

## **Complete Cabinet Confidence**

Your trusted partner for the control cabinet







#### **VALUE-ADDED SERVICES**

- Fully assembled and marked terminal strips with accessories.
- Order complete assembly under a single article number.
- Simply install and connect.
- Reduce the effort of materials and stock management.
- Flexible supply chain management.



# COMPLETE DIN-RAIL ASSEMBLY DESIGN

- Intuitive user interface for configuring terminal strips with intelligent functions such as auto correction, speed marking, or 3D visualisation of projects.
- Professional software for the marking of labelling materials for terminal blocks, conductors, cables, devices and systems.
- Perfect integration, thanks to optimised interfaces to all common CAE programs and spreadsheet formats.
- Equipped with an official template designer which allows users to create their own markings and adapt existing material descriptions.

# COMPLETE PRODUCT PORTFOLIO

- Optimises control cabinet design and construction.
- Technologically leading products.
- Minimise logistics costs by reducing the variety of parts, thanks to standardised marking, bridging, and testing accessories.



#### **FIVE FUNCTIONAL AREAS**



#### Power Reliability

The heart of your installation, all control systems are dependent on being properly powered and protected. Surge and circuit protection, UPS backup, and redundant power solutions are the foundation on which reliable control systems should be built.



#### Connectivity, Switching and Conversion

Never take a good connection for granted, the connection of those wires, the switching and/or isolation of the signals are only as reliable as the quality of the terminations and electronics.



#### Automation, Networks and Safety

From single components to complete integrated systems, Phoenix Contact provides cost-effective, reliable solutions for Industrial networking, Automation and Safety.



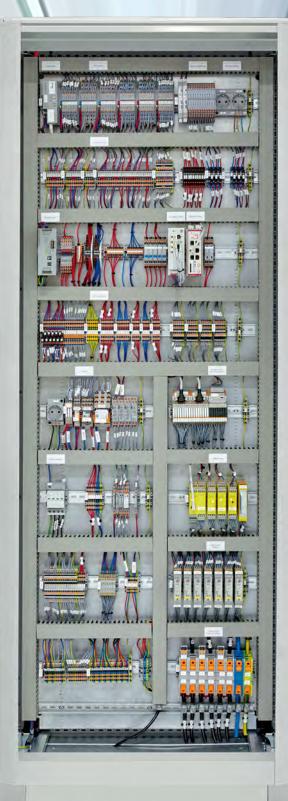
#### **Shopfloor Productivity**

Efficiently building a quality control cabinet starts with what you use to build it. A thoughtful selection of products to reduce cost and save time translates directly to the bottom-line profitability of any shop floor.



#### **Device Connectors**

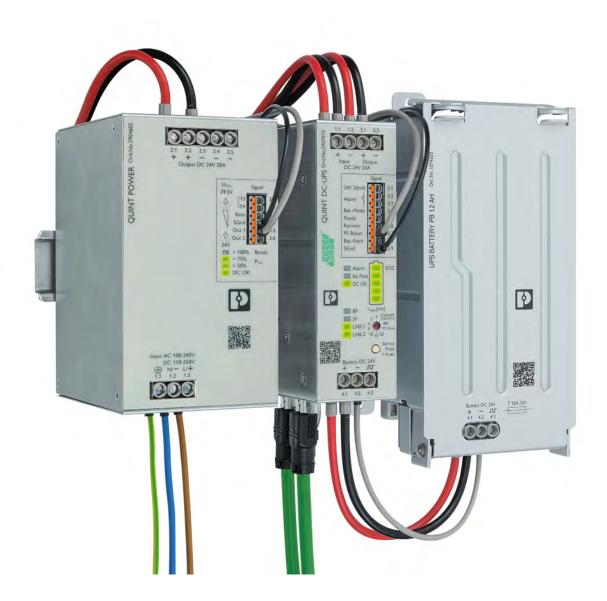
Discover our wide range of new products for the transmission of signals, data, and power. Reliable and cost effective solutions including Circular Connectors, Data ports, Connectors for Energy Storage and many more.





## Power Reliability

Don't overlook the basics. No matter how sophisticated your control system, a system outage is only one power disturbance away. Logic platforms are dependent on being properly powered and protected. Surge and circuit protection, quality power supplies, UPS backup, and redundant power solutions are the foundations on which reliable control systems should be built.







#### Protection from transient overvoltages

Power systems are always vulnerable to transient events. Though these events are unavoidable, taking the initiative to utilise surge protection will ensure the best chances for reliable power. With a variety of options, we provide high feature-set products that provide maximum system protection and reduce maintenance time and long-term cost of ownership. We also recognise the need for basic protection for applications that have only minimal features.



#### DIN rail power supplies

Supply your application reliably with our power supplies. Choose the ideal power supply that meets your needs from our wide range of different product families. The DIN rail power supply units differ with regard to their design, power, and functionality. They have been optimally tailored to the requirements of various industries, including the automotive industry, machine building, process technology, and shipbuilding.



#### Uninterruptible power supplies (UPS)

Mains interruptions can have serious consequences. Do not take any chances, you can rely on our uninterruptible power supply (UPS). A UPS supplies power even in the event of mains failure and protects your system against supply interruptions. We offer UPS solutions for DC and AC applications where the functionality and design are optimally tailored to the require



#### Protection from circuit overcurrents

Having the ability to remove a faulty circuit quickly is imperative to maintaining the uptime of your power system. Phoenix Contact offers a wide variety of circuit protection products for short circuits and thermal overloads. Circuit breakers and fuses easily integrate protection into your control system, improving overall operational efficiency and system reliability.



#### Monitoring and metering

By monitoring machines and processes continuously, any change in the health of the equipment is quickly detected. Maintenance events can then be planned – and costly, unexpected shutdowns avoided altogether. Phoenix Contact offers a wide range of monitoring products to increase your power system's reliability, including voltage and current transducers, Rogowski coil solutions, and energy meters.

Benefit from predictive maintenance with ImpulseCheck, giving you real-time measurements of surge currents and transient overvoltages, allowing you to continuously monitor the condition of your system.



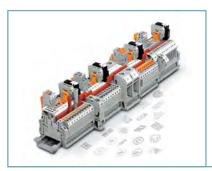
## Connectivity, Switching and Conversion

Never take a good connection for granted. Every wire in your control cabinet is there for a reason. The connections of those wires - via push-in, screw, spring clamp, IDC, or crimp - are only as reliable as the quality of the terminations.

Every signal has a specific purpose and not all signals are the same. Analog signals, digital signals, and motors all require the right product to ensure that the signal gets the job done.







#### Terminal blocks

We invented the first modular terminal block nearly 100 years ago and have continued to innovate ever since. Today we offer terminal blocks for every industrial application, utilising multiple connection technologies. The CLIPLINE complete system provides you with a uniform range of accessories for all connection technologies. The cross-compatibility of this system saves you time and money when creating your terminal strips.



#### Field connectivity

Phoenix Contact offers pre-molded cable assemblies for connecting these power, data, and control signals. Versatile M5 to M58 circular connectors, data and photovoltaic connectors offers a huge variety of solutions for industrial and semi-industrial applications. Industrial connectors from the HEAVYCON complete series are resistant to dirt, water, vibrations, and high levels of mechanical strain up to IP69K.



#### Relays and logic modules

When it comes to switching, isolating, monitoring, amplifying, or multiplying, we provide support in the form of clever relays, optocouplers, and logic modules. Whether solid-state relays, electromechanical relays, coupling relays, optocouplers, monitoring relays, or timer relays and logic modules, you will find the right relay for your application here.



#### Motor switching and control

Motor starters switch and reverse motors quickly and reliably. Our hybrid motor starters replace a conventional reversing contactor and the motor protection with a single device, thanks to the CONTACTRON technology by Phoenix Contact. The Speed Starter is the new device class between motor starters and frequency converters with a particularly intuitive operation.



#### Analog signal isolation and conversion

Safely isolate and/or convert analog field signals in applications commonly found in temperature- or level-sensing applications with our industry-leading signal conditioners. Analog signal conditioners are offered in narrow, feature-rich versions for standard applications, as well as versions for installation in hazardous and explosive environments.



## Automation, Networks and Safety

Smarter factories and convergences with industry 4.0 are increasing the demand for remote access and the collection of real-time data. With this power comes responsibility. In a single network, everything is vulnerable. Intelligent network infrastructure starts with the selection of switches, routers, wireless, and security components to harness an opportunity and minimise risk.







#### Ethernet switches

Phoenix Contact offers unmanaged ethernet switches with a wide variety of port counts, different form factors, and fiber capabilities. Power over Ethernet (PoE) for devices like cameras and RFID readers is easily integrated into your network topology. Additionally, a wide array of managed ethernet switches enables you to manage data traffic across networks, as well as provide advanced features like redundancy and network diagnostics.



#### Wireless ethernet

WLAN technology from Phoenix Contact uses 802.11n technology, providing up to 300 Mbps, perfect for most common industrial applications including remote access of an HMI, uploading or downloading of new PLC code, and video surveillance. Two form factors are available: a robust IP20 DIN option and an IP65 option, designed to be mounted on an enclosure or an Automated Guided Vehicle.



#### Network security

Protect your systems against unauthorised access by people or malware. Industrial routers from Phoenix Contact protect your network with a powerful, flexible, and fast firewall. Packed with advanced networking features, these routers allow your industrial network to securely and easily connect to an enterprise network without IT intervention.



#### Routing and remote access

Applications for remote maintenance and secure SCADA are available through Phoenix Contact products and services. For remote maintenance applications requiring temporary connectivity to a machine or system deployed anywhere in the world, the mGuard Secure Cloud provides easy and reliable access to equipment such as PLCs and HMIs via wired and cellular networks. For secure SCADA and critical infrastructure applications, our full portfolio of VPN and firewall products enables you to deploy large-scale networks while maintaining a high level of security for protection from external threats.



#### Wireless I/O and serial

Trusted wireless technology allows easy, reliable transmission of I/O and serial data. A simple wirereplacement option, Phoenix Contact's Radioline gives you a quick and cost-effective wireless solution where it is too costly or not desirable to run wire.



#### System visualisation

Phoenix Contact offers ethernet-enabled HMI operator panels for simplified connection to PLCs and PACs (Programmable Automation Controller). Free programming software allows for the design of user-friendly screens, and supports advanced features such as alarming, trending, logging, and recipe handling. Importing asset tags can be done with just a few mouse clicks.



#### Ethernet switches for PROFINET RT and IRT

Phoenix Contact offers ethernet switches for PROFINET RT and IRT applications, covering all levels of conformance classes. The switches provide optimum deployment and integration functions for all the PROFINET automation and engineering systems via Discovery and Configuration Protocol (DCP) for device addressing, PROFINET Device (PDEV) support with available device-specific profiles, and Link Layer Discovery Protocol (LLDP) for topology detection. The integrated, high-speed Media Redundancy Protocol (MRP) ring prevents network outages and adverse effects to the control process in the event of a connection failure.



#### Remote I/O

Let Phoenix Contact help you monitor and control I/O via common industrial protocols like Modbus, PROFINET, PROFIBUS, EtherCAT, and EtherNet/IP. Whether in the cabinet (IP20) or in the field (IP67), Phoenix Contact offers several I/O variants to meet all your application requirements, including standard digital and analog I/O, as well as safety, intrinsically safe, and special-function applications.



#### Industrial PC/HMI

Industrial PCs from Phoenix Contact are available in a variety of performance classes, screen sizes, and form factors, such as blind-node configurations. Their powerful CPUs, fanless design, and nonrotating, solid-state drive options make them rugged and reliable, even in the most demanding applications. A wide variety of HMI operator panels, including wide-temperature, sunlight-readable versions, connect easily to third-party PLCs and programming. This allows you to display vital machine information and operate simple tasks.



#### PLCnext Technology

PLCnext Control devices enable you to work flexibly with your preferred programming languages, whether IEC 61131-3 or high-level languages. Unlimited flexibility, with the quick and easy integration of open-source software and apps, current and future communication standards, and intelligent networking through connection to the cloud afford maximum freedom for your transition into the digital age.



#### **PLCnext Store**

PLCnext Store is a new repository for libraries, applications, and solutions for PLCnext Control. Users can access free applications and libraries and create their own to share. It is our goal for the PLCnext Store to become a comprehensive online marketplace for users and suppliers around the world. The PLCnext Community provides information on all aspects of PLCnext Technology. For example, discover application examples, instructions for use, further instructions, tutorials, training videos, and FAQs, as well as software and firmware downloads.



#### Proficioud – The IoT platform

Proficioud is the optimum platform for IoT-based automation. Proficioud can be used to set up flexible, optimised processes and integrate third-party applications. Based on an open platform, even manufacturing companies and service providers can establish their own web applications, as well as develop and operate services and mobile applications.



#### Conventional PLCs

Programmable Logic Controllers (PLCs) from Phoenix Contact are scalable from a simple RTU or data logger to bumpless, redundant, high-performance automation packages for the most demanding applications. Program in accordance with IEC 61131-3 using PC Worx.



#### Stand-alone controllers

Phoenix Contact's programmable relay system is a unique alternative to traditional smart relays. Our approach adds a terminal logic controller to eight terminal block relays with a real time clock. The result is a block of 16 I/O points and expandability of up to 48 points, all with access to replaceable relays. You have the ability to individually select your own relay and if your relay fails - replace the relay and not the entire controller. This programmable relay system is perfect for stand-alone automation tasks.



#### Distributed safety networks

Instead of adding safe control and redundant processors to the most expensive part of the control system – your PLC – Phoenix Contact puts the safety processing power into a narrow slice of I/O. Not only does this remove an immense cost barrier, but now safety can be added to standard PLC networks and distributed as needed on standard controllers via EtherNet/IP, PROFINET, PROFIBUS, and Modbus TCP protocols.



#### Basic safety controllers

Safety controllers are ideal for applications using multiple standard safety sensors, as well as applications that need advanced or unique safety functionality. Using simple, drag-and-drop, preconfigured function blocks, configuring safety logic is easy with Phoenix Contact's completely free software. Finally, view safety online by connecting a network gateway module to get status bits back via Modbus TCP, EtherNet/IP, PROFINET, and PROFIBUS protocols.



#### Safety relays

Phoenix Contact offers safety relays for every safety application: from traditional safety relays with a variety of coil voltage ranges and contact counts, to multifunction safety relays that allow for the independent connection of one, two, or three safety sensors, including e-stops, gates, and light curtains. When you need the safe switching of safety circuits, you need Phoenix Contact.



#### Intrinsically safe isolators

Intrinsically safe isolators are a safe link between control in a safe area and field-level devices in a hazardous location. They provide industry-leading accuracy for measured values and control signals that must be kept electrically isolated. As a link between control and field-level devices, intrinsically safe isolators serve as safe power limitations in potentially explosive areas up to Class I, Div. 1, and Zone 0. Phoenix Contact offers versions with all basic functions: analog in, analog out, digital in, digital out, and temperature. The product range of our 12.5mm wide MACX Ex intrinsically safe isolator comprises one- and two-channel intrinsically safe isolators, all of which feature a unique T-bus connection system for easy power bridging.



## Services and support available from Phoenix Contact

Benefit from the comprehensive service and support that is available for our products and solutions. We will provide you with support throughout the entire lifecycle as well as in all phases of your project.

Benefit from our many years of industry and product expertise, our outstanding global logistics network, and our expert advice.





## Shopfloor Productivity

Time is money. Efficiently building a quality control cabinet starts with what you use to build it. Quick, flexible marking systems, automated tools and hand tools, cable/ wire management, and cabinet accessories are often overlooked methods for reducing errors and cutting commissioning time. The thoughtful selection of these "secret weapons" translates directly to the bottom-line profitability of any shopfloor.

www.phoenixcontact.com/en-au/industries/control-cabinet-building







#### Planning and marking software

Increasing productivity starts with a good cabinet design. Phoenix Contact's cabinet design and marking software package work on all our printers. This allows you to easily design a DIN rail assembly, add accessories to components, and run auto corrections to ensure you have a correct layout with all the necessary end covers and end clamps.



#### Identification systems

When it comes to printing, we offer a full line of identification printers to handle desktop or mobile applications for marking terminal blocks, wires, and equipment in high or low volume. Our desktop line includes versions using laser, UV cured ink, and thermal transfer technology. From your office to the field, we have all your printing needs covered.



#### Industrial tools

Phoenix Contact offers a variety of tools to assist with all facets of control cabinet assembly, including the painstaking task of wire termination. Choose from a variety of manual and semi-automatic wire cutting, stripping, and ferrule crimping tools. Selecting our electric bench-style devices can not only save your hands but possibly your bottom line. Trust Phoenix Contact tools to bring everything in your cabinet together.



#### Cable management and installation

Easily route large amounts of wire in an organised way. Narrow, finger-channel wire duct and matching covers are available as a single part number for convenient ordering. In addition, we have a variety of cable ties, cable routing, and protection hoses that include plastic and stainless steel options.



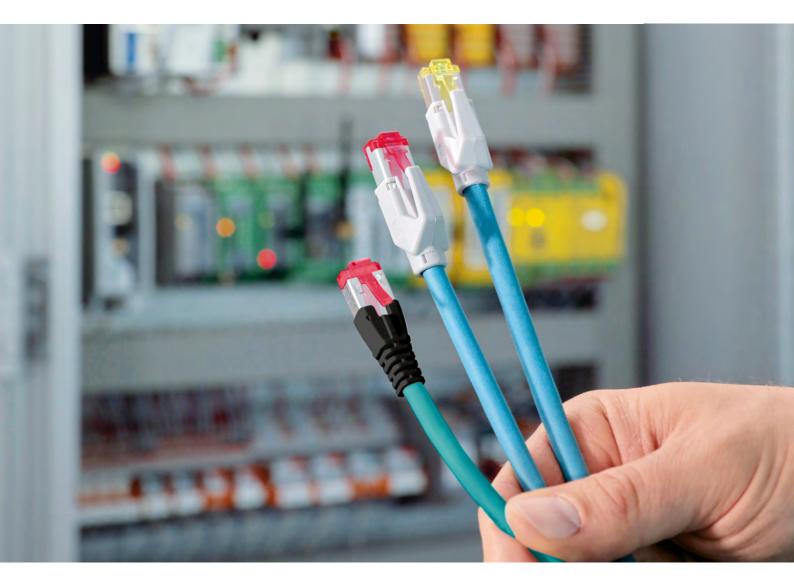
#### Cabinet add-ons

DIN rails and end brackets ensure the secure attachment of electrical connecting elements and components inside the control cabinet. Additional safety is ensured by cover profiles, while shield clamps enable EMC-compliant wiring. Our LED cabinet lighting provides enhanced visibility, even in poorly lit areas, to aid your maintenance process.



### **Device Connectors**

Versatile M5 to M58 circular connectors, data and photovoltaic connectors as well as modular rectangular and heavy-duty industrial connectors: the comprehensive connector range from Phoenix Contact offers a huge variety of solutions for industrial and semi-industrial applications. Application-specific connector systems as well as cables and lines that are pre-assembled or for assembly complete the range.







#### Compact FO splice boxes for DIN rails

High-speed, future-proof data transmission

The new splice boxes from Phoenix Contact ensure continuously reliable data transmission in real time. With their compact and uniform design, the splice boxes provide plenty of interior space for the secure connection of fiber optics.



#### Single Pair Ethernet (SPE)

Single Pair Ethernet (SPE) enables the transmission of Ethernet via a single wire pair, ensuring a costeffective and space-saving connection of sensors. Consistent IP-based communication down to the field level becomes possible. In addition to data transmission, Single Pair Ethernet technology also allows the simultaneous power supply of end devices via PoDL - Power over Data Line.

Single Pair Ethernet meets the requirements on a uniform network infrastructure, which is the basis for Industry 4.0 and the Industrial Internet of Things (IIoT).



#### M12 Push Pull Circular Connectors

Phoenix Contact offers metric circular connectors for industrial automation in a variety of designs: from small to large, straight or angled, molded or for assembly in the field. The wide-ranging portfolio offers versatile solutions for transmitting signals, data, and power.

M12 push-pull connectors guarantee fast and tool-free device connection, even in confined spaces and with a high cabling density. Realize compact housing designs with recessed M12 ports and easily implement extensions in the field with male and female versions.



#### Fiber-Optic Data Cables

Data transmission via fiber-optic cables (FO) has many advantages. It enables data rates of up to 40 Gbps over routes that are many kilometers long, does not have a negative affect on adjacent cables and at the same time, is resistant to electromagnetic interference. The different fiber types (POF, PCF, GOF) and fiber categories OM1 to OM5 plus OS2 allow cabling concepts to be tailored to specific requirements.



#### M17 - M40 PRO Circular Connectors

Use a reliable power supply for your drives. The cross-manufacturer compatible M17-M40 PRO series circular connectors ensure reliable connections in industrial applications. With uniform assembly, the PRO series makes it easier for you to connect your systems. The wide range of pin assignments and the continuous expansion of housing variants in sizes M17, M23, and M40 also provide a new level of freedom when it comes to system design.



## New Products 2025 Developed with passion

Our engineers are constantly developing new products. See more than 100 small and large innovations in connection technology, device connection technology, and automation technology.











### Value Added Centre

Your trusted partner for the control cabinet.

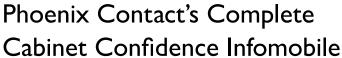
# Helping with your complete build.

Phoenix Contact's Value Added Centre (VAC) based in Rydalmere, Sydney allows our customers to order completely customised item bundles and pre-assembled terminal strips (on or off DIN rail), choosing from our wide product portfolio.

You can build your design using the Phoenix Contact planning and marking software 'Project Complete' or we can assist with the design of the rail. Receive a professional looking, complete rail which is "right" first time every time, including marking, bridging and required accessories.

Get in touch with our Sales Engineers to discuss how our VAC team can help with your next project.





Power, protect, and connect with Phoenix Contact, your trusted partner for cabinet solutions

Step inside our Complete Cabinet Confidence Infomobile and take part in a virtual control-cabinet experience, plus multiple hands-on product opportunities.

Phoenix Contact is a global market leader in industrial electronics and automation technologies. Our expertise and commitment to innovation across a wide range of industries enable you to build your control cabinet with confidence.

With a focus on cost-effectiveness, quality, flexibility, and performance, Phoenix Contact delivers.

www.phoenixcontact.com/en-au/complete-cabinet-confidence





Phoenix Contact is a global, market leader based in Germany. Our group is known

for its future-oriented components, systems, and solutions in the fields of electrical engineering, electronics, and automation.

With a global network reaching across more than 100 countries and 17,400 employees, we can stay in close contact with our customers, something we believe is essential to success. The wide variety of our innovative products makes it easy for our customers to find future-oriented solutions for multiple applications and industries.

We especially focus on the fields of energy, infrastructure, process, and factory automation.

# Mexico

| Section | Sect

You will find our complete product range at:

www.phoenixcontact.com.au

PHOENIX CONTACT Pty. Ltd.

#### **CONTACT US**

Technical Support number: 1300 786 411 Fax: 1300 723 399

E-mail: customerservice@phoenixcontact.com.au

Website: <u>www.phoenixcontact.com.au</u>

#### **OUR LOCATIONS**

#### **SYDNEY**

**ADELAIDE** 

Unit 7, 2-8 South Street RYDALMERE NSW 2116

12B Main Assembly Bldg, Tonsley Park 1284 South Road, TONSLEY SA 5042

#### BRISBANE

#### **PERTH**

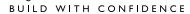
Unit 9, 56 Lavarack Avenue EAGLE FARM QLD 4009 Unit 5, 175 Campbell Street BELMONT WA 6104

#### **MELBOURNE**

Unit 1 8-12 Butler Way TULLAMARINE VIC 3043



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**GUARANTEE** 





BUILD WITH CONFIDENCE





