Remtron

Electronic switching devices and motor control

Reliable motor switching, protecting and monitoring

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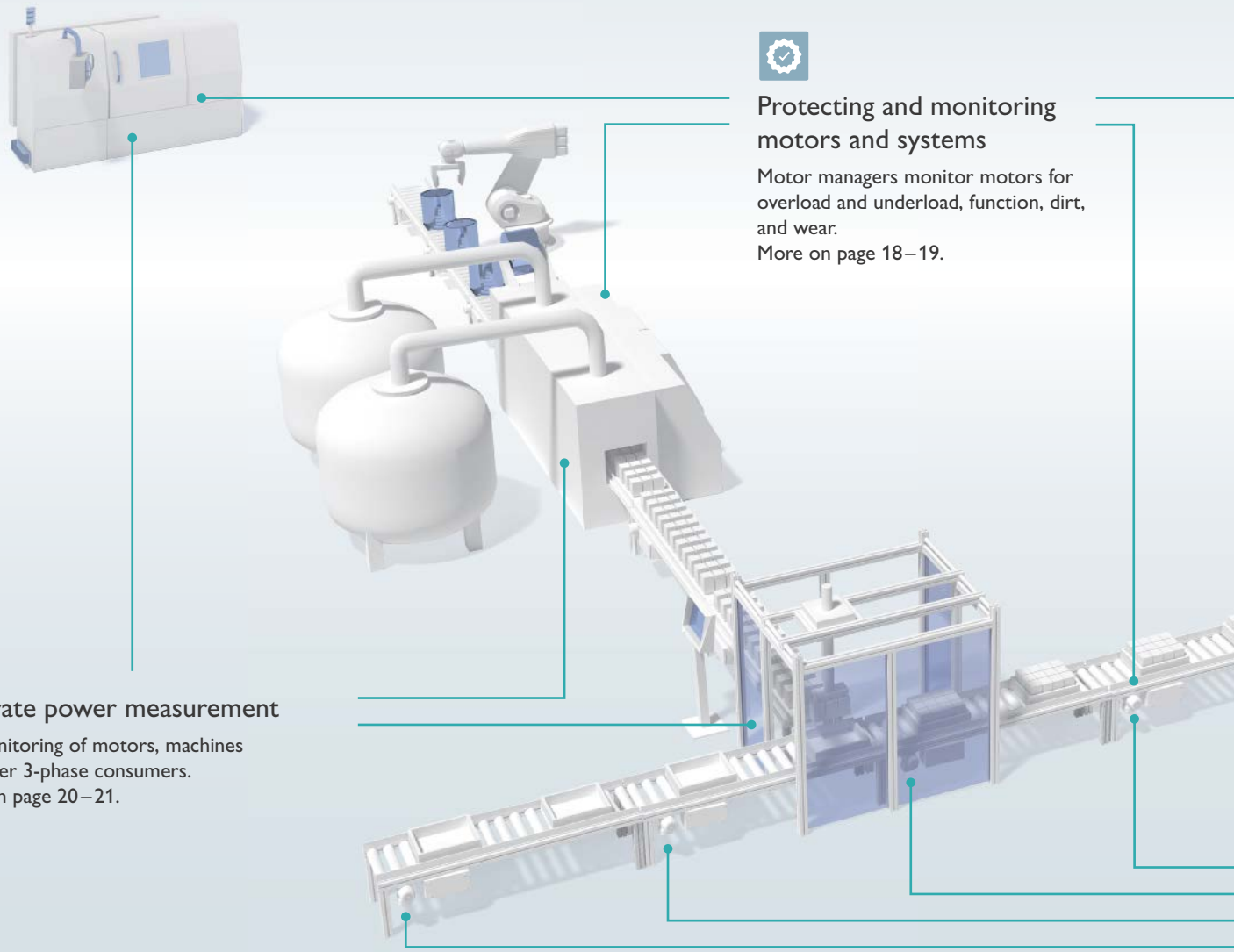
Intelligent switching, protection, monitoring and measurement

Electric motors are used in a variety of industrial applications for controlling movements. Motors are often started and reversed using classic, mechanical protective circuits. However, these require a great deal of space as well as a lot of wiring effort, and have a limited service life. Costly sensor technology is often required to collect important motor and process data. Phoenix Contact offers innovative and intelligent products for your application.



Protecting and monitoring motors and systems

Motor managers monitor motors for overload and underload, function, dirt, and wear.
More on page 18–19.

Accurate power measurement

and monitoring of motors, machines and other 3-phase consumers.
More on page 20–21.

Switch and protect motors intelligently

with hybrid motor starters.

High system availability

Service life is ten times longer, thanks to low-wear switching with CONTACTRON hybrid technology.

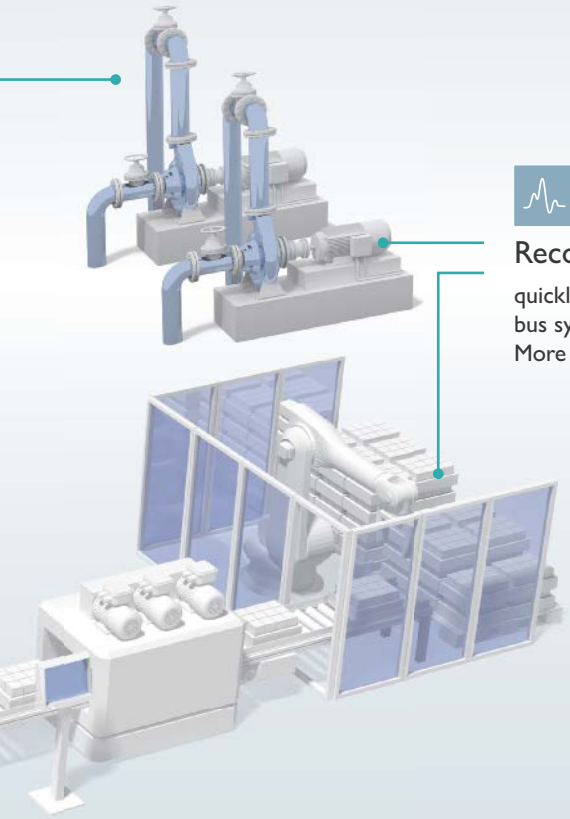
Save time

Up to 75% less wiring costs in comparison to conventional solutions.

Save space

Up to 89% space saving in comparison to conventional switching devices.

More on page 6–7.



Record process data

quickly and easily using standard bus systems or IO-Link.
More on page 14–23.

Functional safety

with group switch-off for motor and motor groups.
More on page 12–13.

Contents

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.net/webcode/#1234

The CONTACTRON product portfolio

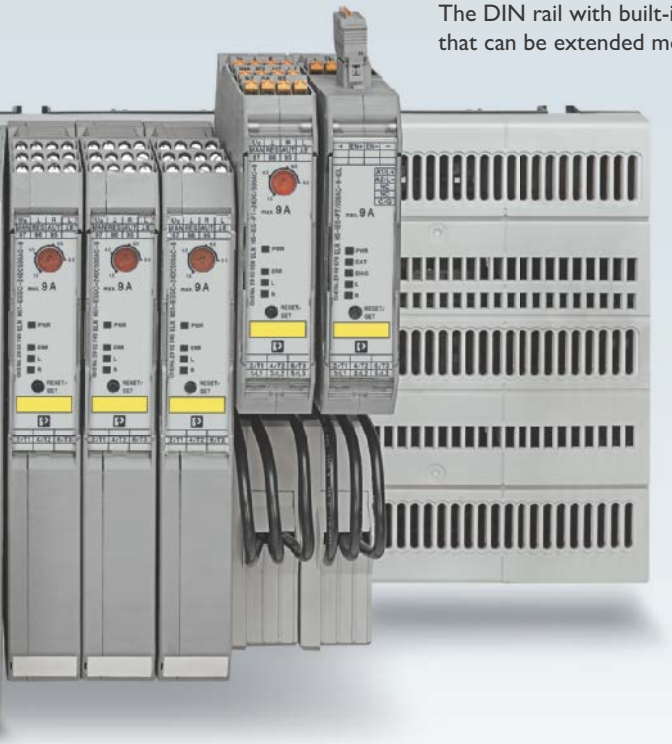
Take advantage of the broad portfolio of electronic switching devices, economical motor and machine managers, and modular power distribution board from Phoenix Contact. Whether you are optimizing your production and operating costs, your maintenance, or your energy management: we will support you in meeting the challenges of digitalization and Industrie 4.0.

Hybrid motor starters

Switch and protect motors cleverly.

CrossPowerSystem

The DIN rail with built-in power distribution that can be extended modularly.



IFS-CONF software

Configuration and monitoring.

Motor and machine management

Protect and monitor motors and systems, and accurately measure the energy of motors, machines and other 3-phase consumers.

Solid-state contactors

Silent and reliable for every AC voltage network.

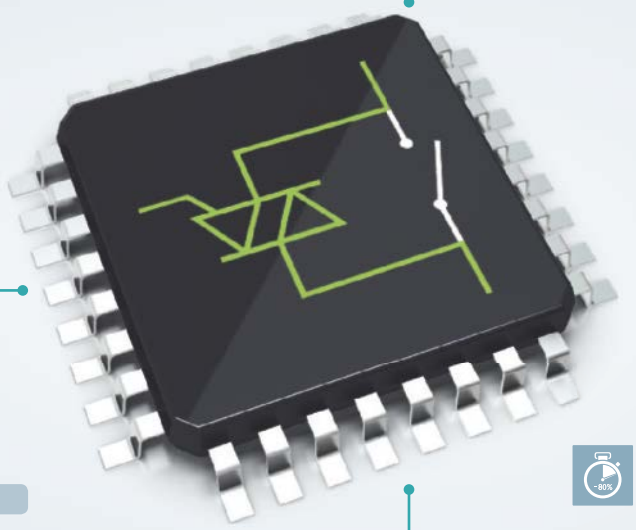
CONTACTRON hybrid technology

CONTACTRON hybrid technology is a microprocessor-controlled combination of wear-free solid-state technology and robust relay technology. The semiconductors execute the wear-prone on and off switching procedures, while the relays only conduct low-loss current. This enables soft switching and considerably reduces the load on the relay contacts.

CONTACTRON Hybrid Technology

Designed by PHOENIX CONTACT

~30 million switching cycles



10 times longer service life

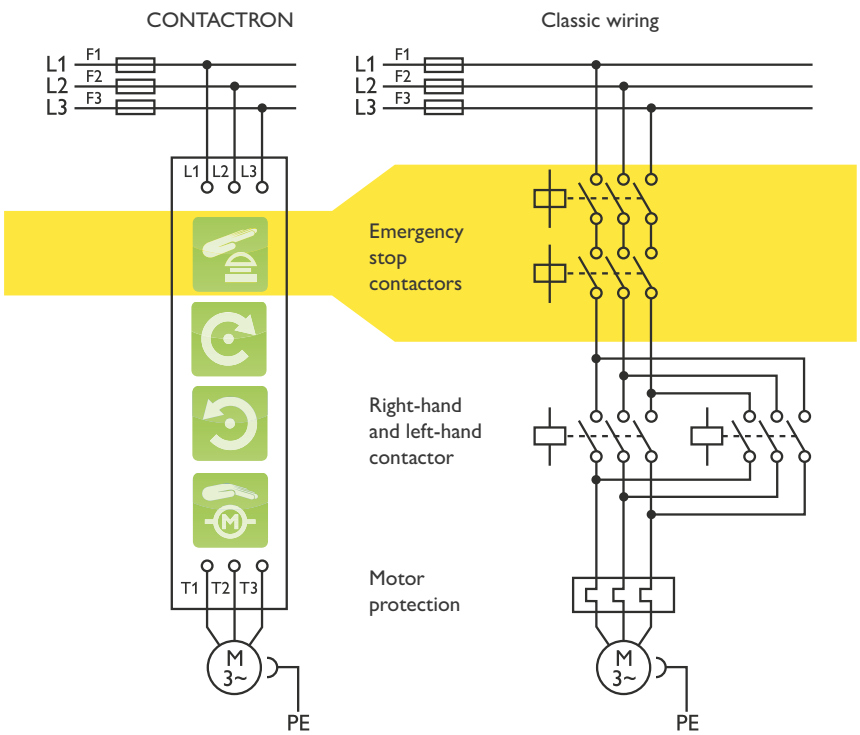
Contactor:

Hybrid motor starter:

Reduce the amount of space and wiring effort required by ~75%

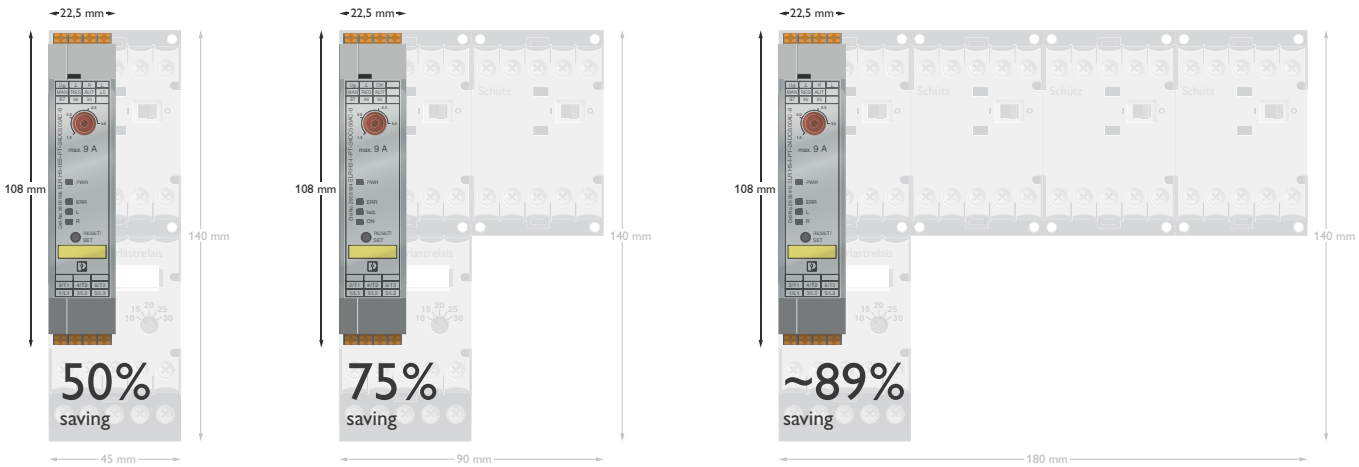
CONTACTRON compared to traditional solutions

- CONTACTRON integrates the functions of a conventional reversing contactor, including safety function, into a single device
- Internal load and locking circuits enable clear wiring
- The locking circuit is certified in accordance with UL 508a and UL 60947-1



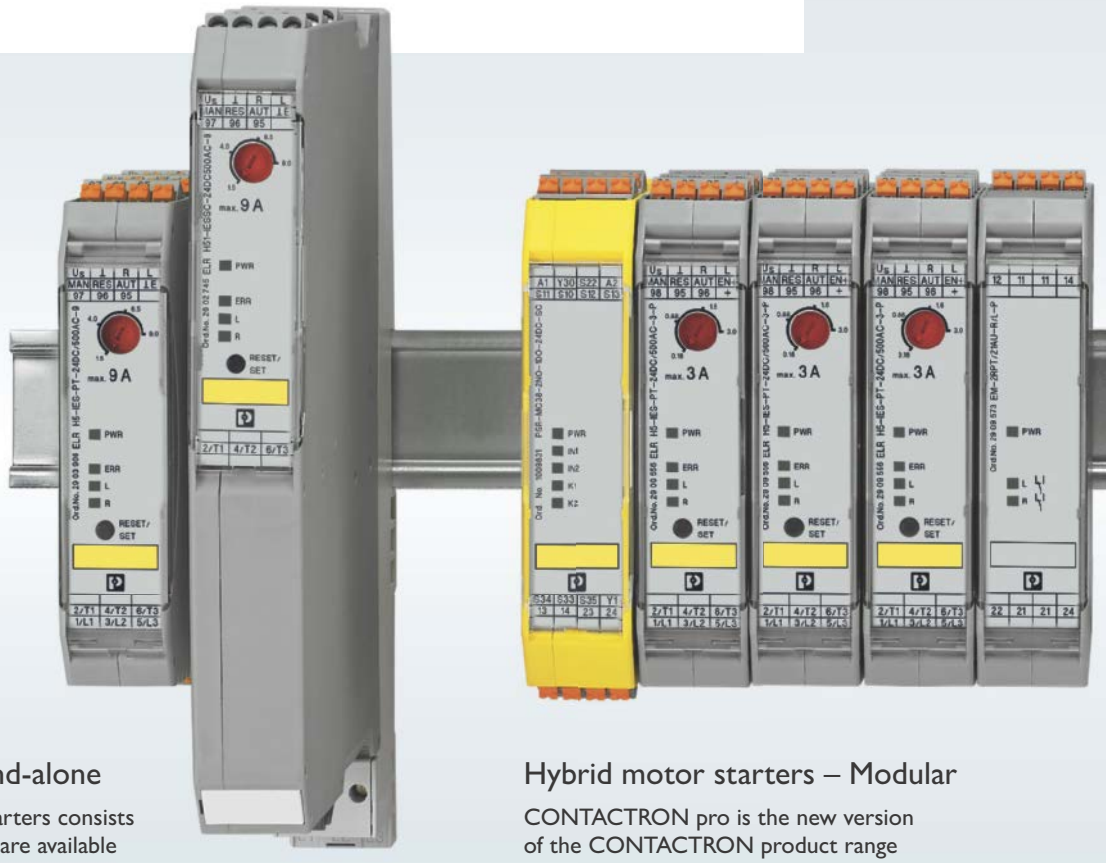
Less space required in comparison to standard switching devices

Using the CONTACTRON hybrid motor starter, device combinations that would previously take up a lot of space in the control cabinet can now be replaced with one single device.



CONTACTRON motor starters

Switch motors safely and reliably with compact standalone, modular, and network-ready hybrid motor starters. The devices can be used wherever three-phase asynchronous motors, from 50 W to 3 kW, need to be reversed and protected. The product range of hybrid motor starters consists of direct and reversing starters, which are available with various functions such as emergency stop and motor protection.



Hybrid motor starters – Stand-alone

The product range of hybrid motor starters consists of direct and reversing starters, which are available with various functions such as emergency stop and motor protection.

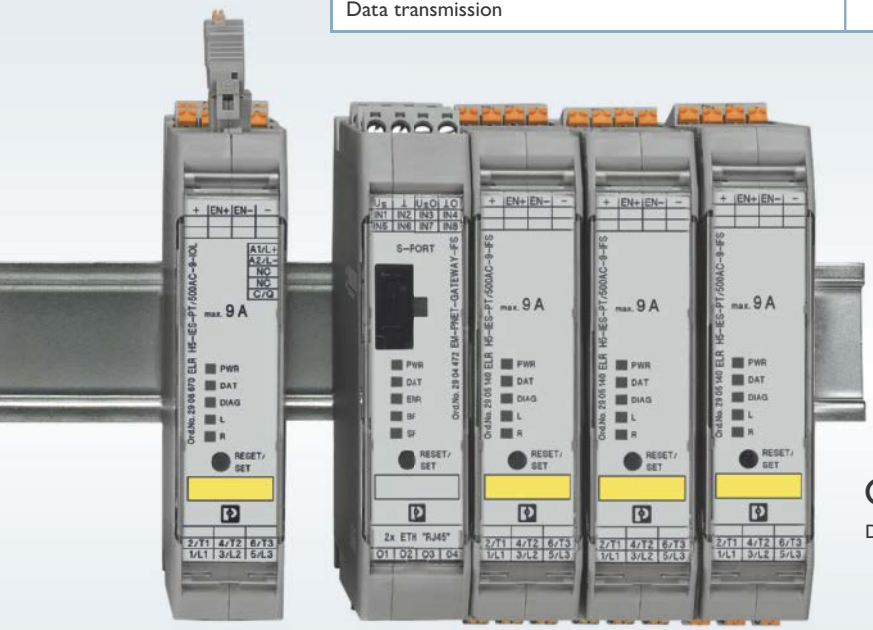
Versions with short-circuit protection
With the integrated fuses, the motor starters meet coordination type 2 in accordance with IEC/EN 60947-4-2. These devices can be mounted flexibly on standard DIN rails or on 60 mm power busbars.

Hybrid motor starters – Modular

CONTACTRON pro is the new version of the CONTACTRON product range offering simple safety integration and modular extension options. All based on hybrid technology – for an increased level of simplicity in functional safety, high system availability, and easy handling.

CONTACTRON	Stand alone	Modular	Network capable
Direct or reversing starters*	•	•	•
Motor protection and emergency stop*	•	•	•
Short-circuit protection	•		
Modular expansion possible		•	•
Network-capable			•
Diagnostic functions			
1 checkback contact	•	•	
Error code display**	•	•	•
Additional relay module for status checkback		•	
Early warning in the case of overload			•
DIN rail connector			
Group switch-off		•	
24 V power supply		•	•
Data transmission			•

* Available in different combinations
** On the device: overload, underload, symmetry, etc.



CONTACTRON Hybrid Technology

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Hybrid motor starters – Network-capable

Integration into fieldbus systems is realized via the INTERFACE system connection. Corresponding gateways are available for all common fieldbus systems.
The IO-Link versions enable you to benefit from consistent communication between the field and control level, thereby enabling the easy transfer of process data.

CANopen
DeviceNet
PROFINET
EtherNet/IP
PROFIBUS
Modbus
IO-Link

CONTACTRON hybrid motor starters – Stand-alone

Switch motors safely and reliably with compact hybrid motor starters. The devices can be used wherever three-phase asynchronous motors, from 50 W to 3 kW, need to be reversed and protected. The product range of hybrid motor starters consists of direct and reversing starters which are available with various functions such as EMERGENCY STOP and motor protection.

CONTACTRON Hybrid Technology

Designed by PHOENIX CONTACT

Your advantages

- Less space required, thanks to the slim design: 22.5 mm overall width
- Easy wiring, thanks to integrated locking circuit and load wiring
- Service life is up to ten times longer, thanks to gentle switching with CONTACTRON hybrid motor starter technology
- Adjustable motor protection with bimetal function up to 9 A
- Safe shutdown, thanks to integrated safety function up to SIL 3 and PL e

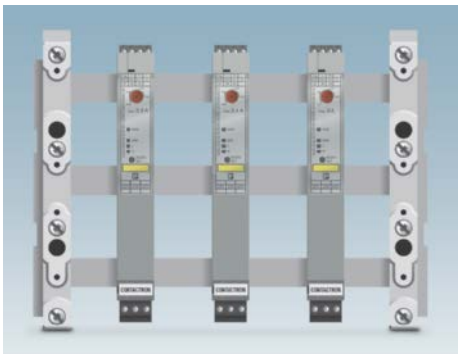
Clever switching and reliable protection

Easy diagnostics

The device visualizes the operating states with a total of four LEDs (overload, underload, symmetry, etc.) thus ensuring simple diagnostics.

Integrated short-circuit protection

With the integrated fuses, the motor starters meet coordination type 2 in accordance with IEC/EN 60947-4-2. These devices can be mounted flexibly on standard DIN rails or on 60 mm power busbars.



Assembly adapters for power busbars

Hybrid motor starters can be flexibly mounted using an assembly adapter. This provides many advantages:

- Mounting directly on a standard DIN rail or power busbar
- Safe disconnection of motor outputs
- Safely disconnected from the mains voltage: by simply removing the switching device from the assembly adapter, for maintenance and servicing

Cost-efficiency, thanks to needs-based function selection

Forward running
Easy control directly via 24 V PLC output cards or 230 V AC signal.

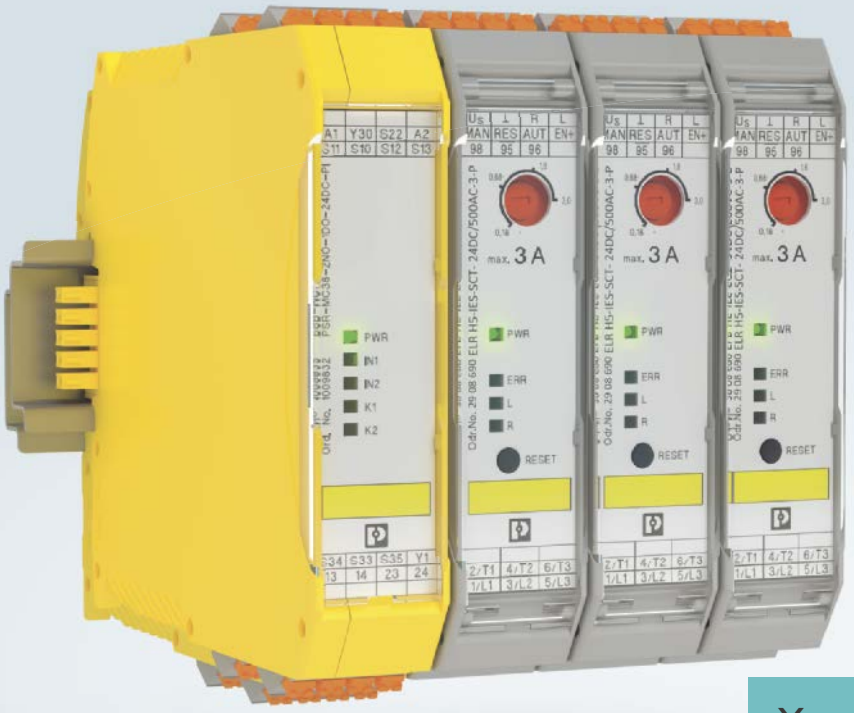
Reverse running
Optional: reversing function including locking circuit and load wiring.

Motor protection
Convenient protection, thanks to the electronic motor protection relay with automatic and remote reset function.

Emergency stop
The integrated safety function enables use in safety-related emergency stop applications.

CONTACTRON hybrid motor starters – Modular

CONTACTRON pro is the new version of the CONTACTRON product range offering simple safety integration and modular extension options. All based on hybrid technology – for an increased level of simplicity in functional safety, high system availability, and easy handling.



CONTACTRON Hybrid Technology

Designed by PHOENIX CONTACT

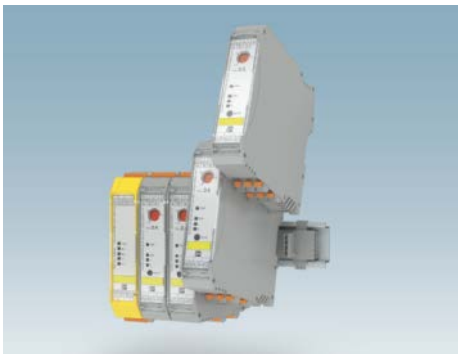
Your advantages

- Easy group shutdown via DIN rail connectors after an emergency stop, thanks to an upstream safety relay
- High system availability, thanks to a service life that is 10 times longer with hybrid technology
- Easy to handle: With the economical DIN rail connector, you save on wiring effort, which means you save money as well
- Reliable feedback on the status of the motor via optional relay module

Simplicity in functional safety

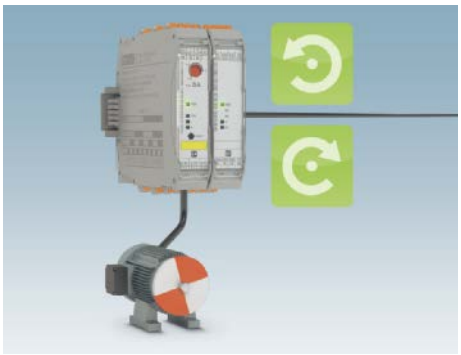
Easy group shutdown

The upstream safety relay guarantees a secure stop of the connected motors after an emergency stop up to performance level e. Our TÜV-certified modules make functional safety very easy for you.



Easy handling

With the economical DIN rail connector, you save on wiring effort, which means you save money as well: Reap the benefits of easy signal loop-through (24 V power supply, ground and enable) plus expansions with checkback contacts.

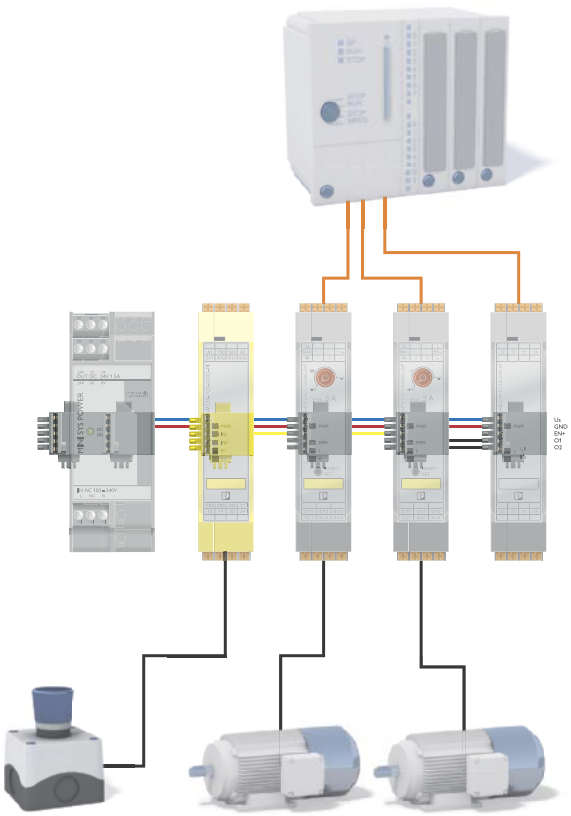


Reliable feedback

Additional feedback on the motor status you can rely on: Thanks to an optional relay module you can reliably capture the status of the motor, e.g. forward or reverse running.

Application example

Using the DIN rail connector, you can perform an emergency stop group shutdown of all the downstream hybrid motor starters without the need for additional wiring.
In addition, all modules can be supplied from the system power supply. The optional response module makes it possible to monitor the motor function.



CONTACTRON hybrid motor starters – Network-capable

Integration into fieldbus systems is realized via the INTERFACE system connection. Corresponding gateways are available for all common fieldbus systems. Transfer your process data easily and network your devices quickly using both the INTERFACE system and the available IO-Link versions.

Not only do you benefit from space and wiring savings, you also get the advantage of diagnostic functions. Custom process data linking helps you meet your application requirements – and that includes digitalization and Industrie 4.0.

CONTACTRON Hybrid Technology

Designed by PHOENIX CONTACT

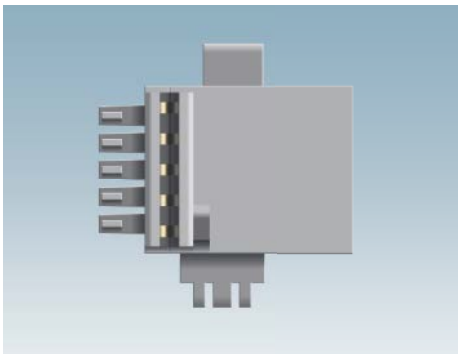
Your advantages

- Flexible and straightforward fieldbus connection with a suitable gateway
- Simple 24 V power supply to IFS devices without additional wiring effort
- Fast connection of other IFS devices, thanks to the DIN rail connector latching concept
- I/O cards no longer required (controller), thanks to the 8 digital inputs and 4 digital outputs on the gateway

Easy networking

Gateway

Up to 32 IFS devices can be easily integrated into conventional fieldbus systems and save bus addresses for field devices. Gateway configuration by means of intuitive IFS-CONF software.



DIN rail connector (T-BUS)

The easy-to-assemble solution for networking, communication, data transmission, and 24 V power supply.

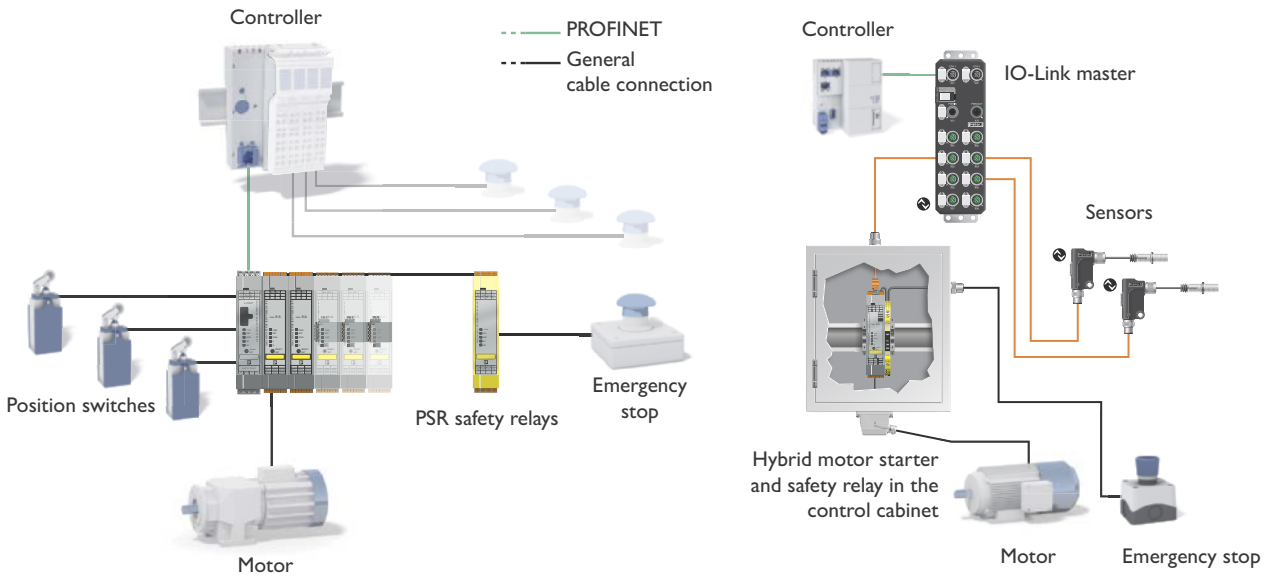
Easy diagnostics

Transfer of status messages to the controller (overload, underload advance warning, symmetry, etc.).

Consistent networking via the INTERFACE system or IO-Link

The new network-capable versions enable consistent communication between the field and control level. Integration into all common fieldbus systems is realized via the interface system or IO-Link.

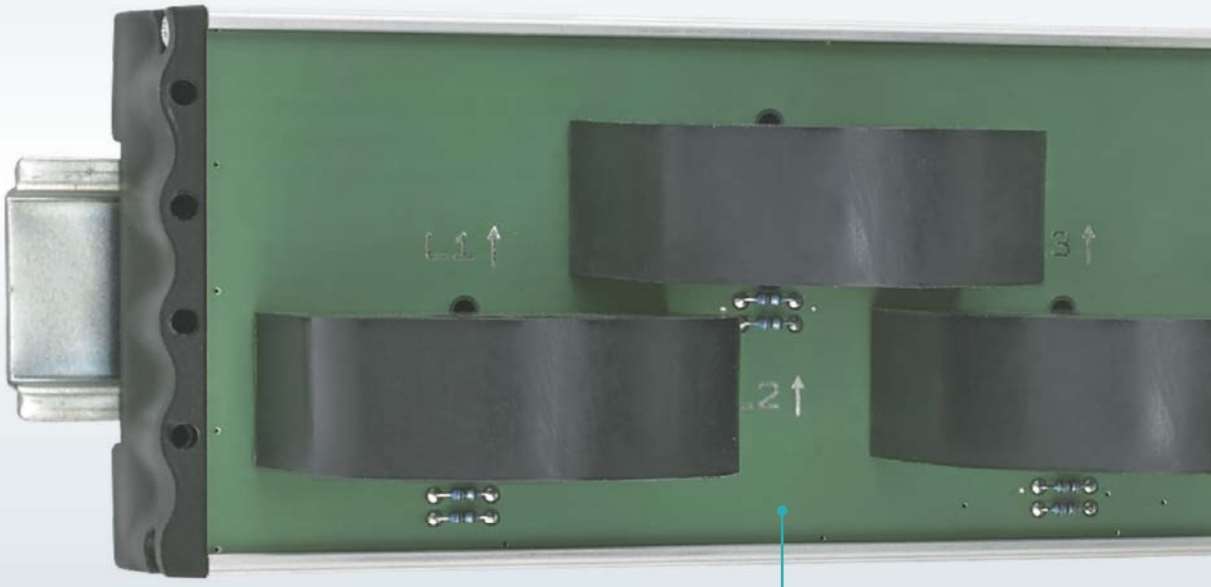
Web code: #1994



CONTACTRON motor and machine management

Protect your motors and systems: The motor manager from Phoenix Contact combines overload and underload detection in a single device. In the event of an emergency, it protects the motor and shuts down the drive.

Monitor your motors and machines: Electronic machine management combines precise energy measurement with the display and monitoring of important parameters of motors, machines or other 3-phase consumers.



Machine manager

By combining the electronic machine manager and an external current transformer, you can cost-effectively monitor motors, machines, and 3-phase consumers.
Two versions are available with current ranges up to 90 A and 160 A.

	Motor manager	Machine manager
Measure electrical parameters (U, I, P, cos phi, S, Q,f)*	•	•
Monitor sinusoidal loads (e.g. asynchronous motors)	•	•
Monitor mixed loads (FU-controlled motors, complete systems)		•
Process data-based preventive maintenance (motors)	•	•
Process data-based preventive maintenance (systems)		•
Measuring range (max.)	5000 A**	160 A
Measuring accuracy	2%	0.50%
Monitored values (incl. message and error message)	8	8
Meter		
Total energy meter	•	•
Operating hours counter	•	•
Measuring instrument		
Internal current transformers	up to 16 A	
Use of external current transformers	•	•
Motor outputs		
Motor output configuration (signal)	•	•

* Voltage, current, real power, cos phi, apparent power, reactive power, frequency
** Depending on the converter used

Motor manager

Motor managers from Phoenix Contact monitor motors for overload and underload, function, dirt, and wear. You can therefore provide permanent protection for pumps, actuating drives, fans, conveyor belts and machine tools, for example.

CONTACTRON motor manager

With the motor manager, you can detect all the critical load states throughout the system and benefit from the advantages of modern real power monitoring. If required, the motor manager switches the drive off and thereby protects the motor and system. The motor manager is configured via the intuitive IFS-CONF software from Phoenix Contact.

Your advantages

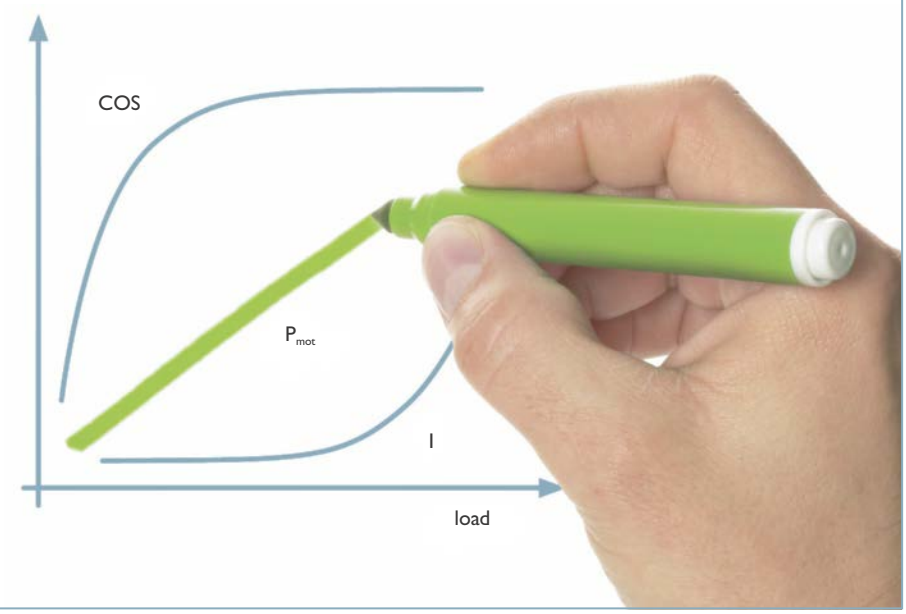
- Integrated full motor protection, thanks to bimetal function and thermistor evaluation
- Protection of high-quality system parts, thanks to freely configurable signaling and switching thresholds
- Production data and energy data acquisition without the need for complex sensors
- Process data such as performance values, operating hours, and switching cycles are safely transmitted between field and control level
- Easy configuration and diagnostics
- Connection to controller via bus gateway

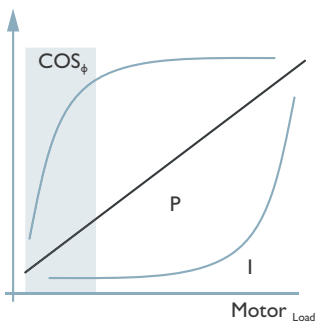
Application examples

Reliable monitoring – exact and fast control

Motor managers from Phoenix Contact monitor motors for overload and underload, function, dirt, and wear. You can therefore provide permanent protection for pumps, actuating drives, fans, and machine tools, for example. The monitoring is realized by freely configuring switching and signaling thresholds. Identical or separate settings can be made for the thresholds relating to the two directions of rotation. Configuration relies on the real power consumed (calculated from three currents, voltages, and the phase angle), thereby offering a much more precise basis than if only the current is taken into consideration, as it is independent of voltage fluctuations and drive load.

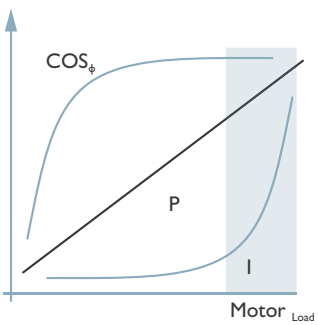
System protection requires real power measurement
While a cos monitor only detects underload states, and a motor protection relay only detects overload states, real power measurement detects all critical load states of the motor.





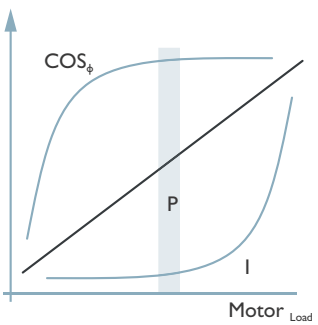
Underload detection in a pump

In the case of motor-driven pumps, the lower power threshold provides reliable protection against hazardous dry running.



Overload detection on the conveyor belt

The upper power threshold protects the motor from overloads and switches off before any damage is caused.



Protecting machine tools

Freely configurable switching and shutdown thresholds guarantee reliable monitoring over the entire performance range protecting the motor and system.

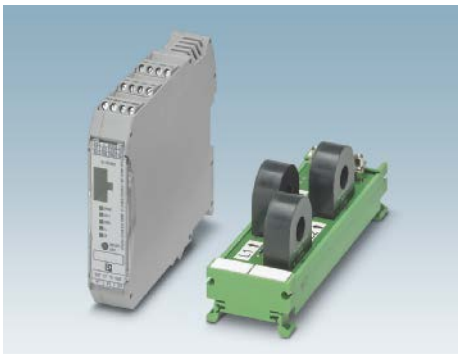
CONTACTRON machine manager

Monitor your motors and machines: electronic motor and machine management combines precise energy measurement with the display and monitoring of important parameters of motors, machines, or other 3-phase consumers. As an option, can be networked with all common fieldbus systems via a gateway.

Your advantages

- DIN rail bus connector interface for direct connection to all standard fieldbus systems
- Flexible use in the central control cabinet and in the decentralized control box
- Compact design saves space in the application
- Increased system availability, thanks to preventive maintenance based on process data
- Continuous monitoring of mixed loads within an application

Efficient machine management

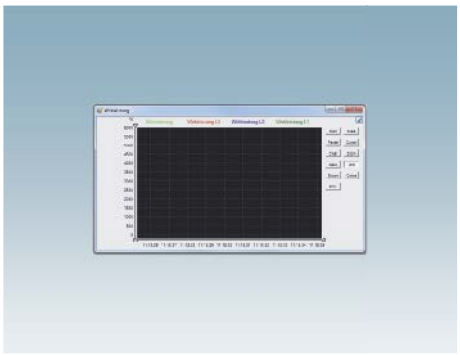


Accurate measurements

Two versions are available with an external current transformer with current ranges up to 90 A and 160 A.

Easy configuration

Benefit from the flexibility of freely configurable switching and signaling thresholds for all relevant measured variables. Configuration is via the IFS-CONF software from Phoenix Contact.



Reliable monitoring

Display of important operating parameters:

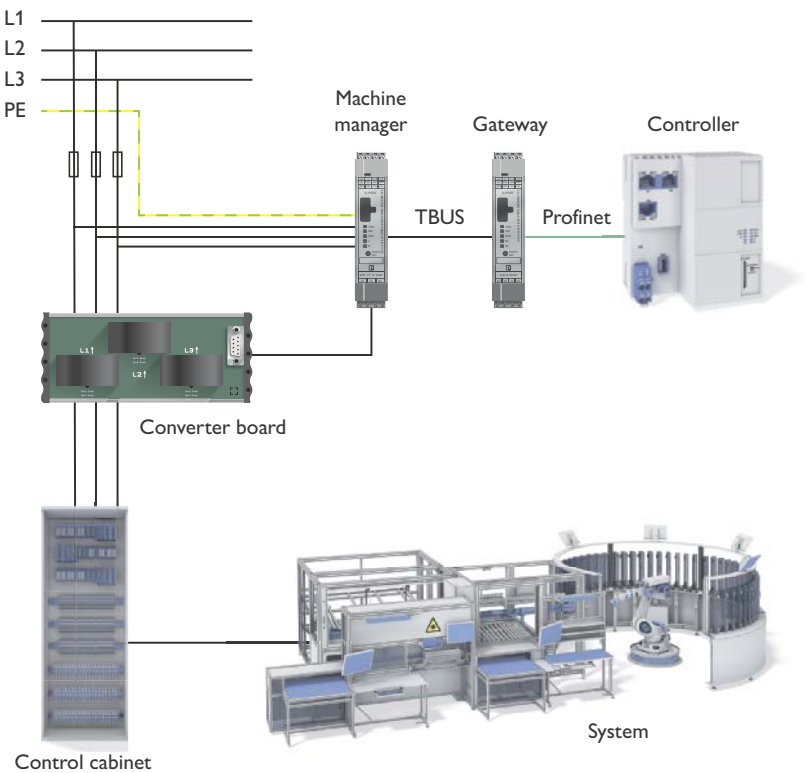
- Real power
- Apparent power
- Reactive power
- Energy meter
- Cos ϕ
- Current
- Voltage
- Frequency

Application example

Monitoring of important machine parameters, networked via Gateway controlled using PROFINET.

Cost-effective energy measurement
By combining the electronic machine manager and an external current transformer, you can cost-effectively monitor motors, machines, and 3-phase consumers.

Easy and consistent communication
Network the machine manager with all popular fieldbus systems (PROFIBUS, PROFINET, Modbus/TCP, Ethernet, CANopen®, DeviceNet™) via a gateway. Consistent communication for Industrie 4.0, thanks to optional data transmission via OPC UA.



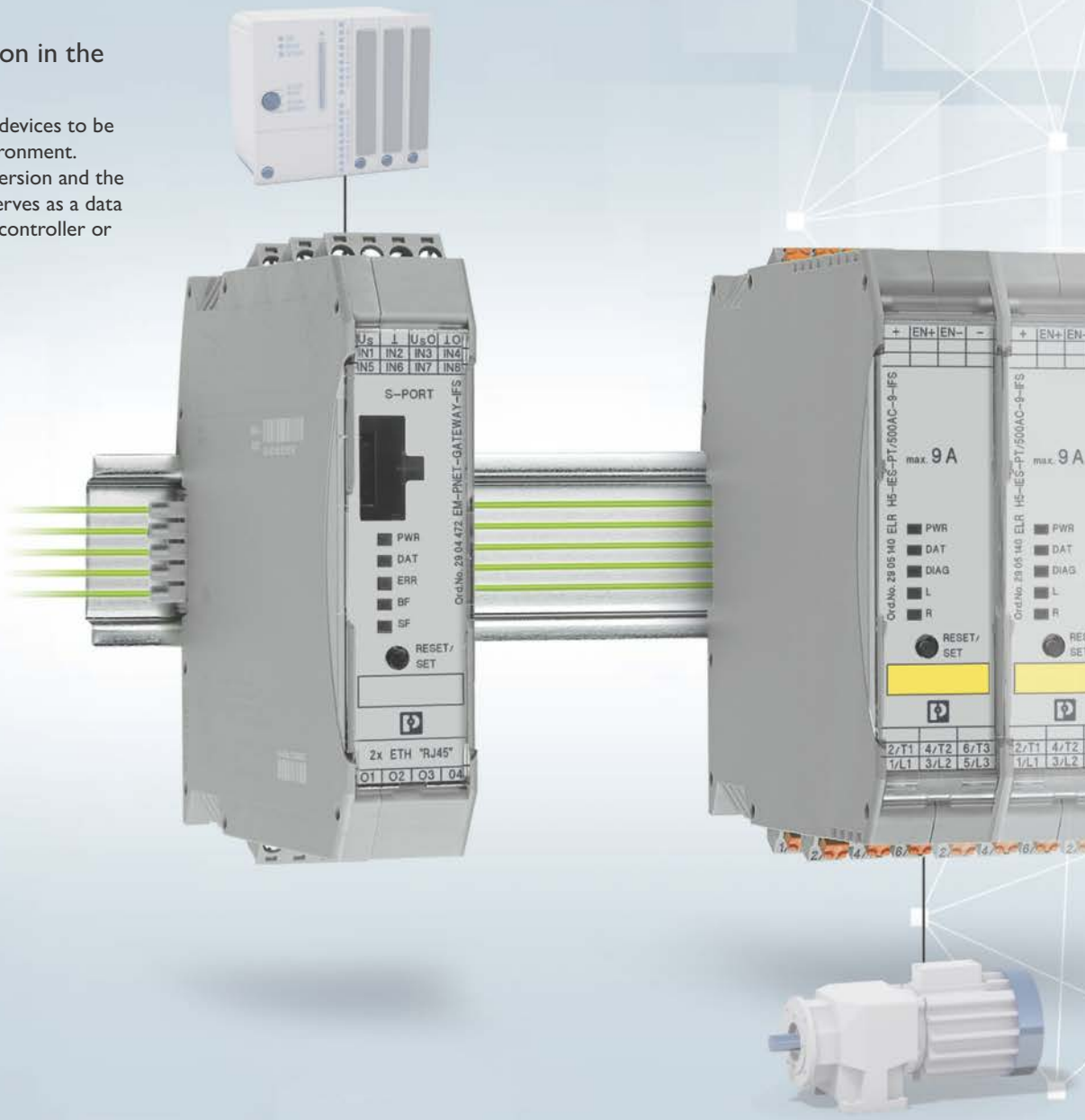
INTERFACE system – Continuous overview of movements thanks to digitalization and networking

The INTERFACE system consists of devices which can be connected to each other via the DIN rail connector. As the usual parallel wiring is redundant, the wiring effort is reduced.

Thanks to the flexible and modular design, the INTERFACE system always adapts to your requirements. The networking options provide an excellent basis to meet the requirements of the Internet of Things (IoT).

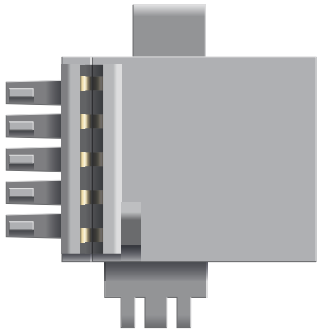
Gateway for integration in the fieldbus environment

A gateway enables up to 32 devices to be networked in a fieldbus environment. In addition to protocol conversion and the coordination of devices, it serves as a data interface to the higher-level controller or cloud solution.



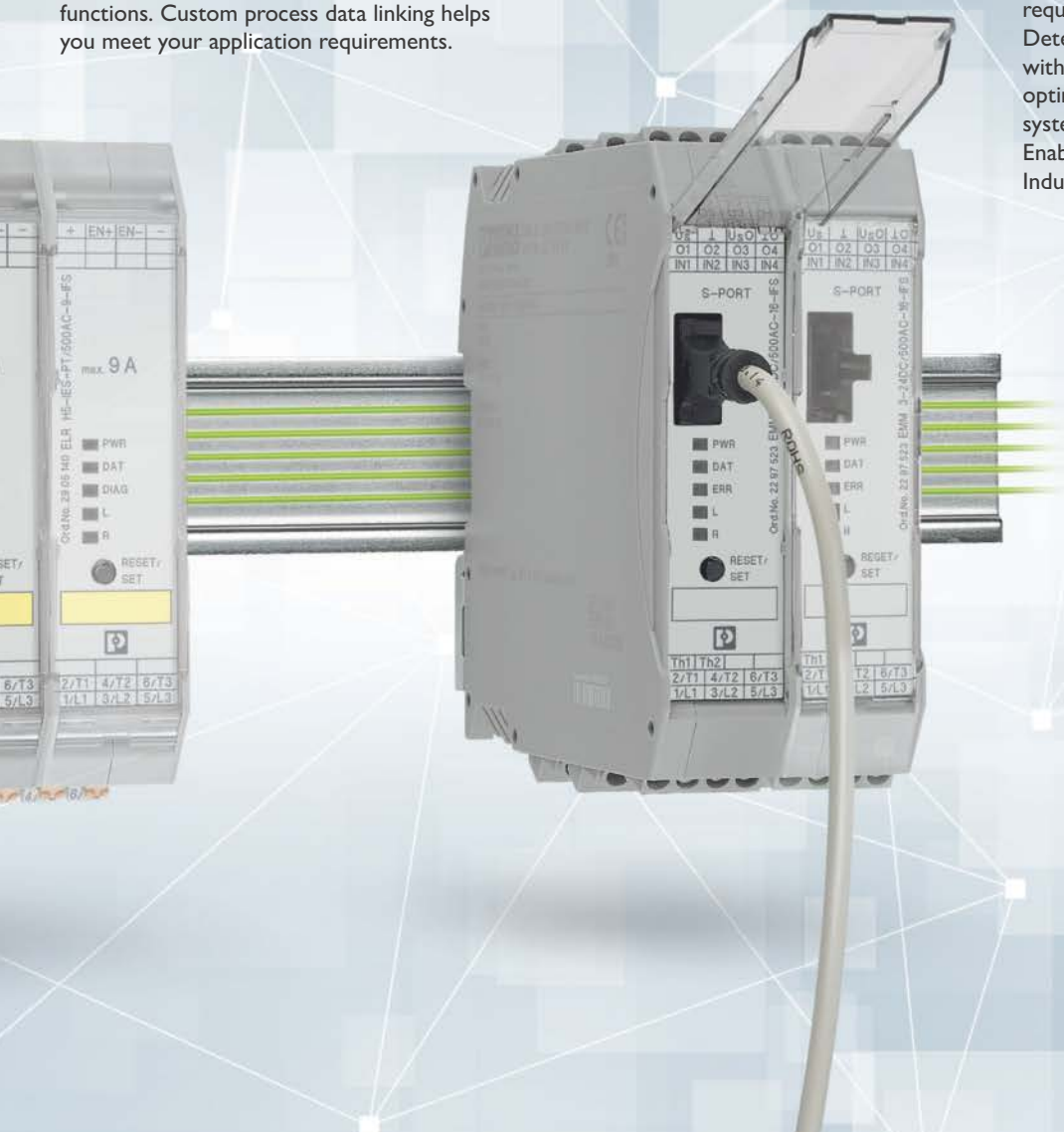
Transfer your process data easily and network your devices quickly

The DIN rail connector (T-BUS) is the core of the INTERFACE system. It oversees the networking, communication and power supply of the devices.



CONTACTRON hybrid motor starters

Not only do you benefit from space and wiring savings, you also get the advantage of diagnostic functions. Custom process data linking helps you meet your application requirements.



Detect all load states of motors and systems reliably

Use important motor and system data to monitor your application and maintain a continuous overview of your energy requirements.
Detect critical load states at an early stage without using additional sensors thus optimizing maintenance cycles and increasing system availability.
Enabling you to meet your specific Industrie 4.0 requirements.

CrossPowerSystem
The power distribution board

Not only can you set up motor starters reliably with the power distribution board, you can also implement modular and functional solutions. Wherever necessary, simple modifications can be made or extensions can be added to adapt to new requirements.

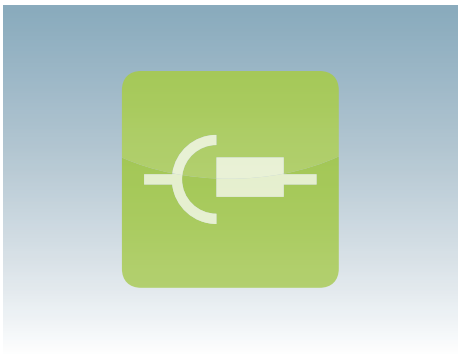
CONTACTRON Hybrid Technology

Designed by PHOENIX CONTACT

Your advantages

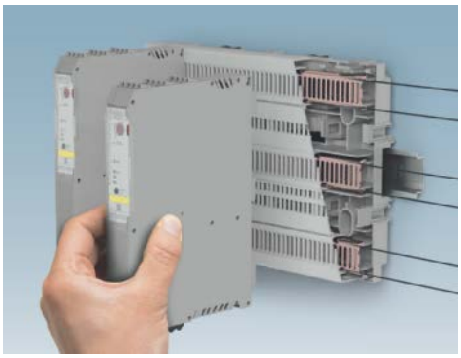
- No need for separate 3 AC feed-in per device – no phase shift is possible
- Quick, complete out-of-the-box system
- Compact construction in comparison to classic power distribution

The perfect connection



Switching technology and power distribution

Time is money – this is particularly true in the construction of machines and systems. Thanks to the combination of power distribution and switching devices, mounting is even faster.
Furthermore, the integrated reverse pole protection prevents errors and ensures even simpler startup.



The new DIN rail with in-built power distribution

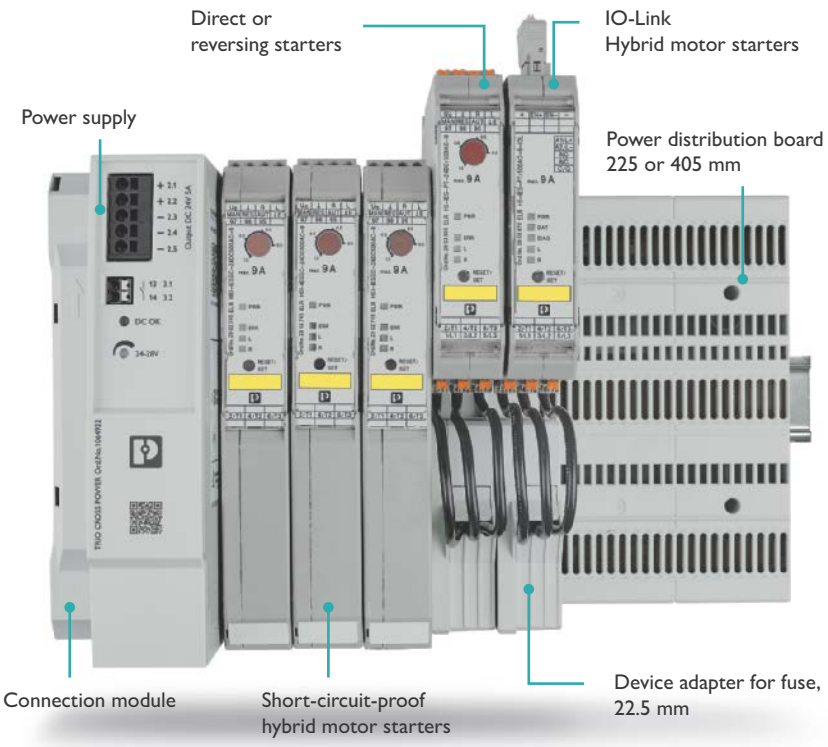
The CONTACTRON hybrid motor starter is mounted on the board without tools with just a click, and simultaneously safely electrically connected to the three phases – all in just one step.

Power supply

The new TRIO CROSS POWER power supply for the CrossPowerSystem power distribution board is perfectly adapted for use in machine building. All functions and the space-saving design are tailored to the stringent demands in this area. The Push-in connection enables quick and easy connection of a 24 V DC control voltage.

Implementing modular and functional solutions

Now, reduce your wiring costs with the new 5 A power supply. This can be used to supply power to all hybrid motor starters on the board.
Furthermore, to generate motor-relevant data for system monitoring, simply use the network-capable solution alongside the classic motor starters via IO-Link.
A 225 mm and 405 mm version of the power distribution board is available.



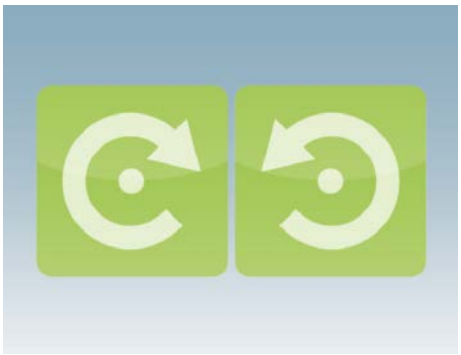
Solid-state contactors

Solid-state contactors are far superior to mechanical contactors in terms of switching speed, service life, and robustness. This is because they also work reliably and with stable switching times in dusty or chemically aggressive atmospheres. They switch resistive and inductive loads silently and without wear. The solid-state contactors from the CONTACTRON series are available for single and three-phase networks and, depending on the type, also provide a reversing function.

Your advantages

- Reliable and fast switching, thanks to wear-free electronics
- Robust – resistant to shocks and vibrations
- Easy wiring, thanks to integrated locking circuit and load wiring
- Switching capacity up to 18.5 kW
- Direct start and reversing of three-phase asynchronous motors

Wear-free switching



Forward running and reverse running

Easy control via a 24 V DC or 230 V AC signal. Locking circuit and load wiring included.

1-phase solid-state contactors

Wear-free starting of 1-phase AC loads up to 660 V AC/50 A, e.g. in the following applications:

- Production machines and heating systems
- Lighting systems
- 1-phase motors

3-phase solid-state contactors

Wear-free starting or reversing of 3-phase AC motors 575 V AC/3 x 37 A, e.g. in the following applications:

- Conveying systems and machine tools
- Pumps and fans
- Mixers and much more

Applications with high switching frequency and switching rate

Solid-state contactors are particularly suitable for high switching frequencies, such as boilers, temperature controllers or light and lighting systems.

Solid-state contactors can also be used to switch production machines, conveyor systems, machine tools, sliders, pumps, fans, separators or ship steering gear.

Switching large AC loads
Error-free switching in the power supply network: solid-state contactors from Phoenix Contact only switch in zero crossing mode. This means that no high-frequency disturbing pulses are generated.

Product overview

Hybrid motor starters

		Functions							Connection technology	
		Direct starter	Reversing starter	Motor protection	Emergency stop	Can be networked	Modular	Short-circuit protection	Screw	Push-in
Maximum load current	Input voltage									
0.6 A	24 V DC	•		•	•	•			2905154	2905141
		•		•	•				2900566	2903914
		•	•	•	•	•			2905151	2905138
		•	•	•	•				2900582	2903902
		•	•	•	•			•	2902746	
		•		•		•			2905162	2905148
		•		•					2900542	2903920
		•	•	•		•			2905157	2905144
		•	•	•					2900573	2903908
2.4 A	24 V DC	•		•	•				2900567	2903916
		•	•	•	•				2900414	2903904
		•	•	•	•			•	2902744	
		•		•					2900543	2903922
		•	•	•					2900574	2903910
	230 V AC	•		•	•				2900568	
		•	•	•	•				2900420	
		•		•					2900544	
		•	•	•					2900575	
3 A	24 V DC	•		•	•	•			2905155	2905142
		•	•	•	•	•			2905152	2905139
		•		•		•			2905163	2905149
		•	•	•		•			2905159	2905146
		•		•			•		2908696	2909563
		•	•	•			•		2908695	2909562
		•		•	•		•		2908700	2909570
		•	•	•	•		•		2908699	2909569
9 A	24 V DC	•		•	•	•			2905156	2905143
		•		•	•				2900569	2903918
		•	•	•	•	•			2905153	2905140
		•	•	•	•				2900421	2903906
		•	•	•	•			•	2902745	
		•		•		•			2905164	2905150
		•		•					2900545	2903924
		•	•	•		•			2905160	2905147
		•	•	•					2900576	2903912
		•							2900530	
		•	•						2900538	
		•		•			•		2908694	2909561
		•	•				•		2908693	2909560
		•		•	•		•		2908698	2909568
		•	•	•	•		•		2908697	2909567
	230 V AC	•		•	•				2900570	
		•	•	•	•				2900422	
		•		•					2900546	
		•	•	•					2900578	
		•							2900531	
		•	•						2900539	

Product overview

Solid-state contactors

Maximum load current	Input voltage	Functions			
		Direct starter	Reversing starter	Single-phase	3-phase
2 A	24 V DC	•			2297196
		•	•		2297293
	230 V AC	•			2297206
		•	•		2297303
9 A	24 V DC	•			2297219
		•	•		2297316
	230 V AC	•			2297222
		•	•		2297329
16 A	24 V DC	•			2297235
		•	•		2297332
	230 V AC	•			2297248
		•	•		2297345
20 A	24 V DC	•		1032919	
	230 V AC	•		1032920	
30 A	24 V DC	•		1032921	
	230 V AC	•		1032922	
37 A	24 V DC	•			2297277
		•	•		2297374
	230 V AC	•			2297280
		•	•		2297387
50 A	24 V DC	•		1032926	
	230 V AC	•		1032927	

Electronic reversing load relays for controlling DC motors

Maximum load current	Input voltage	Functions		
		Direct starter	Reversing starter	
2 A	24 V DC	•	•	2963598
6 A		•	•	2982090
10 A		•	•	2964306

Product overview

Gateways

	Connection technology	Can be networked
	Screw	IFS connection
		
Profinet gateway	•	2904472
Ethernet IP™ gateway	•	2901988
PROFIBUS gateway	•	2297620
CANopen® gateway	•	2901504
DeviceNet™ gateway	•	2901529
Modbus/TCP gateway	•	2901528

Motor manager

		Applications	Connection technology	Can be networked
		Motor protection	Screw	IFS connection
Maximum load current	Input voltage			
< 16 A	24 V DC	•	•	2297523
	230 V AC	•	•	2297536
> 16 A	24 V DC	•	•	2297497
	230 V AC	•	•	2297507

Machine manager

		
Description	**90 A machine management**	**160 A machine management**
Measuring range	0.5 A … 90 A	0.5 A … 160 A
Int. diameter of converter	11 mm	23 mm
Type	EMM 3-24DC/500AC-90-EXM-IFS	EMM 3-24DC/500AC-160-EXM-IFS
Order no.	2908602	2908603

Product overview

CrossPowerSystem			
			
Description	**Power distribution board, 225 mm**	**Power distribution board, 405 mm**	
Nominal current	–	–	
Designation	EM-CPS-225	EM-CPS-405	
Order no.	1002634	1002635	

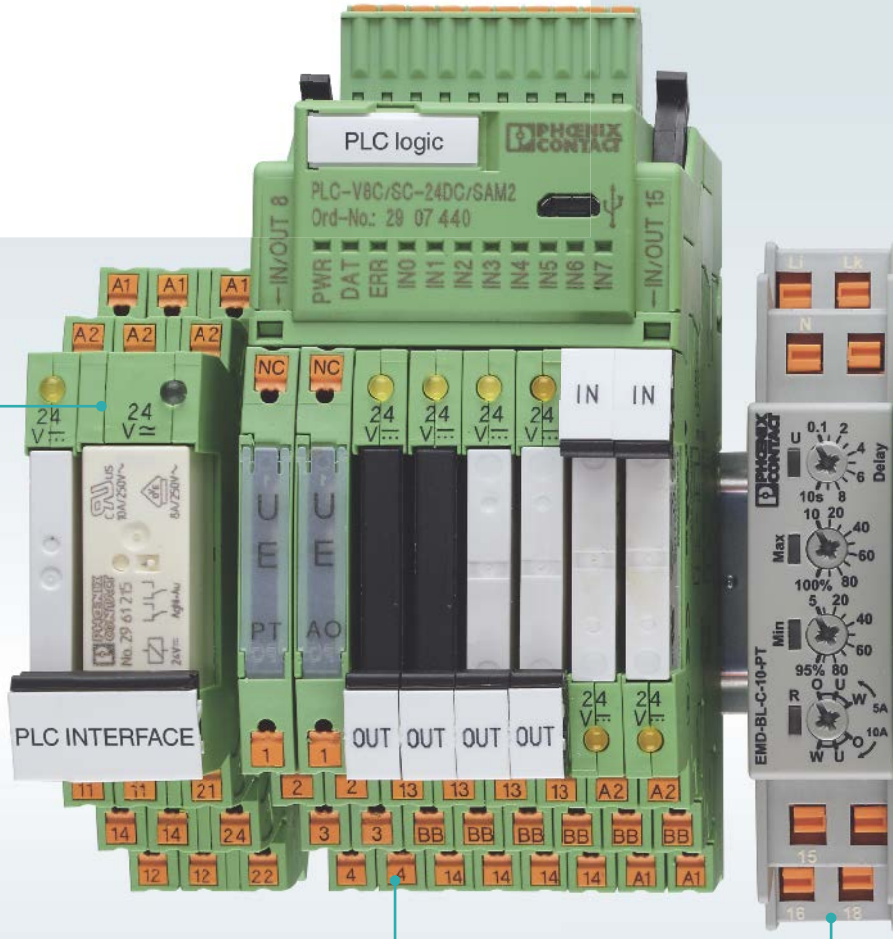
CrossPowerSystem accessories			
			
Description	**Connection module**	**Connection module**	**Device adapter for fuse, 22.5 mm***
Nominal current	63 A	125 A	16 A (3-pos. for fuse)
Designation	EM-CPS-TB3/63A	EM-CPS-TB3/125A	EM-CPS-DA-22,5F/16A
Order no.	1002633	1070299	1002668

* Fuses are not supplied as standard

TRIO CROSS POWER			
			
Description			
Nominal current	5 A		
Designation	EM-CPS-PS/3AC/24DC/5A		
Order no.	1064922		

Switch now
Clever switching devices for every application

Discover our cutting-edge technological products and master any challenge. The wide range of switching devices from Phoenix Contact offers you the ideal solution for every application.



High-performance and at a great price

Whatever the required application or industry for your relay modules, you will find the best solution with PLC-INTERFACE.

Web code: #0688

Extremely compact control and switching

PLC logic combines relay and analog modules with logic functions and intuitive software.

Web code: #1104

For high system availability

Detect deviations in important system parameters early with EMD monitoring relays.

Web code: #1105

Easy handling

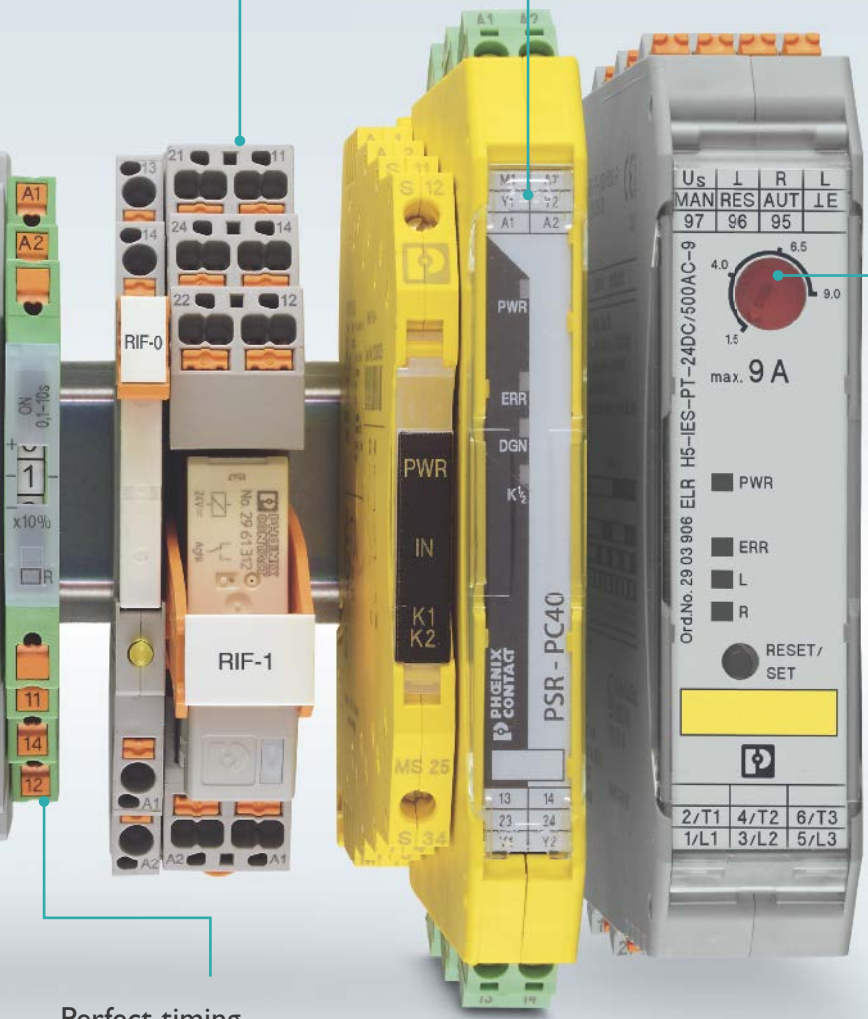
You can realize all standard relay applications with RIFLINE complete.

Web code: #0695

Proven safety

Innovative and reliable technology, tried and tested over many years. Our PSR safety devices guarantee functional safety.

Web code: #0494



Intelligent motor switching

Switch and reverse motors quickly and reliably with compact CONTACTRON hybrid motor starters.

Web code: #0568

Perfect timing

ETD time relays ensure optimum time sequences.

Web code: #1106

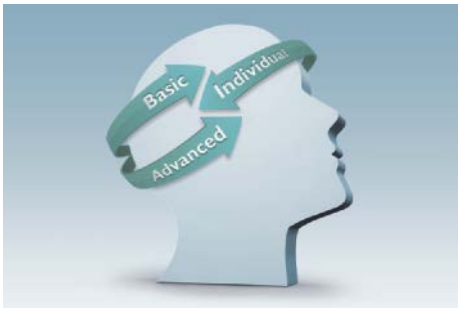
Worldwide service and support: We are there for you

At Phoenix Contact, the focus is always on you, the customer. With over 50 subsidiaries across the world and more than 30 agencies, we are always close by. As a result, you receive verified, first-hand advice and benefit from fast and timely delivery of a complete package consisting of high-grade, optimally coordinated components. Our expertise and the high levels of production depth also allow customized solutions tailored to you. We will also support you after the purchase with comprehensive after-sales services.

Web code: #1256

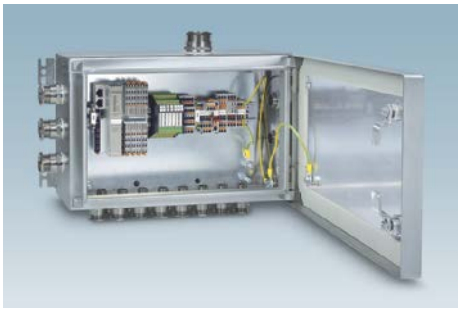
Comprehensive after-sales services

We are there for you – not just before the sale, but also afterwards, with our extensive after-sales services. This includes a repair service, a replacement service, and a spare part service.



Comprehensive training program

From the basics to specialist expertise: we will give you the skills you need to the extent and configuration you require.



Product sets and junction boxes

We pre-assemble product sets, equip and wire up terminal strips as per your specifications, and integrate these into the matching junction box.

Cable assembly

We assemble your specific cable solutions in accordance with your specifications. For this purpose, use our online configurators or get in touch with your local contact person.

In dialog with customers and partners worldwide

Phoenix Contact is a globally present, Germany-based market leader. Our group is synonym for future-oriented components, systems, and solutions in the fields of electrical engineering, electronics, and automation. A global network across more than 100 countries, and 16,500 employees ensure a close proximity to our customers, which we believe is particularly important.

The wide variety of our innovative products makes it easy for our customers to find future-oriented solutions for different applications and industries. We especially focus on the fields of energy, infrastructure, process and factory automation.

You will find our complete product range at:

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INSPIRING INNOVATIONS