 A.





Lever connection technology Intuitive and tool-free device connection.





HDMI and USB connectors Safe data transmission for media technology.

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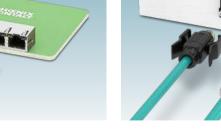
Connectors for Single Pair Ethernet

Advanced networking of building technology.



RJ45 connectors Optimal networking of building technology.

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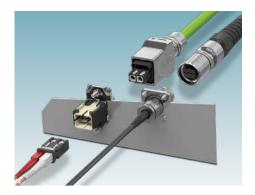


V6 and V14 connectors Robust Ethernet components for field use.

**i** Web code: #2922



#### Product overview



FO-based data connectors Flexible and consistent networking with fiber optics.

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FO distributor solutions FO distributor boxes for demanding environments.





Coaxial connectors Optimal transmission of HF signals.





D-SUB connectors Proven cabling for serial and parallel interfaces.

i Web code: #2860



Photovoltaic connectors Connection technology for PV systems.





Connectors for energy storage Connection technology for busbars and battery poles.





Installation connectors Connection technology for power distribution.





BC modular electronics housings Housings for compact controllers.



ICS modular electronics housings Housings for energy and safety technology.



Web code: #2948







ME-IO multifunctional housings Housings for building automation.

**i** Web code: #0308



ME MAX multifunctional housings Housings for energy and safety technology.

**i** Web code: #0903



ME multifunctional housings Housings for energy and safety technology.

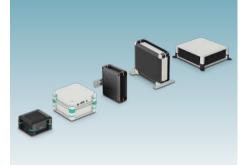




ECS outdoor housings Housings for harsh conditions.







UCS universal housings Housings for universal use.





Customer-specific electronics housings Housings for individual requirements.

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#### New customer-specific product developments

You have a challenge, we have the solution. We will support you throughout the product lifecycle, from the initial idea right through to the realization of your connection or housing solution. Our experience, built up over many years, guarantees that each new development will meet stringent market requirements.

Whether you are looking for special designs or complex electromechanical system solutions, Phoenix Contact will develop your tailored product using processes that have been proven many times over. Shape the innovations of tomorrow with us.



- Expert consultation on product requirements
- Detailed design of your desired concept

- Development of the ideal production concept
- Product qualification at our in-house laboratory
- Certification of the solution for your application
- Targeted project management right through to the start of series production

#### From the initial idea right through to series production



#### Preliminary clarification

Talk to us as your partner who understands the requirements and speaks your language. In the shortest time, we will provide you with:

- Personal consultation with experienced development engineers
- Joint technology workshops
- A technical concept, with inspection samples as an option
- A non-binding quotation



#### Conceptual design

Together, we will develop the optimal solution for your product in accordance with your specific requirements. Take advantage of the benefits of our proven conceptual design sequences:

- Coordinated and approved technical specification
- Regulated test plan, including laboratory tests and approvals
- Comprehensive documentation



#### Production-ready

Decades of experience and locations throughout the world enable flexible and absolutely reliable development sequences. Benefit from working with Phoenix Contact through:

- High-level development and laboratory expertise
- Simultaneous engineering
- Standardized project management and quality assurance
- Application-specific standards and approvals



#### Production and logistics

We guarantee that your products will always arrive on time and in accordance with processes – regardless of batch quantity. Your advantages:

- High-level vertical integration and in-house tool shop and machine building facilities
- Flexible production planning, from manual assembly right through to mass production
- Customer-specific identification and packaging
- Global production and logistics network



#### Product lifecycle

Whether you are developing your products further, changing technical details, or want to discontinue them, we will accompany you throughout the entire product lifecycle:

- Certified quality and environmental management
- Holistic approach to the entire value added chain
- One contact person throughout the entire product lifecycle



#### Contact

Contact us at Email: dcsolution@phoenixcontact.com



#### **Excellent** services

Along your development process, Phoenix Contact offers excellent services that make a difference. Discover how modern configurators, comprehensive technical data, and free product samples can make your daily work easier. As your partner, we will support you in the design-in process all the way to the development of customized connection and housing solutions.

#### **The easy way to more choice** Choose online from 60,000 products and find the right

- solution quickly:
  Intuitive filter and search
- functionsComprehensive technical data and downloads such a
- data and downloads such as drawings and 3D models
- Personal on-site consultation

#### The easy way to more individuality

Customize your products with colors, printing, and special designs:

- Customer-specific versionsCustomized new products
- Intuitive online configurators

#### The easy way to more flexibility

Use our different procurement channels and benefit from worldwide availability:

- All products can easily be ordered online
- Free online sample service
- Globally reliable logistics through direct shipping or distribution

#### The easy way to more expertise

Always stay up to date on technologies and trends with us as your reliable partner:

- Technology, industry, and design-in experts at your side
- We will provide you with custom training programs – either on site or digitally
- Free webinars, seminars, and video tutorials

Further information on Phoenix Contact services: Simply enter the web code in the search field on our website.

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Simple selection with filters and technical data



There is a separate detail page for every product



A data sheet is available to download for every item



With our global network, Phoenix Contact is always nearby



Device connection technology can be comprehensively configured



Housing parts and connection technology are easy to configure



Cable and assembly systems can be configured easily



Phoenix Contact supports you from the initial idea right through to series production



The online sample service is available in a large number of countries



Find the desired product quickly with intuitive filters



Product samples are available with free shipping



Reliable logistics worldwide



Keep up to date on new products, trends, and technologies



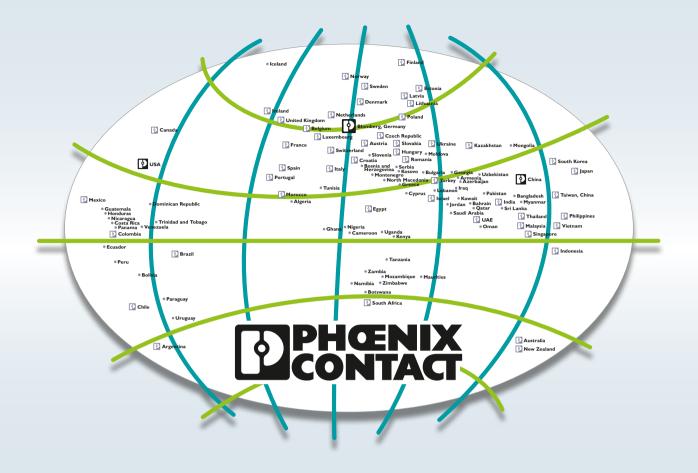
We will provide you with custom training programs – either on site or digitally



Stay updated via Phoenix Contact apps and the Phoenix Contact YouTube channel



Remain reliably updated with the Phoenix Contact newsletter



### Open communication with customers and partners worldwide

Phoenix Contact is a global market leader based in Germany. We are known for producing future-oriented products and solutions for the electrification, networking, and automation of all sectors of the economy and infrastructure. With a global network reaching across more than 100 countries with over 20,000 employees, we maintain close relationships with our customers, something we believe is essential for our common success.

Our wide range of innovative products makes it easy for our customers to implement the latest technology in a variety of applications and industries. This especially applies to the target markets of energy, infrastructure, industry, and mobility.

You can find your local partner at

phoenixcontact.com

