

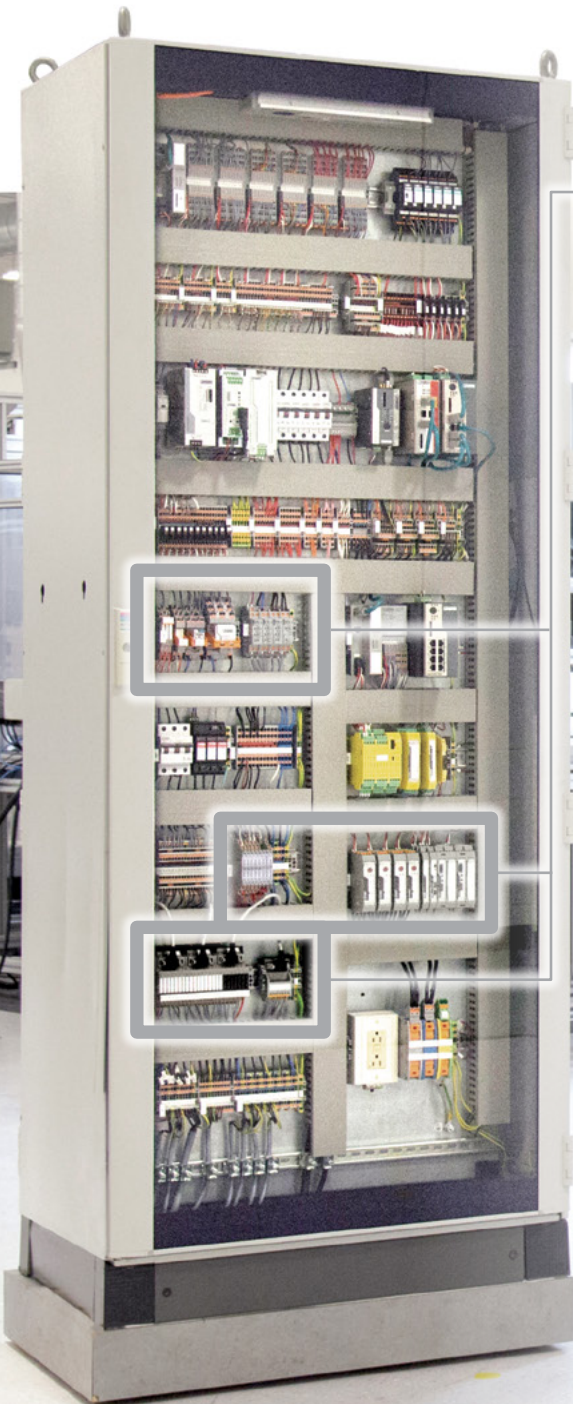


CONTACTRON Speed Starter

Connect. Set. Start.

Speed starter with intuitive operation – CONTACTRON Speed Starter

Speed starter is the name of a new device class between motor starters and frequency drives. Intuitive and simple to use, this compact solution provides all of the functions necessary for different speeds, soft start, and safe stopping with the Safe Torque Off (STO) function.



NETWORKING



AUTOMATION
AND CONTROL



CONNECTIVITY



POWER RELIABILITY



SAFETY



SHOP FLOOR
PRODUCTIVITY

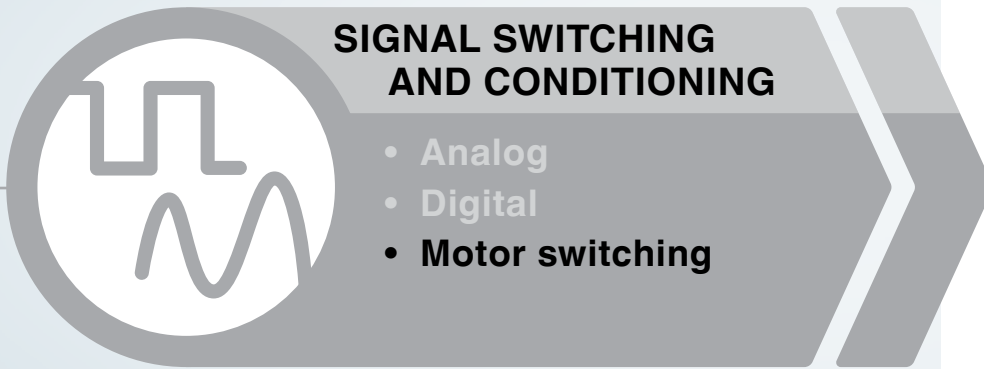


LIMITED LIFETIME
WARRANTY

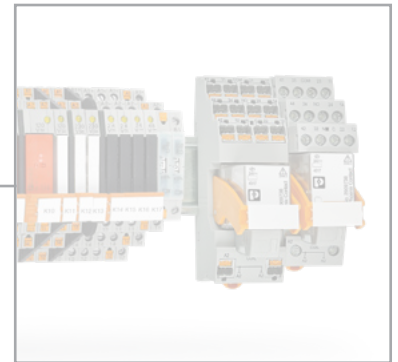
BUILD WITH CONFIDENCE

Signal switching and conditioning

Every signal has a specific purpose and not all signals are the same. And sometimes along the journey, signals may need to be isolated, amplified, or converted to serve their purpose in the system. Ensuring the signal's mission is accomplished can be as simple as choosing a universal product, or might require digging deeper and allowing the application to dictate the product selection. Analog signals, digital signals, and motors all require the right product to ensure that the signal gets the job done.



Analog



Digital

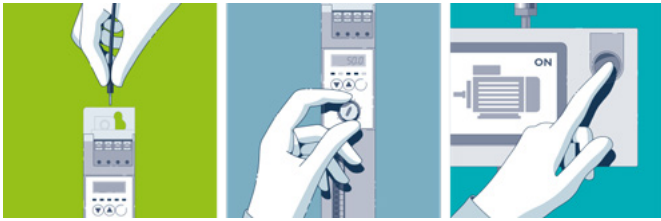


Motor switching

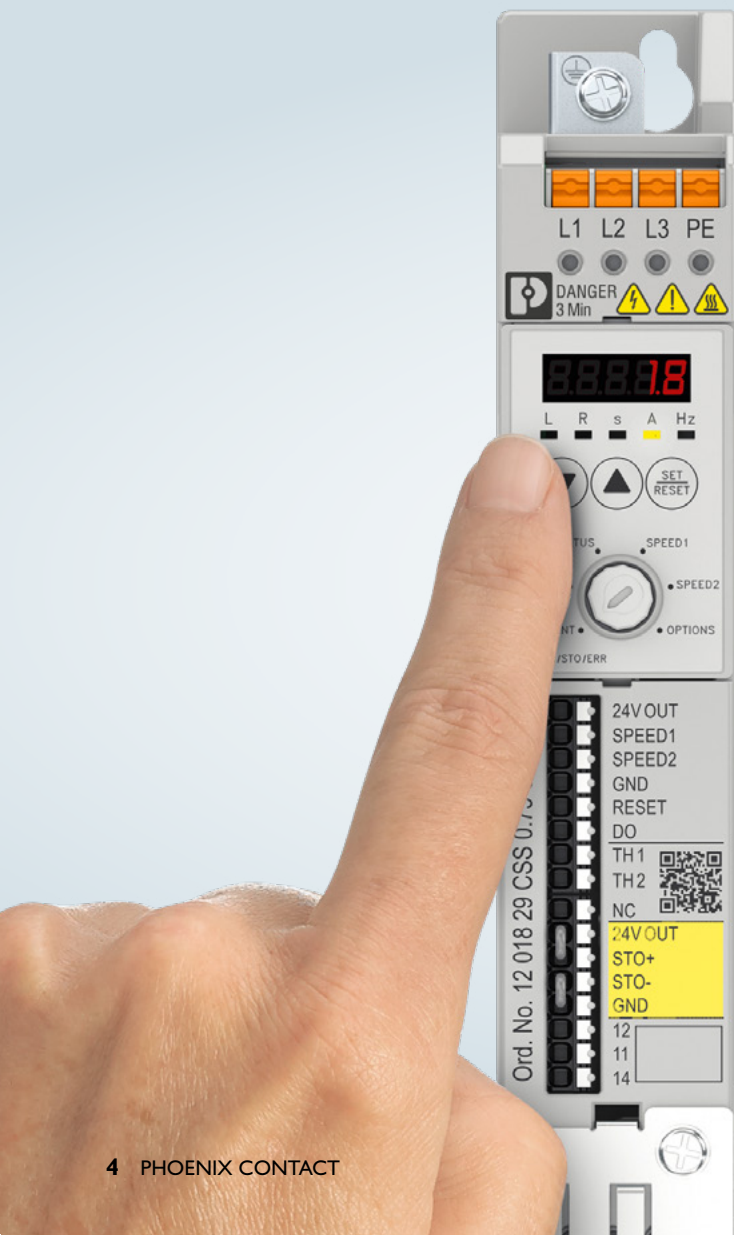
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Connect – Set – Start



The easy and intuitive speed starter concept offers all of the basic functions of CONTACTRON motor starters – starting, reversing, overload protection, and safe shutdown – while also adding speed control, full-torque ramp, and efficiency-enhancing capabilities.



Want to try it before you buy it?

Scan the code below to get started!

PXR What is it?
Phoenix Contact eXtended Reality

Using PXR
Scan the QR code with your mobile device camera or QR code reader to launch **PXR**.



CONTACTRON Speed Starter

Overview of all functions



Direct start

Easy control directly via 24 V PLC output cards or the 24 V output of the device.



Reversing start

Reverse rotation via buttons directly on the device.



Motor protection

Adjustable overload protection with remote reset capability.



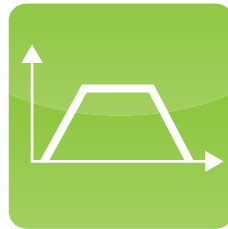
Safe Torque Off

The integrated STO function enables emergency stop solutions up to SIL 3/PLe.



Various speeds

Speeds can be customized and modified as desired.



Ramp function

Ramp motor speeds up and down while providing full torque.

The operating concept

The plug-and-play operation of CONTACTRON speed starters permits setup and operation in a matter of minutes.

Current

Nominal overload current setting.

Ramp

Motor ramp up/ramp down time setting.

Status

Monitor the status of the motor (direction of rotation, control signal, frequency, current, voltage, power, and power factor).

All programming is done using the rotary switch and 3 buttons. Use the arrow keys to change values, toggle through menu options, and store configuration changes using the SET button – it's as simple as that!

Speed1

Speed and direction of rotation settings for Speed 1.

Speed2

Speed and direction of rotation settings for Speed 2.

Options

Optional settings for more advanced applications and optimization.



Operator interface of the speed starter

Features at a glance

Simple, efficient, and safe

The CONTACTRON Speed Starters are available in a wide range of versions, with output power between 0.25 and 1.5kW (0.3 - 2 HP), with or without EMC filter, and with 1- or 3-phase mains input. These options ensure there is a suitable speed starter for every application.

Push-in Technology

Designed by Phoenix Contact

Intuitive operating concept

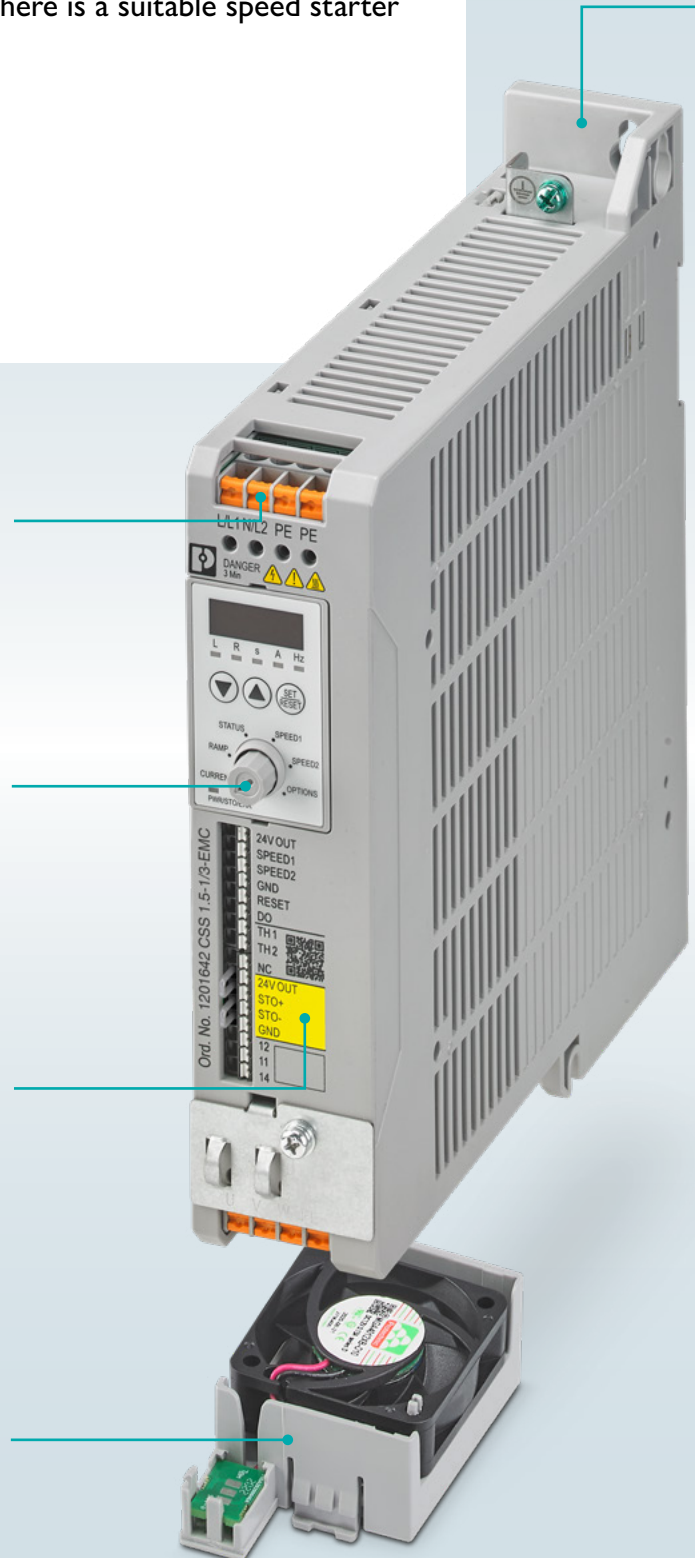
Straightforward operator interface consisting of a rotary switch, three buttons, and a display makes setup and operation particularly simple.

Safe Torque Off (STO)

Unique integrated STO function allows for two channel shutdown up to SIL3/PLe.

Versions with fans

Keep your speed starter cool and your maintenance procedures chill with tool-free fan replacement.



DIN rail mounting

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

Your advantages

- ✓ Designed to prioritize quick installation, easy wiring, and fast startup
- ✓ Safe shutdown with the integrated Safe Torque Off function (STO)
- ✓ Bookcase form factor saves cabinet space with a best-in-class 35 mm width
- ✓ Cost-effective solution with all functions necessary for different speeds and soft start

Direct panel mounting

The housing includes tabs for both rear and side mounting positions.

Space-saving bookcase form factor

A compact design starting at only 35 mm wide, the CONTACTRON Speed Starter is the narrowest device in its class.

Versions with heatsink

Cooling the devices without wear or noise.

Performance class

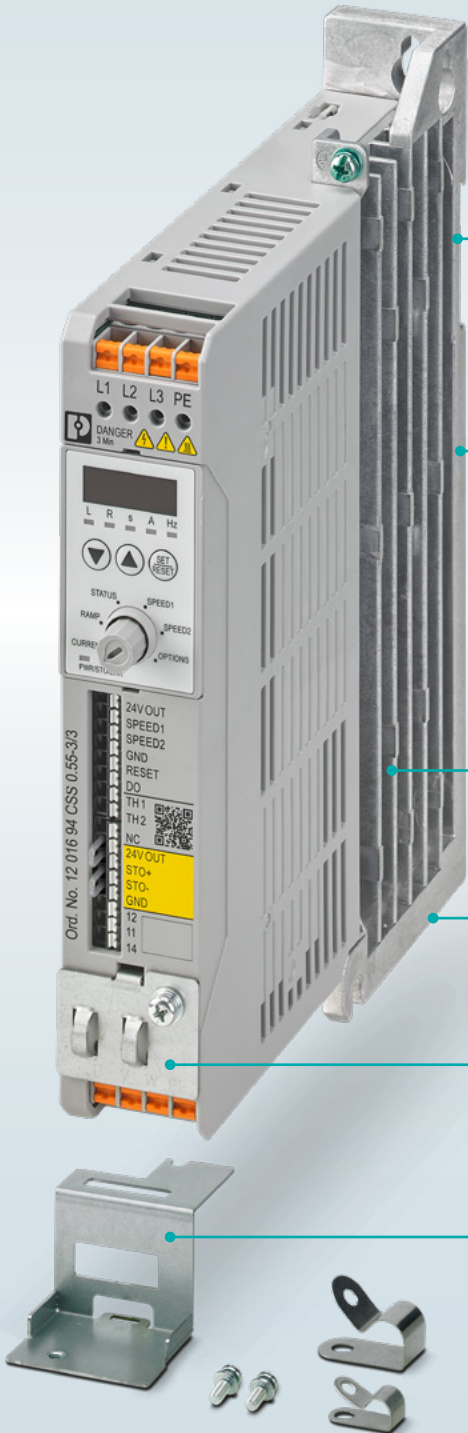
Available for 3-phase motors from 0.25-1.5 kW.

Shroud for control lines

Protects control wires from induced EMF noise.

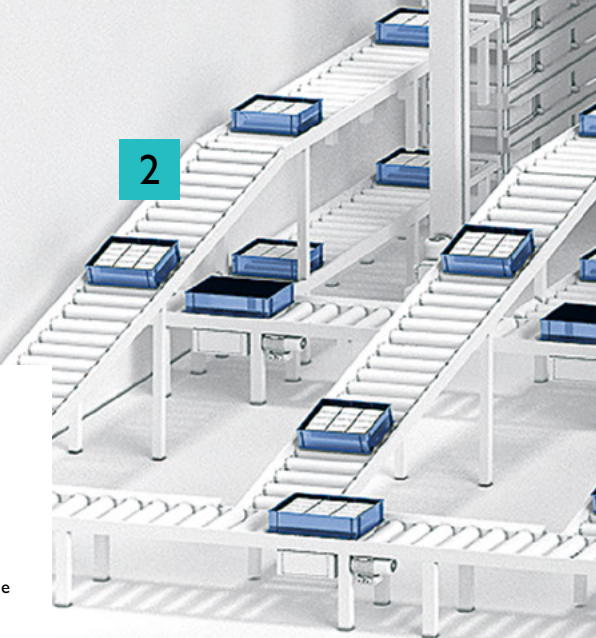
Shroud for motor feeder lines

Optional mounting flange supports and shrouds motor feed cable, also allowing for easy shield wire termination.



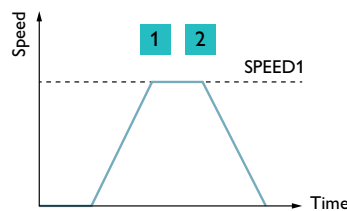
Everything you need for a wide range of applications

The safe, simple, and efficient operation of 3-phase asynchronous motors is required in a wide variety of applications. The CONTACTRON Speed Starter achieves this goal with a simple operating principle that includes everything needed without unnecessary complexity. Speed starters can provide various speed control functions, such as normal speed, creeping speed, and soft start, as well as energy efficiency and ramping functions.

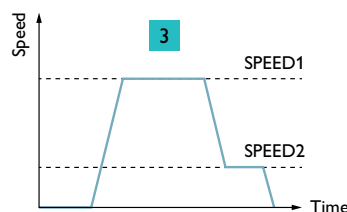


Example: Speed profile

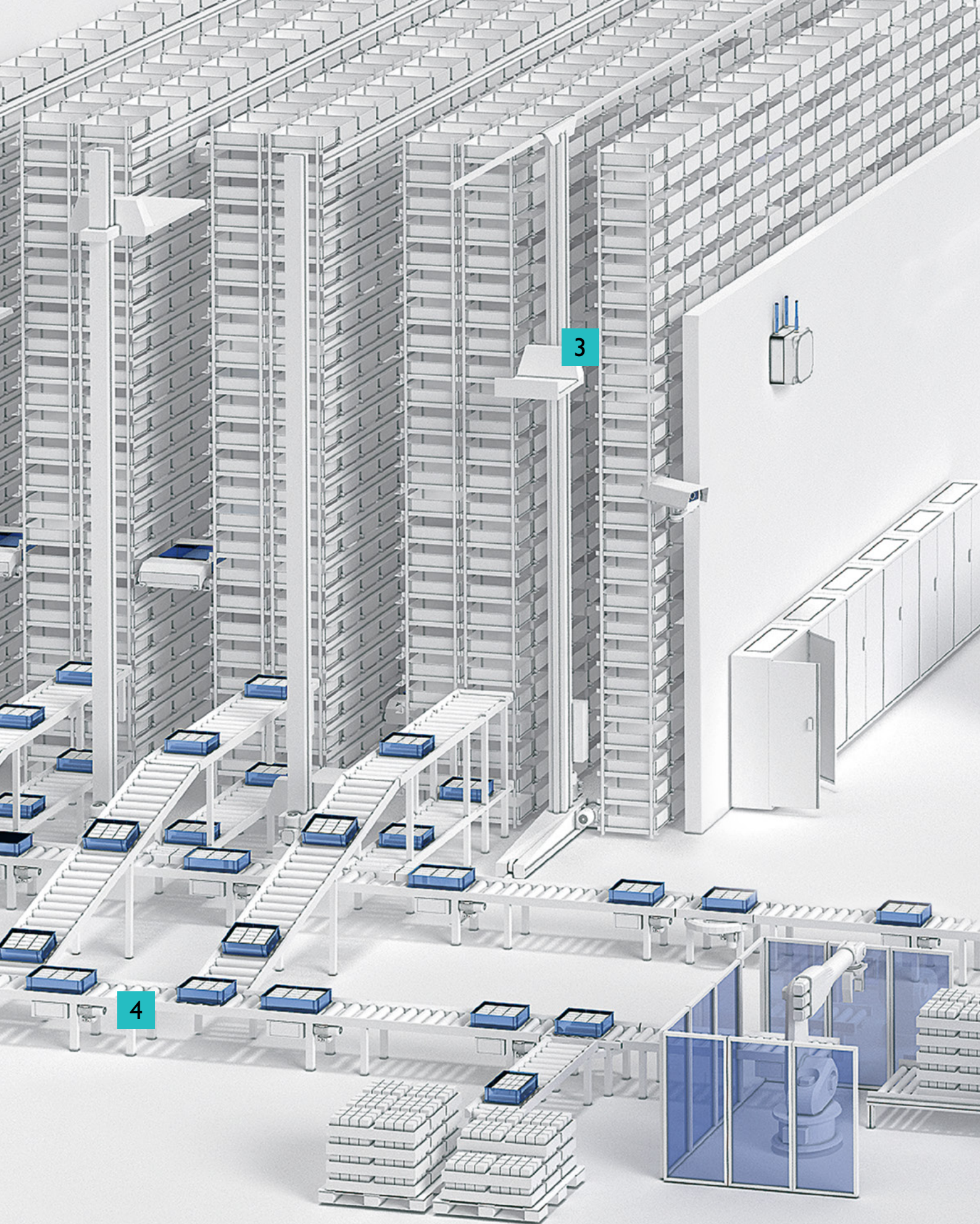
1. To avoid high starting currents, e.g., in the case of large fans, a soft start can be used for the motor.
2. A conveyor belt is carefully decelerated by the ramp function (to avoid a collision).
3. Normal speed for a fast transport phase and creeping speed for a slow positioning phase.
4. Efficient operation of motors.



Soft start (1), ramp function (2)



Normal and creeping speed (3)














3

4

Product overview

CONTACTRON Speed Starter				
Performance	Nominal current (input/output)	Housing	Type	Order no.
Single-phase load input, without EMC filter				
0.25 kW/0.3 HP	3.5 A/1.7 A	A1	CSS 0.25-1/3	1201132
0.37 kW/0.5 HP	5.3 A/2.5 A	A1	CSS 0.37-1/3	1201135
0.55 kW/0.7 HP	6.7 A/3.2 A	B1 heatsink	CSS 0.55-1/3	1201494
0.75 kW/1.0 HP	9.1 A/4.3 A	B1 heatsink	CSS 0.75-1/3	1201509
1.5 kW/2.0 HP	15.8 A/7.5 A	B1 fan	CSS 1.5-1/3	1201511
Single-phase load input, with EMC filter				
0.25 kW/0.3 HP	3.5 A/1.7 A	A2	CSS 0.25-1/3-EMC	1201520
0.37 kW/0.5 HP	5.3 A/2.5 A	A2	CSS 0.37-1/3-EMC	1201600
0.55 kW/0.7 HP	6.7 A/3.2 A	B2	CSS 0.55-1/3-EMC	1201602
0.75 kW/1.0 HP	9.1 A/4.3 A	B2	CSS 0.75-1/3-EMC	1201613
1.5 kW/2.0 HP	15.8 A/7.5 A	B2	CSS 1.5-1/3-EMC	1201642
Three-phase load input, without EMC filter				
0.25 kW/0.3 HP	1.0 A/0.9 A	A1	CSS 0.25-3/3	1201679
0.37 kW/0.5 HP	1.7 A/1.5 A	A1	CSS 0.37-3/3	1201683
0.55 kW/0.7 HP	2.0 A/1.8 A	A1	CSS 0.55-3/3	1201694
0.75 kW/1.0 HP	2.8 A/2.5 A	B1 heatsink	CSS 0.75-3/3	1201695
1.5 kW/2.0 HP	4.2 A/3.9 A	B1 fan	CSS 1.5-3/3	1201650
Three-phase load input, with EMC filter				
0.25 kW/0.3 HP	1.0 A/0.9 A	A2	CSS 0.25-3/3-EMC	1201713
0.37 kW/0.5 HP	1.7 A/1.5 A	A2	CSS 0.37-3/3-EMC	1201825
0.55 kW/0.7 HP	2.0 A/1.8 A	A2	CSS 0.55-3/3-EMC	1201828
0.75 kW/1.0 HP	2.8 A/2.5 A	A2	CSS 0.75-3/3-EMC	1201829
1.5 kW/2.0 HP	4.2 A/3.9 A	B2	CSS 1.5-3/3-EMC	1201696

Housing					
					
Description	A1	A2	B1 heatsink	B1 fan	B2
Cooling	Heatsink	Replaceable fan	Heatsink	Replaceable fan	Replaceable fan
Dimensions (HxWxD)	180 x 35 x 165 mm	180 x 35 x 185 mm	180 x 45 x 180 mm	180 x 45 x 180 mm	180 x 45 x 200 mm

Accessories for the CONTACTRON Speed Starter			
	Description	Type	Order no.
Fan			
	Fan for 35 mm housing	EM-CSS-FAN-35	1276911
	Fan for 45 mm housing	EM-CSS-FAN-45	1276912
Shroud			
	Shroud for motor feeder for 35 mm housing	EM-CSS-MOTORSHIELD-35	1276914
	Shroud for motor feeder for 45 mm housing	EM-CSS-MOTORSHIELD-45	1276916
	Shroud for control lines for 35 mm housing	EM-CSS-CONTROLSHIELD-35	1276904
	Shroud for control lines for 45 mm housing	EM-CSS-CONTROLSHIELD-45	1276909



For more accessories, just scan the QR code or enter the web code into the search field on our website.

 Web code: [#2809](#)

Switching devices and motor control

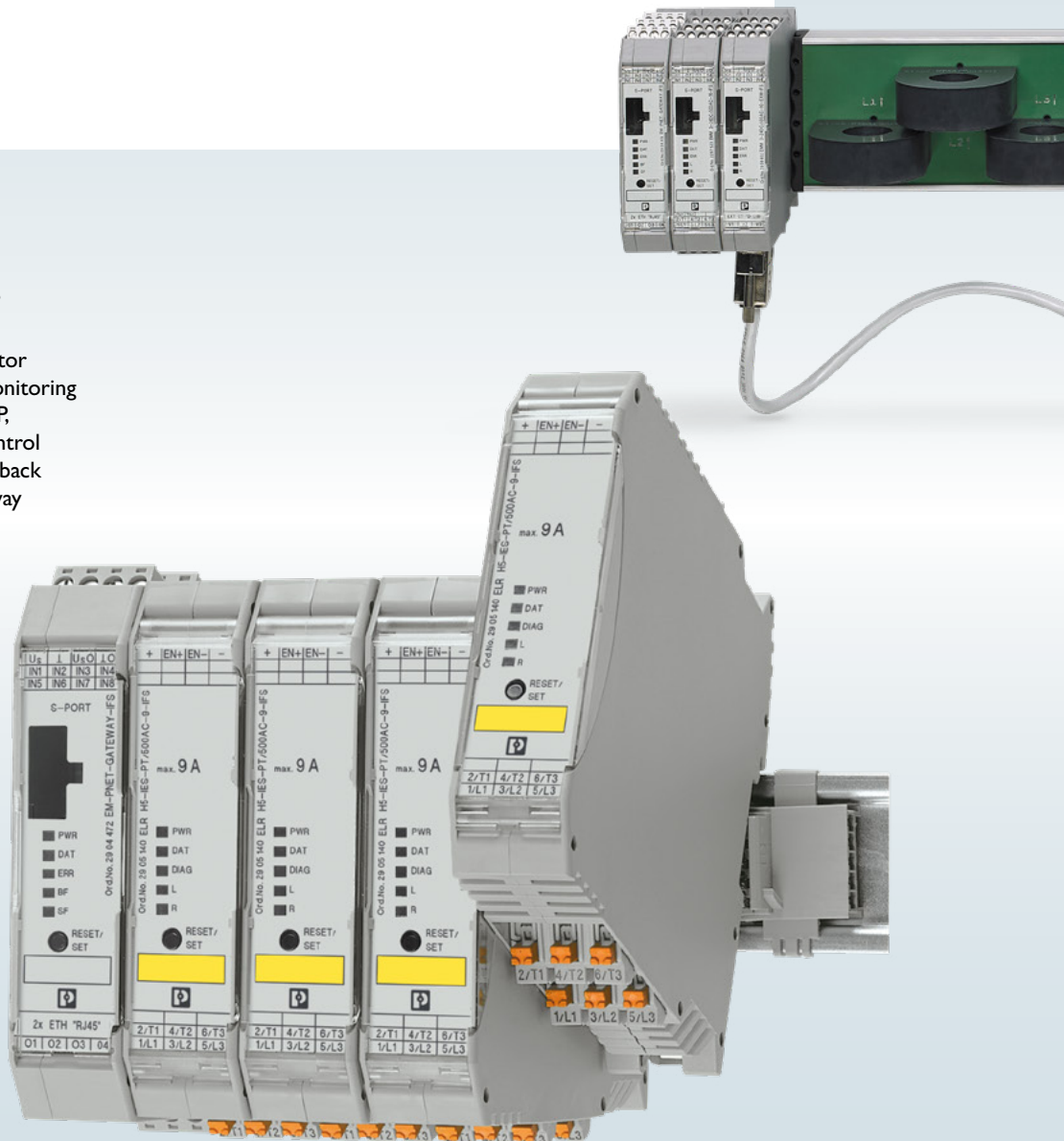
The CONTACTRON product portfolio

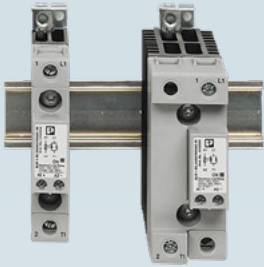
We're your partner for motor control devices. Take advantage of Phoenix Contact's extensive machine and motor capabilities with slim, long-life, networkable motor starters, and now, simple and smart speed starter solutions.

CONTACTRON motor control products bridge the gaps between capabilities, cost, service life, and space, so you can achieve your goals smarter and faster.

Networkable motor starters

Control, monitor, and predict:
CONTACTRON-IFS offers classic motor starter functionality with advanced monitoring and control capabilities via EtherNet/IP, PROFINET, and Modbus. Eliminate control wiring and I/O, and receive direct feedback from each motor starter via the gateway module.





Solid-state contactors

Reliable and fast switching up to 18 kW.



Motor and machine management

Economic protection and monitoring:
Detection of all critical load conditions and precise energy measurement of motors and other machines.

Motor starter

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



Speed starter

Connect. Set. Start. The CONTACTRON Speed Starter is a new device class that offers motor switching and speed control functionality without the complexity of a frequency drive.





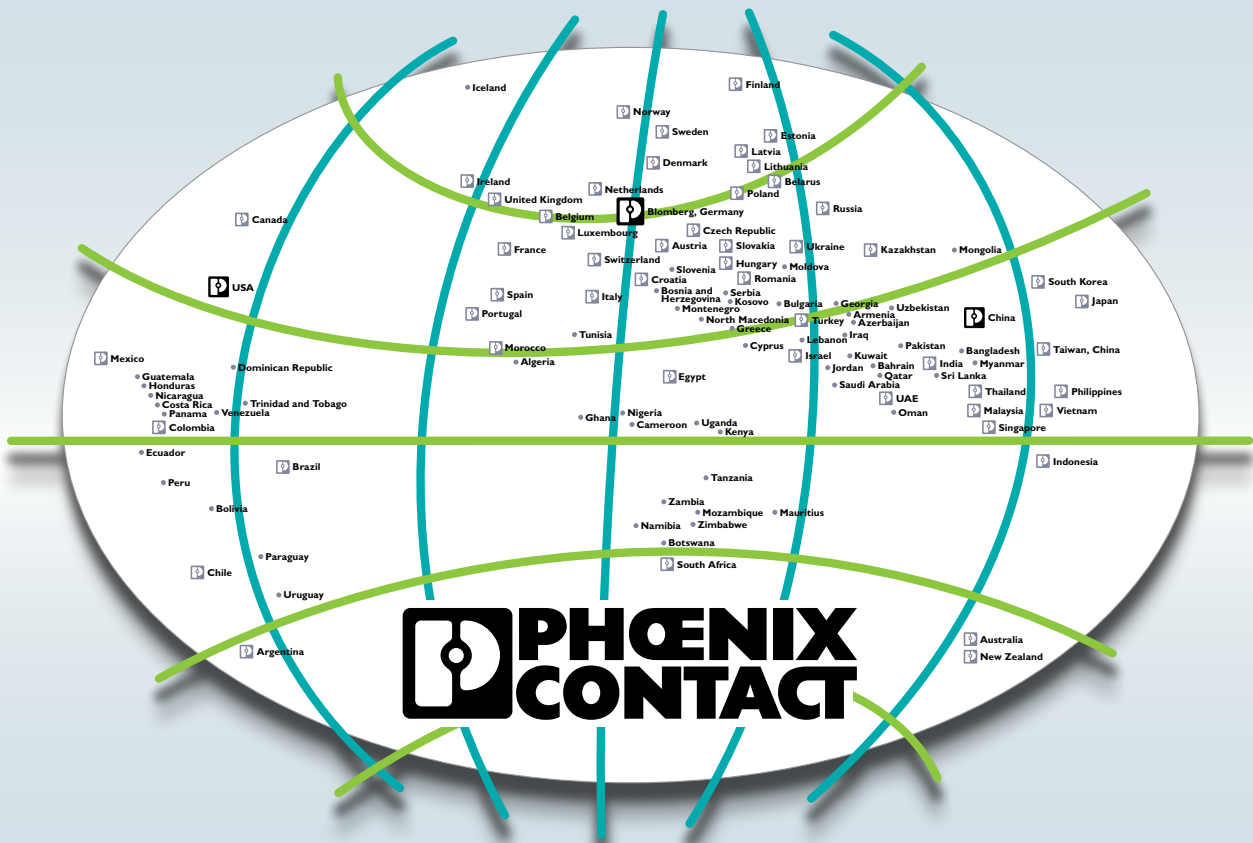
LIMITED LIFETIME WARRANTY

BUILD WITH CONFIDENCE

Build with confidence

Our Limited Lifetime Warranty is our promise to you that the products you install in your control cabinets are built to last. In industry and infrastructure, we stand with you. Simply register and relax. Isn't it time you trusted Phoenix Contact to build your cabinet confidence?

Register today at: www.phoenixcontact.com/LLW



Ongoing communication with customers and partners worldwide

Phoenix Contact is a global market leader based in Germany. We are known for our future-oriented components, systems, and solutions in the fields of electrical engineering, electronics, and automation. With a global network reaching across more than 100 countries with over 17,400 employees, we stay in close contact with our customers, something we believe is essential for success.

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

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