



# CONTACTRON Speed Starter

Speed Starter with intuitive operation

# Speed starter with intuitive operation – CONTACTRON Speed Starter

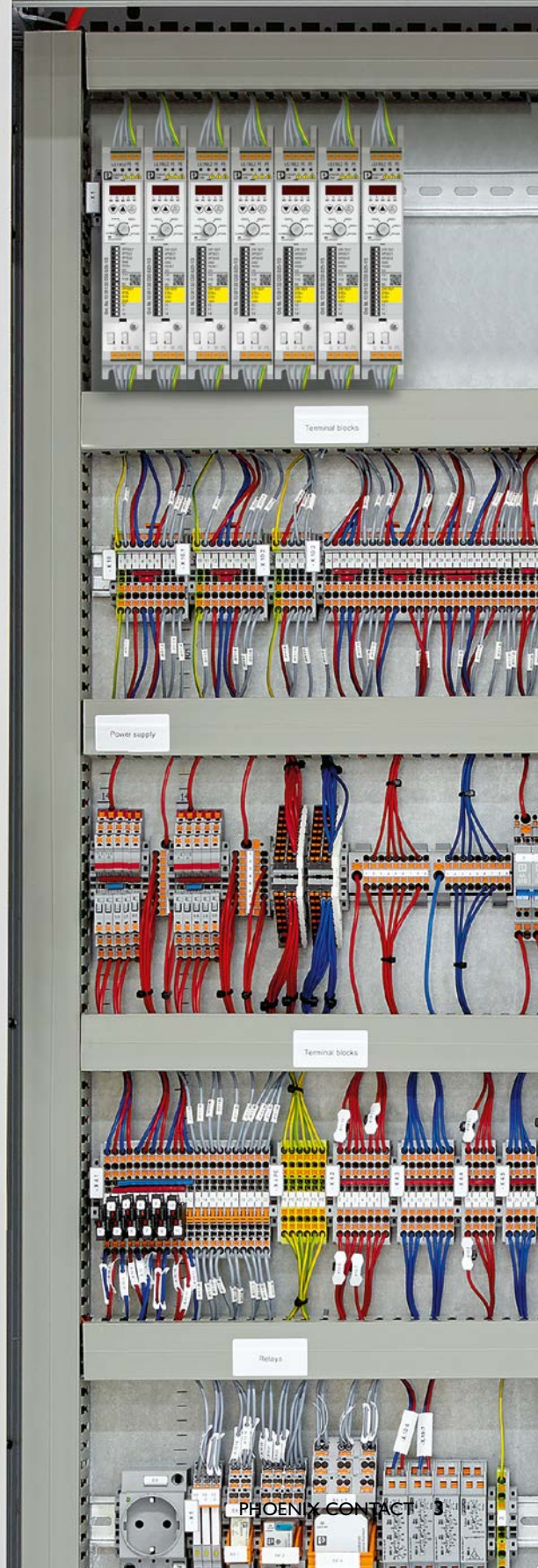
The speed starter, with particularly intuitive operation, is the new device class between motor starters and frequency converters. This compact solution provides all of the functions necessary for different speeds, soft start, and safe stopping with the Safe Torque Off (STO) function.

## The comprehensive solution for your control cabinet

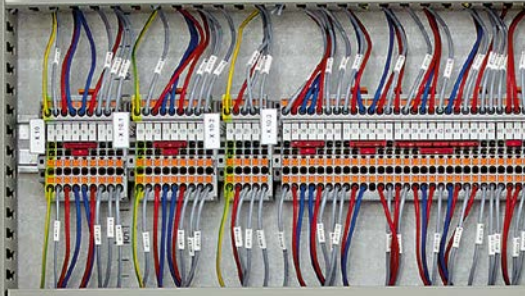
The CONTACTRON product family is a part of the COMPLETE line. COMPLETE line is a system comprised of coordinated hardware and software products, consulting services, and system solutions that help you optimize your processes in control cabinet manufacturing. Engineering, purchasing, installation, and operation become significantly easier for you. More information on pages 14 to 15.

**COMPLETE line**

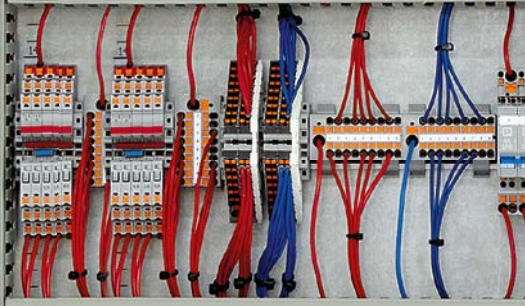




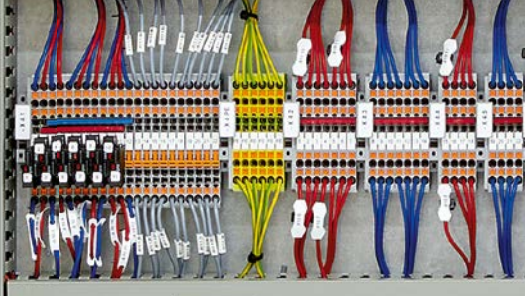
Terminal blocks



Power supply



Terminal blocks



Relays



PHOENIX CONTACT

# Everything you need for a wide range of applications

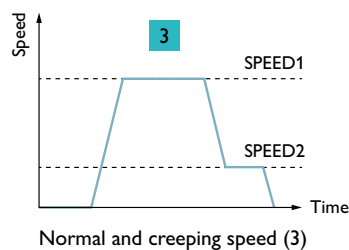
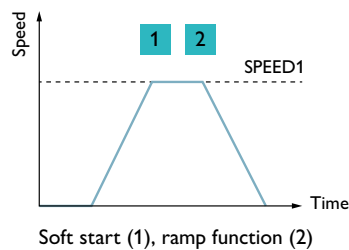
The safe, simple, and efficient operation of three-phase asynchronous motors is an important objective in a large number of applications. The CONTACTRON Speed Starter features simple operation with various speeds, from normal speed, creeping speed, and soft start, all the way to energy efficiency and ramping functions.



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## 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 according to the EUP lot directive (energy efficiency directive).





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# Features at a glance

## Simple, efficient, and safe

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 1- or 3-phase mains input. Select the appropriate product for your application.

### Push-in Technology

Designed by Phoenix Contact

### Intuitive operating concept

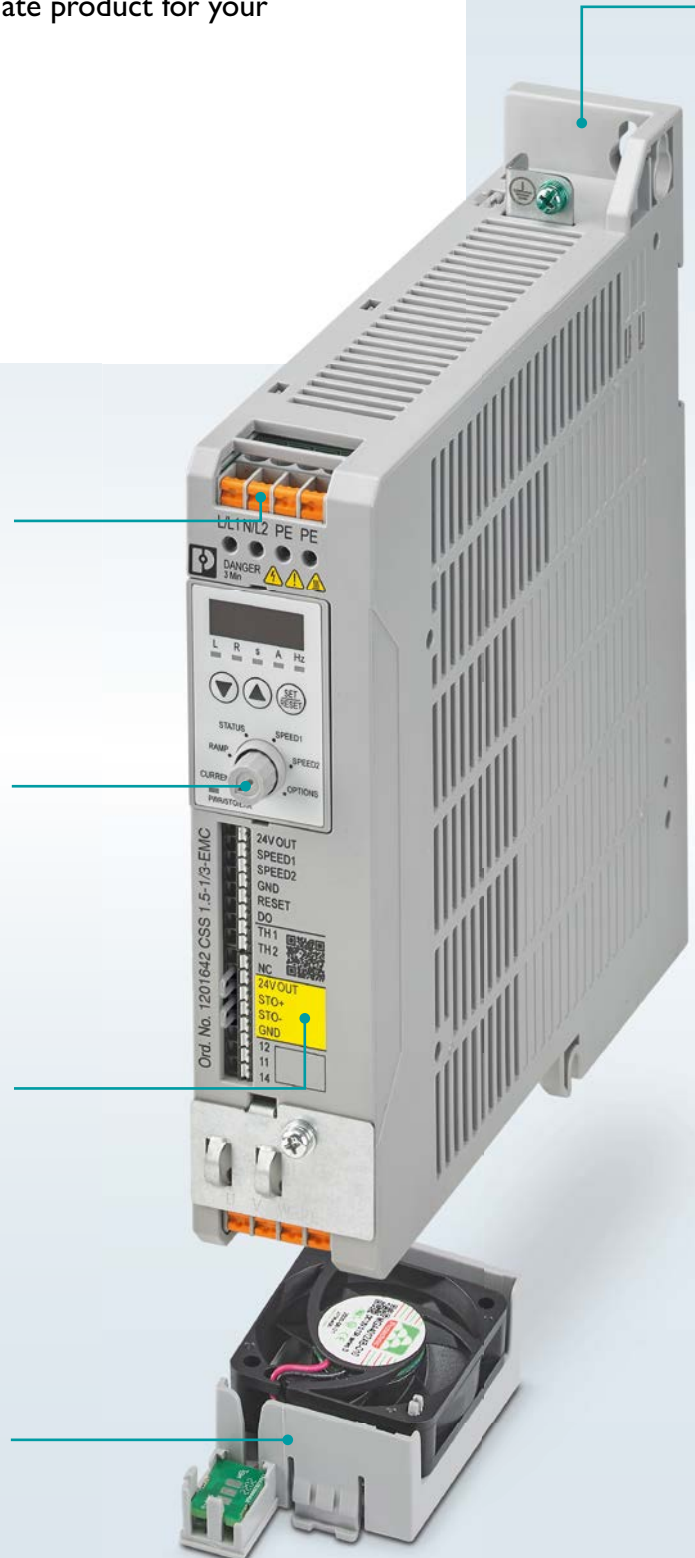
Thanks to the simple operator interface consisting of a rotary switch, three buttons, and a display, all necessary settings can be made particularly intuitively.

### Safe Torque Off (STO)

Thanks to the integrated 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.

### Versions with fans

Particularly service-friendly due to the replaceable fan.



## DIN rail mounting

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

## Your advantages

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

## 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

Providing a compact design with an overall width starting at only 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.

## Performance class 0.25–1.5 kW

## Shroud for control lines

## Shroud for motor feeder lines

Optional mount on the shroud for control lines for supporting the shroud of the motor feeder lines.



# Connect – Set – Start CONTACTRON Speed Starter

The easy and intuitive operation concept allows for a quick startup. 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.





## 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

Comfortable protection via flexible nominal current setting of the motor incl. remote reset function.



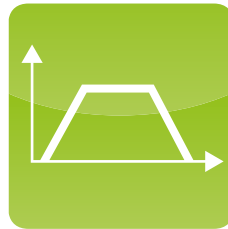
### Safe Torque Off

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



### Various speeds

Speeds can be customized and modified as desired.



### Ramp function

Fully adjustable soft motor start and shutdown.

## The operating concept

The Plug and Play solution provides you with an easy startup option. Set the required parameters quickly and efficiently via the rotary switch and the buttons.

### Current

Nominal current setting of the motor via the arrow buttons with subsequent confirmation (Set/Reset button).

### Ramp

Ramp setting of the motor via the arrow buttons with subsequent confirmation (Set/Reset button).

### Status

Status indicator of the motor (direction of rotation, control signal, frequency, current, voltage, power, and cos phi).

### Speed1

Speed and direction of rotation setting of Speed 1 via the arrow buttons with subsequent confirmation (Set/Reset button).

### Speed2

Speed and direction of rotation setting of Speed 2 via the arrow buttons with subsequent confirmation (Set/Reset button).

### Options






Further possible optional parameter settings.









Operator interface of the speed starter

## Product overview

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

<b>Housing</b>					
					
<b>Description</b>	<b>A1</b>	<b>A2</b>	<b>B1 heatsink</b>	<b>B1 fan</b>	<b>B2</b>
<b>Cooling</b>	Heatsink	Replaceable fan	Heatsink	Replaceable fan	Replaceable fan
<b>Dimens. (H x W x D)</b>	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.
<b>Fan</b>			
	Fan for 35 mm housing	EM-CSS-FAN-35	<a href="#">1276911</a>
	Fan for 45 mm housing	EM-CSS-FAN-45	<a href="#">1276912</a>
<b>Shroud</b>			
	Shroud for motor feeder for 35 mm housing	EM-CSS-MOTORSHIELD-35	<a href="#">1276914</a>
	Shroud for motor feeder for 45 mm housing	EM-CSS-MOTORSHIELD-45	<a href="#">1276916</a>
	Shroud for control lines for 35 mm housing	EM-CSS-CONTROLSHIELD-35	<a href="#">1276904</a>
	Shroud for control lines for 45 mm housing	EM-CSS-CONTROLSHIELD-45	<a href="#">1276909</a>



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

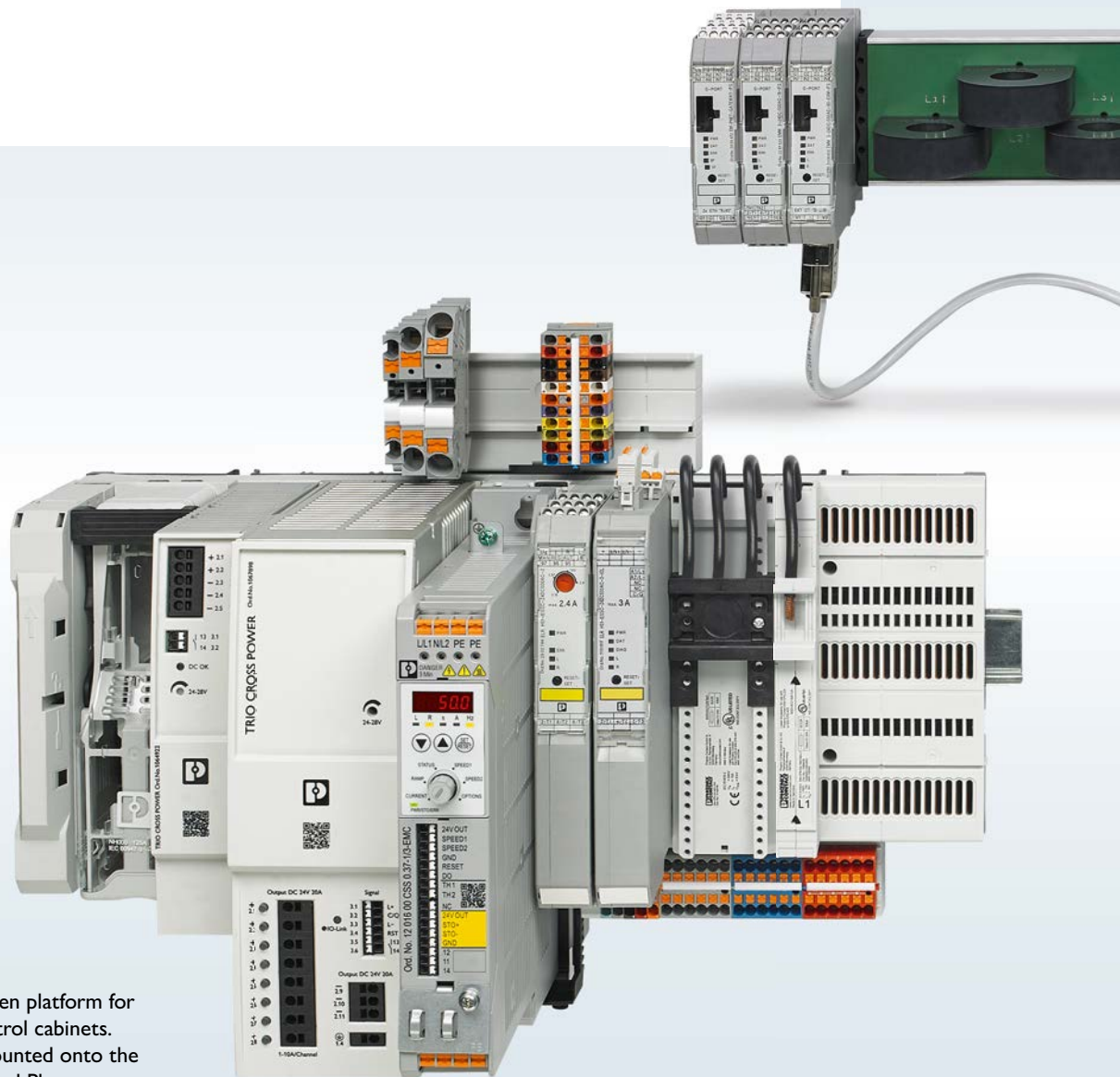
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# Switching devices and motor control

## The CONTACTRON product portfolio

Your partner for switching devices and motor control: Take advantage of Phoenix Contact's broad portfolio of electronic switching devices, economical motor and machine managers, the modular power distribution system, and speed starters with intuitive operation.

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



### CrossPowerSystem

CrossPowerSystem is an open platform for modular and functional control cabinets. Three-phase devices are mounted onto the power distributor via Plug and Play.



## Solid-state contactors

Reliable and fast switching  
up to 18 kW.



Software IFS-CONF  
Configuration and monitoring



## 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.

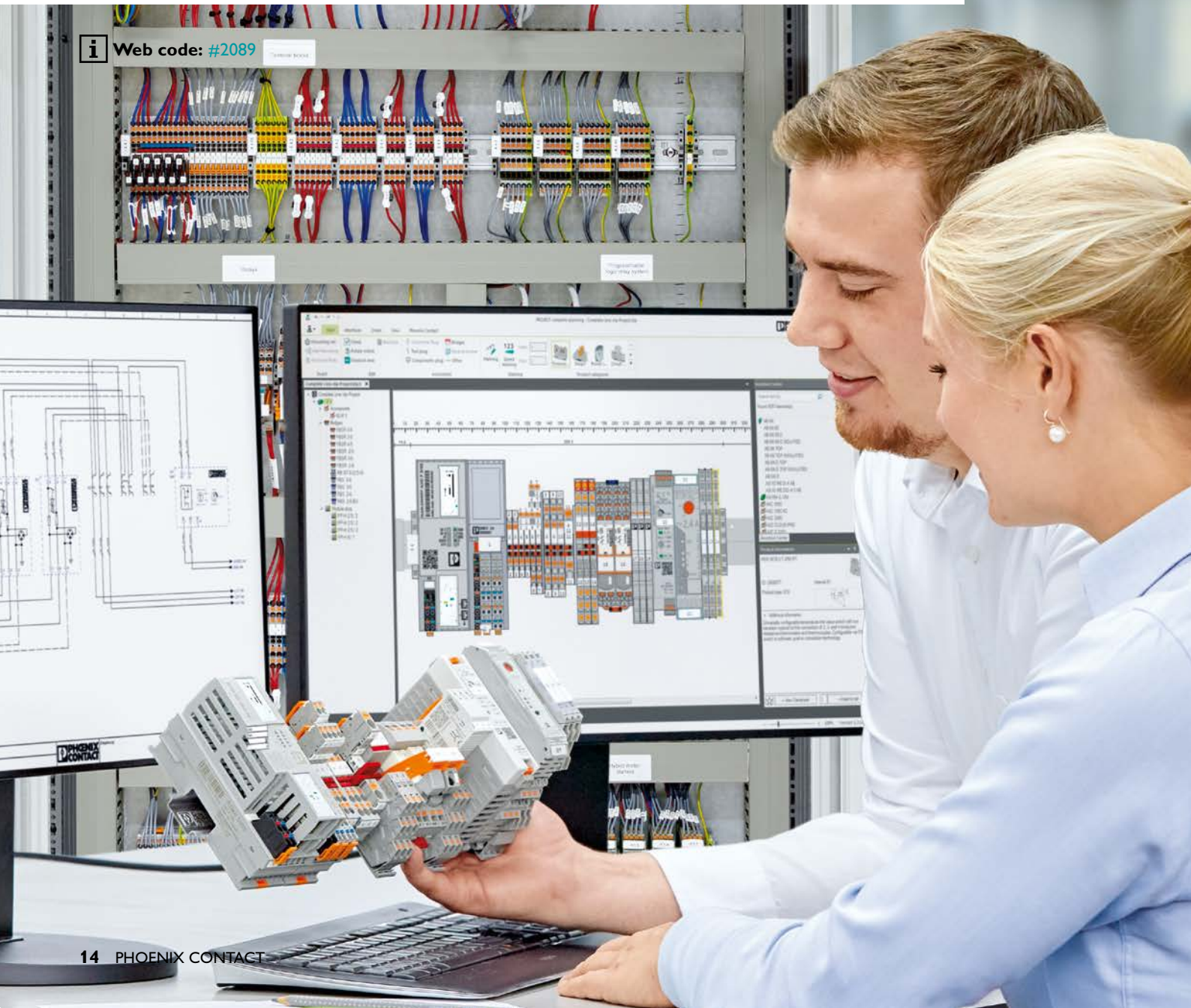


## Speed starter

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

# COMPLETE line – The comprehensive solution for the control cabinet

COMPLETE line is a system comprised of technologically leading and coordinated hardware and software products, consulting services, and system solutions that help you optimize your processes in control cabinet manufacturing. Engineering, purchasing, installation, and operation become significantly easier for you.



## Your advantages in detail:



### Comprehensive product portfolio

With COMPLETE line, we offer a complete product portfolio of technologically leading products. This includes:

- Controllers and I/O modules
- Power supplies and device circuit breakers
- Terminal blocks and distribution blocks
- Relay modules and motor starters
- Signal conditioners
- Safety technology
- Surge protection
- Heavy-duty connectors



### Intuitive handling

Thanks to the simple, intuitive handling of the coordinated hardware components, you will save time during installation, startup, and maintenance. Push-in connection technology allows you to wire applications quickly – without using tools. The broad, technologically leading product portfolio will always provide you with the right product for standard or special applications.



### Save time throughout the entire engineering process

The PROJECT complete planning and marking software supports the entire process of control cabinet manufacturing. The program features an intuitive user interface that allows the individual planning, automatic checking, and direct ordering of terminal strips.



### Reduced logistics costs

Reduced variety of parts, thanks to standardized marking, bridging, and testing accessories. The COMPLETE line system coordinates products, design, and accessories so that you benefit from maximum reusability and thus reduce your logistics costs.



### Optimized processes in control cabinet manufacturing

COMPLETE line supports you, from engineering through to manufacturing, in designing your control cabinet production as efficient as possible. This is how your customized concept for optimizing your processes in control cabinet manufacturing is created. Our terminal strip production helps you to flexibly manage order peaks or to supply your control cabinet production with fully assembled DIN rails just in time.

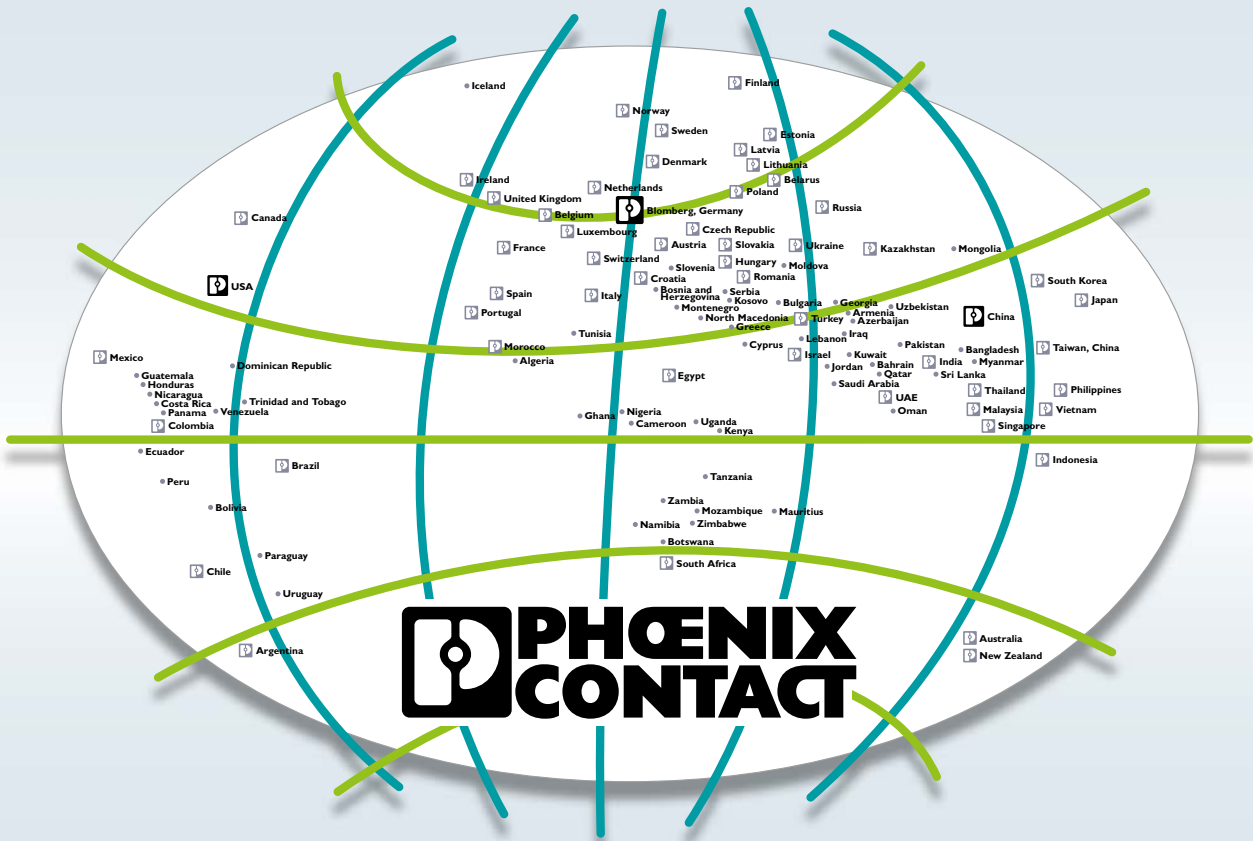


### The new standard for the control cabinet

Discover the extensive COMPLETE line product portfolio and find out more about COMPLETE line and your comprehensive solutions for the control cabinet.

Visit our website:

[phoenixcontact.com/completeline](https://phoenixcontact.com/completeline)



## Open communication with customers and partners worldwide

Phoenix Contact is a global market leader based in Germany. We are known for producing future-oriented components, systems, and solutions for electrification, networking, and automation. With a global network reaching across more than 100 countries with over 17,100 employees, we maintain close relationships with our customers, something we believe is essential for our common success.

Our wide variety of innovative products makes it easy for our customers to implement the latest technology in a variety of applications and industries. We focus on developing the fields of energy, infrastructure, process, and factory automation.

You can find your local partner at  
[phoenixcontact.com](https://www.phoenixcontact.com)