


Machine building

Products and solutions for your success

Your strong partner for machine building

Machine building is a global and highly dynamic market. The competition you face as a provider is tough. It is important that you meet your customers' requirements and develop a range of products and services that allows you to remain competitive for the long term. The focus is on the cost-effectiveness, quality, flexibility, and performance of your machines. Phoenix Contact offers you a comprehensive range of products and services – making a significant contribution to your competitiveness.

 Web code: #1255

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




Contents

We have a long tradition of machine building	4
Technologically leading products for machine building	6
Functional safety	8
Machine availability	14
Worldwide communication	20
Process data acquisition and visualization	26
Reducing the variety of parts	32
Modular machine building	38
Reducing and optimizing production times	44
Greater efficiency in control cabinet building	52
Worldwide service and support	54

We have a long tradition of machine building

Phoenix Contact has close ties with the machine building industry. Our in-house machine building department, with 180 employees, provides support for all developmental and manufacturing business units worldwide. Therefore, we are very familiar with your daily challenges. The service portfolio ranges from creating manually operated equipment to complex production systems. Together, we develop high-quality production resources, innovative solutions, and modern production technologies.

 Web code: #1255



The past

To maintain our independence from service providers, Phoenix Contact has operated an in-house machine building department at the Blomberg location since 1968.



Today

Today's machine building supports all Phoenix Contact business units around the globe with technologically leading solutions.



The future

We will also continue to help shape important trends and developments in machine building in the future.

Technologically leading products for machine building

As the heart of a machine, a suitable control cabinet supplies, controls, protects, and monitors all applications at all times. To build up all necessary applications in machine building so that they are holistic and coordinated with each other, Phoenix Contact provides a broad product portfolio. For this purpose, not only are numerous solutions for use in the control cabinet available, but also devices and components with IP67 protection for use in the field.

 Web code: #3097



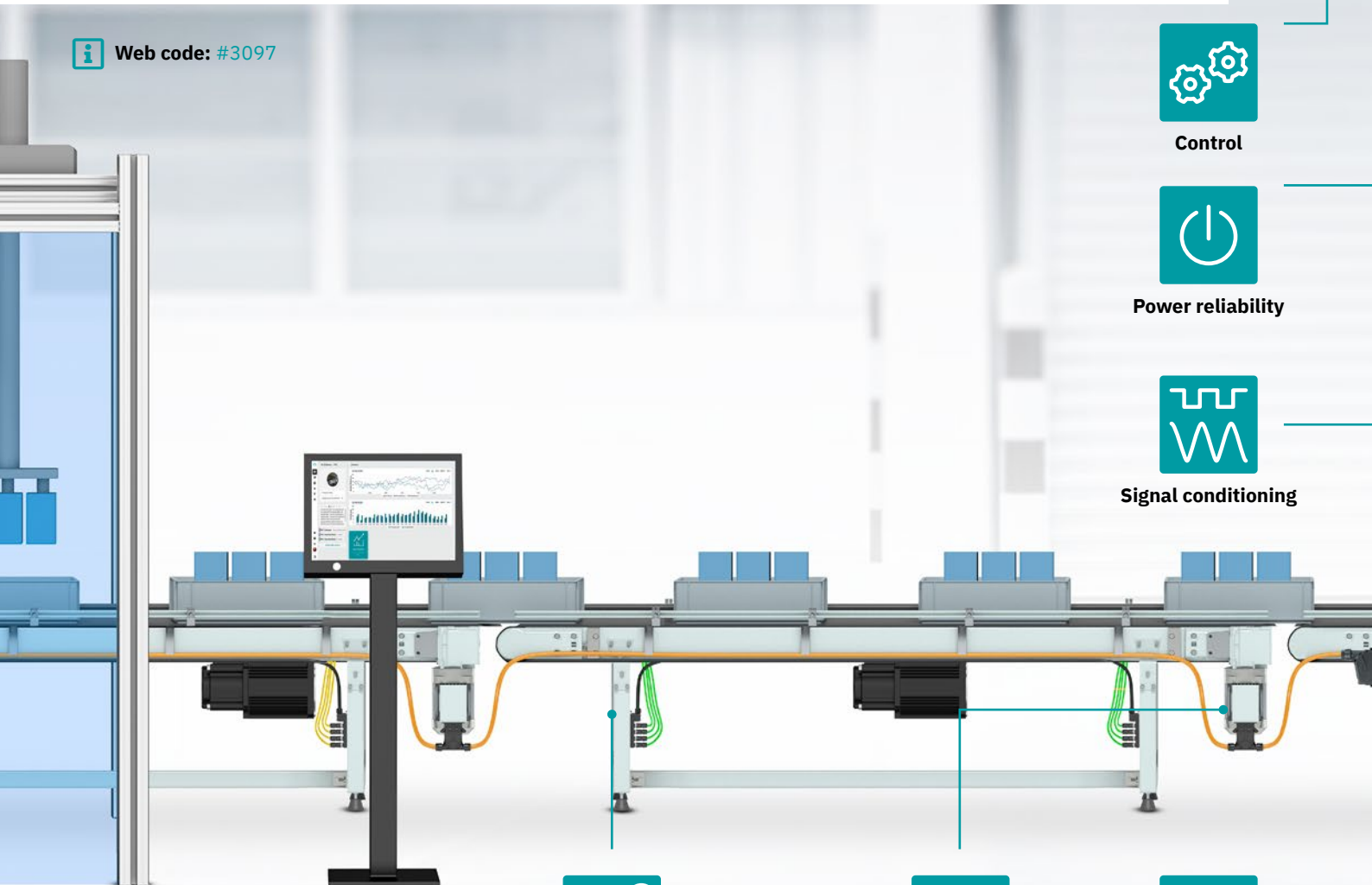
Control



Power reliability



Signal conditioning



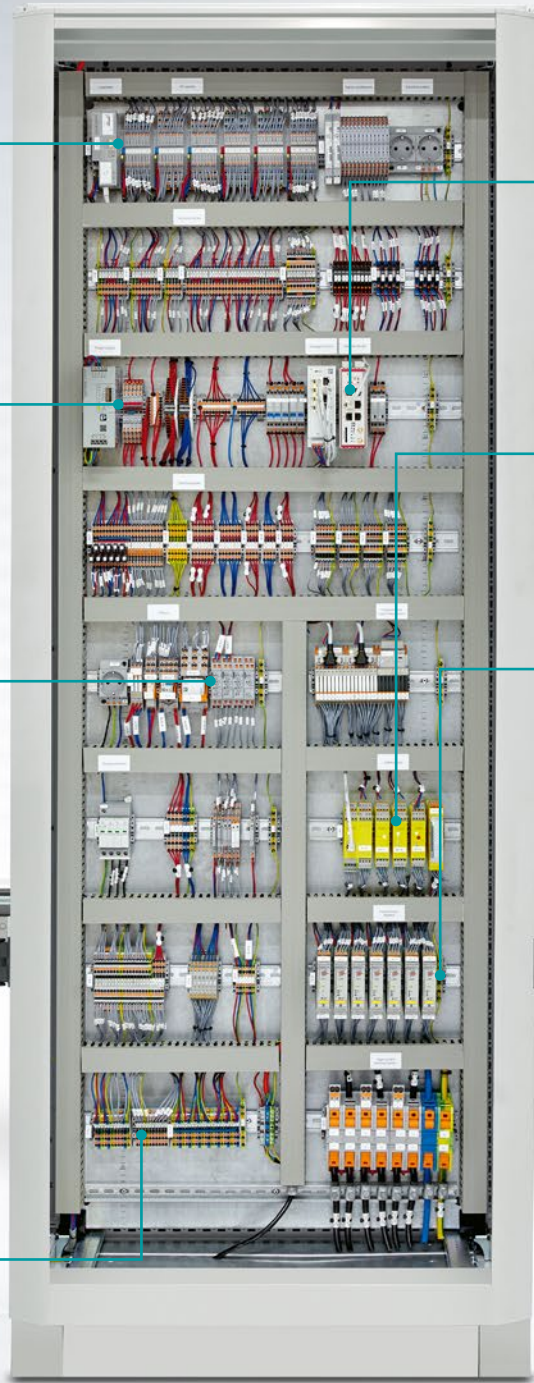
Communication
in the field



Power reliability
in the field



Connectivity



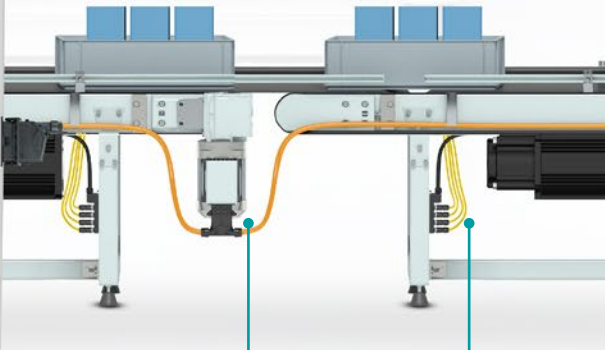
Industrial networking and security



Functional safety



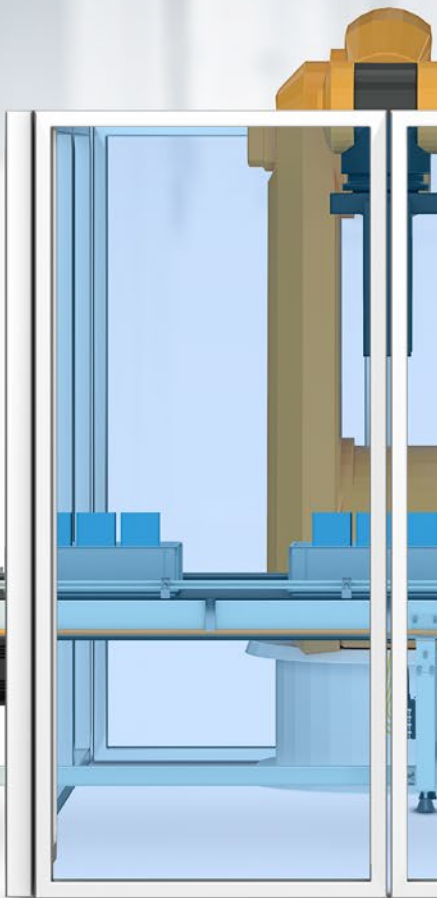
Load switching



Connectivity in the field



Signal transmission in the field



Functional safety

Easily integrate safety technology into your machines

Safety technology is paramount in machine building. It prevents operating personnel from being put at risk and damage to the machine. The EN ISO 13849-1 standard on functional safety fulfills the requirements of the Machinery Regulation. This results not only in increased requirements for the implementation of safety functions, but also in new opportunities for you as machine builder.

 Web code: #3098




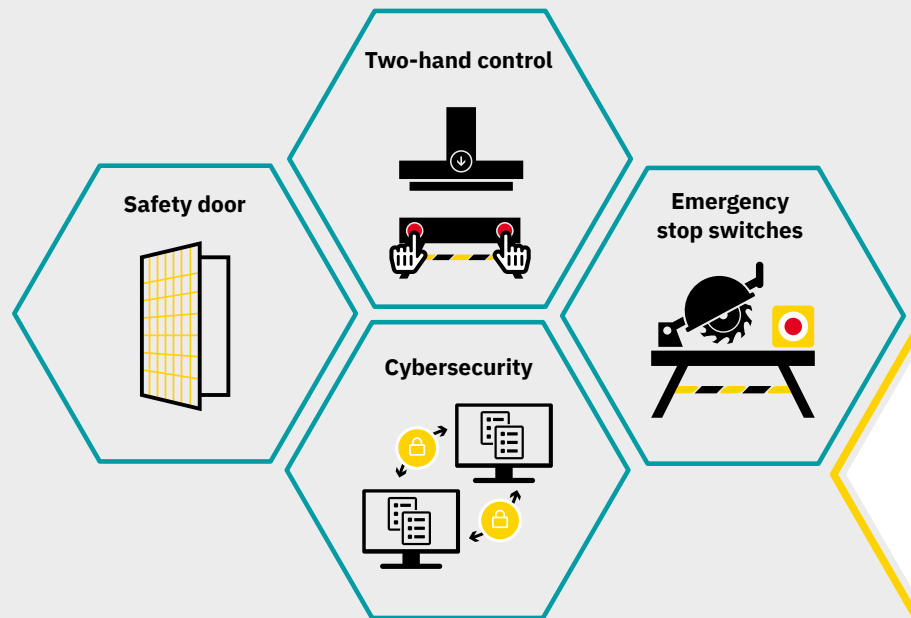


Functional safety

Get insights into the world of applications

Dive into the world of applications that involve functional safety in machine building. Get an overview of the important aspects when it comes to designing machines in accordance with safety requirements.

 Web code: #3098



Optimal design of the safety functions

Standard-compliant and economical design of the safety functions for safe operation of the machine.



Comprehensive support for all aspects of safety

Expert support for the entire machinery safety lifecycle, from planning to operation.

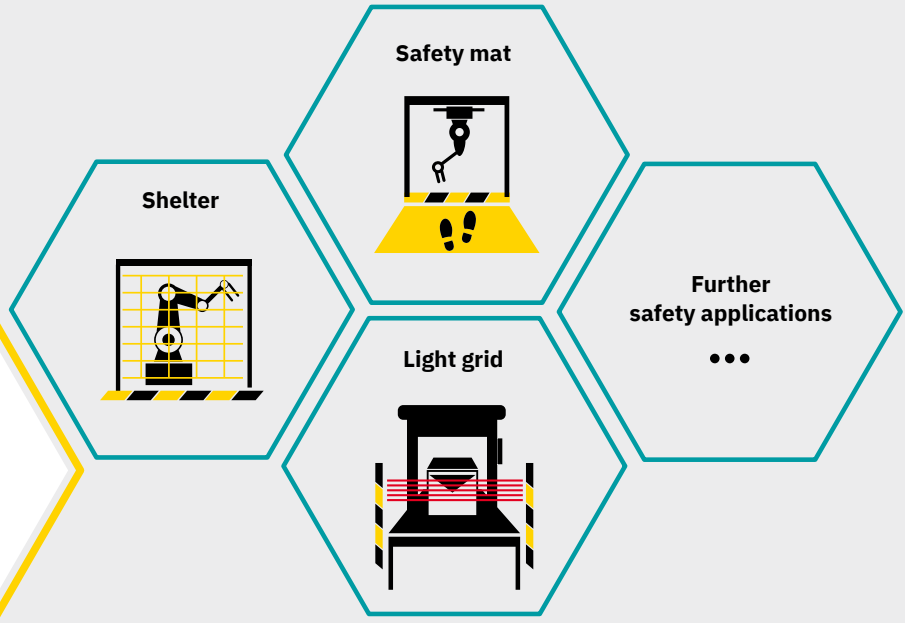



ISO 13849-1 | EN IEC 62061
EN IEC 61508

Planning machines safely and in compliance with standards



Thorough safety assessment is a prerequisite for the optimum design of the safety functions. This significantly reduces the time and effort required for installation and commissioning.



- 1 —
- 2 —
- 3 —

Consistent documentation

Consistent and standard-compliant documentation is the prerequisite for verifiable legal protection.



Quick startup and approval

Optimum design of the safety functions leads to fast commissioning and approval of the machine.

Functional safety

Find the right products for your application

For safety applications in machine building, Phoenix Contact offers a comprehensive portfolio of SIL-certified products, from safety switches and safety relay modules to network-capable safety solutions. All of our products are very easy to install and configure. This allows you to benefit from the fast and cost-effective implementation of safety-related applications.

 **Web code: #3098**



Monitoring for safety doors


Use our non-contact safety switches with RFID technology for intelligent safety door and position monitoring.

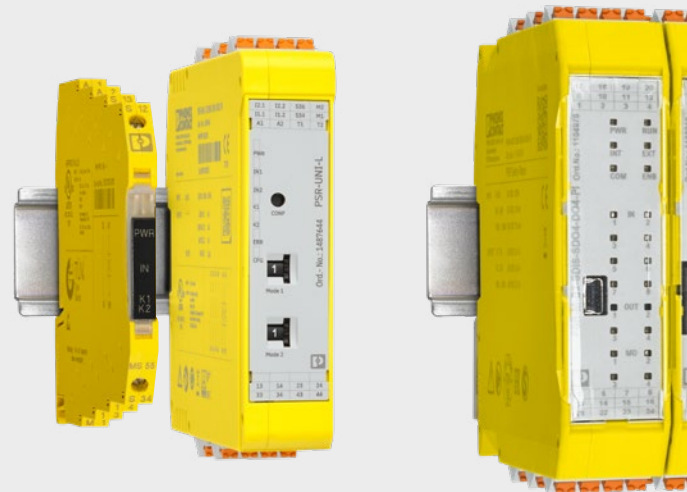
 **Web code: #1940**



Safe stopping

Phoenix Contact provides a large portfolio of emergency stop and emergency switching off switches for standard applications and individual safety solutions. Stop your system safely in the event of an emergency or ensure the safety-oriented shutdown of your system.

 **Web code: #2859**



Safety for every function

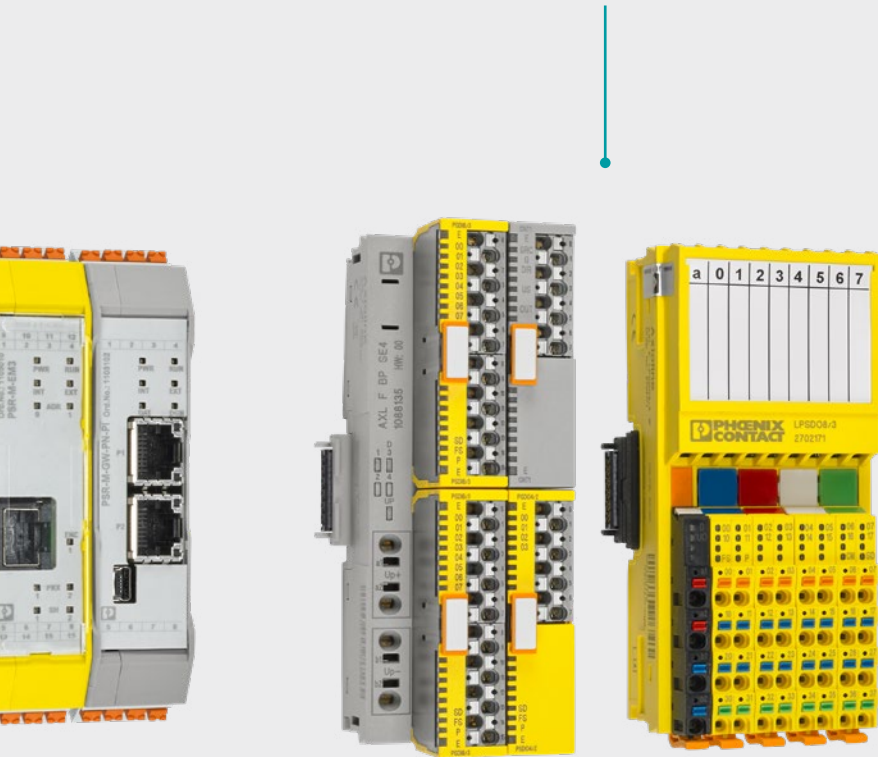
If you require just a small number of safety functions, a large range of safety relays is available. You can use our over-speed and zero-speed safety relay to monitor the speed of rotating parts in your systems and machines.

 **Web code: #0494**

Acquire and output safe signals


Integrate functional safety in your preferred network. Our SafetyBridge Technology allows the realization of distributed safety solutions easily and regardless of the network, even without a safety controller.

 Web code: #1258




Monitoring several safety functions

The PSRmodular configurable safety system is a flexible safety solution for monitoring your machine or system, including the monitoring of motion and analog value data.

 Web code: #1257

Acquire and output safe signals in the field

The Axioline E safe IP67 I/O boxes allow you to process safe inputs and outputs outside of the control cabinet. The communication for this can be established with PROFIsafe or IO-Link Safety.

 Web code: #2209



Modular safety control

Extend the functional scope of your PLCnext Control and implement safe applications up to SIL 3 / PL e. Our safe PLC extension module extends your PLCnext Control device to form a PROFIsafe-capable safety controller.

 Web code: #1543

Machine availability

Avoid expensive machine downtimes

There is nothing costlier for you or your customers than a machine that is down. Downtimes ultimately lead to production losses and result in extreme costs. This makes machine availability a high priority for you. To prevent downtimes and production losses, reliable components and high machine availability are essential.

 Web code: #3099

Power Reliability

With power reliability, we provide comprehensive and reliable supply concepts. Solutions consisting of surge protection, power supply, device protection, and energy monitoring ensure very high system availability.

 Web code: #3081




Power Reliability



Signal lights

Phoenix Contact can provide you with compact signal towers. The versions feature a modular design, easy handling, plus visual and audible signaling. This ensures optimum visibility and clear identification of machine states.

 **Web code: #2624**

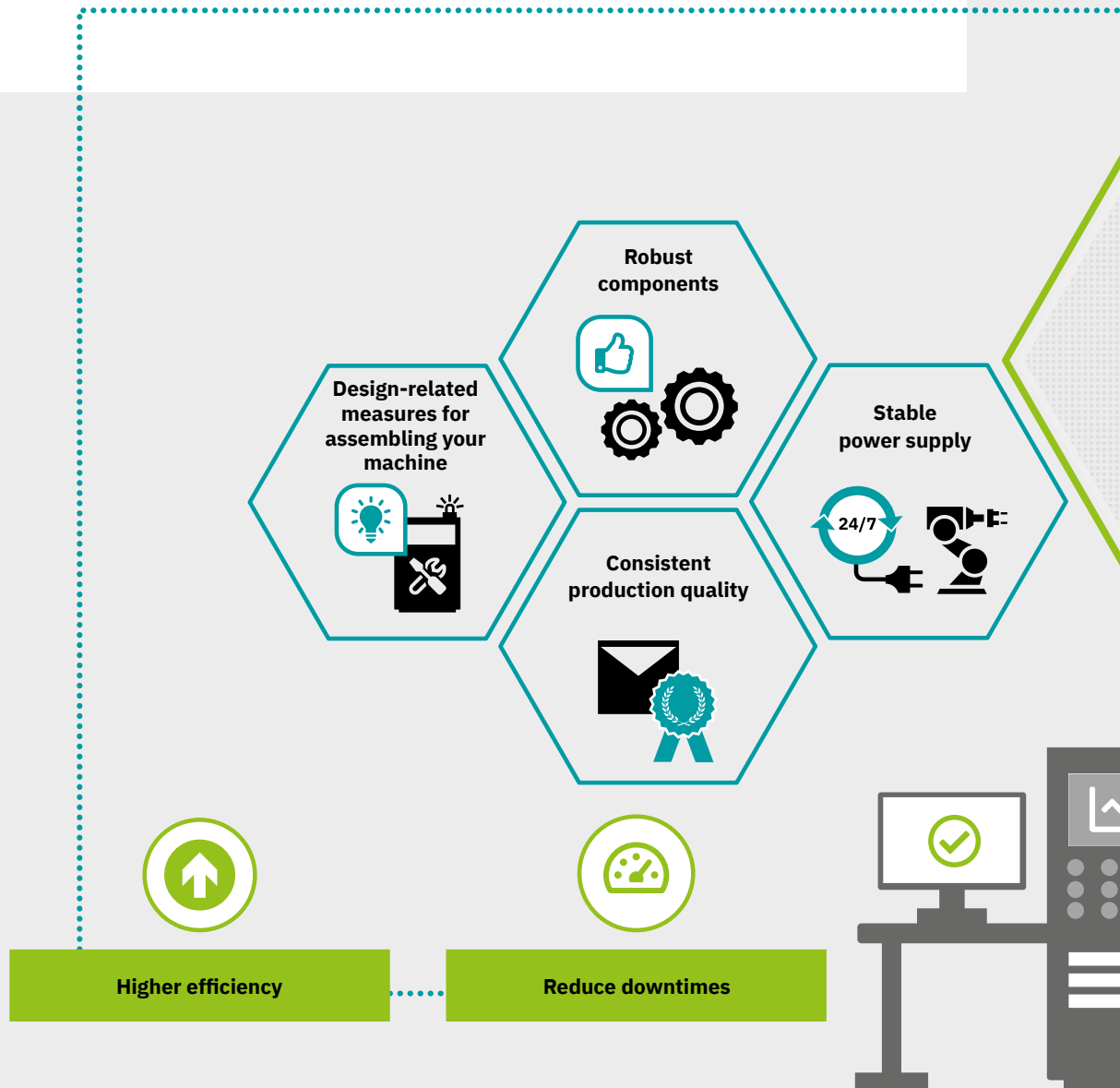


Machine availability

Get insights into the world of applications

Dive into the world of applications for machine availability. Gain an overview of the important aspects when it comes to operating machines reliably.

 Web code: #3099



“Machines are expensive,
so they should run
reliably and steadily
168 hours a week!”



Clear
error detection



Transparent
processes



Resource-oriented
order planning



Predictive
maintenance



Reliable technology precise
to the second



Increase in efficiency

Machine availability

Find the right products for your application

We increase your competitiveness as a machine builder with products that support the availability and, in turn, the productivity of your machine. The devices ensure long operating times and production around the clock. As a result, your customer can avoid downtimes and costly production losses. We offer surge protection, device circuit breakers, technologically pioneering power supplies, and innovative switching devices.

 Web code: #3099




Protection against surge voltages

Surge voltages put machines at risk and can lead to the destruction of important function groups. Increase safety and availability with effective surge protection in the feed-in, as end device protection and upstream of the signal interfaces.

 Web code: #0291

Selective fuse protection for circuits

Device circuit breakers allow you to provide individual protection for your equipment, whether it involves solenoid valves, servo motors, or industrial PCs. In the event of an error, only the affected actuator or sensor is shut down. All other system parts remain in operation. Various technologies and designs ensure the right solution for every application.

 Web code: #0156

Power reliability

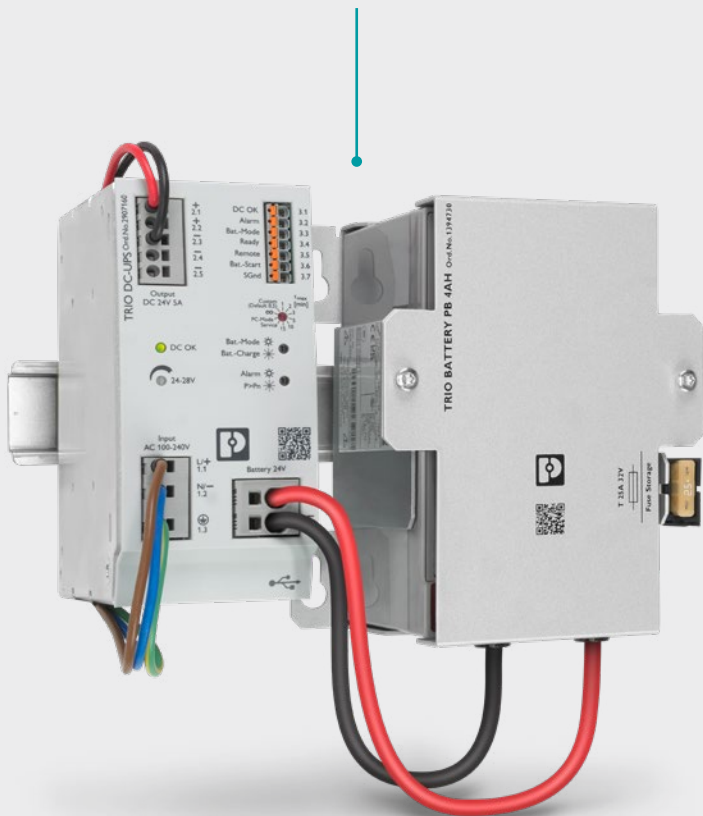
Compact, robust, and totally reliable: the new TRIO POWER power supplies feature a compact design, easy handling, and smart diagnostic functions. An optionally integrated circuit breaker and an IO-Link interface for diagnostics and parameterization make TRIO POWER an all-rounder for machine building and systems manufacturing.

 Web code: #0497

Uninterruptible supply


A reliable power supply even in the event of downtimes. The TRIO DC UPS with integrated power supply combines various features including signaling, diagnostics, connection technology, and cold restart function in one compact housing. The dynamic boost makes it particularly reliable. Select the appropriate TRIO battery module for ensuring optimum protection for your system.

 Web code: #3770



Solid-state contactors for controlling DC motors

Electronic load relays and reversing load relays enable the fast switching of mechanically commutated DC motors. Our reversing load relays switch and brake DC motors up to 24 V/10 A without wear.

 Web code: #3346

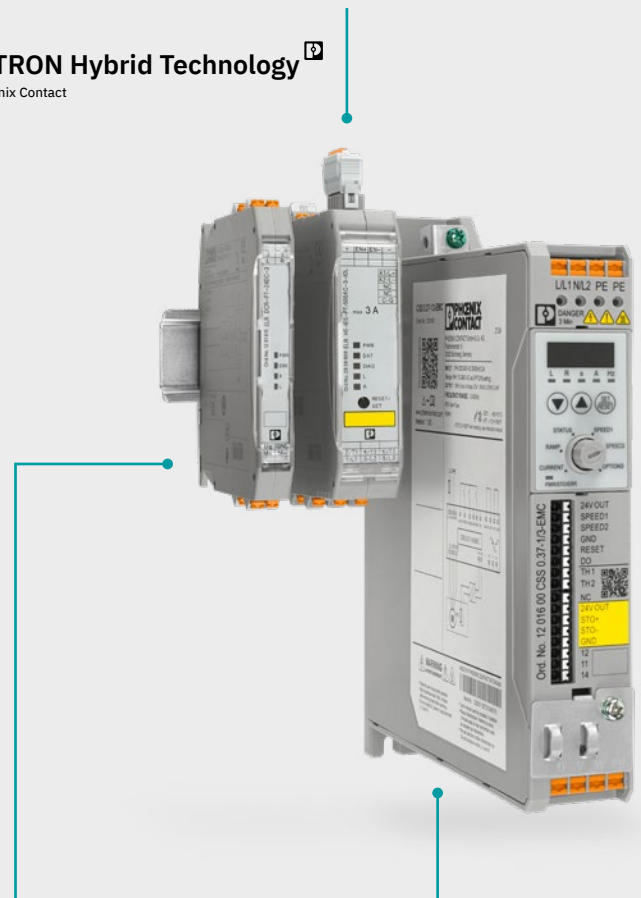
Intelligent motor switching

Switch and reverse motors quickly and reliably with hybrid motor starters. The CONTACTRON hybrid technology combines wear-free semiconductor technology with robust relay technology, thereby increasing the service life by a factor of ten compared to purely mechanical switching devices.

 Web code: #0568


CONTACTRON Hybrid Technology ²

Designed by Phoenix Contact



Efficient operation of three-phase asynchronous motors

The CONTACTRON Speed Starter provides simple operation with various speeds, from normal speed, creeping speed, and soft start all the way to energy efficiency and ramp functions.

 Web code: #2820

Worldwide communication

Communicate with your machines worldwide

The global use of machines makes it increasingly important to be able to communicate with machines all around the world so that you can avoid expensive on-site service visits. Modern production systems require networks that enable data exchange between different processes and machines. Industrial Ethernet is the fast communication standard for integrated communication between office and production level. The Cyber Resilience Act ensures the security of digital products and networks, which is essential for secure data exchange in modern production systems.




 Web code: #3100

Services for security and industrial communication

We offer a comprehensive portfolio of industrial security and industrial communication services. We advise you on an individual basis, provide support during configuration and startup, provide you with the skills you need, and are also there for you in the event of any problems.



> PH1



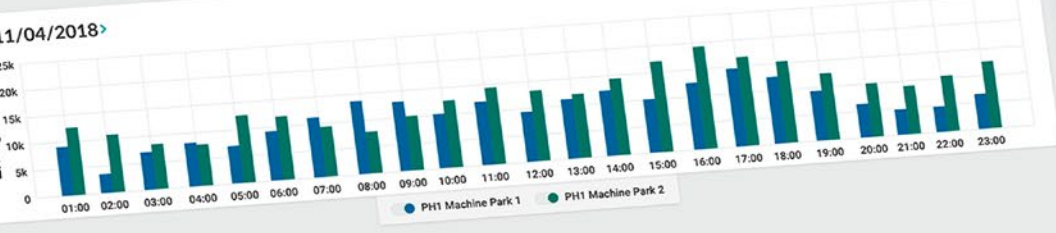
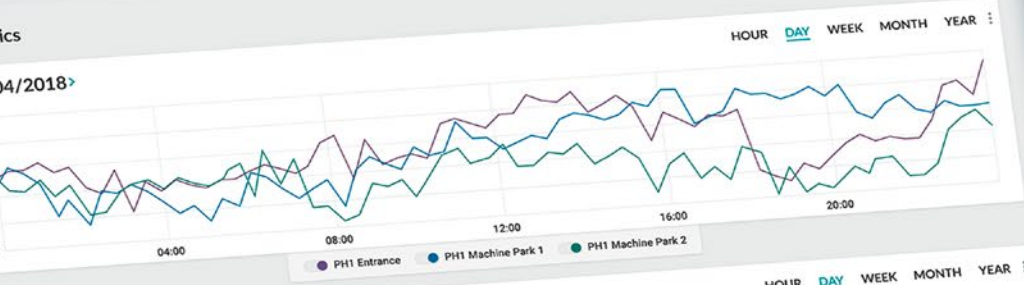
Hall 1

erstr. 34, Bad Pyrm...

B **I** **U** [List icons]

In Production Hall 1 the following parts are monitored: The entrance area, the machine park 1 and the machine park 2. Machine park 1 consists of all machinery related to the housing production whereas Machine park 2 contains the electronics and the final assembly of all

- PH1 Entrance Phoenix, Bad Pymont
 - PH1 Machine Park 1 Phoenix...
 - PH1 Machine Park 2 Phoenix...
- [ASSIGN NEW DEVICE](#)



NEW ANALYSIS

Create a new Analytics Widget.

Worldwide communication

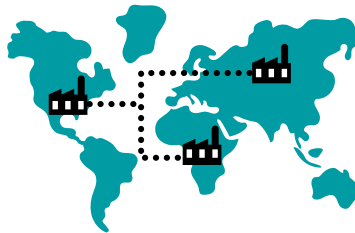
Get insights into the world of applications

Dive into the world of applications for worldwide communication with machines. Gain an overview of the important aspects when it comes to being able to access machines worldwide.

 **Web code:** #3100

Worldwide networking of machines

Network machines together worldwide. This allows you to record and exchange production data regardless of location. This gives you a global overview of production data such as the machine status and machine utilization, allowing you to optimize your production capacities.



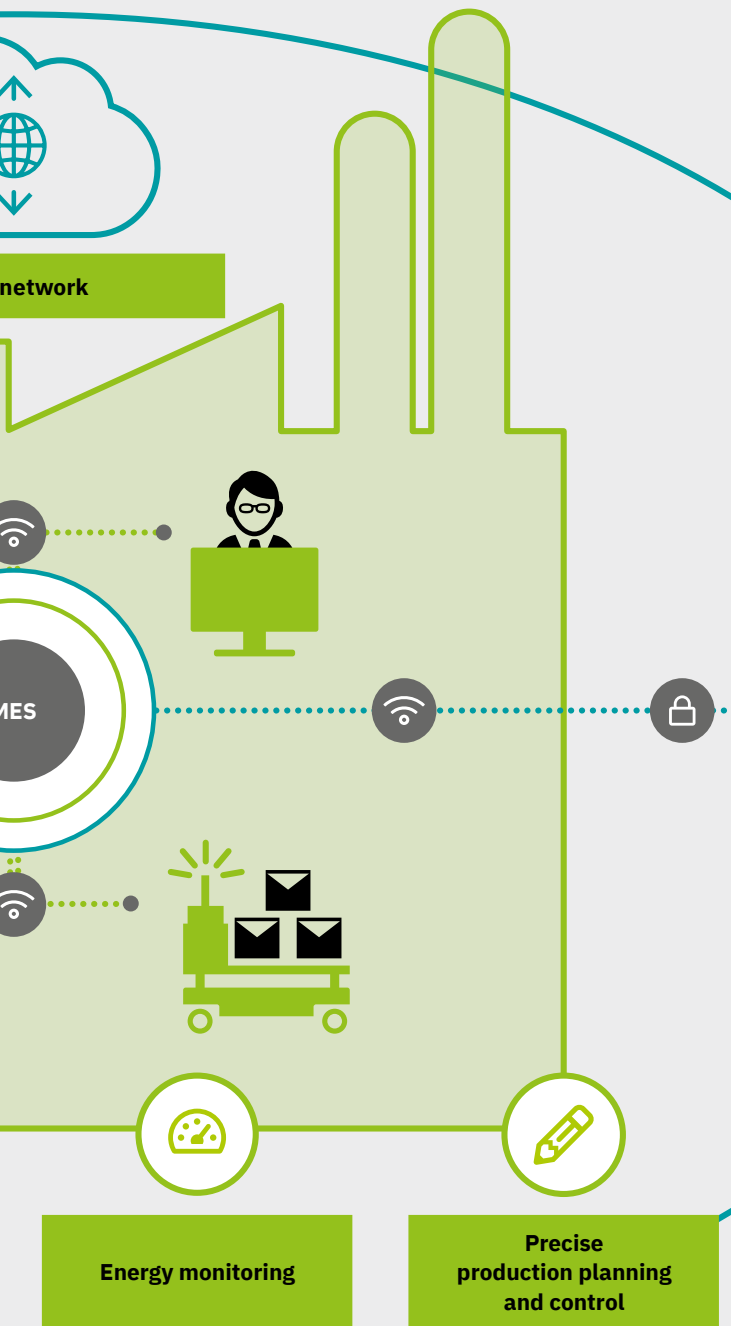
Predictive maintenance

Networking of all machines and shop floor vehicles

Secure data exchange

Protect your machines and your network against unauthorized access by people or malware. This prevents machine breakdowns, sabotage, or data loss, which otherwise can cause substantial economic damage.





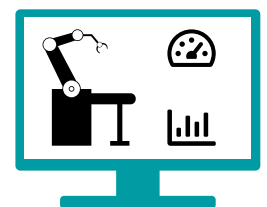
Remote service

Reduce expensive downtimes with remote service. This enables you to increase the availability of your machines. Save on worldwide service calls since remote machines and systems can be serviced and reset through remote access. In addition, you can easily schedule and perform maintenance and repair cycles via remote maintenance.



Data-driven development optimization

Obtain valuable information on operation, utilization, and malfunctions throughout the machine lifecycle. Use this data to optimize your machines and to drive new machine developments.



Worldwide communication

Find the right products for your application

Modems and routers connect you to your machines and systems worldwide for efficient remote maintenance, continuous data acquisition, and automatic early warnings. Switches and access points can be used to build powerful Ethernet networks. Security routers and firewalls guarantee data security and protect your machine against unauthorized access and tampering.

 Web code: #3100



Easy-to-install network infrastructure


Ethernet patch panels allow quick and easy connection in the field. They are available with various connection technologies and in versions with surge protection and a Power over Ethernet injector.

 Web code: #1997



Global access to data

Connect to machines worldwide using routers via a high-performance data connection or cellular communication. With the mGuard Secure Remote Service, you also receive a hosted, ready-to-use, secure portal for cloud-based remote maintenance which you can use with the Cloud Client, the TC Router, or mGuard.

 Web code: #0499




Protect networks and data

The mGuard security routers protect your machine and network against unauthorized access by people or malware. Due to the high processing speed, a data throughput of almost 1,000 Mbps is achieved. This allows you to avoid unplanned downtimes caused by network failure and harmful exploitation of system vulnerabilities.

 Web code: #1270

Distribute data in the field

The switches in IP65/IP66/IP67 degree of protection are compact and robust for field installation. The innovative M12 connection technology with push-pull fast locking system also ensures that they are easy to mount while providing a high level of robustness against mechanical strain.

 **Web code: #2258**




NearFi Technology 
Designed by Phoenix Contact




Distribute data in the network

Ethernet switches are the communication hubs of your industrial network. They provide reliable, efficient data exchange and can ensure the robustness of your network. Whether managed or unmanaged switches – we offer the right solution.

 **Web code: #2258**

Connect mobile machine parts via WLAN

The WLAN 1100 wireless module allows you to easily install a fast and stable WLAN network on your machine. Featuring integrated antennas and extreme robustness, the space-saving module has been carefully considered down to the last detail for applications in machine building.

 **Web code: #1532**

Contactless power and data transmission


The NearFi couplers transmit power and real-time Ethernet data across an air gap without the need for contact. Therefore, connections subject to wear and slip rings in industrial applications can be replaced easily and costs caused by failures can be minimized.

 **Web code: #2794**

Process data acquisition and visualization

Reliable acquisition and evaluation of operating data


To maintain your competitive edge in the market, processes must be highly efficient and continuously improved. Decisions regarding the optimization of machines and production processes are made based on machine and system data. The collection and evaluation of values such as flow rates, electrical power or performance data, or temperatures allows predictive maintenance to be carried out, thereby improving machine performance and reducing machine downtimes.

 Web code: #3101

Digital Factory now

Use your existing machine and process data to design a production system that is flexible, efficient, and sustainable. Secure your competitive edge by setting up new, data-centric business models.

**DIGITAL
FACTORY**
now

 Web code: #3084



Process data acquisition and visualization

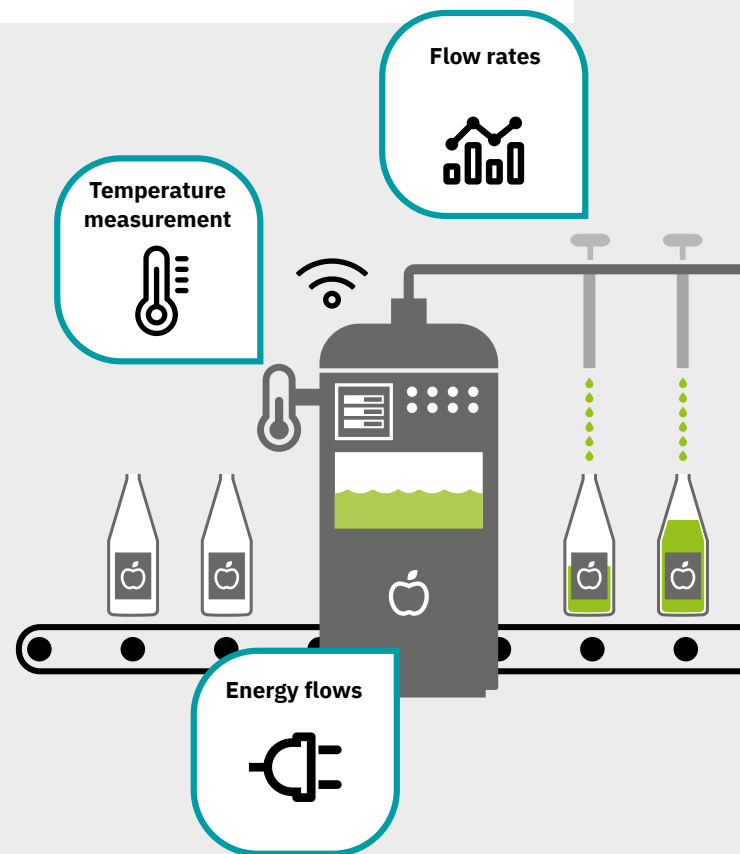
Get insights into the world of applications

Dive into the world of applications that involve acquiring and evaluating process data with reliability. Get an overview of the important aspects when it comes to having all relevant machine data at a glance whenever you need it.

 Web code: #3101

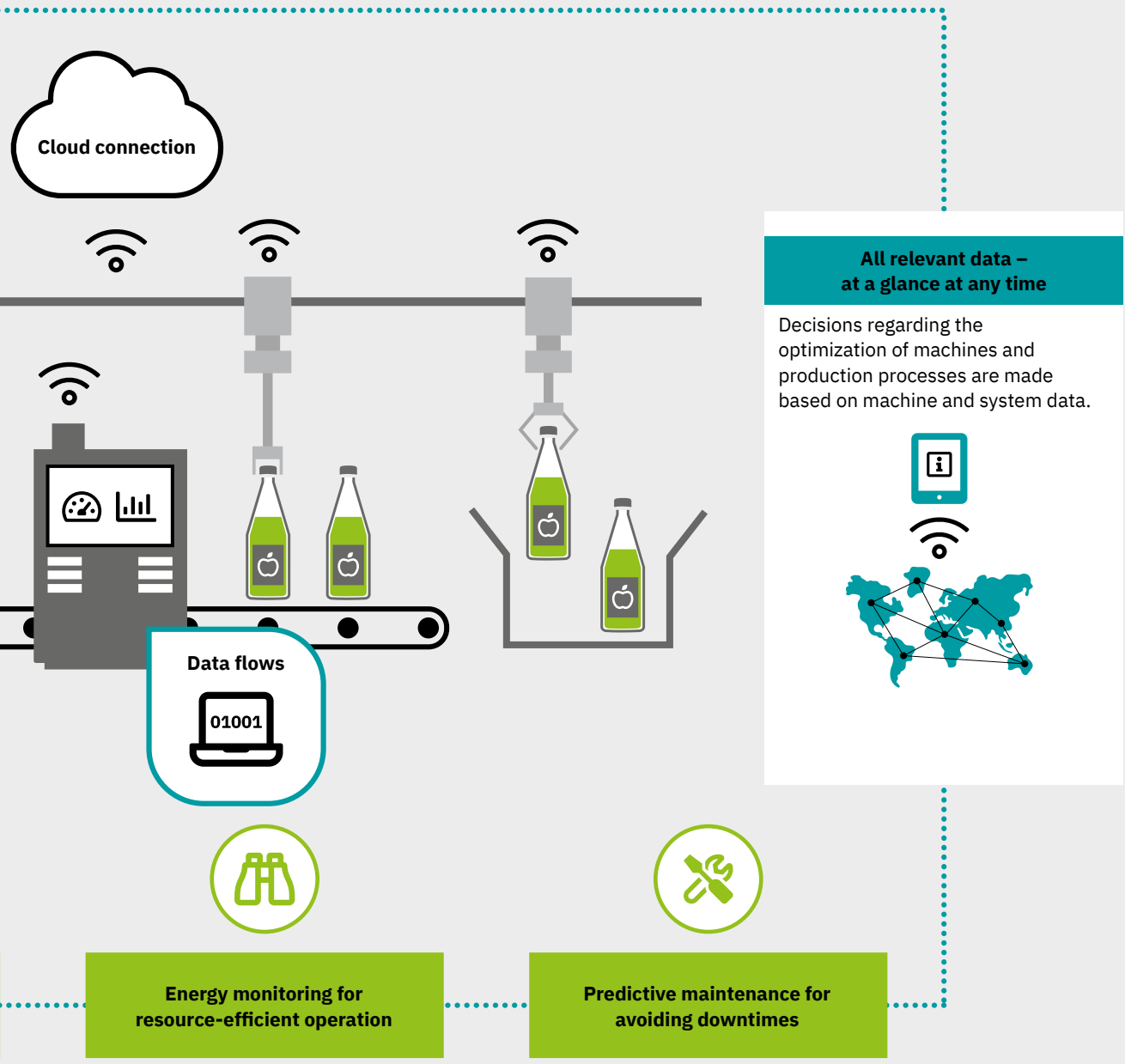
Smart data – identify and evaluate

It's not about collecting as much machine and production data as possible. The important thing is to identify, record, and evaluate the right key figures. This is the only way to draw meaningful conclusions about production. This, in turn, makes it possible to optimize machine and production processes.



Process data acquisition for
optimizing production processes

Machine data acquisition for
optimizing system efficiency



Process data acquisition and visualization

Find the right products for your application

Acquire data, make predictions, and improve machine performance: Our components for process data acquisition offer everything you need for the precise conversion, measurement, monitoring, display, and logging of consumption values. Furthermore, this data can also be pre-evaluated using a PLCnext Control and easily transferred to the cloud. This means that you have an overview of your machine data anytime, anywhere. For optimum machine utilization and availability.

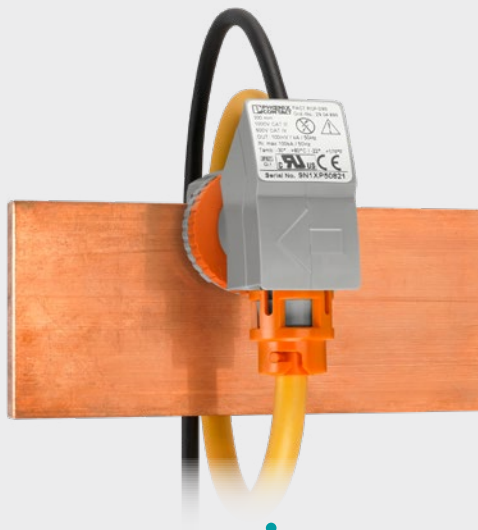
 Web code: #3101



Measure currents


Our MCR current transducers can be used to acquire direct, alternating, and distorted currents. The portfolio ranges from configurable devices for precisely mapping low measuring ranges up to 55 A to universal measuring transducers for high currents up to 600 A.

 Web code: #1263



Convert currents

For your current measurements up to 4,000 A, our PACT window-type and winding current transformers are available in a range of transformation ratios, accuracy classes, and rated power values. The PACT current transformers for retrofitting give you the benefit of fast installation that does not require you to remove system parts.

 Web code: #1263

 **EMMA Service**
Powered by Proficloud.io



Access measurement and component data worldwide

Energy monitoring, management, analytics: With the EMMA Smart Service and the IoT-capable EMpro energy measuring devices, you are ready for your energy management system of the future. Go straight into the IoT with EMpro. Benefit from cloud-based data acquisition, intuitive functions, and informative visualization.

 Web code: #2841

Global access to data

Proficloud.io provides you with an overview of your machine and system data from anywhere in the world. For example, you can create a custom dashboard as the basis for evaluating and analyzing your operating data. This enables you to continuously improve processes based on the Proficloud.io solution.




 **Web code: #0949**



Industrial panel PCs – modern solutions for operation and monitoring

Scalable, modern panel PCs for acquiring, processing, measuring, controlling, and visualizing. Designed as flush-mounted or support-arm versions with IP65 or IP69K protection, all panel PCs are characterized by their robustness, performance, and state-of-the-art touch technology.

 **Web code: #2001**



Compact box PCs – analyze large volumes of data locally

The particularly compact VL3 UPC enables outstanding performance in a compact design. Outstandingly designed as an “edge device”, the VL3 UPC can act as a data collector. The data can be analyzed entirely by means of artificial intelligence – with the “MLnext” app. MLnext enables the creation of a predictive maintenance model without AI expertise and programming effort.

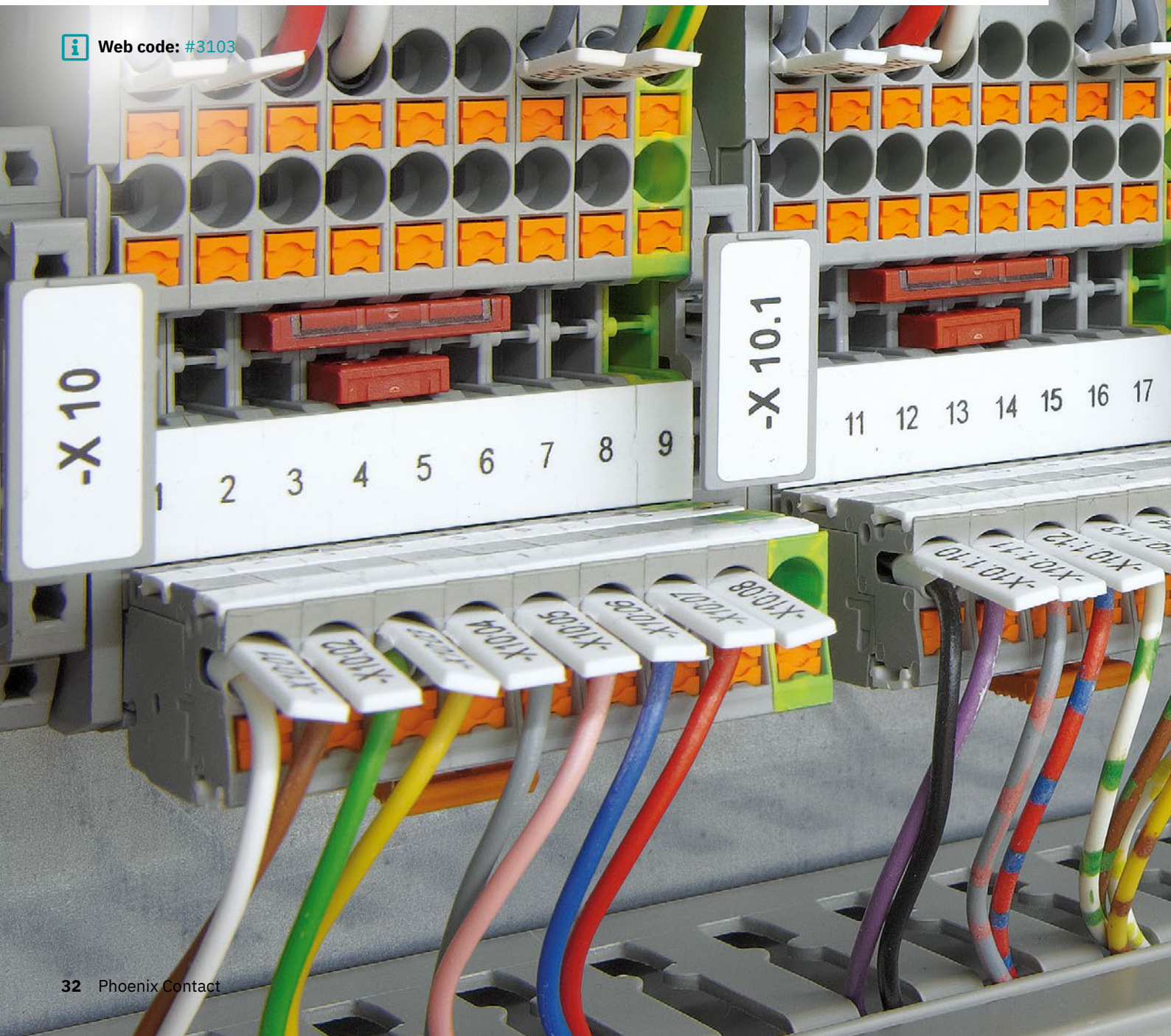
 **Web code: #3837**

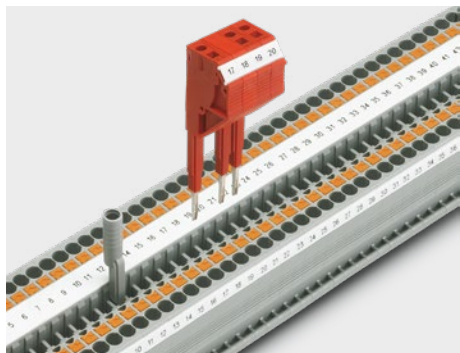
Reducing the variety of parts

Reduce the variety of parts and lower your storage costs

Optimally coordinated product solutions are key to keeping machine manufacturing costs as low as possible. Our uniform and standardized accessories can be used in many product groups. This allows you to reduce the variety of parts and lower your storage costs while still remaining flexible. With their uniform design and operating concepts, standardized products simplify startup and maintenance for your technical staff.

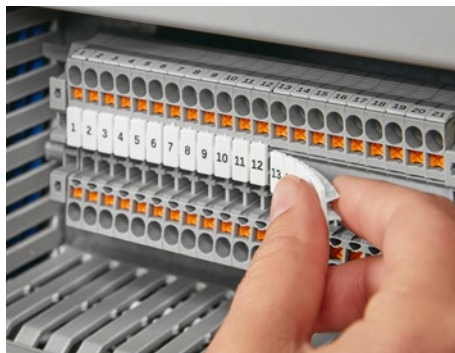
 Web code: #3103





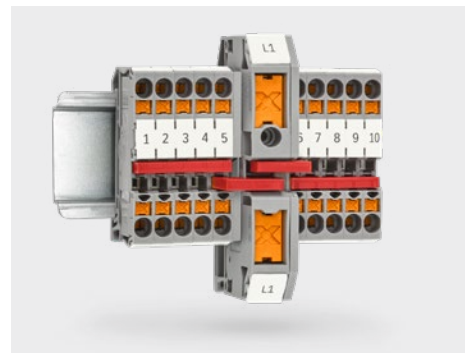
Standardized test system

We provide comprehensive, uniform testing accessories for our products. All test plugs can make contact in the freely accessible function slot.



Clear marking

The terminal points of our products support large-surface marking. This creates a clear overview in the control cabinet and facilitates startup, testing, and maintenance work.



Flexible plug-in bridge system

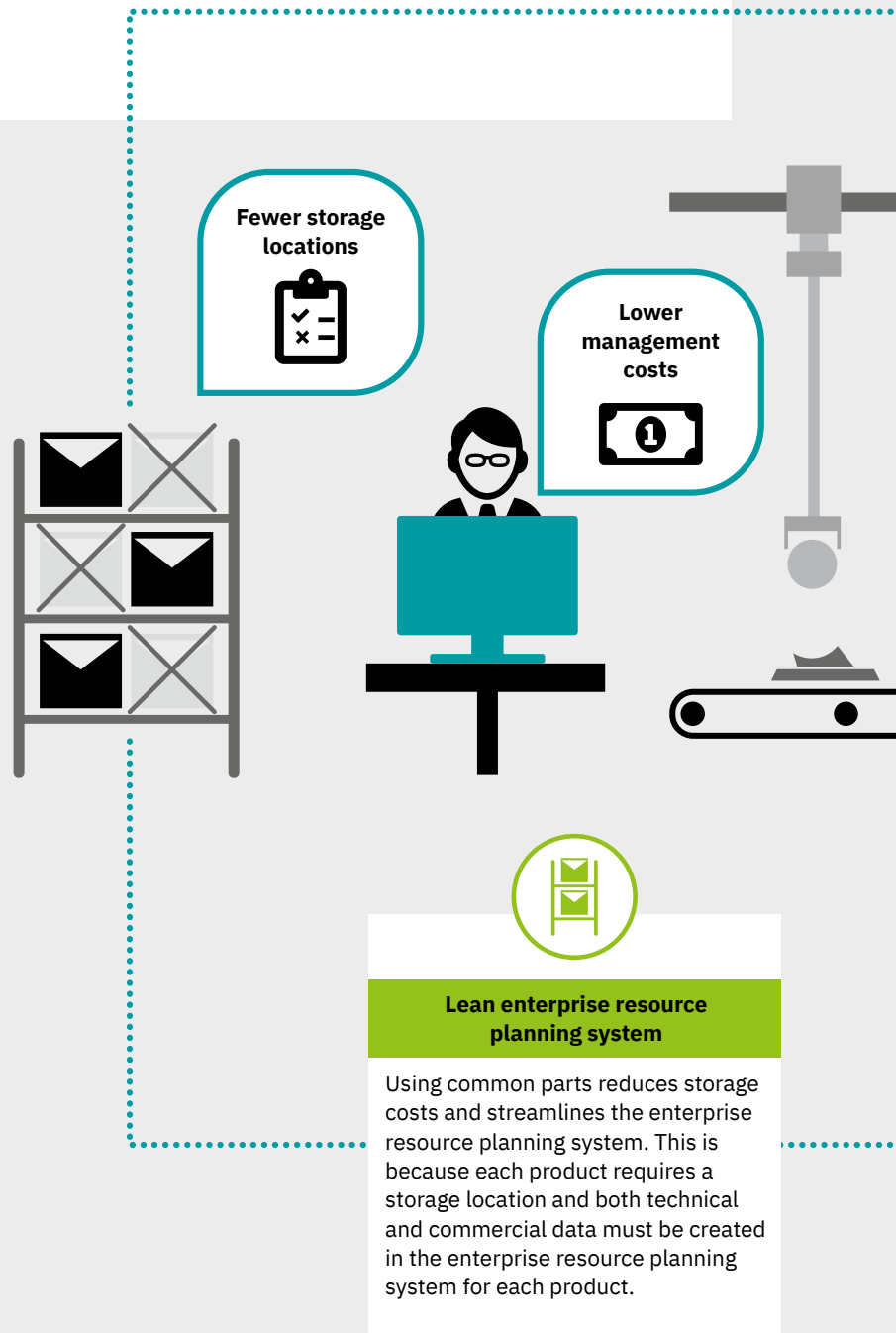
One plug-in bridge system for all connection technologies: The 2- to 50-position plug-in bridges allow you to save time when carrying out any potential bridging tasks.

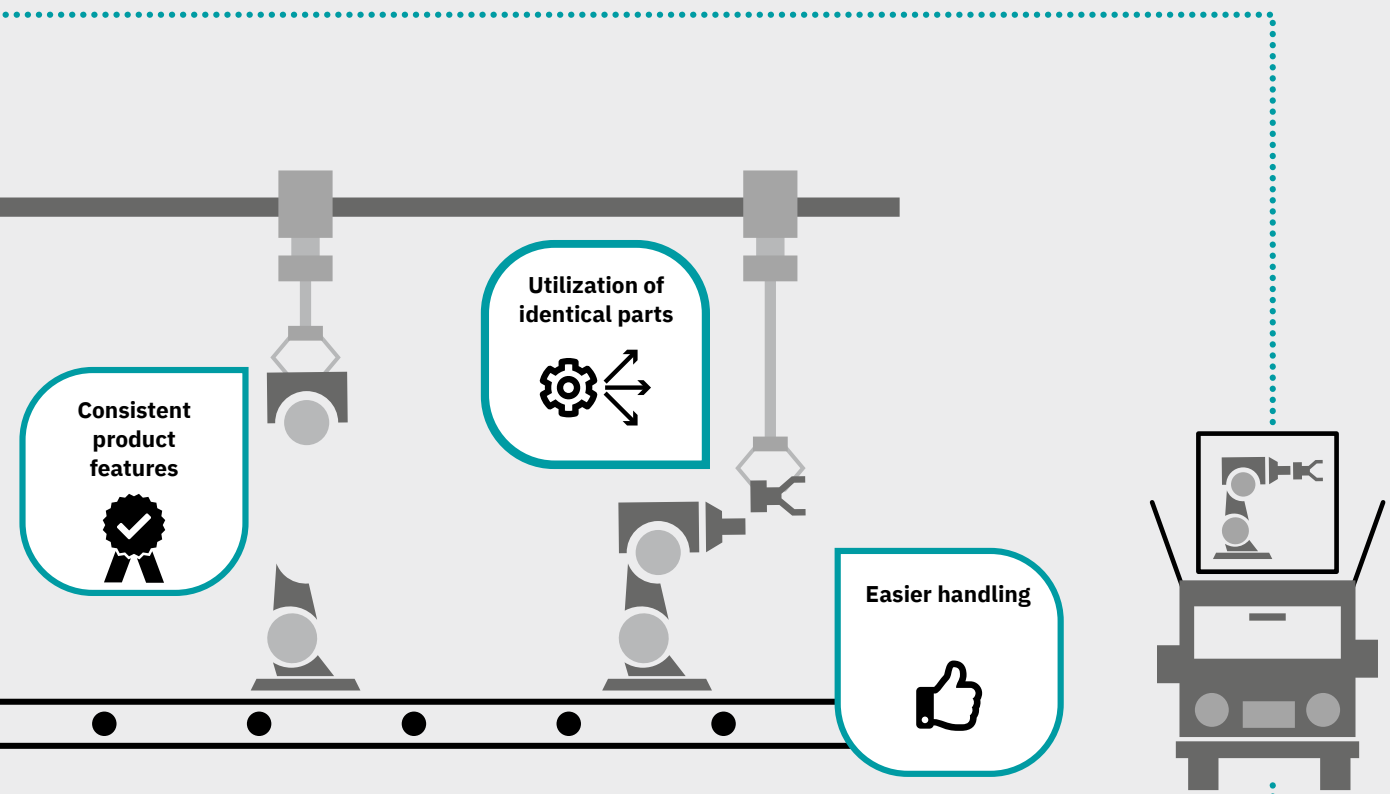
Reducing the variety of parts

Get insights into the world of applications

Dive into the world of applications that involve reducing the variety of parts. Get an overview of the important aspects when it comes to reducing storage costs in machine building.

 Web code: #3103





More cost-effective production

Optimally coordinated product solutions are key to keeping machine manufacturing costs as low as possible.



Fast startup and maintenance

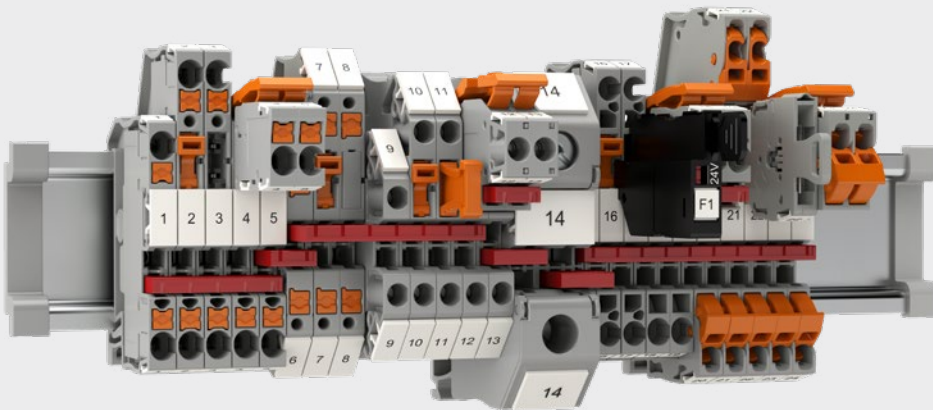
With their uniform design as well as well-planned design and operating concepts, standardized products simplify startup and maintenance for your technical staff.

Reducing the variety of parts

Find the right products for your application

Simply use the standard accessories in modern terminal block and relay systems, whether this be for bridging, marking, or testing. CLIPLINE complete provides a terminal block system for all connections. Implement all relay applications with the RIFLINE complete and PLC-INTERFACE relay systems, whether for switching, isolating, monitoring, amplifying, or amplifying.

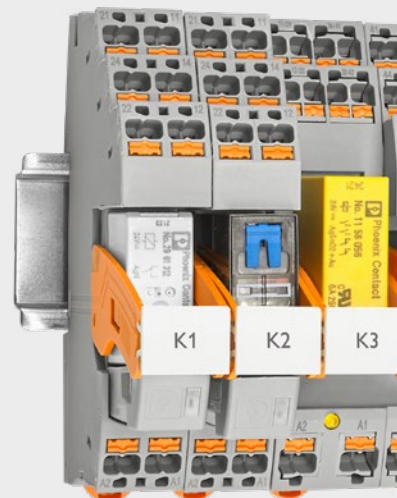
 Web code: #3103



One terminal block system for all connection technologies


CLIPLINE complete gives you the freedom to choose the appropriate connection technology. Whether Push-in, screw, spring-cage, bolt, or plug-in connection: You can combine all connection methods with the same accessories.

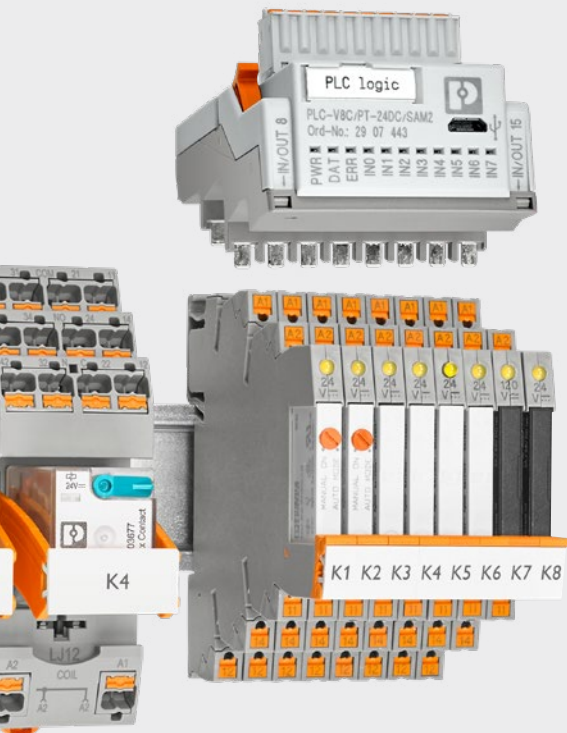
 Web code: #0567



One relay system for all standard applications


The RIFLINE complete relay system features a universal plug-in design that allows quick, easy, and error-free handling. You can implement all of your standard relay applications with the industrial relay system. The field of application ranges from coupling and timer relays to a replacement for small power contactors.

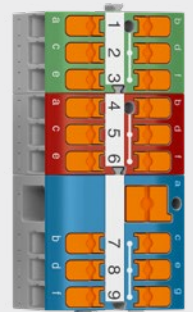
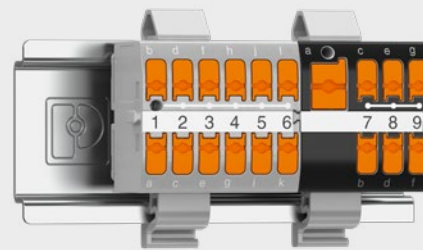
 Web code: #0695



Highly compact relay modules – narrow and high-performance switching

The PLC-INTERFACE relay series for universal use provides a wide range of plug-in electromechanical relays and solid-state relays. You can combine the logic module with the corresponding relay and analog modules as required. The modular construction enables a variety of possible applications.

 **Web code: #0695**



Individual distribution block solutions

Distribution blocks with Push-in and screw connection technology come ready to connect and are available in various numbers of positions, mounting types, and colors. They can be used immediately and can be extended as needed. Create individual PTFIX distribution blocks quickly and easily with the online configurator.

 **Web code: #1740**

Modular machine building

Build machines in a modular and flexible way

Today's machines must be able to quickly adapt to changes in the market. A modular concept guarantees your customers maximum levels of flexibility. The modular design also makes the transport and installation of large and extensive machines at the customer's premises easier.

 Web code: #3104




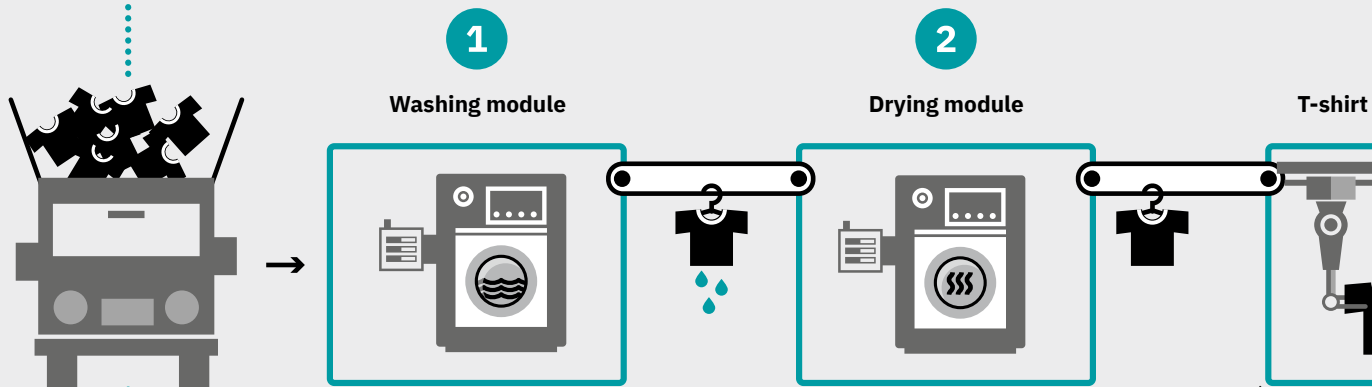


Modular machine building

Get insights into the world of applications

Dive into the world of applications that involve modular machine building. Get an overview of the important aspects when it comes to assembling in a modular and flexible way.

 Web code: #3104



Reduced programming effort

Decentralized machines and plant concepts allow the use of smaller controllers and automation solutions.

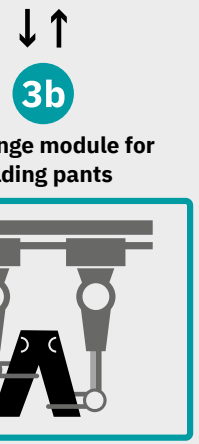
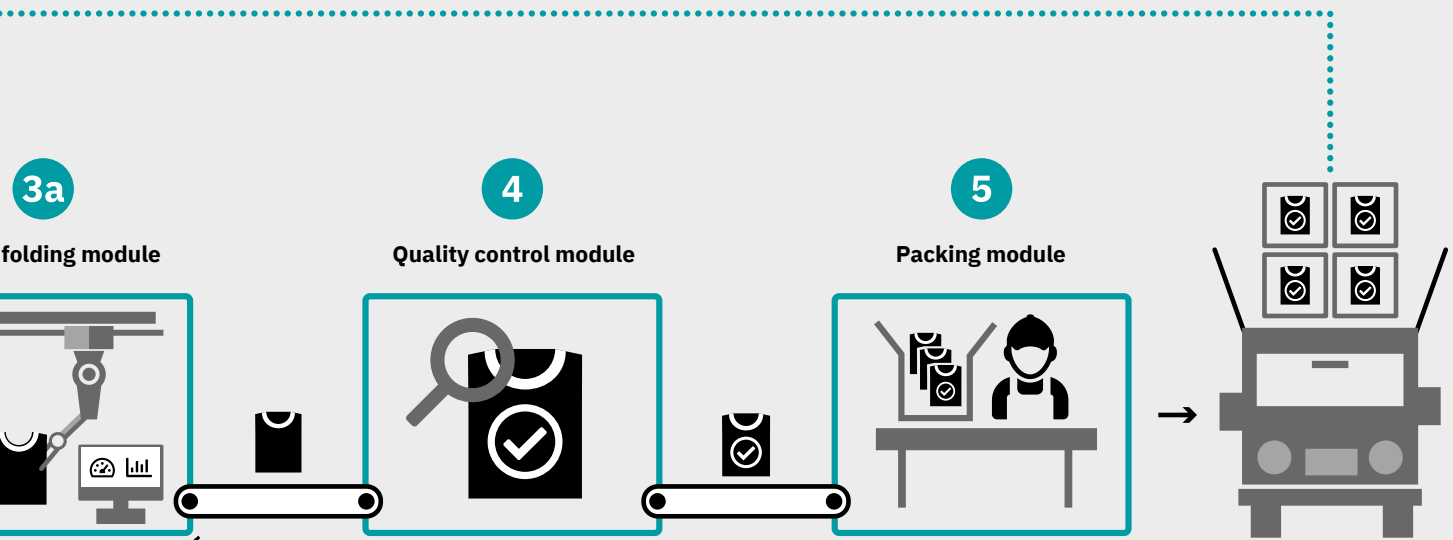


Faster assembly, startup, and retrofitting

Uniform interfaces ensure rapid assembly of individual system modules to form a production line and enable a machine to be quickly converted or retrofitted.

Exchange
for








Flexible conversion and retrofitting

The combination of individual production steps enables flexible production. Production systems can be adapted to changing market requirements. You can also react flexibly in the event of malfunctions, and production can continue.



Faster and more flexible delivery

Compact machine modules are transported more quickly and easily.

Modular machine building

Find the right products for your application

Modular machine and switching devices can be set up in parallel and assembled quickly, easily, and safely at the destination. Plug-in systems combined with individually configurable cable feed-throughs help you to achieve this and ensure the necessary level of flexibility. If necessary, you can convert your machine quickly and thus increase its utilization rate.

 Web code: #3104



Flexible automation solutions

With the Axioline I/O system, automation solutions can be set up based on the modular principle. A controller such as PLCnext Control can carry out the function of the head of an I/O station, alongside which you can arrange I/O modules from the Axioline F and Axioline Smart Elements product families in any combination.

 Web code: #0500



Reliable connection with sensor/actuator cabling

M8/M12 cabling enables the modular, efficient connection of sensors and actuators. Secure, tool-free installation is made possible with the Push-Lock connection and push-pull fast-locking system. Distributor boxes with plug-in cover connection also guarantee significant time savings and quick cabling modifications.

 Web code: #3652

Single Pair Ethernet – finally goes the distance

Single Pair Ethernet (SPE) enables the transmission of Ethernet via just one wire pair and ensures the space-saving connection of sensors and actuators in the Ethernet network. SPE connectors and managed SPE switches achieve transmission speeds of up to 1 Gbps and distances of up to 1,000 m.

 Web code: #3289




Robust industrial connectors

HEAVYCON heavy-duty connectors enable safe power, data, and signal transmission from the control cabinet through to the field. Different housings, fixed-position contacts, and modular contact inserts provide flexible cabling. Push-in connection and click-in latching enable tool-free installation.

 Web code: #0002


Power supplies with IP67 degree of protection

The IP67 power supplies are ideal for distributed field supply. Its weatherproof die-cast aluminum housing provides protection against dust and water and therefore ensures high system availability. The field installation reduces cable lengths and frees up space in the control cabinet. Different connections offer flexibility during mounting.

 Web code: #3192

I/O modules for distributed signal acquisition

The Axioline E devices have been designed to satisfy both the current and future requirements on field installation and for direct use in a machine under harsh ambient conditions.


 Web code: #2551



Reducing and optimizing production times

Reduce your production time with fast installation

As a machine builder, you face increasing competitive pressure. With innovative connection technologies and professional tools, you can significantly speed up the installation process and ensure error-free wiring. This reduces production times and enables your machines to be delivered more quickly. In addition, we can support you in the comprehensive optimization of the value-added chain in control cabinet building.

 Web code: #3102





Reducing and optimizing production times

Get insights into the world of applications

Dive into the world of applications that involve shortening production times. Get an overview of the important aspects when it comes to assembling and installing machines quickly and easily.

 Web code: #3102

1

Digital product selection

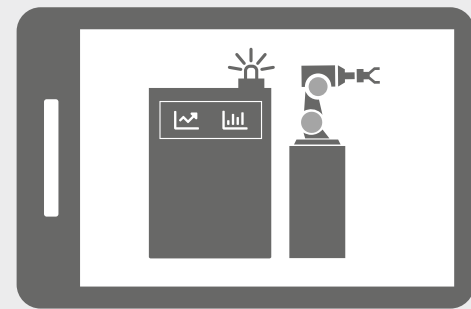
The reduction of production times already starts with the digital product selection. Therefore, it is important that all products are described digitally in full.



2

Planning and simulation of the machine

With the help of the machine's digital twin, all processes can be tested even before construction. This identifies possible sources of error and danger at an early stage and enables you to eliminate them before the machine is built. This shortens production times and speeds up machine startup.



Just-in-time production



Minimize production times

3

Construction of the machine

Worker assistance systems, digital installation notes, and innovative connection technologies and professional tools help to shorten machine production times during the assembly of the real machines.

Get digital installation notes via QR code



Worker assistance system



Fast and error-free wiring



Fast installation



Faster delivery

Reducing and optimizing production times

Find the right products for your application

Our software solutions for control cabinet building create seamless, digital processes from planning and procurement through to production. Efficient products and scalable solutions such as our marking systems and worker assistance systems increase your control cabinet building and machine building productivity through optimized workflows.

 **Web code: #3102**




Perfect ECAD integration

Both the clipx ENGINEER engineering software and the MARKING system marking software provide individual and convenient process support. Continuous data flow, intelligent functions, and high-performance ECAD interfaces contribute significantly to increasing efficiency.

 **Web code: #3205**

MARKING system – simply easy!

We simplify your daily work – that's the promise backing every industrial marking and identification solution from Phoenix Contact. The MARKING system product portfolio provides a comprehensive system solution for simple and efficient marking processes – consisting of intuitive marking software, powerful marking systems, versatile identification solutions, and comprehensive services.

 **Web code: #0849**




Worker assistance systems

In industrial control cabinet building, processes still feature a large number of manual steps. Software-supported worker assistance systems guide users through partially automated process steps, control the relevant output devices and provide the necessary information based on ECAD data. This boosts productivity and increases process reliability.

 **Web code: #3062**

The right tool for every application

Be it cutting, stripping, crimping, screwing, or measuring: our high-grade tools impress with ergonomic designs, simple handling, long service life, and excellent operative results. Assemble conductors in under two seconds with the Crimphandy.

 **Web code: #1929**

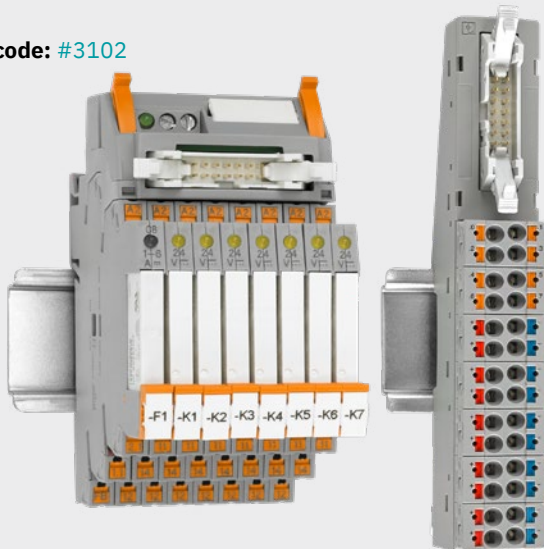


Reducing and optimizing production times

Find the right products for your application

Reduce the wiring time and minimize the error rate with connection technologies that are quick and easy to operate, such as Push-in and Push-X connection technology. M12 connectors with the push-pull fast-locking system also enable quick and error-free installation in the field. The system cabling helps you to wire your E/A modules efficiently and without any errors.

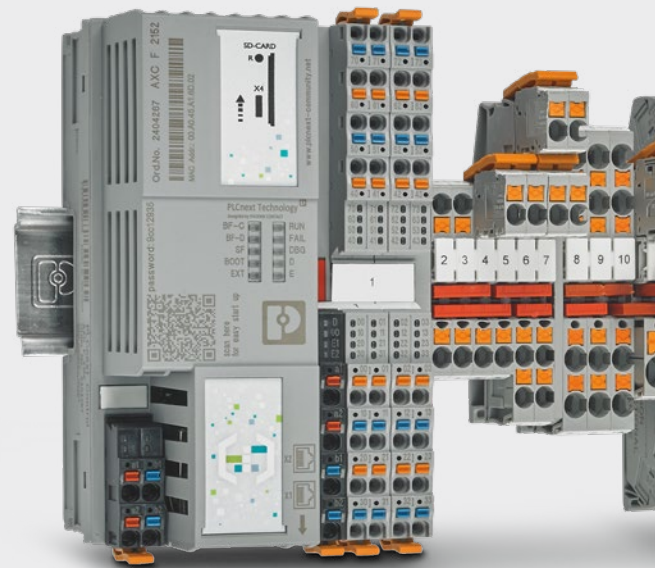
 Web code: #3102



Connect the field level safely to the controller

VARIOFACE system cabling connects the controller to the field – easily and without any errors. Phoenix Contact offers suitable front adapters, system cables, and interface modules.

 Web code: #0702



Tool-free conductor wiring

With Push-in Technology, you can contact conductors from 0.25 mm² easily – both directly and without using tools.

 Web code: #1534

Push-in Technology

Designed by Phoenix Contact



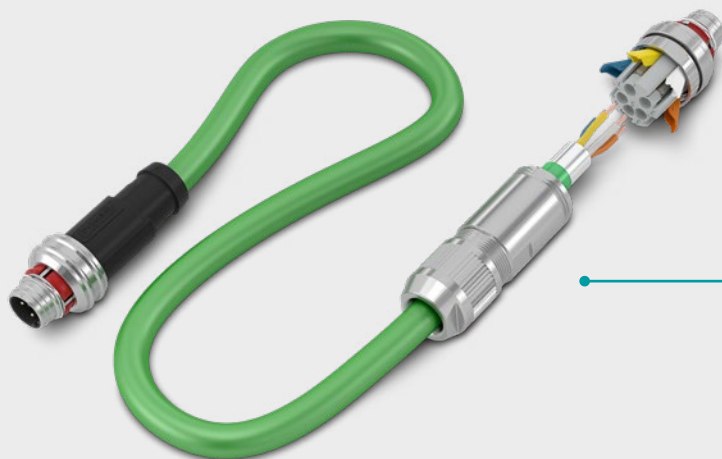
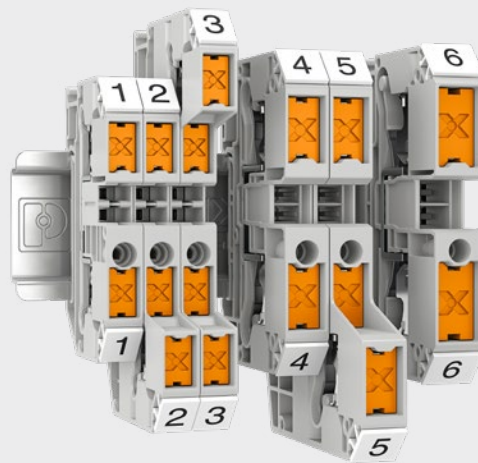
Push-X: the new connection technology for all types of conductors

Phoenix Contact, inventor of the Push-in connection, sets a new benchmark in connection technology: Using the new Push-X technology you are able to connect all types of conductors and cross-sections even faster now. The easy and tool-free operation reduces installation times and paves the way for automated wiring.

 Web code: #3091


Push-X Technology

Designed by Phoenix Contact



Tool-free field cabling

Forget about the time-consuming and tedious installation of M8 and M12 connectors. With the Push-Lock conductor connection and the push-pull fast-locking system, you can design your signal, data, and power cabling flexibly, easily, and consistently without tools.


 Web code: #3059

Greater efficiency in control cabinet building

From engineering to production

Control cabinets are at the core of modern, digitalized, and automated production lines and the machines used in them. Therefore, more efficient control cabinet building processes simultaneously mean an optimization of the machine building process as a whole.

Digital data, scalable solutions, and lean production methods increase efficiency in control cabinet building. We will support you in this from the engineering process right through to the finished control cabinet.

 Web code: #3812



Our services at a glance



Intuitive software

Our software solutions for control cabinet building create seamless, digital processes from planning and procurement through to production.



Scalable solutions

Tailored to your needs, we provide scalable, ergonomic, and modular solutions: from our hand tools and printing system, to software-supported workstation solutions, right through to complete automation.



Partnership-based consulting

As your partner, we will support you with practice-oriented methods and individually developed solutions for greater efficiency throughout the entire value-added chain.



Flexible services

Benefit from reliable, customized support: From presales through to aftersales, from rental devices to preassembled components.

Worldwide service and support

We are there for you

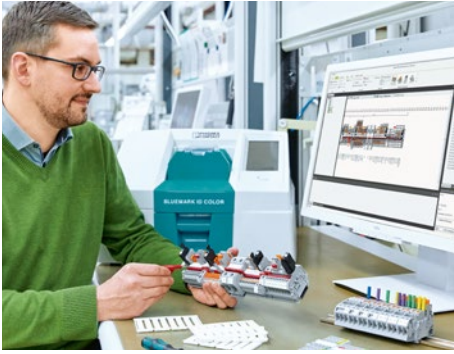
At Phoenix Contact, the focus is always on you, the customer. With over 50 subsidiaries and more than 30 agencies around the world, we are always close by.

As a result, you receive expert, first-hand advice and benefit from fast and timely delivery of a complete package consisting of high-quality, optimally coordinated components. Our expertise and the high levels of vertical integration also allow customized solutions tailored to you. We will also support you after the purchase with comprehensive after-sales services.

 Web code: #2247



Your advantages in detail:



Fast terminal strip production

Our terminal strip production service provides help in managing order peaks flexibly and allows terminal strips to be delivered just in time for series production. The fully assembled and marked terminal strips, already equipped with accessories, just need to be installed and connected.



Individual set solutions

To reduce the effort of materials and stock management, you can order pre-picked material sets under a single item number.



Customized solutions

Can't find what you're looking for in our range? No problem: From minor adaptations to completely new product developments, we focus on your specific requirements.



Global approvals and certificates

Our numerous certificates are proof that you can put your full trust in our products, because quality is essential. We strive to satisfy this claim in every respect. For this reason, our systems, processes, and products are tested and certified several times over.



Comprehensive after-sales services

We are there for you – not just before your purchase, but also after with our comprehensive after-sales services. This includes our repair service, exchange service, and replacement parts service.



Comprehensive training program

From the basics to specialist expertise: we provide you with the skills you need in line with your specific requirements.

Open communication with customers and partners worldwide

Phoenix Contact is a global market leader based in Germany. We are known for producing forward-thinking products and solutions for the comprehensive electrification, networking, and automation of all sectors of the economy and infrastructure. With a global network, we maintain close relationships with our customers, something we believe is essential for our common success.

You can find your local partner at
phoenixcontact.com

