



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

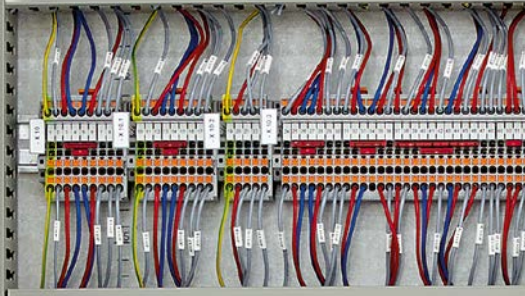
The CONTACTRON product family is a part of the COMPLETE line. COMPLETE line is a system comprised of coordinated hardware and software products, consulting services, and system solutions that help you optimize your processes in control cabinet manufacturing. Engineering, purchasing, installation, and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

COMPLETE line

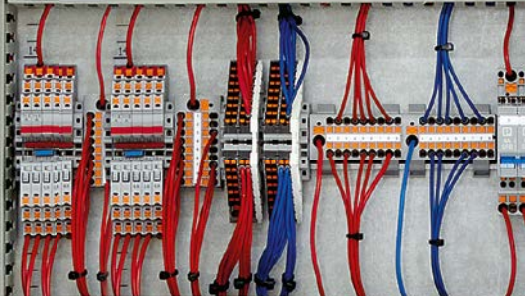




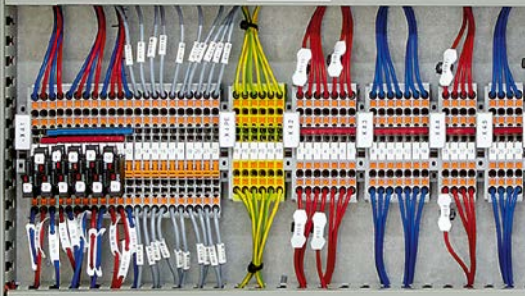
Terminal blocks



Power supply



Terminal blocks



Relays



Everything you need for a wide range of applications

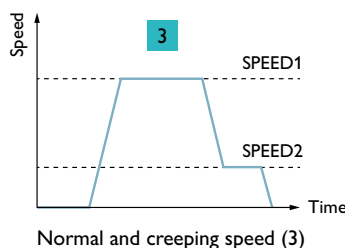
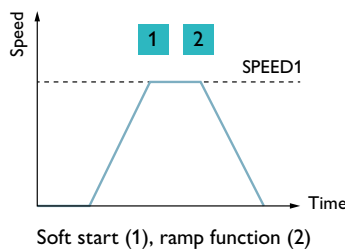
The safe, simple, and efficient operation of three-phase asynchronous motors is an important objective in a large number of applications. The CONTACTRON Speed Starter features simple operation with various speeds, from normal speed, creeping speed, and soft start, all the way to energy efficiency and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



2

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).





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

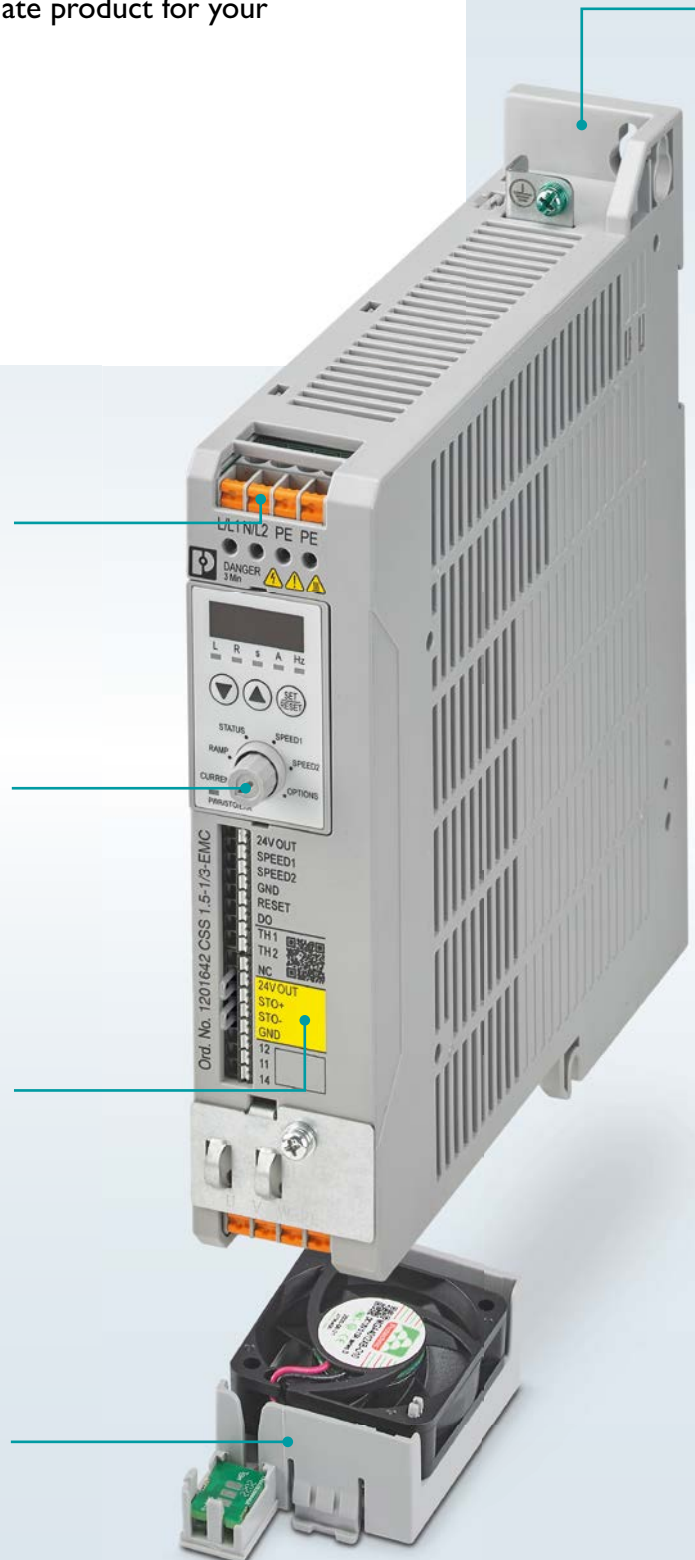
Thanks to the simple operator interface consisting of a rotary switch, three buttons, and a display, all necessary settings can be made particularly intuitively.

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

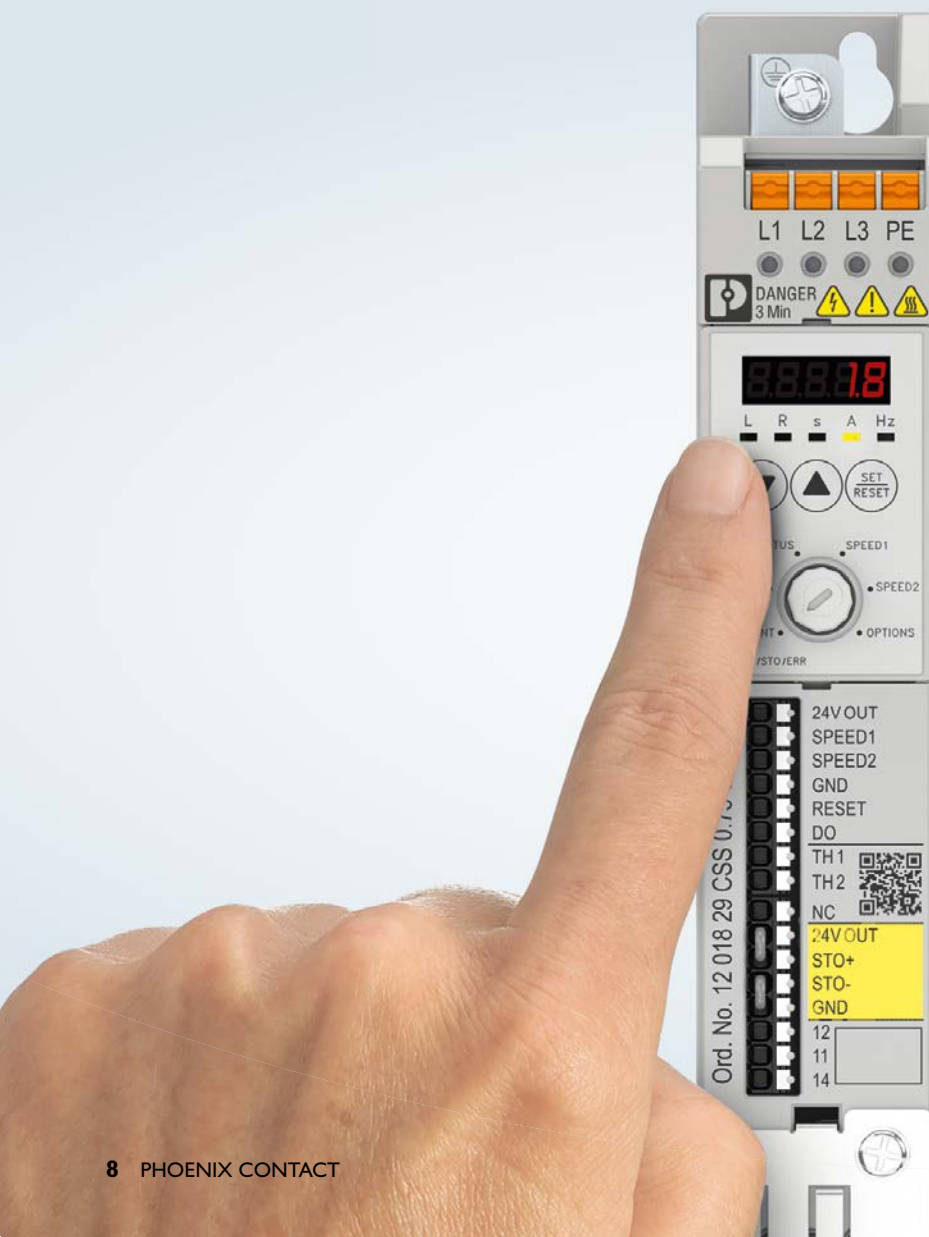
Optional mount on the shroud for control lines for supporting the shroud of the motor feeder lines.



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.



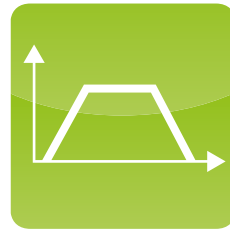
Safe Torque Off

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

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
Dimens. (H x W x D)	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.

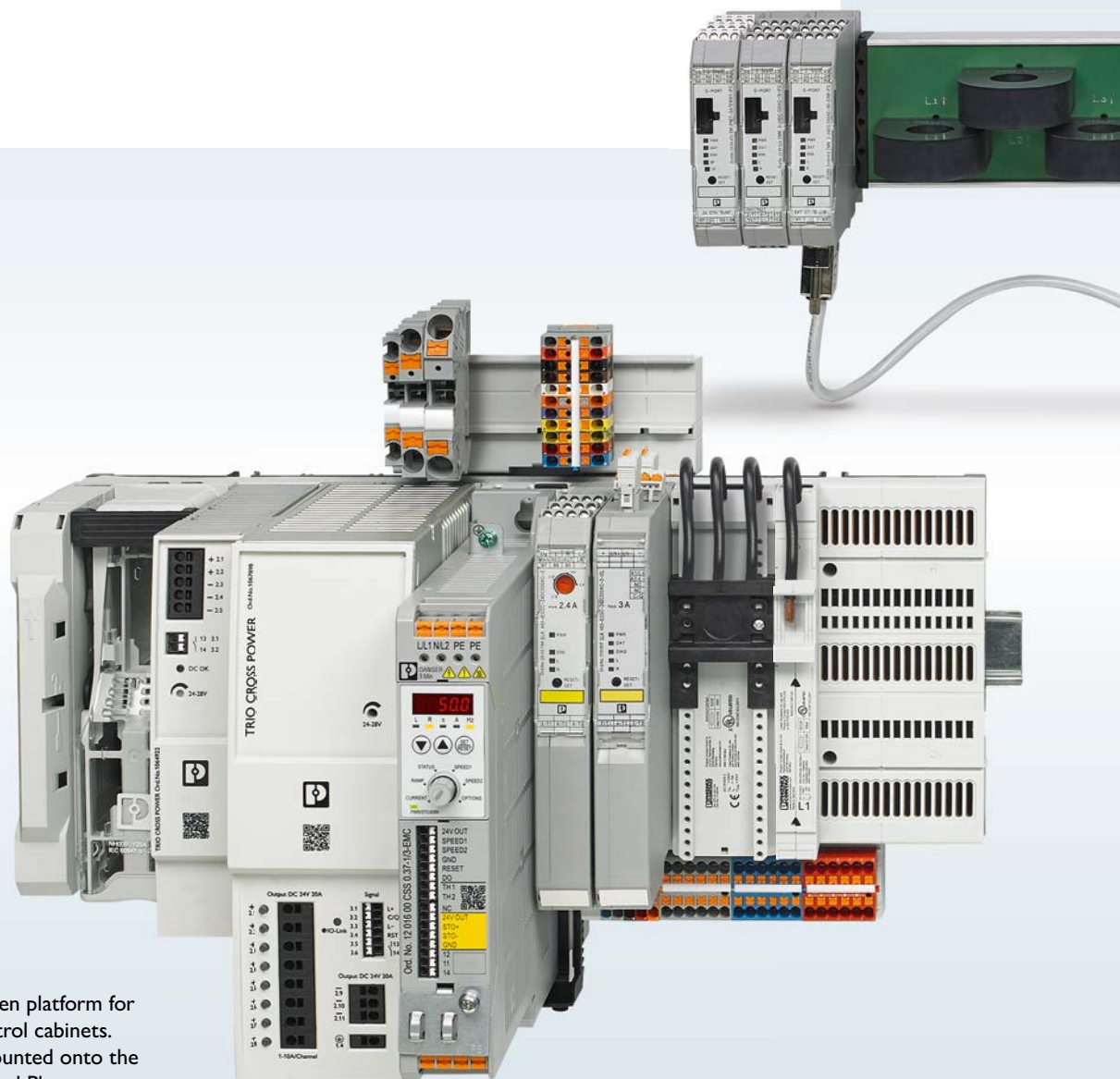
 Web code: #2809

Switching devices and motor control

The CONTACTRON product portfolio

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.



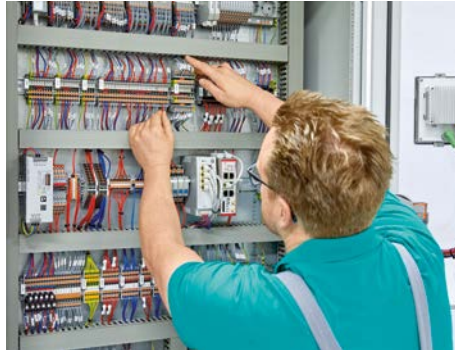
Your advantages in detail:



Comprehensive product portfolio

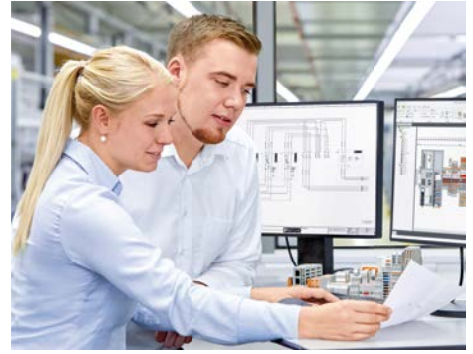
With COMPLETE line, we offer a complete product portfolio of technologically leading products. This includes:

- 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

