

Motor starters and electronic switching devices

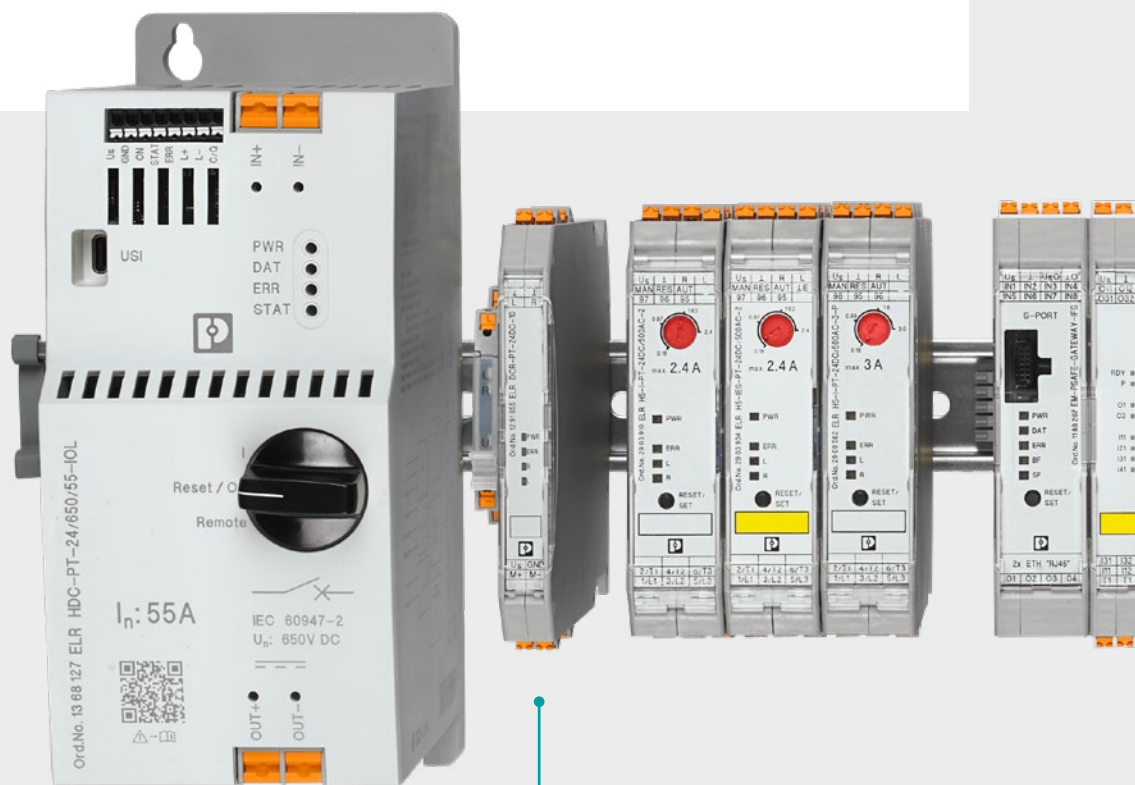
Reliable motor switching, protection, and monitoring

Motor starters and electronic switching devices

The CONTACTRON product portfolio

Your partner for switching devices and motor control: Take advantage of the broad portfolio of switching devices and the intuitive speed starters from Phoenix Contact.

We will also support you in meeting the challenges of digitalization, optimizing production and operational costs, Industry 4.0, and energy management.



4 DC circuit breaker

The compact CONTACTRON ELR HDC DC circuit breaker with hybrid technology and intuitive parameterization ensures sustainable, efficient, and safe operation of high DC loads.

➤ More information starting on page 28

3 Motor starters for DC motors

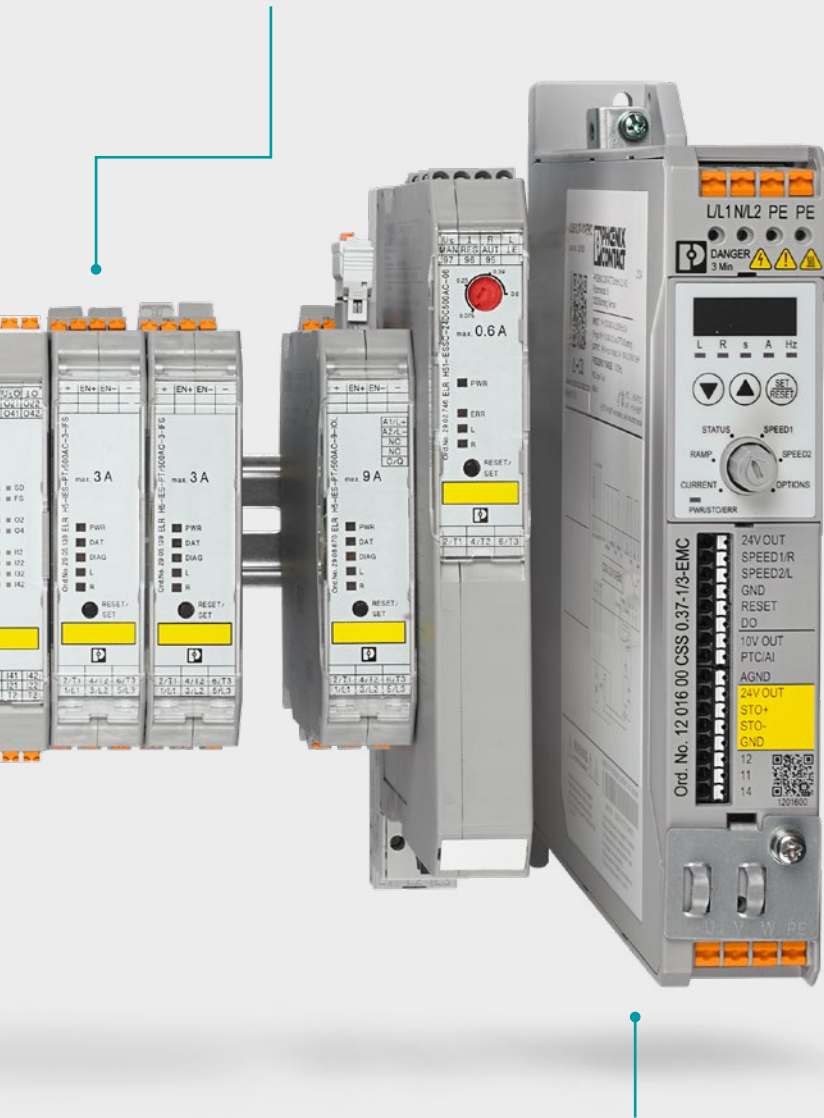
Reliable and fast switching of DC loads.

➤ More information starting on page 24

1 Hybrid motor starters

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

➤ More information starting on page 4



2 Speed starters

Connect, set, start:
CONTACTRON Speed Starter, the new device class with intuitive operation for soft start, different speeds, motor protection, and Safe Torque Off.

➤ More information starting on page 18

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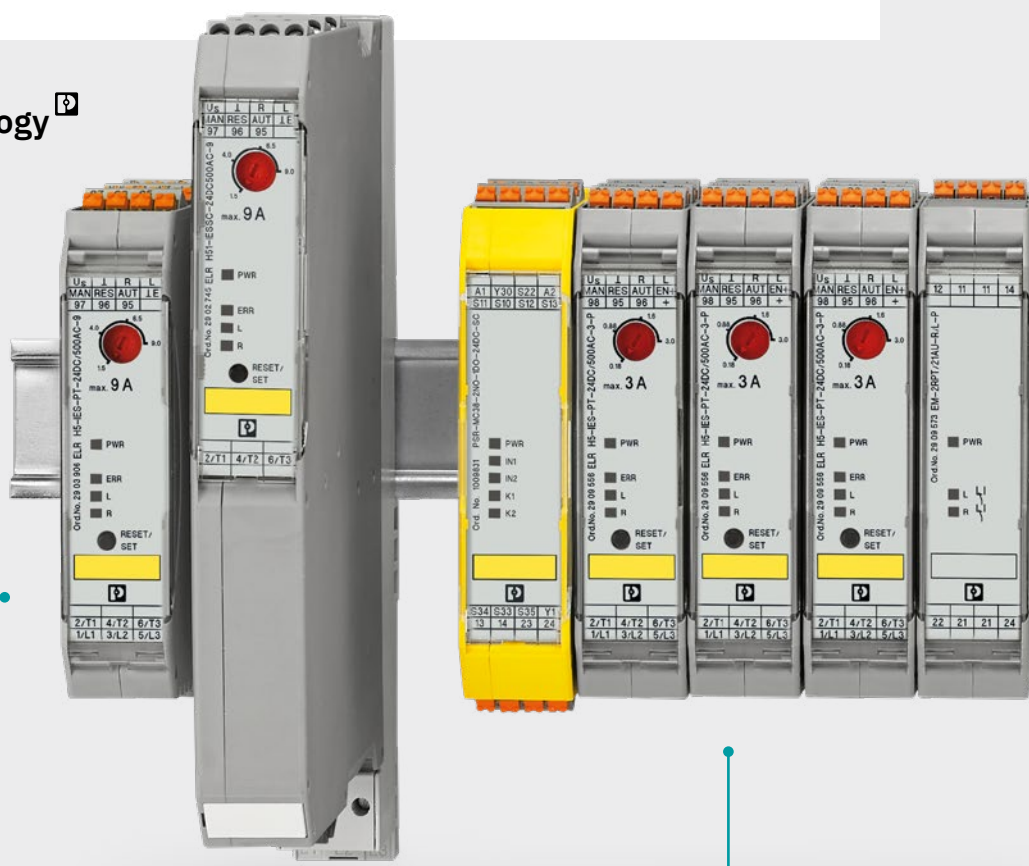
Hybrid motor starters

1

Switch motors safely and reliably with the compact CONTACTRON stand-alone, modular, and network-capable 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



Hybrid motor starters – stand-alone

The product range of CONTACTRON 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.

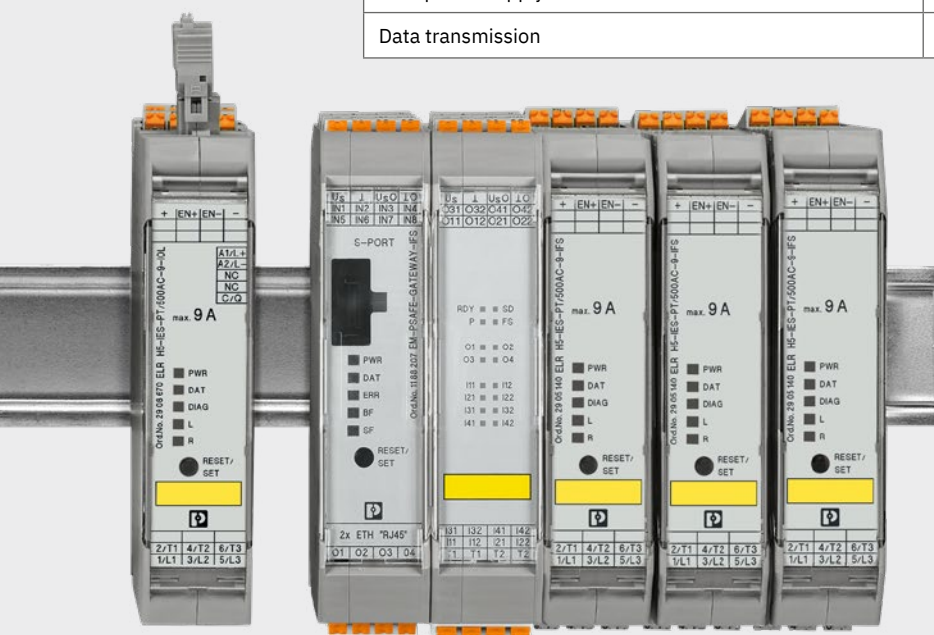
➤ More information starting on page 8

Hybrid motor starters – modular

CONTACTRON pro is the new version of the CONTACTRON family. It offers simple safety integration and supports modular expansion. Everything on the basis of hybrid technology – for an increased level of simplicity in functional safety, high system availability, and easy handling.

➤ More information starting on page 10

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



PROFI
NET

EtherNet/IP

Modbus



CANopen

PROFI
BUS

IO-Link

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 allow you to benefit from end-to-end communication between the field level and control level, thereby enabling the easy transfer of process data.

➤ More information starting on page 12

Technologies and advantages

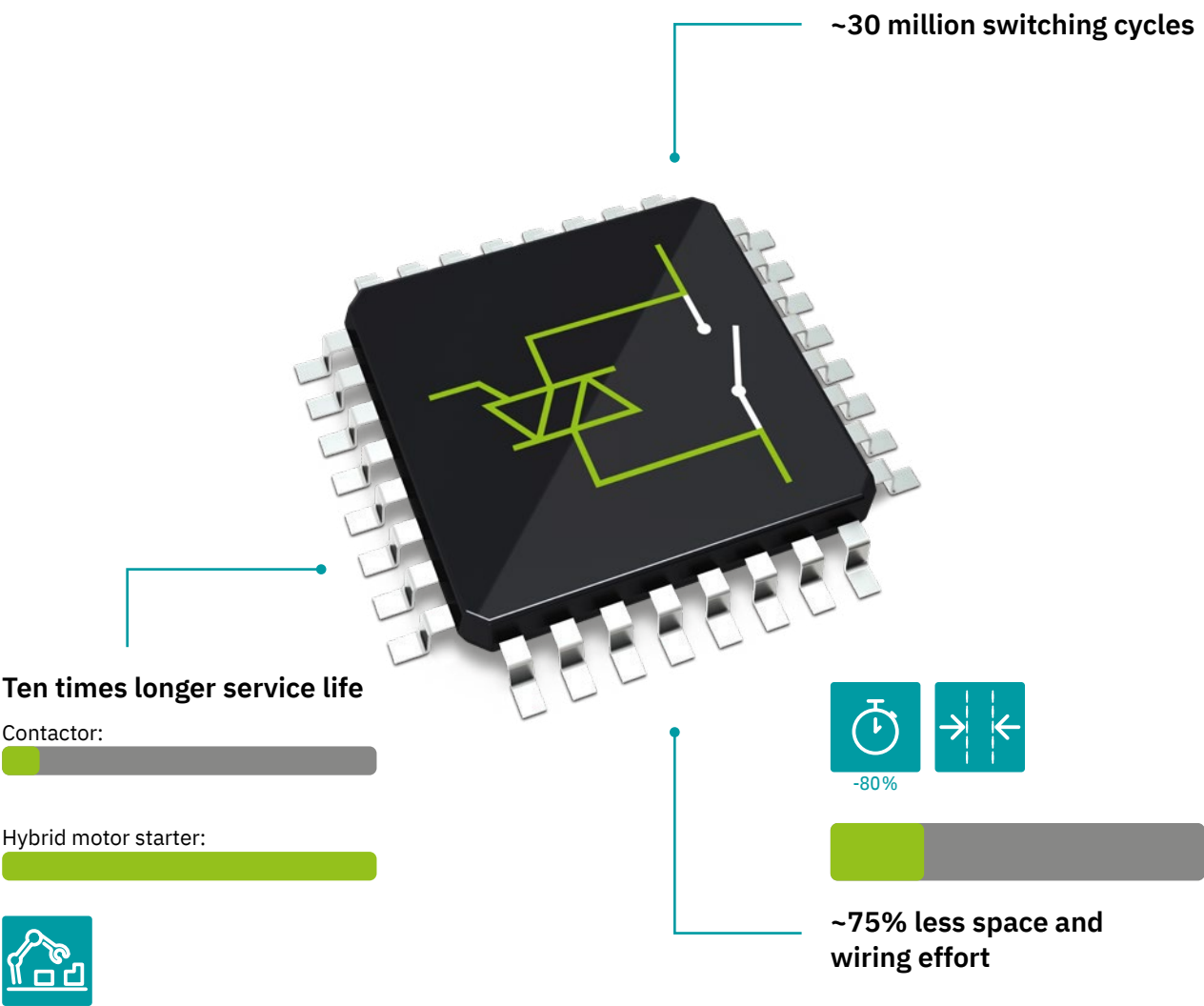
Hybrid technology

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 operations, while the

relays only conduct low-loss current. This enables soft switching and considerably reduces the load on the relay contacts.

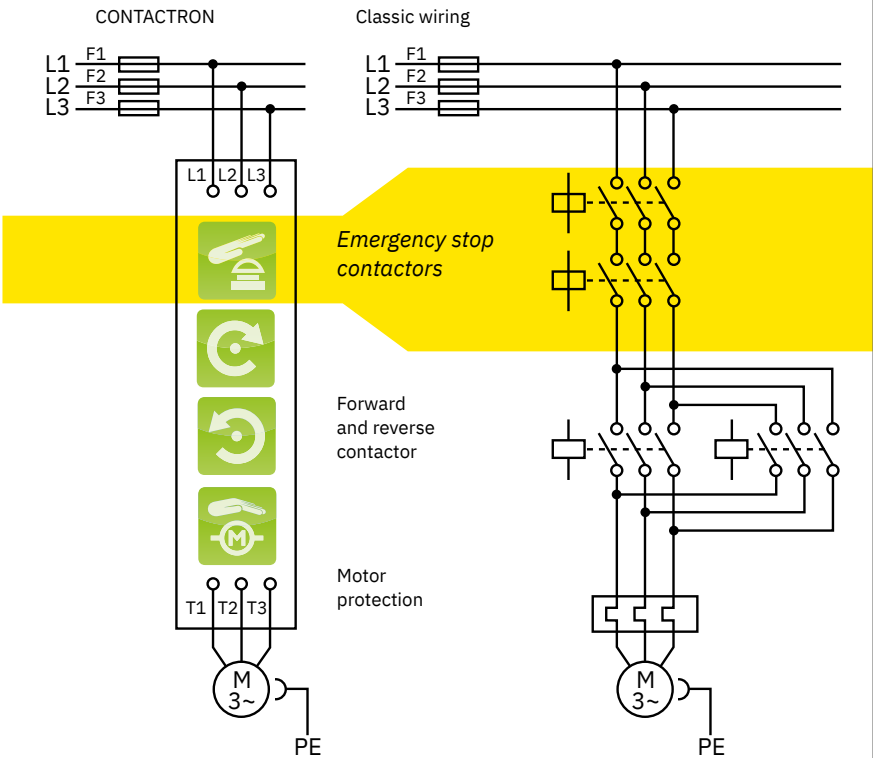
CONTACTRON Hybrid Technology [®]

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CONTACTRON hybrid motor starters compared to traditional solutions

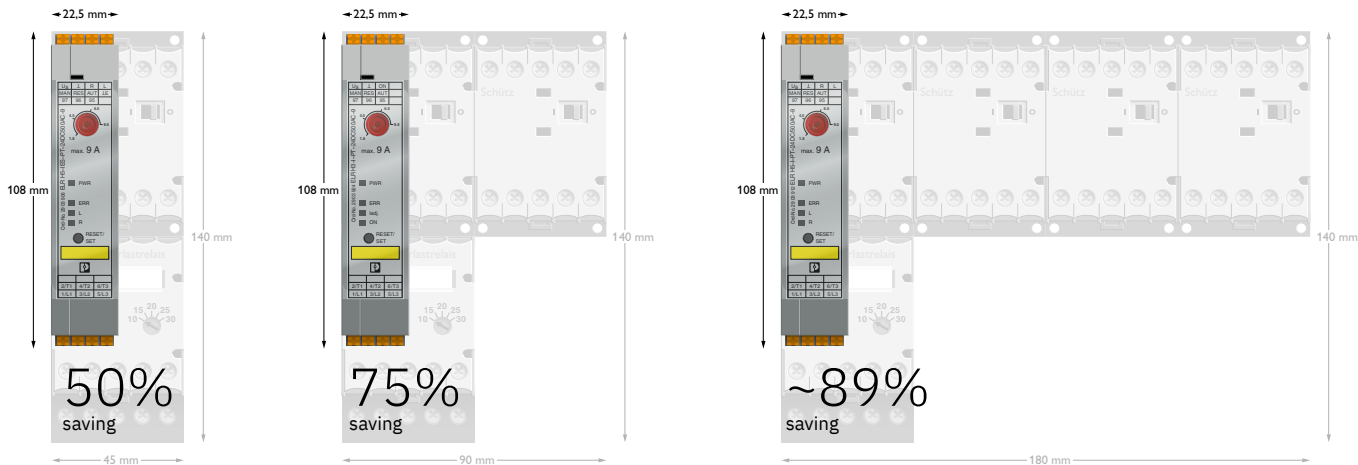
- CONTACTRON integrates the functions of a conventional reversing contactor, including safety function, into a single device up to Cat. 4 / PL e, SIL 3 depending on the module
- Internal load and locking circuits enable clear wiring
- The locking circuit is certified in accordance with UL 508a and UL 60947-1



Less space required compared 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.



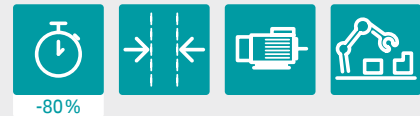
Hybrid motor starters – stand-alone

Switch motors safely and reliably with the compact CONTACTRON 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

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Your advantages

- ✓ Less space required due to the narrow design: 22.5 mm overall width
- ✓ Easy wiring with integrated locking circuit and load wiring
- ✓ Service life is up to 10 times longer due to gentle switching with the CONTACTRON hybrid motor starter technology
- ✓ Adjustable motor protection with bimetal function up to 9 A
- ✓ Safe shutdown with the integrated safety function up to SIL 3 and PL e

Intelligent switching and reliable protection



Easy diagnostics

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



Fast power distribution

The optional loop bridges for 1 to 10 hybrid motor starters enable quick and error-free wiring of the three-phase feed-in. Bridges are available for screw and Push-in terminal blocks with various supply line lengths.

Cost-efficiency with 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 with 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.

Hybrid motor starters – modular

CONTACTRON pro is the new version of the CONTACTRON family. It offers simple safety integration and supports modular expansion. In addition, CONTACTRON pro can also be used to operate single-phase AC motors in one direction of rotation. Everything on the basis of hybrid technology – for an increased level of simplicity in functional safety, high system availability, and easy handling.



CONTACTRON Hybrid Technology [?]

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Your advantages

- ✓ Easy group shutdown via DIN rail bus connectors after an emergency stop with an upstream safety relay
- ✓ High system availability due to 10 times longer service life with hybrid technology
- ✓ Easy handling: using the economical DIN rail bus connector means you save wiring effort and therefore costs
- ✓ Reliable feedback on the status of the motor via optional relay module

Simplicity in functional safety

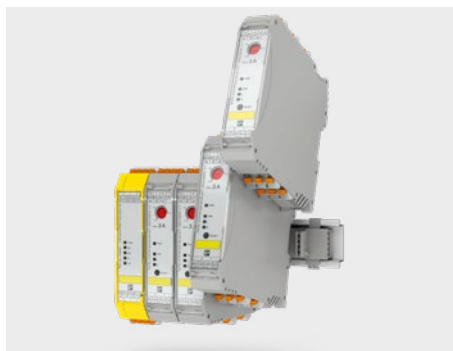
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4

Hybrid motor starters



Easy group shutdown

The upstream safety relay guarantees a safe 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

Using the economical DIN rail bus connector means you save wiring effort and therefore costs: Benefit from easy signal loop-through (24 V power supply, ground and enable) plus expansion with checkback contacts.



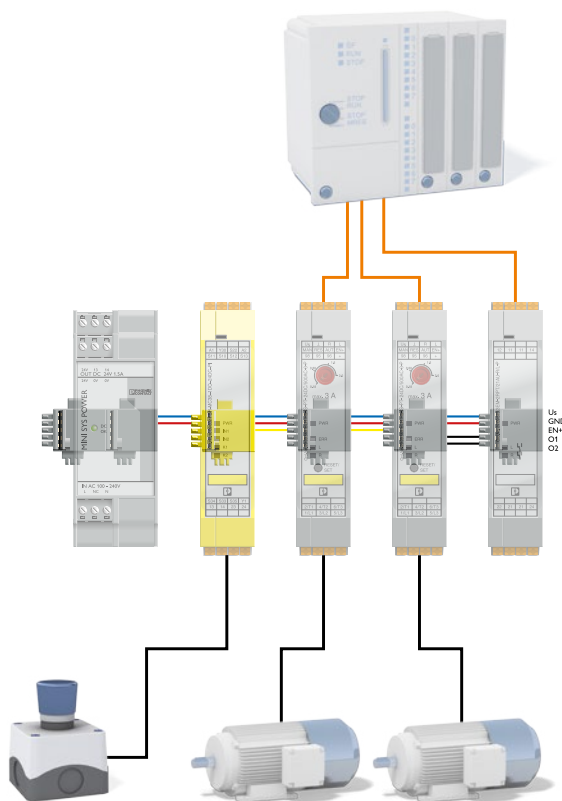
Reliable feedback

Additional feedback on the motor status that you can rely on: An optional relay module allows you to reliably acquire the status of the motor, e.g., forward or reverse running.

Application example

Using the DIN rail bus 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 status.



Hybrid motor starters – network-capable

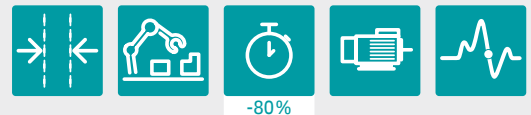
Integration into fieldbus systems is realized via the Interface system connection. Corresponding gateways are available for all common fieldbus systems. Easily transfer your process data and quickly network your devices within the framework of digitalization and Industry 4.0, both with the Interface system (IFS) and also the available IO-Link versions.



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 with the DIN rail bus connector latching concept
- ✓ I/O cards no longer required (controller) with the eight digital inputs and four digital outputs on the gateway

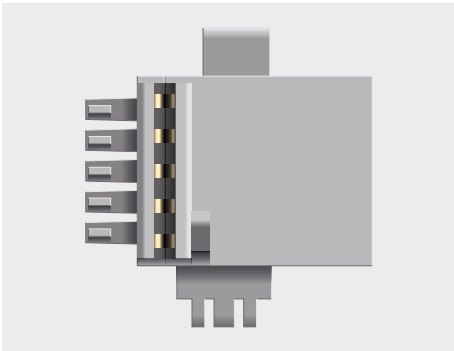


Easy networking



Gateway

Up to 32 IFS devices can be easily connected to common fieldbus systems, saving bus addresses for field devices. The gateway is parameterized using the intuitive CLIPX ENGINEER DEVICE PARAMETERIZATION software.



DIN rail bus connector

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



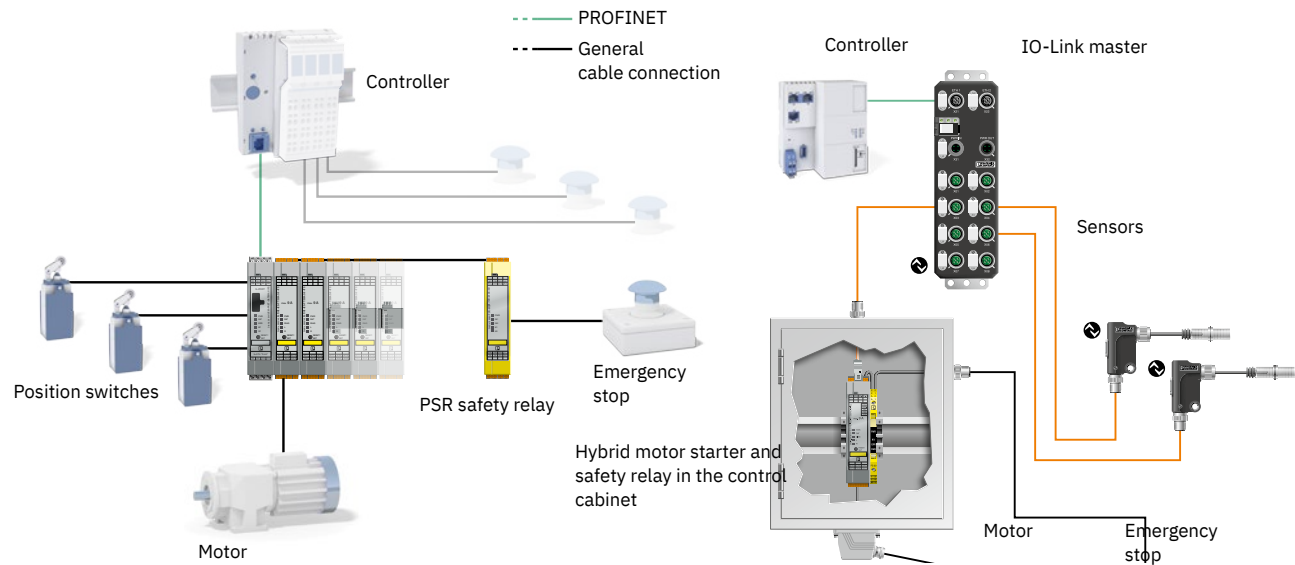
Easy diagnostics

Transmission of status messages to the controller, e.g., overload, overload advance warning, underload, symmetry, etc.

End-to-end networking via the Interface system or IO-Link

The new network-capable versions allow end-to-end communication between the field and the control level. Integration into

all common fieldbus systems is realized via the Interface system or IO-Link.



Product overview for hybrid motor starters

Stand-alone motor starters									
Max. load current	Input voltage	Functions						Push-in connection	Screw connection
		Direct starter	Reversing starter	Motor protection (Class 10A)	Emergency stop	ATEX	Short-circuit protection		
0.6 A	24 V DC	•		•				2903920	2900542
		•		•	•	•		2903914	2900566
			•	•				2903908	2900573
			•	•	•	•		2903902	2900582
			•	•	•	•	•		2902746
2.4 A	230 V AC	•		•	•	•			2900568
			•	•	•	•			2900420
	24 V DC	•		•				2903922	2900543
		•		•	•	•		2903916	2900567
			•	•				2903910	2900574
			•	•	•	•		2903904	2900414
9 A	230 V AC	•		•	•	•			2900570
			•	•	•	•			2900422
	24 V DC	•							2900530
		•		•				2903924	2900545
		•		•	•	•		2903918	2900569
			•						2900538
			•	•				2903912	2900576
			•	•	•	•		2903906	2900421
			•	•	•	•	•		2902745

Product overview for hybrid motor starters

Stand-alone motor starters, special versions																	
Max. load current	Input voltage	Functions													Push-in connection	Screw connection	
		Direct starter	Reversing starter	Motor protection (Class 10A)	Motor protection (Class 10/10A)	Motor protection (Class 10)	Emergency stop	Monitoring of rotating field	Switching of 1~ AC motors, 1 direction of rotation	Switching of 1~ AC motors, 2 directions of rotation	Without symmetry monitoring	Without phase failure detection	Without underload detection	Higher resistance to transient voltages			ATEX
0.6 A	24 V DC	•		•			•							•	•	2906061	
			•	•			•							•	•	2906058	
•			•			•							•	•	2906062		
		•			•				•	•	•	•				2905513	
		•			•							•				2901063	
		•	•					•				•				2297109	
		•	•				•						•	•	2906059		
•			•			•							•	•	2906064		
		•		•				•							1160740		
		•	•						•			•				2900795	
		•	•				•						•	•	2906060		
		•	•									•				2904678	

Product overview for hybrid motor starters

Modular motor starters												
Max. load current	Input voltage	Functions										Push-in connection
		Direct starter	Reversing starter	Motor protection (Class 10/10A)	Motor protection (Class 10)	Emergency stop	Switching of 1– AC motors, 1 direction of rotation	Without underload detection	Higher resistance to transient voltages	ATEX	Modular	
3 A	24 V DC	•			•		•	•	•		•	2909563
		•			•	•			•	•	•	2909557
		•			•	•	•	•	•		•	2909570
			•		•		•	•	•		•	2909562
			•		•	•			•	•	•	2909556
			•		•	•	•	•	•		•	2909569
9 A		•			•		•	•	•		•	2909561
		•			•	•	•	•	•		•	2909568
		•		•		•			•	•	•	2909555
			•		•		•	•	•		•	2909560
			•		•	•	•	•	•		•	2909567
			•	•			•		•	•	•	2909554

Network-capable motor starters										
Max. load current	Input voltage	Functions								Push-in connection
		Direct starter	Reversing starter	Motor protection (Class 10/10A)	Motor protection (Class 10)	Emergency stop	Higher resistance to transient voltages	ATEX	Network-capable	
Network-capable via Interface system gateways										
0.6 A	24 V DC		•		•	•	•	•	•	2905138
3 A		•			•	•	•	•	•	2905142
			•		•	•	•	•	•	2905139
9 A		•		•		•	•	•	•	2905143
			•	•		•	•	•	•	2905140
IO-Link motor starters										
3 A	24 V DC	•			•	•	•		•	2908671
			•		•	•	•		•	2908669
9 A		•		•		•	•		•	2908672
			•	•		•	•		•	2908670

Product overview for Interface system







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Hybrid motor starters

Gateways			
	Description	Push-in connection	Type
	Gateway for the connection of up to 15 Interface system devices to a higher-level safe controller via PROFIsafe. The system devices are connected to the gateway via DIN rail bus connectors. The DIN rail bus connectors are provided.	NEW 1188207	EM-PSAFE-GATEWAY-IFS
	Gateway for the connection of up to 32 Interface system devices to a higher-level controller via PROFIBUS DP. The Interface system devices are connected to the gateway via DIN rail bus connectors. The DIN rail bus connectors are provided.	2297620	EM-PB-GATEWAY-IFS
	Gateway for the connection of up to 32 Interface system devices to a higher-level controller via CANopen™. The Interface system devices are connected to the gateway via DIN rail bus connectors. The DIN rail bus connectors are provided.	2901504	EM-CAN-GATEWAY-IFS
	Gateway for the connection of up to 32 Interface system devices to a higher-level controller via PROFINET. The Interface system devices are connected to the gateway via DIN rail bus connectors. The DIN rail bus connectors are provided.	2904472	EM-PNET-GATEWAY-IFS
	Gateway for the connection of up to 32 Interface system devices to a higher-level controller via Modbus/TCP. The Interface system devices are connected to the gateway via DIN rail bus connectors. The DIN rail bus connectors are provided.	2901528	EM-MODBUS-GATEWAY-IFS
	Gateway for the connection of up to 32 Interface system devices to a higher-level controller via EtherNet/IP™. The Interface system devices are connected to the gateway via DIN rail bus connectors. The DIN rail bus connectors are provided.	2901988	EM-ETH-GATEWAY-IFS

Extension module			
	Description	Push-in connection	Type
	For more complex applications with Interface system devices (IFS), the extension module offers digital inputs and outputs for processing additional signals in the field. Easy connection to an IFS gateway via the DIN rail bus connector as the slave.	2904473	EM-D-8/4-24DC-IFS

Speed starters

2

Easy, safe, and efficient

The CONTACTRON Speed Starters are available in a wide range of versions: performance classes between 0.25 and 1.5 kW, with and without EMC filter, and with single- or three-phase mains input. Select the appropriate product for your application.

Your advantages

- ✓ Quick installation and startup with easy wiring and intuitive operating concept
- ✓ Safe shutdown with the integrated Safe Torque Off (STO) function
- ✓ Space savings in the control cabinet due to the compact design with an overall width starting at just 35 mm
- ✓ Cost-effective solution with all functions necessary for different speeds and soft start
- ✓ Variable speed setting option with the analog input

Main features

Quick installation and startup

The plug-and-play solution enables easy startup. Set the required parameters quickly and efficiently via the rotary switch and the buttons.

Currently the narrowest device of its class on the market. Higher density in the control cabinet will save you additional costs.

Push-in Technology
Designed by Phoenix Contact

Intuitive operating concept
With the simple operator interface consisting of a rotary switch, three buttons, and a display, all necessary settings can be made particularly intuitively.

Safe Torque Off (STO)
With the integrated STO function, the CONTACTRON Speed Starter is unique in its device class. Thus, you benefit from two-channel, safe shutdown without complex procedures and without additional contactors. SIL 3 and PLe certifications provide for your safety.

DIN rail mounting
The devices can be mounted on and removed from the DIN rail without the use of tools.

Rear panel mounting
Due to the mounting apparatus, the devices can be attached to the rear panel from the front, in the classic way, or from the side.

Saving space in the control cabinet
Featuring a compact design with an overall width starting at just 35 mm, the CONTACTRON Speed Starter is currently the narrowest device in its class available on the market. Higher density in the control cabinet will save you additional costs.

Versions with heatsink
Cooling the devices without wear or noise.

Analog input
For even greater flexibility in terms of speed.

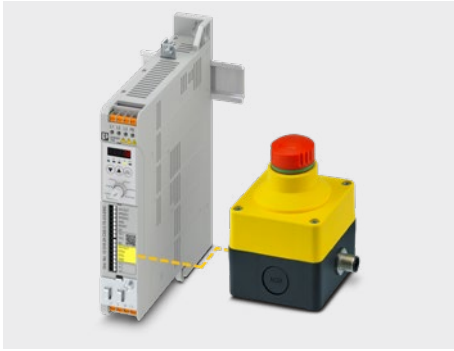
Performance class
0.25 kW ... 1.5 kW

Shielding plate for control lines

Versions with fan
Particularly service-friendly due to the replaceable fan.

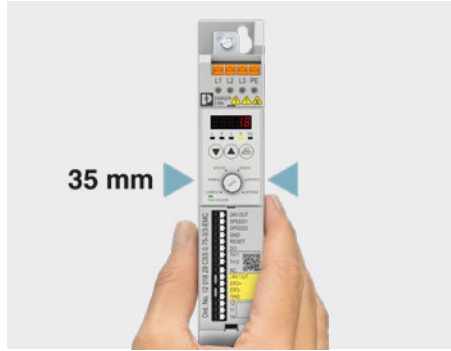
Shielding plate set
Optional set for easy and reliable connection of cable shields of motor and signal lines.

Safe, narrow, and cost-effective



Safe shutdown

With the integrated Safe Torque Off (STO) function, the CONTACTRON Speed Starter is unique in its device class. This means that you benefit from two-channel, safe shutdown without complex procedures and without additional contactors. SIL 3 and PLe certifications provide for your safety.



Saving space in the control cabinet

Featuring a compact design with an overall width starting at just 35 mm, the CONTACTRON Speed Starter is currently the narrowest device in its class available on the market. Higher density in the control cabinet will save you additional costs.



Cost-effective solution

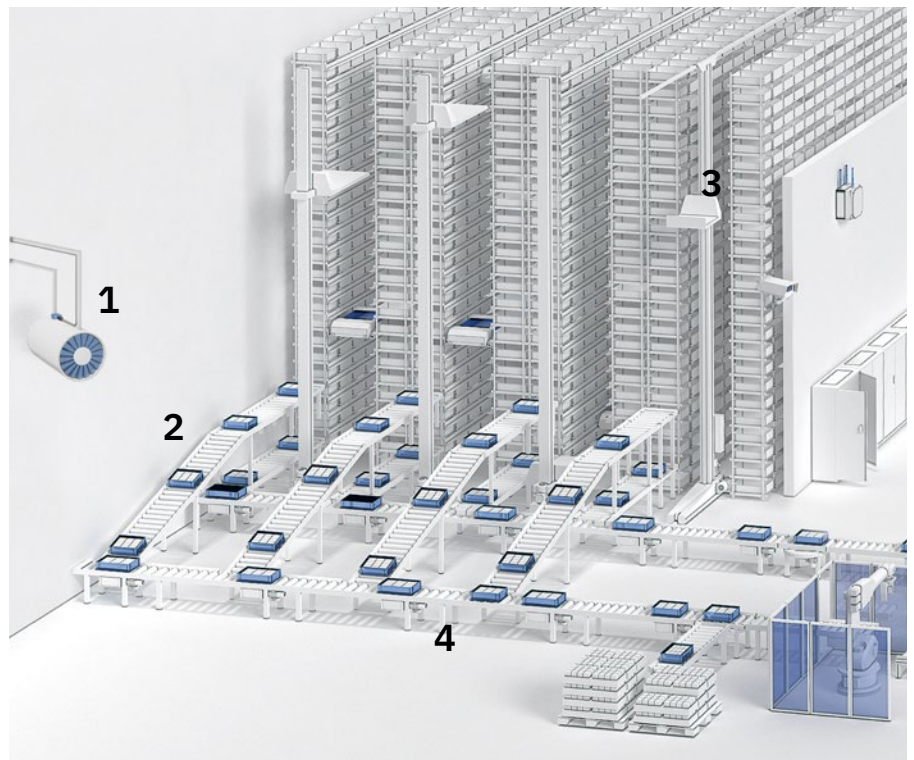
The new speed starter has all the basic functions of CONTACTRON motor starters that you need: start, reverse rotation, overload protection, and safe shutdown of three-phase asynchronous motors. You can realize different speeds as well as the soft start and stop of the motor at full torque. You get the exact functionality you need.

Application example

Speed profile:

1. To avoid high startup currents, such as in the case of large fans, a soft start can be used for the motor.
2. A conveyor belt is carefully decelerated by the ramp function (to avoid a collision).
3. Normal speed for a fast transport phase and creeping speed for a slow positioning phase.
4. Efficient operation of motors in accordance with the EUP Lot directive (energy efficiency directive).






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









Product overview for speed starters

1-phase load input										
Power	Nominal current		EMC protection	Housing	Cooling	Overall width	Depth	Item no.		
	Input	Output								
0.25 kW	3.5 A	1.7 A	Without EMC filter	A1	Heatsink	35 mm	175 mm	1201132		
0.37 kW	5.3 A	2.5 A		B1 heatsink		45 mm	190 mm	1201135		
0.55 kW	6.7 A	3.2 A						1201494		
0.75 kW	9.1 A	4.3 A		B1 fan	Fan			1201509		
1.5 kW	15.8 A	7.5 A						1201511		
0.25 kW	3.5 A	1.7 A	With EMC filter	A2	Fan	35 mm	195 mm	1201520		
0.37 kW	5.3 A	2.5 A		B2		45 mm	210 mm	1201600		
0.55 kW	6.7 A	3.2 A						1201602		
0.75 kW	9.1 A	4.3 A						1201613		
1.5 kW	15.8 A	7.5 A						1201642		

3-phase load input								
Power	Nominal current		EMC protection	Housing	Cooling	Overall width	Depth	Item no.
	Input	Output						
0.25 kW	1 A	0.9 A	Without EMC filter	A1	Heatsink	35 mm	175 mm	1201679
0.37 kW	1.7 A	1.5 A						1201683
0.55 kW	2 A	1.8 A		1201694				
0.75 kW	2.8 A	2.5 A		B1 heatsink	45 mm	190 mm	1201695	
1.5 kW	4.2 A	3.9 A		B1 fan			Fan	1201650
0.25 kW	1 A	0.9 A	With EMC filter	A2	Fan	35 mm	195 mm	1201713
0.37 kW	1.7 A	1.5 A						1201825
0.55 kW	2 A	1.8 A						1201828
0.75 kW	2.8 A	2.5 A						1201829
1.5 kW	4.2 A	3.9 A		B2		45 mm	210 mm	1201696

Overview of housing types					
					
Housing	A1	A2	B1 heatsink	B1 fan	B2
Cooling	Heatsink	Fan	Heatsink	Fan	
Width	35 mm		45 mm		
Height	210 mm				
Depth	175 mm	195 mm	190 mm		210 mm

Accessories			
	Description	Item no.	Type
Fan			
	Replaceable fan for 35 mm wide CONTACTRON Speed Starters	1276911	EM-CSS-FAN-35
	Replaceable fan for 45 mm wide CONTACTRON Speed Starters	1276912	EM-CSS-FAN-45
Shielding plate			
	Shielding plate for motor lines for 35 mm wide CONTACTRON Speed Starters	1276914	EM-CSS-MOTORSHIELD-35
	Shielding plate for motor lines for 45 mm wide CONTACTRON Speed Starters	1276916	EM-CSS-MOTORSHIELD-45
	Accessories set for the simple and reliable connection of cable shields to the CONTACTRON Speed Starter, consisting of a 35 mm shielding plate, two shield connection terminal blocks for the signal lines, and one shield connection terminal block for the motor line.	1451206	EM-CSS-SHIELDING-SET-SCC-35
	Accessories set for the simple and reliable connection of cable shields to the CONTACTRON Speed Starter, consisting of a 45 mm shielding plate, two shield connection terminal blocks for the signal lines, and one shield connection terminal block for the motor line.	1451208	EM-CSS-SHIELDING-SET-SCC-45

Motor starters for DC motors

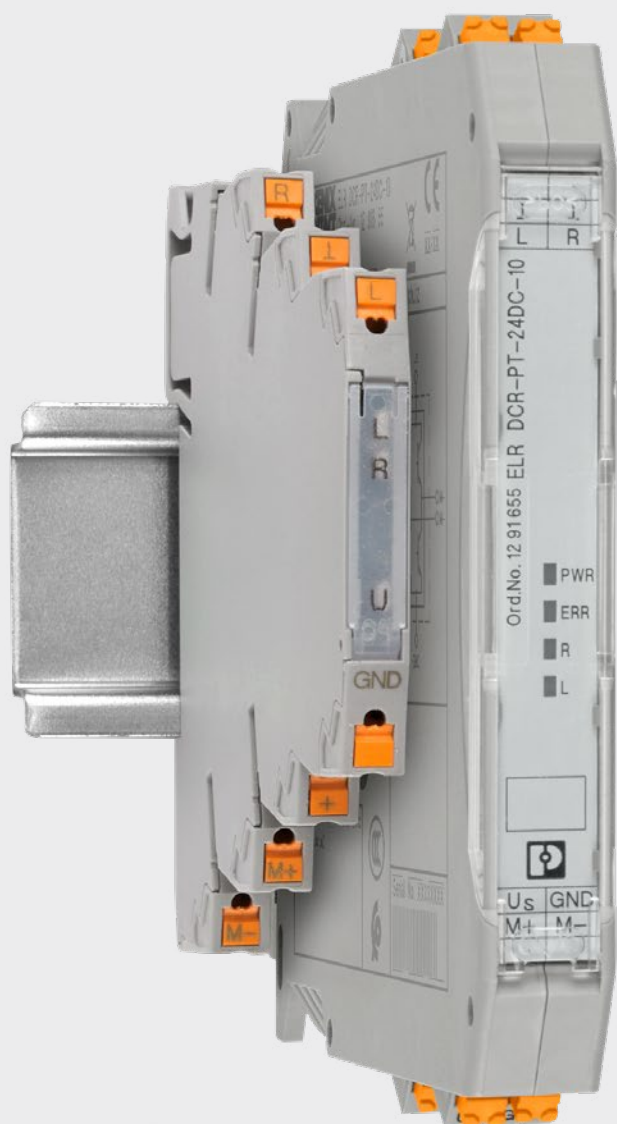
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Electronic CONTACTRON load relays and reversing load relays enable the fast switching of mechanically commutated DC motors. Our reversing load relays reverse and brake DC motors up to 24 V/10 A without wear. An output that is protected against short circuits, surge voltages, and overloads ensures reliable operation in the system.

The internal locking circuit and load wiring minimize the wiring effort.

Your advantages

- ✓ High system availability through safe and fast switching with wear-free electronics
- ✓ Easy wiring with integrated locking circuit and load wiring
- ✓ Direct start and reversing of mechanically commutated DC motors
- ✓ Robust and resistant to shocks and vibrations
- ✓ Reliable operation with short-circuit-, surge-, and overload-proof output



Motor starters for DC motors

CONTACTRON load relays and reversing load relays are designed for DC motors up to 24 V/6 A and are available in two overall widths (6.2 and 12.5 mm). Benefit from high system availability through safe and fast switching with wear-free electronics.

Push-in Technology

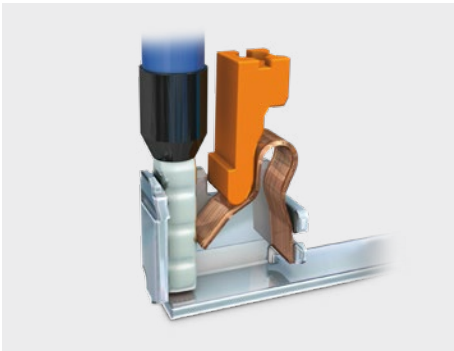
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Main features



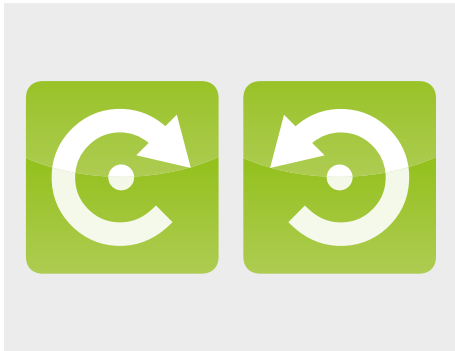
Space-saving

Compact version with a 6.2 mm design for optimum space savings in the control cabinet.



Time savings

Quick and easy wiring through the consistent use of Push-in connection technology.



Forward running and reverse running

Easy control via a 24 V DC signal. Locking circuit and load wiring are already included.

A compact and simple solution for your goods transport and material flow



DC motors play a key role within conveying technology and intralogistics. As a compact solution, they ensure simple and low-wear goods transport and material flow.

High-frequency switching operations enable fast response times, for example in solenoid valves or points within the transport system.

With the two-channel control of the electronic load relay, two solenoid valves, for example, can be switched independently or a motor can be reversed.



Electronic load relays for controlling DC motors

	Max. load current	Input voltage	Functions	Switching delay	Overall width	Push-in connection	Screw connection
			Reversing starter				
	2 A	24 V DC	•	80 ms	6.5 mm	1069556	2980539
	3 A		•	5 ms	12.5 mm	NEW 1291615	
	10 A		•	5 ms	12.5 mm	NEW 1291655	

Protect, monitor, and switch high DC loads with hybrid technology with the CONTACTRON ELR HDC multifunctional DC circuit breaker. Benefit from intuitive parameterization, data logging, network capability, and sustainable efficiency increases with energy recovery.

Your advantages

- ✓ Efficient operation with highly innovative hybrid technology for protection, monitoring, and switching functions in DC grids
- ✓ Sustainable increase in efficiency through energy recovery (recouperation) in DC grids
- ✓ Overall width of just 85 mm saves space in control cabinets
- ✓ Optimal user-friendliness and flexibility through intuitive parameterization with clipx ENGINEER and easy communication via IO-Link interface
- ✓ Avoidance of current peaks during switching with the integrated precharging function

Push-in Technology

Designed by Phoenix Contact



Protection, monitoring, and switching of high DC loads

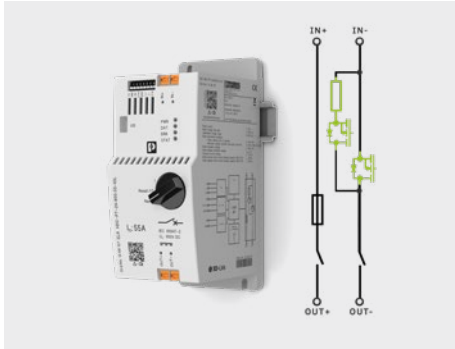
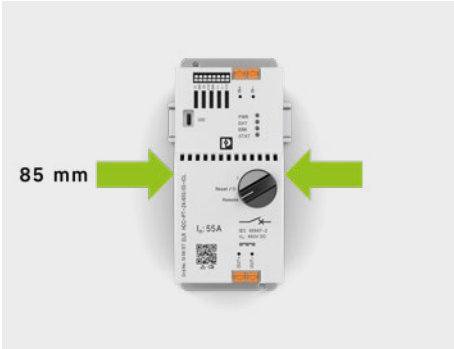
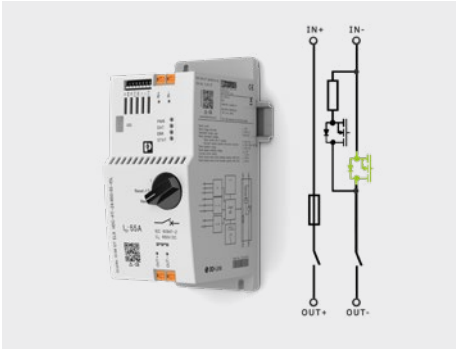
The compact CONTACTRON ELR HDC DC circuit breaker with hybrid technology and intuitive parameterization from Phoenix Contact ensures sustainable, efficient, and safe operation of high DC loads.

Optimum user-friendliness and IO-Link

Intuitive and easy parameterization with clipx ENGINEER via a USB-C interface. In addition, the CONTACTRON ELR HDC is easy to integrate into networks via IO-Link.



Main features



Arc-free switching

Benefit from the hybrid technology for arc-free switching as well as comprehensive protection and monitoring functions.

Space-saving

Benefit from the space savings in your control cabinet with an overall width of just 85 mm.

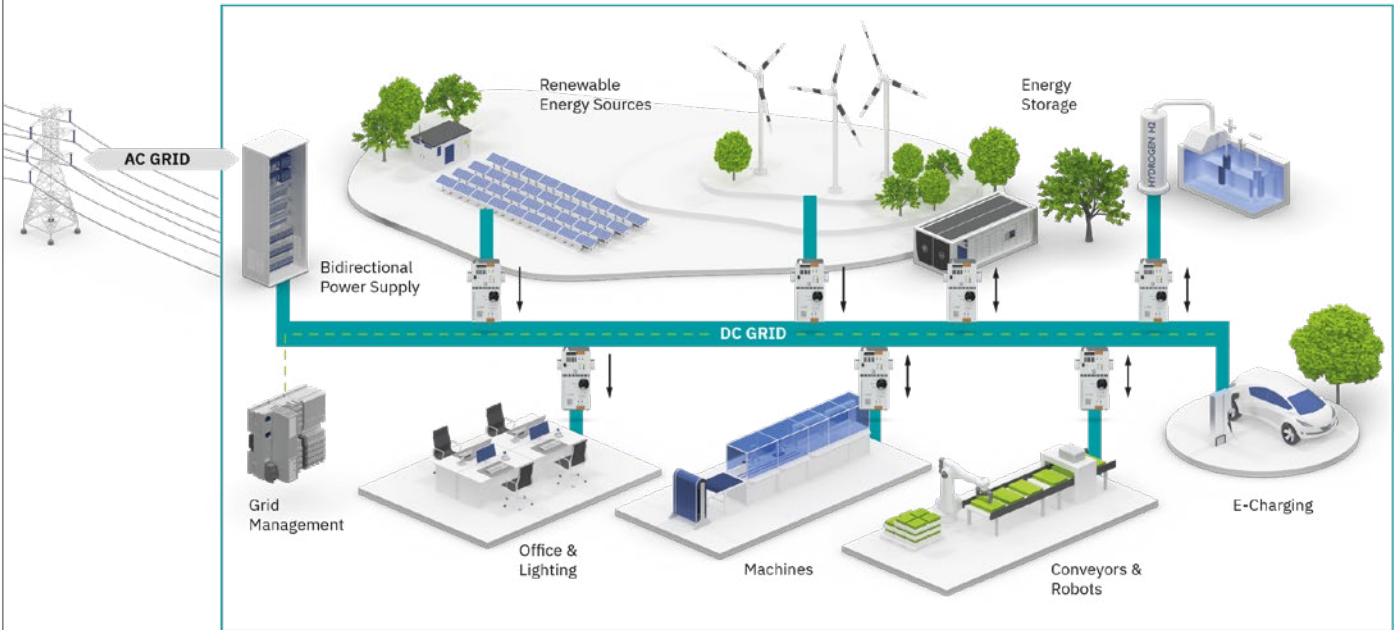
Avoidance of current peaks


The integrated precharging function effectively prevents current peaks during switch-on and switch-off processes.

CONTACTRON ELR HDC in an industrial DC grid

To operate an industrial DC grid, switching devices with special functions are required at the DC branches – such as arc-free switching. This compact DC circuit breaker

from Phoenix Contact is the first of its kind to integrate this multifunctionality.



DC circuit breaker			
	Description	Item no.	Type
	<p>DC circuit breaker for protecting, monitoring, and switching high DC loads, intermediate circuit precharging; can be parameterized, 0 V DC ... 800 V DC, up to 55 A, shutdown in the event of short circuit in <10 µs thanks to hybrid technology, integrated bus communication</p>	<div>NEW</div> <div>1368127</div>	<p>ELR HDC-PT-24/650/55-IOL</p>

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

