



New products 2018

Connection and automation technology


New products 2018 – Innovative products for your industrial systems

As a leading manufacturer of connection technology and automation components, we are always working to turn the growing demands of your applications and markets into new innovations.

Our products are a part of the nervous system in your industrial facilities and help you increase the efficiency, availability and safety of your systems. Find out about our wide range of new products from the fields of connection technology, automation components, surge protection, marking, and tools.

Find out more with the web code

The web codes in this brochure take you to additional product information and product versions. 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

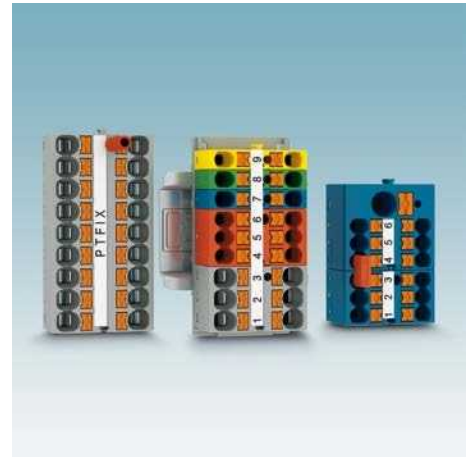
Contents

Terminal blocks	4
Sensor/actuator cabling	14
Connectors	16
Marking and labeling	23
Tools	26
Measurement and control technology	28
Monitoring	30
Functional safety	32
Relay modules	34
Electronic switching devices and motor control	38
System cabling for controllers	40
Power supplies and UPS	42
Protective devices	46
Surge protection and interference suppression filters	48
I/O systems	58
Industrial cloud computing	62
Software	63
Controllers	64
Industrial communication technology	67
HMIs and industrial PCs	78
Lighting and signaling	81
Charging technology for electromobility	82
Service	86

Connection-ready distribution blocks with Push-in connection

The new PTFIX distribution blocks are now available with a 4 mm² Push-in connection and with various terminal points and mounting types. They are connection-ready and can be configured individually. The 2.5 mm² terminal block range has been expanded with versions with just two terminal points.

Push-in Technology 
Designed by PHOENIX CONTACT










Your advantages

- ✓ Time savings of up to 80 percent, thanks to ready-to-mount blocks without manual bridging
- ✓ Flexible use, thanks to DIN rail, direct or adhesive mounting
- ✓ Time-saving conductor connection, thanks to tool-free Push-in direct connection technology
- ✓ Space savings of up to 50 percent on the DIN rail, thanks to transverse mounting

Main features

- Push-in connection
- Voltage up to 600 V in accordance with UL
- Available in 11 colors
- Number of terminal points: 2, 6, 12 and 18
- Alignable and can be bridged with standard plug-in bridges
- Testing option for all standard test probes

 Web code: #1739						
	Description	Basic block	Distribution block			DIN rail adapter
Cross section	2.5 mm ²	4 mm ²				-
Number of terminal points	2	18				-
Current/voltage	24 A / 500 V	32 A / 690 V				-
Mounting type	For self-assembly	NS 35	NS 35 (transverse)	Self-adhesive	NS 15	Direct mounting
Type	PTFIX 2,5/1GY	PTFIX 18X4-NS35A GY	PTFIX 18X4-NS35 GY	PTFIX 18X4-GGY	PTFIX-NS15A	PTFIX-F
Order No.	1028067	3273702	3273570	3273966	3274058	3274060

The web code gives you access to additional product versions on our website.

Distribution block solutions – Configuring and ordering online

The online configurator for your tailor-made PTFIX distribution block solution: configure your distribution blocks with just a few entries thanks to simple menus, 2D and 3D product images, and intuitive user interfaces. We deliver your solutions, all you have to do is install them.




Your advantages

- ✓ Convenient configuration: create your desired solution with just a few clicks
- ✓ Tailored combinations – PTFIX distribution blocks in accordance with your specific requirements
- ✓ User-friendly visualization – real-time 3D representation of your configuration
- ✓ Reduce your logistics costs, thanks to the delivery of blocks ready for use

Main features

- Web configuration: block arrangement, marking, color and mounting type selection
- Intuitive user interface
- Drag-and-drop operation
- 2D and 3D design data
- Easy repeat ordering of your configuration using the solution ID

<p>i Web code: #1740</p>	
<p>Description</p>	<p>Online configurator for PTFIX distribution block solutions</p>
	<p>PTFIX distribution blocks provide you with countless combination possibilities. Configure and keep track of your individual solutions easily and quickly with the configurator. We will create a non-binding quote for your individual configuration.</p>

Compact potential collective terminals with screw and Push-in connection

The compact PTU potential collective terminals open up a wealth of application possibilities to you: feed-in via the tried-and-tested, maintenance-free screw connection, combined with tool-free pick-off wiring, and quick and easy Push-in connection.






Push-in Technology[®]
Designed by PHOENIX CONTACT

Your advantages

- ✓ Easy potential distribution or collection
- ✓ Compact, space-saving design
- ✓ Can be bridged with standard plug-in bridges from the CLIPLINE complete system
- ✓ Easy testing, thanks to 2.3 mm standard test point
- ✓ Large-surface marking options

Main features

- Feed-in: screw connection
- Pick-off: Push-in connection
- Voltage up to 1000 V

 Web code: #1741		
Description	Potential collective terminals	
Color	Gray	Blue
Feed-in cross section	35 mm ²	
Pick-off cross section	4 x 10 mm ²	
Current	101 A	
Type	PTU 35/4X10	PTU 35/4X10 BU
Order No.	3002371	3002370

Pick-off terminals for bolt terminal blocks with Push-in connection

You can connect conductors with cross sections of up to 300 mm² securely with Phoenix Contact bolt terminal blocks. The AGK pick-off terminals for high-current bolt terminal blocks of the HV and RBO series now provide you with a simple method of potential distribution.

Push-in Technology 
 Designed by PHOENIX CONTACT



Your advantages

- Easy potential distribution or collection
- Compact, space-saving design
- Easy testing, thanks to 2.3 mm standard test point
- Large-surface marking options
- Clear assignment, thanks to pre-bridged terminal points in alphabetical order

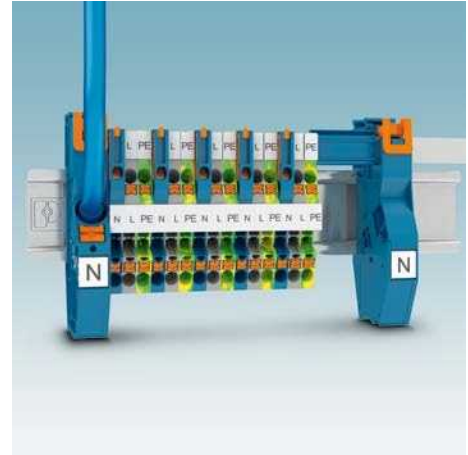
Main features

- Push-in connection
- Voltage: 1000 V
- Current up to 116 A
- Cross sections up to 10 mm²

 Web code: #1742			
Description	Pick-off terminals		
Bolt thread	M10	M10	M12
Number of terminal points	4	8	4
Type	AGK PT 4X6/M10	AGK PT 4X6/M12	AGK PT 8X6/M10
Order No.	1017448	1017454	1017450

Feed-in terminal for N busbars with Push-in connection

You can contact neutral busbars with the PTI-16-NLS-FI feed-in terminal easily and without tools. Thanks to the integrated end bracket and support bracket function, you save additional space in the installation distributor. An identically shaped support bracket rounds off the range.



Push-in Technology[®]
Designed by PHOENIX CONTACT

Your advantages

- ✓ Secure and tool-free busbar contacting
- ✓ Mechanical securing on the busbar, thanks to locking tab
- ✓ Lateral busbar touch proofness, thanks to integrated cover
- ✓ Easy testing, thanks to 2.3 mm standard test point
- ✓ Large-surface marking option

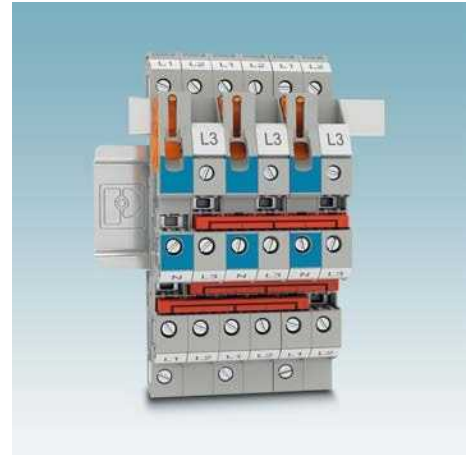
Main features

- Push-in connection
- Spring contact for busbars
3 x 10 mm
- Compatible with the Phoenix Contact installation system
- Voltage: 1000 V
- Current: 76 A
- Cross-sections up to 16 mm²

 Web code: #1743			
Description	Feed-in terminal	Support bracket	Cover profile
Color	Blue	Blue	Blue
Type	PTI 16-NLS-FI BU	AB-PTI 16-NLS BU	AP-NLS N
Order No.	1030131	1030138	1013634

Multi-level building installation terminal blocks with 10 mm² screw connection

Wire your building installation in the tightest spaces with the UTI multi-level terminal blocks. Double function shafts on each level ensure time-saving three-phase distribution in the terminal strip. Suitable for conductors up to 10 mm², and with all features of the CLIPLINE complete system.


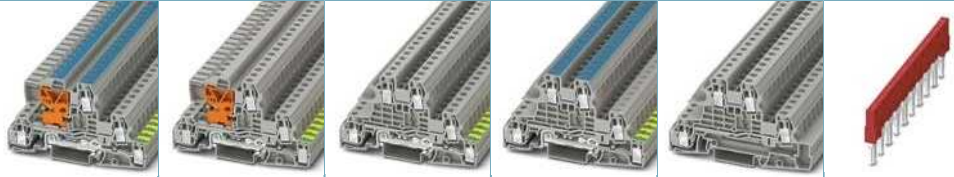


Your advantages

- ✓ Low, compact design for use in installation distributors
- ✓ Double function shaft on each level for easy potential distribution
- ✓ Easy and secure N disconnection, thanks to robust, screw-less disconnect slide
- ✓ Clear organization, thanks to distinct marking of each terminal point

Main features

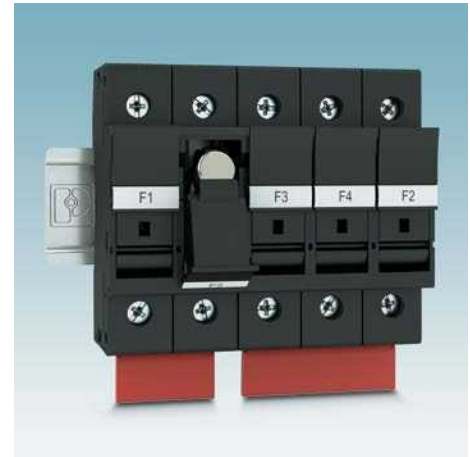
- Screw connection
- Compatible with the Phoenix Contact installation system
- Voltage: 400 V
- Current: 41 A
- Cross sections up to 10 mm²
- Terminal block width: 8.2 mm

 Web code: #1744						
	Installation terminal blocks					Plug-in bridge
Description						
PE connection	Yes					-
Disconnect slide	Yes	-				
Potentials	2+PE				2	1
Number of positions	-					10
Type	UTI 6-PE/L/NT	UTI 6-PE/L/LT	UTI 6-PE/L/L	UTI 6-PE/L/N	UTI 6-L/L	FBSL 10-8
Order No.	3076039	3076043	3076040	3076041	3076042	3030328

The web code gives you access to additional product versions on our website.

Fuse terminal blocks up to 1000 V with screw connection

UK lever-type fuse terminal blocks provide the right fuse holder for various applications. With 32 A and a power dissipation of up to 4 W, they are perfect for demanding standard applications or photovoltaics systems with 1000 V DC. Fuse-links in accordance with IEC and UL round out the portfolio.







Your advantages

- ✓ Easily accessible fuse-links are easy to replace
- ✓ Easy potential collection or distribution with insertion bridges
- ✓ Better heat dissipation, thanks to optional spacers
- ✓ Quick identification of triggered fuses, thanks to LED status indicator and large-surface marking options

Main features

- Screw connection
- Current: 32 A
- Power dissipation up to 4 W
- Cross sections up to 25 mm²

 Web code: #1745						
	Lever-type fuse terminal blocks			56-pos. insertion bridges		Spacer
Description						
Voltage	690 V	600 V	1000 V	-		
LED display	No	Yes	Yes	-		
Fuse type	Midget 10.3 x 38 mm	CLASS CC 10.3 x 38 mm	Midget 10.3 x 38 mm	-		
Width/spacing	18 mm			22 mm	(22 mm)	
Type	UK 10,3-HESI A	UK 10,3-CC HESILED A 600 V	UK 10,3-HESILED A 1000 V	EB 56-18 A	EB 56-22 A	DP-UK 10,3 HESI A
Order No.	1045676	1045716	1045723	3009315	3009319	1045724

The web code gives you access to additional product versions on our website.

Current indicator lever-type disconnect terminal block with Push-in connection

The PT current indicator terminal block allows you to clearly identify interruptions or line breaks in the operating state. The voltage drop is evaluated at a Zener diode in reverse direction and indicated by an LED. The circuit can be safely disconnected using the disconnect lever.




Push-in Technology ^{PT}
 Designed by PHOENIX CONTACT

Your advantages

- ✓ Space-saving, thanks to the compact design
- ✓ LED for visualizing the operating state
- ✓ Identical shape and bridgeable to standard terminal blocks
- ✓ Convenient testing, thanks to test points on both sides
- ✓ Clear arrangement, thanks to marking on all terminal points and disconnect lever

Main features

- Push-in connection
- Currents up to 100 mA
- Diode voltage: 2.4 V
- Cross sections up to 4 mm²
- Terminal block width: 6.2 mm

<p>i Web code: #1746</p>	
<p>Description</p>	<p>Current indicator lever-type disconnect terminal block</p>
<p>Type</p>	<p>PT 4-HE-ILA 100</p>
<p>Order No.</p>	<p>1030359</p>

Barrier terminal blocks for direct mounting with screw and Push-in connection

Connect conductors safely and conveniently with BT barrier terminal blocks. The direct mounting terminal blocks can be aligned with terminal blocks and secured without DIN rails. They expand the portfolio for connecting conductors up to 35 mm².










Push-in Technology 
 Designed by PHOENIX CONTACT

Your advantages

- Flexible use, thanks to DIN rail or direct mounting
- Direct mounting without pitch loss, because they can be secured at any chosen point on a terminal block
- Free selection of connection technology, thanks to convenient ring cable lug connection and easy Push-in connection
- Simple potential distribution with time-saving CLIPLINE complete plug-in bridge system

Main features

- Screw and Push-in connection
- DIN rail and direct mounting versions
- Voltage: 690 V
- Current up to 125 A
- Cross sections up to 35 mm²

 Web code: #1747						
	Description	Screw terminal block	Hybrid terminal block	Push-in terminal block	Screw terminal block	Screw terminal block
Cross section	1.5 mm ²	2.5 mm ²	4 mm ²	6 mm ²	16 mm ²	35 mm ²
Current	17.5 A	24 A	32 A	41 A	76 A	125 A
Type	BT 1,25-F	BTH 2,0-F	BTP 3,5-F	BT 5,5-F	BT 14-F	BTO 38-F
Order No.	3281103	3281111	3281119	3281136	3281179	3281205

The web code gives you access to additional product versions on our website.

Warning labels for Push-in terminal blocks

Easy marking

The WS PT warning labels are used to mark Push-in terminal blocks that remain live even after the main switch has been shut down. They can be snapped into place on all Push-in standard terminal blocks with a cross section from 2.5 mm² to 16 mm². Versions for marking the diode forward direction are also available.










Push-in Technology [®]
 Designed by PHOENIX CONTACT

Your advantages

- ✓ Clear marking of live terminal blocks
- ✓ Easy mounting, thanks to tool-free snap-in system
- ✓ High quality printing guarantees permanent marking

Main features

- Tool-free mounting
- Printing: lightning flash, diode
- Color: yellow

 Web code: #1748						
Description	Warning labels					
Terminal pitch	5.2	6.2	8.2	10.2	12.2	5.2
Printing	Lightning flash					Diode graphic symbol
Type	WS PT 2,5	WS PT 4	WS PT 6	WS PT 10	WS PT 16 N	WS-DIO PT 2,5
Order No.	1029026	1029563	1029029	1029030	1029033	1029037

Assembled M8 data cables with D-coding for Ethernet and PROFINET

The new M8 product range ensures reliable data transmission through symmetrically arranged contacts. Compared to M12 connectors, you save up to 30% of the installation space. Our shielding sleeve guarantees extremely robust and vibration-resistant overall shielding braid.








Your advantages

- ✓ Ethernet and PROFINET even in the smallest devices, thanks to compact connector dimensions
- ✓ Reliable and vibration-resistant 360° shield transition
- ✓ Space savings, thanks to Power over Ethernet: provide field devices with data and power simultaneously
- ✓ Versions with special material selection for railway applications

Main features

- D-coding with symmetrically arranged contacts
- 4-pos.
- Conductor cross section: 0.34 mm²
- Degree of protection: IP65, IP67
- Suitable for 100 Mbps CAT5
- PoE-capable up to 4 A with a maximum of 60 V
- Standardized in accordance with IEC 61076-2-114

 Web code: #1656				
	M8 data cable			M8 data cable for the railway industry
Description	Plug, straight, M8			
Head 1 design	Plug, straight, M8			
Head 2 design	Free cable end	Plug, straight, M8	Plug, straight, RJ45	Plug, straight, M8
Sheath material	PVC			PE-X
Sheath color	Green			Black
Type	NBC-M8MSD/1,0-93B	NBC-M8MSD/1,0-93B/M8MSD	NBC-M8MSD/1,0-93B/R4AC	NBC-M8MSD/1,0-939/M8MSD RAIL
Order No.	1423703	1423707	1423711	1423719

The web code gives you access to additional product versions on our website.

Assembled M12 Power cables M-coding for AC applications

Innovative M12 Power cabling: maximum power in a compact design. Assembled cables with M-coded connectors expand the portfolio. In addition to three phases plus PE, two additional contacts are available that can be used for a motor brake, for example.




Your advantages

- ✓ High power transmission in AC applications up to 8 A and 690 V
- ✓ Space savings, thanks to the compact M12 design
- ✓ Protection against incorrect connections thanks to a coded pin connector pattern
- ✓ Reliable EMC protection, thanks to optional 360° shielding

Main features

- 6-pos. (5+PE)
- Conductor cross section: 1.5 mm²
- Degree of protection: IP65, IP67
- 360° shielded connectors
- Standardized in accordance with IEC 61076-2-111
- Approval in accordance with UL 2237

 Web code: #1749				
	Power cables			
Description				
Head 1 design	Male connector, straight, M12	Free cable end	Male connector, angled, M12	Free cable end
Head 2 design	Free cable end	Female connector, angled, M12	Free cable end	Female connector, straight, M12
Sheath material	PUR		PVC	
Shielding	Unshielded	Shielded	Shielded	Unshielded
Type	SAC-6P-M12MSM/ 1,5-PUR PE	SAC-6P- 1,5-PUR/ M12FRM PE SH	SAC-6P-M12MRM/ 1,5-PVC PE SH	SAC-6P- 1,5-PVC/ M12FSM PE
Order No.	1414949	1414900	1414935	1414905

The web code gives you access to additional product versions on our website.

M12 connectors for assembly with push-pull fast locking system

Thanks to the push-pull fast locking system, you can quickly and securely latch the new M12 connectors for assembly with just one click. The interlock is achieved without tools, simply by plugging in. This offers significant advantages during mounting work, especially in confined spaces.










PROFI Ethernet

Your advantages

- ✓ Plug and Produce: convenient and secure connection, thanks to the cross-manufacturer locking system
- ✓ Safely shielded: reliable overall shielding braid even under extreme mechanical strain
- ✓ Clear feedback: connector springs back if not snapped in correctly
- ✓ Robust connection: suitable for railway applications with high shock and vibration loads

Main features

- Push-pull fast locking system
- Crimp connection
- 360° overall shielding braid
- Degree of protection: IP65, IP67

 Web code: #1618						
	M12 CAT6_A data connectors		M12 CAT5 data connectors		M12 signal connectors	
Description	8-pos./X		4-pos./D		4-pos./5-pos./A	
Number of positions / coding	8-pos./X		4-pos./D		4-pos./5-pos./A	
Conductor cross section	AWG 26 ... 22		AWG 22 ... 18		0.34 mm ² ... 1.00 mm ²	
Outer cable diameter	6.5 mm ... 10.0 mm		4.5 mm ... 7.5 mm		4.5 mm ... 7.5 mm	
Design	Plug, straight	Plug, angled	Plug, straight	Plug, angled	Plug, straight	Plug, angled
Type	SACC-P12MSX-8CT-CL SH	SACC-P12MRX-8CT-CL SH	SACC-P12MSD-4CT-CM SH PN	SACC-P12MRD-4CT-CM SH PN	SACC-P12MS-5CT-CM SH	SACC-P12MR-5CT-CM SH
Order No.	1021783	1021784	1021830	1021831	1021815	1021816

M12 device connectors with push-pull fast locking system

M12 device connectors with push-pull fast locking system expand the existing M12 portfolio. Cross-manufacturer connection compatibility ensures superior availability worldwide and enables the easy expansion of existing cabling concepts.







PROFI NET Ethernet

Your advantages

- ✓ Plug and Produce: convenient and secure connection, thanks to the cross-manufacturer locking system
- ✓ Safely shielded: reliable overall shielding braid even under extreme mechanical strain
- ✓ Clear feedback: connector springs back if not snapped in correctly
- ✓ Robust connection: suitable for railway applications with high shock and vibration loads

Main features

- Push-pull fast locking system
- Versions with litz wires or for wave soldering, A and D-coded
- THR housing screw connections for A, D and X-coding
- Degree of protection: IP65, IP67

 Web code: #1620					
Description	M12 device connectors with push-pull fast locking system				
Design	THR housing screw connection	One-piece, for wave soldering		Litz wire version	
Number of positions / CAT5 coding	For 4-pos./D-socket		4-pos./D-socket		4-pos./D-socket
Number of positions / signal coding	For 5-pos./A-socket	5-pos./A-socket		5-pos./A-socket	
Number of positions / CAT6 _A coding	For 8-pos./X-socket				
Rear mounting	1027662	1027669	1027696	1027666	1027670
Front mounting	1027678	-	-	1027683	1027686

Customized heavy-duty connectors – Configuring and ordering online

The new HEAVYCON online configurator provides you with ideal support for designing your tailor-made connector. Thanks to simple filter menus, 2D and 3D product images, and intuitive user interfaces, you can configure and order your solution with just a few entries.




Your advantages

- ✓ Convenient configuration: just a few entries to create your desired solution
- ✓ Custom combination: housing and contact inserts suitable for your specific requirements
- ✓ User-friendly visualization: real-time 3D representation of your configuration
- ✓ Easy planning: download and import 2D or 3D data into your CAD software

Main features

- Web configuration: housing type, contact inserts for data, signals, power and pneumatics, cable gland
- Intuitive user interface
- Drag-and-drop functionality
- 2D and 3D design data
- 3D preview
- Configuration file safeguarded using a solution ID

<p>i Web code: #1708</p>	
<p>Description</p>	<p>Online configurator for HEAVYCON heavy-duty connectors</p>
	<p>HEAVYCON provides you with countless combination possibilities. The configurator will only recommend parts suitable for the selected components. You can add your solution to the shopping cart and place your order immediately.</p>

High-position Push-in contact inserts for heavy-duty connectors

With the new modular Push-in contact inserts, you can easily connect up to 72 signal contacts in one B24 connector. The particularly compact terminal chamber enables a high packing density, which was previously only possible with traditional crimp connections.

Push-in Technology [®]
Designed by PHOENIX CONTACT






Your advantages

- ✓ Space savings and high packing density, thanks to compact terminal chamber
- ✓ Easy, tool-free installation with Push-in connection
- ✓ Connection-compatible with other connection technologies, such as crimp connection
- ✓ Highly compact modular interface, thanks to the combination of various transmission media in one housing

Main features

- Push-in connection
- Material: PC
- Suitable for B series housings (EVO, STANDARD and ADVANCE)
- Connection-compatible with the market standard

 Web code: #1751		
Description	Modular contact insert	
Design	Socket	Pin
Housing size	B6 ... B48	
Number of positions / max. conductor cross section	12 / 1.5 mm ²	
Rated current / voltage	10 A / 250 V	
Type	HC-M-12-PT-F	HC-M-12-PT-M
Order No.	1424228	1424246

Compact connector housings for single modular contact inserts

The new HEAVYCON EVO M1 plastic housings accommodate a modular contact insert. You can thus transmit data, signals or power as necessary via one compact interface. The cable outlet is also flexible thanks to the swiveling bayonet locking system.



Your advantages

- ✓ Compact interface for single modular contact inserts
- ✓ Easy handling: free on-site selection of cable outlet direction
- ✓ Safe and reliable: the plastic housing fulfills the IP66 degree of protection and is shock-proof up to IK09
- ✓ Flexible application for the transmission of power, signals or data

Main features

- Size: M1 single-module housing
- Housing material: PA
- Sealing material: NBR
- Degree of protection IP66 / NEMA 12
- Temperature range: -40°C ... +125°C
- Locking with single locking latch
- Suitable for all standard single modules

 Web code: #1753		
Description	Sleeve housing	Panel mounting base
Size	M1 single-module housing	
Clamping range	M20: 7 mm ... 13 mm / M25: 9 mm ... 17 mm	-
Locking	For single locking latch	With single locking latch
Type	HC-EVO-M1-HHFS-PLBK	HC-EVO-M1-BWS-PLRBK
Order No.	1424436	1424437

Extra-large connector housings for high-position supply lines

The new HEAVYCON STANDARD housings in the sizes B32 and B48 accommodate two fixed-position contact inserts side by side. They are made of high-quality corrosion-resistant aluminum and are also suitable for EMC applications, thanks to conductive seals.










Your advantages

- ✓ Space savings, thanks to two contact inserts in one housing
- ✓ Maximum corrosion resistance, thanks to die-cast aluminum
- ✓ Reliable EMC protection, thanks to conductive surface and seals
- ✓ Connection-compatible with the market standard
- ✓ Quick and easy installation and maintenance

Main features

- Housing material: corrosion-resistant die-cast aluminum
- Sealing material: NBR
- Degree of protection: IP66, IP67
- Temperature range: -40°C ... +125°C

 Web code: #1752						
	Description	Sleeve housing	Panel mounting base	Surface mounting housing	Sleeve housing	Panel mounting base
Size	B32			B48		
Locking	For double locking latch	With double locking latch		For single locking latch	With single locking latch	
Design	Lateral cable outlet	Without cover		Cable outlet at top	With cover	Without cover
Type	HC-STA-B32-HHFD-1STM40-EL-AL	HC-STA-B32-BWD-ELC-AL	HC-STA-B32-SHWD-2SSM32-ELC-AL	HC-STA-B48-HHFS-1TTM40-EM-AL	HC-STA-B48-BWSC-EMC-AL	HC-STA-B48-SHWS-2SSM40-EMC-AL
Order No.	1424837	1424845	1424848	1424855	1424864	1424868

The web code gives you access to additional product versions on our website.

Compact T-distributors

Simple power distribution up to 2.5 mm²

Thanks to IDC fast connection, you can connect cables quickly and easily using the QPD installation system. The portfolio has been expanded to include the new 4-position T-distributors for 2.5 mm². They allow a flexible branch line to be created for loads in the power distribution system.



Your advantages

- ✓ Time savings of up to 80% for on-site connection
- ✓ Quick and easy assembly without special tools
- ✓ Flexible branching of trunk cable via T-distributors
- ✓ Easy maintenance: the connectors enable fast device replacement
- ✓ Easy startup with assembled cables

Main features

- QUICKON fast connection technology (IDC)
- Voltage: 690 V
- Currents up to 20 A
- 4-position
- Conductor cross section: 1 mm² ... 2.5 mm²
- Degree of protection: IP66, IP68 (2 m, 24 h), IP69K
- Shock resistance: IK07

 Web code: #1750				
Description	T-distributors			
QUICKON nuts	2	3	2	3
Cable diameter	6 ... 10		9 ... 14	
Type	QPD T3PE2,5 2X6-10 BK	QPD T3PE2,5 3X6-10 BK	QPD T3PE2,5 2X9-14 BK	QPD T3PE2,5 3X9-14 BK
Order No.	1424047	1424045	1424048	1424046

The web code gives you access to additional product versions on our website.

High-tech UV LED printers

Industrial color printing made easy

The new generation BLUEMARK ID printing system is the all-in-one solution for industrial identification. An intuitive user interface guides you through the entire printing process. Furthermore, the BLUEMARK ID COLOR does not just print in monochrome, but also in CMYK color.






Your advantages

- ✓ Versatile in application, thanks to optional color printing, and the availability of over 1350 marking materials
- ✓ Intuitive operation, thanks to integrated marking software
- ✓ Optimized fluid use, thanks to scalable print resolution
- ✓ Flexible material assembly, thanks to front feed and de-stacking magazine
- ✓ Time savings, thanks to high print speed

Main features

- Printing method: UV LED printing
- Display: 7" multicolor touch display
- Software onboard
- Identification of UCT and US materials
- Interfaces: USB, LAN, WLAN, Bluetooth
- Weight: 20.8 kg

 Web code: #1754		
Description	UV LED color printer	UV LED printer
Print speed	30 s / sheet	20 s / sheet
Min. print resolution	1,200 dpi x 1,200 dpi	300 dpi x 300 dpi
Max. print resolution	2,400 dpi x 2,400 dpi	600 dpi x 600 dpi
Type	BLUEMARK ID COLOR	BLUEMARK ID
Order No.	1002329	1003334

The web code gives you access to additional product versions on our website.

Efficient laser marker

Performance meets economy

The TOPMARK NEO redefines laser marking. Thanks to compact dimensions and easy operation via integrated HMI, it enables efficient industrial identification of the highest quality. Equipped with a 20 W fiber laser, the TOPMARK NEO processes more than 250 labels per minute.



Your advantages

- ✓ Intuitive operation, thanks to integrated marking software
- ✓ Avoidance of printing errors, thanks to automatic material identification
- ✓ Wide range of the materials, comprising stainless steel, aluminum, ABS, polyacrylics, and polycarbonate
- ✓ Individual design, thanks to easy image file importing
- ✓ Clear print image, thanks to high resolution (500 dpi)

Main features

- Marking laser, class 1
- Fiber laser, 20 W, 1064 nm
- Ambient temperature: +5°C ... +35°C
- Easy importing of the following image formats: jpg, bmp, dxf, dwg, hpgl
- Editable field: 180 mm x 180 mm
- Processes LS material and UCT material

 Web code: #1755		
Description	Laser marker	Extraction unit
Type	TOPMARK NEO	TOPMARK NEO EXTRACTION
Order No.	1012015	1012102

The web code gives you access to additional product versions on our website.

Process innovations for control cabinet manufacturing

From planning to the finished control cabinet

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

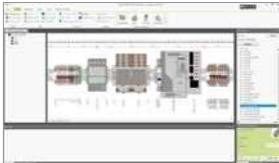


Your advantages

- ✓ Intuitive software operation, clear and convenient, thanks to configurable user interface
- ✓ Perfect integration, thanks to optimized interfaces to all standard CAE programs
- ✓ Quick and easy ordering in real time, thanks to direct connection to the web
- ✓ Comprehensive process support from planning through to the fully equipped DIN rail

Main features

- Operating systems:
MS Windows 7 (32 / 64 Bit),
MS Windows 8 (32 / 64 Bit),
MS Windows 8.1 (32 / 64 Bit),
MS Windows 10 (32 / 64 Bit)
- Numerous interfaces
- Available in 14 languages

<p>i Web code: #1756</p>	
<p>Description</p>	<p>Planning and marking software</p>
<p>Type</p>	<p>PROJECT COMPLETE</p>
<p>Order No.</p>	<p>1050453</p>

Professional crimping pliers for flexible use

CRIMPFOX DUO crimping pliers can be used in every application. The rotating die enables front or lateral processing of ferrules and TWIN ferrules. The self-adjusting mechanism and large cross section range provide convenience, flexibility, and process reliability.



Your advantages

- Crimping at difficult to access points, thanks to rotating die
- Convenient to use, thanks to low grip span with optimum hand force progression
- Suitable for TWIN ferrules, thanks to step-less automatic adjustment
- Large cross section range from 0.14 mm² to 10 mm²
- Process reliability, thanks to pressure lock and self-adjusting die

Main features

- For standard ferrules: 0.14 mm² ... 10 mm²
- Rotating die (with locking mechanism)
- Automatic cross section adjustment
- Also for TWIN ferrules:
2x0.5 mm² ... 2x4 mm²
- Low grip span
- Weight: 320 g
- Integrated pressure lock (tool-free release)
- UL certification pending

 Web code: #1757			
Description	Crimping pliers	Crimping pliers, individually labeled	Crimping pliers set
Type	CRIMPFOX DUO 10	CRIMPFOX DUO 10 CUS	CRIMPFOX DUO 10 SET
Order No.	1031721	1044970	1044971

The web code gives you access to additional product versions on our website.

Compact cordless screwdriver for simple screwing tasks

You can set the new cordless screwdriver in a straight or angled position, even in confined spaces. The 16-step torque setting makes the tool suitable for variable, diverse screwing applications in the range of 0.2 Nm to 4.0 Nm – convenient, well-balanced, and reliable.



Your advantages

- ✓ Convenient handling, thanks to ergonomic one-hand operation with soft grip
- ✓ Effortless working, thanks to the finely balanced weight distribution
- ✓ Flexible in application, thanks to the straight and angled operating positions
- ✓ Extremely easy to set the speed and torque
- ✓ Fast direction change, thanks to the clockwise/counterclockwise rotation switch

Main features

- 3.6 V DC, 2 A
- Battery: 1.5 Ah
- Speed: 220 rpm / 450 rpm
- Torque: 0.2 Nm ... 4.0 Nm
- 1/4" hexagonal fast connection
- Two-speed gear
- Forward/reverse running

 Web code: #1758				
Description	Cordless screwdriver set	Cordless screwdriver	Charger	Battery
Type	SF-ASD 16 SET	SF-ASD 16	SF-ASD 16/CHARGER	SF-ASD 16/ACCU 1,5 AH
Order No.	1200295	1200294	1200296	1200297

The web code gives you access to additional product versions on our website.

Extremely compact signal conditioners

Easy-to-handle in confined spaces

The highly compact MINI Analog Pro signal conditioners are extremely easy to install and start up in a confined space. The new output loop-powered conditioners and repeater power supplies, as well as a supply duplicator and a sensor power supply provide you with new functions.








Push-in Technology 
 Designed by PHOENIX CONTACT

Your advantages

- Easy installation, thanks to easily accessible terminal points and plug-in connection terminal blocks
- Measure current signals during operation without disconnecting the current loop
- Versatile parameter configuration via DIP switch, software or app
- Easy to maintain: large marking areas, status LEDs, and group error messaging

Main features

- Overall width: 6.2 mm
- Front operation
- State-of-the-art switching technology
- Safe electrical isolation with 3 kV test voltage
- Supply voltage range: 9.6 V DC ... 30 V DC
- Operating temperature: -40°C ... +70°C
- Plug-in terminal blocks with screw or Push-in connection

 Web code: #1768				
Description	Supply duplicator	Output loop-powered repeater power supply	Output loop-powered repeater power supply, two-channel	Sensor power supply
Input	1	1	2 x 1	9.6 V DC ... 30 V DC
Output	2 x 1	1	2 x 1	15 V DC / max. 30 mA
Type	MINI MCR-2-RPSS-I-2I-PT	MINI MCR-2-RPS-I-I-OLP-PT	MINI MCR-2-RPS-2I-2I-OLP-PT	MINI MCR-2-SPS-24-15-PT
Order No. for Push-in connection	2905629	2906447	2906449	1033201
Type	MINI MCR-2-RPSS-I-2I	MINI MCR-2-RPS-I-I-OLP	MINI MCR-2-RPS-2I-2I-OLP	MINI MCR-2-SPS-24-15
Order No. for screw connection	2905628	2906446	2906448	1033202

Process indicators and field devices

Measurement, control, and monitoring

The loop-powered Field Analog process indicators show a scaled display of a 4 ... 20 mA signal, or up to four process values via HART. The output loop-powered temperature transducers measure and transduce temperatures on site into analog standard signals.

Push-in Technology 
 Designed by PHOENIX CONTACT









Your advantages

- ✓ Easy configuration of process indicators via front keypad or FDT/DTM software
- ✓ Backlit display with bar graph and color change in the event of an error
- ✓ Can be used internationally, thanks to UL and CSA approvals
- ✓ Also for intrinsically safe circuits in the Ex area: versions with ATEX, CSA and FM approval
- ✓ Measure and transduce temperatures on site, thanks to output loop-powered temperature transducers

Main features

- Versions for field and control cabinet installation
- Output loop-powered measuring transducers as head and DIN rail-mounted devices
- Process indicators with 5-digit display
- HART-capable variants
- Standardized housing dimensions
- Push-in connection

 Web code: #1770					
Description	Loop-powered temperature transducer, HART			Process indicator for control cabinet installation, HART	Process indicator for field installation, HART
Input	2 x RTD, TC, resistance, voltage encoder			4 mA ... 20 mA / HART	4 mA ... 20 mA / HART
Output	4 mA ... 20 mA / HART	4 mA ... 20 mA / HART	4 mA ... 20 mA / HART	4 mA ... 20 mA / HART	4 mA ... 20 mA / HART
Type	FA MCR-EX-HT-TS-I-OLP-PT	MACX MCR-EX-TS-I-OLP-SP	-	-	-
Order No. for Push-in connection	2908743	2908661	-	-	-
Type	-	MACX MCR-EX-TS-I-OLP	MACX MCR-TS-I-OLP-C	FA MCR-EX-DS-I-I-OLP	FA MCR-EX-FDS-I-I-OLP
Order No. for screw connection	-	2908660	1012249	2908800	2908801

Current transformers for retrofitting

Fast installation in a confined space

PACT RCP current transformers for retrofitting can be mounted conveniently, even in spaces that are too confined for a split core current transformer. Benefit from fast installation without having to remove system parts. The range has been expanded with new versions with various signal cable lengths.



Your advantages

- ✓ Fast installation of the Rogowski coil without having to disconnect electrical lines
- ✓ High level of accuracy: 8 measuring ranges for currents up to 4,000 A
- ✓ Space saving and practical: just one compact coil for all current strengths
- ✓ Harmonics and transients detected with phase accuracy in the frequency range of 40 Hz to 20 kHz
- ✓ Safe installation and operation: no dangerous open circuit voltages

Main features

- 8 current measuring ranges: 0 A ... 100 A, 250 A, 400 A, 630 A, 1000 A, 1500 A, 2000 A, 4000 A
- Measuring transducer current output: 1 A AC
- Coil frequency range: 40 Hz ... 20 kHz
- Coil operating temperature range: -30°C ... +80°C
- Optional bracket for secure attachment to busbars

 Web code: #1767				
Description	Current transformer for retrofitting			
Coil length	300 mm	300 mm	450 mm	600 mm
Signal cable length	5 m	10 m	10 m	10 m
Type	PACT RCP-4000A-1A-D95-5M	PACT RCP-4000A-1A-D95-10M	PACT RCP-4000A-1A-D140-10M	PACT RCP-4000A-1A-D190-10M
Order No.	2910325	2910326	1033483	2910327

Current transformer for retrofitting UV protection for permanent outdoor use

The PACT RCP current transformer set is now also available for outdoor use. The Rogowski coil of the UV version is equipped with a UV-resistant housing and UV-protected cables. This enables permanent installation outdoors.





Your advantages

- ✓ Permanent current measurement in outdoor applications, thanks to UV protection for housing and cables
- ✓ Fast installation of the Rogowski coil without having to disconnect electrical lines
- ✓ High level of accuracy: 8 measuring ranges for currents up to 4,000 A
- ✓ Space saving and practical: just one compact coil for all current strengths
- ✓ Harmonics and transients detected with phase accuracy in the frequency range of 40 Hz to 20 kHz

Main features

- 8 current measuring ranges:
0 A ... 100 A, 250 A, 400 A, 630 A, 1000 A, 1500 A, 2000 A, 4000 A
- Measuring transducer current output:
1 A AC
- Coil frequency range: 40 Hz ... 20 kHz
- Coil operating temperature range:
-30°C ... +80°C
- Housing protection class: IP67

 Web code: #1766	
Description	UV-resistant current transformer for retrofitting
Type	PACT RCP-4000A-1A-D190-3M-UV
Order No.	1033485

Non-contact safety switches

Flexible safety door and position monitoring

The compact PSRswitch is an electronic, coded safety switch with RFID technology. It provides maximum protection against manipulation and the highest level of safety in accordance with EN ISO 14119. You receive a cost-effective complete solution with compatible evaluation units and SAC cabling.










Your advantages

- ✓ Maximum protection against manipulation, thanks to three RFID coding levels
- ✓ Consistent M12 connection technology for convenient installation
- ✓ Rapid diagnostics, thanks to comprehensive status information
- ✓ Flexible use, thanks to compact design
- ✓ Safe, cost-effective complete solution

Main features

- Three coding types
- Safe series connection in accordance with EN ISO 14119
- Up to PL e in accordance with ISO 13849
- Integrated restart function on the switch
- Adjustable actuator head with 3 approach directions
- Compatible evaluation unit with IO-Link interface

 Web code: #1803						
	Safety sensor			Actuator	Bridging plug	Y distributor
Description	Unicode (Actuator 8 x teach-in)	Multicode (Actuator unlimited teach-in)	Fixcode (Actuator 1x teach-in)	For all coding types	-	-
Coding type	M12 plug	M12 plug	M12 plug	-	M12 plug	M12 plug
Connection method	PSR-CT-C-SEN-1-8	PSR-CT-M-SEN-1-8	PSR-CT-F-SEN-1-8	PSR-CT-C-ACT	SAC-5P-M12MS BK BR 1-2-4	SAC-8PY-M/2XF BK 1-PSR
Type	2702972	2702975	2702976	2702973	1054366	1054338
Order No.						

The web code gives you access to additional product versions on our website.

SIL 3 certified coupling relays

Full diagnostics for fire and gas applications

With the PSRmini coupling relays for safe switching on, you can perform comprehensive diagnostics of the controller through to the actuator. Errors are reported through the existing wiring. Additional digital inputs for error messaging are not necessary, and you save on installation outlay.








Your advantages

- ✓ Comprehensive diagnostics, thanks to ON state and earth leakage monitoring
- ✓ Lower wiring outlay, thanks to active error reporting via existing cabling
- ✓ Rapid configuration of the coupling relay using a DIP switch
- ✓ Space savings, thanks to the highly compact design

Main features

- Single- or two-channel control
- Integrated DCS test pulse filter
- Up to SIL 3 in accordance with IEC 61508 / IEC 61511 / EN 50156
- UL and cUL
- ATEX and IECEx, Class 1 Zone 2
- Use in corrosive atmospheres possible
- Overall width: 17.5 mm

 Web code: #1804				
Description	Safe coupling relay for various SI systems			
Connection method	Screw	Spring-cage	Screw	Spring-cage
Type	PSR-PC51	PSR-PC51	PSR-PC52	PSR-PC52
Order No.	2702522	2702523	1017062	1017064

Industrial relay modules

Switching loads in Ex areas

You can implement all standard relay applications with the RIFLINE complete industrial relay system. The new versions allow you to safely isolate and switch signals in potentially explosive areas of Zone 2.







Push-in Technology 
Designed by PHOENIX CONTACT

Your advantages

- Can be used in potentially explosive areas of Zone 2
- Approval in accordance with IECEx, ATEX and Class 1 Zone 2
- Satisfies the requirements of the ISA G3 corrosive gas test and of EN 60068-2-60
- Easy startup, thanks to pre-assembled relay modules
- Individual marking options, thanks to marking accessories

Main features

- Plug-in industrial relay with 4 x 6 A continuous current
- RTIII-sealed relay housing
- Various input voltages (24 V DC, 120/230 V AC)
- Maximum switching voltage: 250 V AC/DC
- Screw or Push-in connection

 Web code: #1762			
Description	Complete module (relay and base)		
Operating voltage	24 V DC	120 V AC	230 V AC
Maximum current	4 x 6 A		
Type	RIF-2-RPT-LDP-24DC/4X21/EX	RIF-2-RPT-LV-120AC/4X21/EX	RIF-2-RPT-LV-230AC/4X21/EX
Order No. for Push-in connection	2909741	2909740	2909739
Type	RIF-2-RSC-LDP-24DC/4X21/EX	RIF-2-RSC-LV-120AC/4X21/EX	RIF-2-RSC-LV-230AC/4X21/EX
Order No. for screw connection	2909845	2909846	2909847

The web code gives you access to additional product versions on our website.

Highly compact relay modules with lockable manual actuation

The PLC-INTERFACE relay system acts as the high-performance interface between the controller and system I/O devices. Benefit from the manual actuation of the new electromechanical relay. These relay modules are particularly suitable for maintenance and commissioning.

Push-in Technology 
 Designed by PHOENIX CONTACT



Your advantages

- Space-saving, thanks to narrow, 14 mm design
- Time-saving potential distribution, thanks to plug-in bridges
- Efficient connection to system cabling using a V8 adapter
- Lockable manual actuation

Main features

- Contact nominal load: 250 V AC / max 10 A
- Plug-in relay with manual actuation
- Contact type: 1 and 2 changeover contacts
- Version with gold contacts available
- Relay degree of protection: RTII
- Screw or Push-in connection
- Overall width: 14 mm

 Web code: #1763				
	Complete module			
Description				
Input voltage	24 V DC	24 V DC	120 V AC / 110 V DC	230 V AC / 220 V DC
Contact current	1 x 10 A	2 x 6 A	2 x 6 A	2 x 6 A
Type	PLC-RPT- 24DC/21HC/MS	PLC-RPT- 24DC/21-21/MS	PLC-RPT-120UC/21HC/MS	PLC-RPT-230UC/21-21/MS
Order No. for Push-in connection	2910530	2910519	2910533	2910523
Type	PLC-RSC- 24DC/21HC/MS	PLC-RSC- 24DC/21-21/MS	PLC-RSC-120UC/21HC/MS	PLC-RSC-230UC/21-21/MS
Order No. for screw connection	2910514	2910502	2910517	2910506

The web code gives you access to additional product versions on our website.

Coupling relay module with force-guided contacts

The PLC-INTERFACE relay system acts as the high-performance interface between the controller and system I/O devices. The new force-guided coupling relay module provides you with a reliable signal exchange with feedback function between two systems.

Push-in Technology [®]
 Designed by PHOENIX CONTACT




Your advantages

- ✓ Maximum reliability with force-guided contacts in accordance with EN 50205
- ✓ Easy operation, thanks to state-of-the-art wiring and potential distribution concept
- ✓ Reliable system for high machine and system availability

Main features

- Input voltage: 24 V
- Contact type: 2 changeover contacts
- Nominal load: 250 V AC/6 A
- Plug-in relay
- Overall width: 14 mm
- Contact material: AgNi
- Ambient temperature range (operation): -25°C ... +50°C
- Screw or Push-in connection

 Web code: #1764			
	Description	Complete module	Complete module
Input voltage	24 V DC	24 V AC/DC	24 V DC
Connection method	Push-in connection	Screw connection	-
Contact type	2 changeover contacts, force-guided	2 changeover contacts, force-guided	2 changeover contacts, force-guided
Type	PLC-RPT- 24DC/2x21/FG	PLC-RSC- 24UC/2x21/FG	REL-SR- 24DC/2x21/FG
Order No.	2910537	2910536	2908777

The web code gives you access to additional product versions on our website.

Coupling relay module with screw connection and force-guided contacts

You can implement all standard relay applications with the RIFLINE complete industrial relay system. The new force-guided coupling relay module with screw connection technology ensures reliable signal exchange with feedback function between two systems.




Your advantages

- ✓ Maximum reliability with force-guided contacts in accordance with EN 50205
- ✓ Easy operation, thanks to state-of-the-art wiring and potential distribution concept
- ✓ Reliable system for high machine and system availability
- ✓ Complete range covering all standard applications

Main features

- Input voltage: 24 V DC
- Contact type: 2 changeover contacts
- Nominal load: 250 V AC / 6 A
- Plug-in relay
- Overall width: 16 mm
- Contact material: AgNi
- Ambient temperature range (operation): -25°C ... +50°C
- Screw or Push-in connection

<p>i Web code: #1765</p>	
<p>Description</p>	<p>RIF 1 relay module with force-guided contacts</p>
<p>Operating voltage</p>	<p>24 V DC</p>
<p>Limiting continuous current</p>	<p>2 x 6 A</p>
<p>Type</p>	<p>RIF-1-RSC-LDP-24DC/2X21/FG</p>
<p>Order No.</p>	<p>2909848</p>

Machine manager

Cost-effective energy measurement

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 loads.






Your advantages

- ✓ DIN rail connector interface for direct connection and transmission of process data
- ✓ Flexible use in the central control cabinet and in the decentralized control box
- ✓ Compact design, saving space in the application
- ✓ Increased system availability, thanks to service intervals based on process data
- ✓ Continuous monitoring of mixed loads within an application

Main features

- Final measuring range value of 90 A or 160 A
- Typical measuring accuracy of 0.5%
- Easy connection of the converter board to the evaluation module via 9-pos. D-SUB cable

 Web code: #1759		
Description	90 A machine management	160 A machine management
Measuring range	0.5 A ... 90 A	0.5 A ... 160 A
Interior 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

The power distribution board for hybrid motor starters

Switch and reverse motors easily and reliably with CONTACTRON hybrid motor starters. The new CrossPowerSystem power distribution board eliminates the need for device-side load wiring. Simply snap the hybrid motor starter on and create modular, functional solutions.







Your advantages

- ✓ No separate 3 AC feed-in for each device necessary
- ✓ Quick, complete out-of-the-box system
- ✓ Compact design compared to traditional power distribution
- ✓ Integrated reverse-polarity protection: phase rotation not possible

Main features

- DIN rail and wall mounting
- Length: 225 mm and 405 mm
- Device adapters available for further switching devices
- Can be expanded freely

 Web code: #1760			
Description	Power distribution board	Power distribution board	Connection module
Length	255 mm	405 mm	-
Type	EM-CPS-225	EM-CPS-405	EM-CPS-TB3/63A
Order No.	1002634	1002635	1002633

The web code gives you access to additional product versions on our website.

Migration adapters for Rockwell Automation

Easy integration of PLC-5®

With the new migration adapters, you can quickly and easily connect the existing field wiring of a Rockwell Automation PLC-5® controller to a new controller generation.










Your advantages

- ✓ Easy adaptation of the existing PLC-5® field wiring, thanks to pre-assembled adapter
- ✓ Greater availability, thanks to short downtimes during the migration process
- ✓ Fast startup, thanks to the Plug and Play concept

Main features

- Coupling at the field level: PLC-5® front adapter (1771-WG and 1771-WH)
- Wiring at the control level: S7-1500, open end or universal terminal connection
- Maximum permissible operating voltage: 230 V AC/DC
- Maximum permissible current per signal path: 2 A
- UL listed

 Web code: #1761						
	Migration adapter for Rockwell Automation PLC-5® (1771)					
Description						
I/O card type	Digital	Analog	Digital	Analog	Digital	Analog
Connection to the new control level	S7-1500 front connector		Universal open cable end		Universal screw terminal connection	
Type	FLKM-1771-WH/ S7-521-1FH/0,5M	FLKM-1771-WG/ S7-531-7NF/ I/O,5M	FLKM-1771-WH/ OE/21X0,5/0,7M	FLKM-1771-WG/ OE/21X0,5/0,7M	FLKM-1771-WH/ SMKDS	FLKM-1771-WG/ SMKDS
Order No.	2910089	2910097	2910099	2910100	2910102	2910103

The web code gives you access to additional product versions on our website.

Termination board for Tricon CX UIO universal cards

The 16-channel universal base with plug kits as accessory options provides Plug and Play connection for field signal wiring, accessories for the power supply, shielding, and input/output modules (IOAs), enabling maximum flexibility for connection to the Triconex Tricon CX universal cards.

Push-in Technology[®]
Designed by PHOENIX CONTACT







Your advantages

- ✓ Integrated fastening option for IOAs
- ✓ IOAs and plug kits can be selected separately for your flexibility
- ✓ Easy engineering with freely and flexibly configurable IOs
- ✓ Great integration depth, thanks to a wide range of IOA function modules

Main features

- Two isolated supplies, with fuse protection
- 1:1 mapping of the universal I/O card (Tricon CX)
- Kits with screw terminal blocks or PT terminal blocks
- UM-PRO housing for high temperatures
- Coated PCB

 Web code: #1769			
Description	Termination board for channels 1 ... 16	Terminal strip kit	Terminal strip kit
Number of positions	50 D-SUB	-	-
Connection method	-	Screw connection	Push-in connection
Type	VIP/MSTB/D50M/BASE/16CH/CX/EX	MVSTBR PLUG KIT FOR CX	FKC PLUG KIT FOR CX
Order No.	2908788	2910416	2910417

DC UPS with IQ Technology for industrial networks

The first intelligent QUINT UPS for integration into established industrial networks. Your systems continue to be supplied with uninterrupted power, even in the event of a power supply failure. The battery management system with IQ Technology and a powerful battery charger ensures superior system availability.



IQ Technology
Designed by PHOENIX CONTACT








Your advantages

- ✓ Evaluation of state of health (SOH) and state of charge (SOC), thanks to the intelligent battery management system (BMS)
- ✓ Automatic recognition of the battery capacities and technologies (VRLA, WTR, LiFePO4)
- ✓ Monitoring of output current and voltage, as well as manual connection and disconnection of the system
- ✓ SFB Technology selectively trips standard miniature circuit breakers; loads connected in parallel continue working

Main features

- Integrated interfaces: PROFINET, EtherNet/IP™, EtherCAT® or USB
- IQ Technology and SFB Technology
- Most powerful battery charger with up to 5 A
- Static boost up to 125% for a sustained period
- Dynamic boost up to 200% for 5 s
- Cold start function (battery start)
- PC mode for shutting down PCs
- Slim design

 Web code: #1771				
	QUINT DC-UPS 5 A	QUINT DC-UPS 10 A	QUINT DC-UPS 20 A	QUINT DC-UPS 40 A
Description	QUINT4-UPS 24DC/24DC/5/...	QUINT4-UPS 24DC/24DC/10/...	QUINT4-UPS 24DC/24DC/20/...	QUINT4-UPS 24DC/24DC/40/...
Type	QUINT4-UPS 24DC/24DC/5/...	QUINT4-UPS 24DC/24DC/10/...	QUINT4-UPS 24DC/24DC/20/...	QUINT4-UPS 24DC/24DC/40/...
Order No. for PROFINET	2906993	2907068	2907073	2907079
Order No. for EtherNet/IP™	2906994	2907069	2907074	2907080
Order No. for EtherCAT®	2906996	2907070	2907076	2907081
Order No. for USB	2906991	2907067	2907072	2907078
Order No. without interface	2906990	2907066	2907071	2907077

DC UPS with integrated power supply and USB interface

Supply DC loads reliably and save space with the new uninterruptible TRIO power supplies. An input grid is no longer necessary for startup. Connected industrial PCs can be shutdown easily via the integrated USB interface.

Push-in Technology 
 Designed by PHOENIX CONTACT







Your advantages

- Space-saving: UPS module and power supply combined in one housing
- Long buffer times, thanks to large selection of VRLA energy storage systems
- USB interface for connection to higher-level controllers, such as industrial PCs
- Startup via the energy storage system possible, even without power supply input

Main features

- Three versions: 5 A, 10 A, and 20 A
- Push-in connection
- Comprehensive signaling
- Dynamic boost up to 150% for 5 s
- Temperature range -25°C ... +70°C
- Integrated USB interface

 Web code: #1772			
Description	DC UPS 1-phase		DC UPS 3-phase
Nominal input voltage	100 V AC ... 240 V AC 110 V DC ... 250 V DC		3x 400 V AC ... 500 V AC 2x 400 V AC ... 500 V AC
Nominal output voltage	24 V DC	24 V DC	24 V DC
Nominal output current	5 A	10 A	20 A
Dimensions W x H x D [mm]	60 x 130 x 115	68 x 130 x 160	88 x 130 x 160
Type	TRIO-UPS-2G 1AC/24DC/5	TRIO-UPS-2G 1AC/24DC/10	TRIO-UPS-2G 3AC/24DC/20
Order No.	2907160	2907161	2906367

Power supplies with maximum functionality

Powerful and space-saving

For the first time, QUINT POWER provides superior system availability in the smallest size in the power range of up to 100 W. Thus, preventative function monitoring and exceptional power reserves are now also available for your applications in the low-power range.










Push-in Technology 
Designed by PHOENIX CONTACT

Your advantages

- Startup of heavy loads, thanks to dynamic boost
- Preventive function monitoring reports critical operating states before errors occur
- High efficiency and long service life, with low power dissipation and low heating
- Space savings in the control cabinet, thanks to a narrow, slim-line design
- Free selection between Push-in and screw connection

Main features

- Power reserves:
 - Static boost up to 125% for a sustained period
 - Dynamic boost up to 200% for 5 s
- Configurable signaling of DC OK or selectable power thresholds
- Efficiency up to 93.7%
- Further DC input voltage range 88 V DC ... 350 V DC
- Temperature range -40 C ... +70°C

 Web code: #1773						
	1-phase power supply with screw connection			1-phase power supply with Push-in connection		
Description						
Input voltage	85 V AC ... 264 V AC			85 V AC ... 264 V AC		
Output voltage	24 V DC ... 28 V DC			24 V DC ... 28 V DC		
Output current	1.3 A	2.5 A	3.8 A	1.3 A	2.5 A	3.8 A
Dynamic boost	2.6 A (5 s)	5 A (5 s)	7 A (5 s)	2.6 A (5 s)	5 A (5 s)	7 A (5 s)
Dimensions W x H x D [mm]	22.5 x 99 x 90	32 x 99 x 90	45 x 99 x 90	22.5 x 99 x 90	32 x 99 x 90	45 x 99 x 90
Type	QUINT4-PS 1AC/24DC/1.3/ SC	QUINT4-PS 1AC/24DC/2.5/ SC	QUINT4-PS 1AC/24DC/3.8/ SC	QUINT4-PS 1AC/24DC/1.3/ PT	QUINT4-PS 1AC/24DC/2.5/ PT	QUINT4-PS 1AC/24DC/3.8/ PT
Order No.	2904597	2904598	2904599	2909575	2909576	2909577

Power supplies with maximum functionality

Powerful with SFB Technology

The new voltage versions of the powerful power supplies expand the QUINT POWER range. SFB Technology and preventive function monitoring ensure superior system availability. You can adjust signaling thresholds and characteristic curves individually via the NFC interface.







Your advantages

- ✓ Strongest output side: easy system expansion, reliable heavy load startup and miniature circuit breaker tripping
- ✓ Most robust input side: high noise immunity, thanks to integrated gas-filled surge arrester (up to 6 kV) and ≥ 20 ms power supply failure buffer time
- ✓ Most comprehensive signaling: preventive function monitoring reports critical operating states before errors occur
- ✓ Available pre-configured: from a batch quantity of just 1

Main features

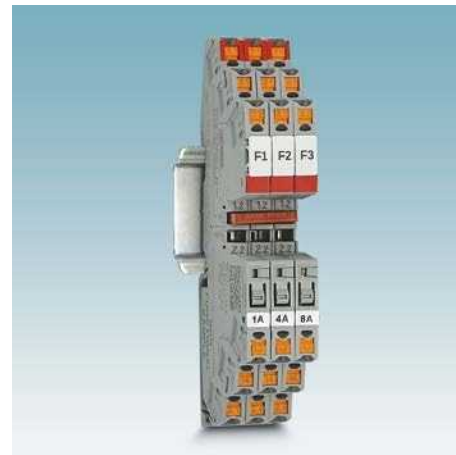
- Strongest output side:
 - Static boost up to 125% for a sustained period
 - Dynamic boost up to 200% for 5 s
 - Selective Fuse Breaking Technology (SFB): 6 times the nominal current for 15 ms
- Comprehensive signaling: analog, digital and relay contact
- Integrated gas-filled surge arrester
- Temperature range: $-40^{\circ}\text{C} \dots +70^{\circ}\text{C}$

 Web code: #1774			
	1-phase power supply 100 V AC ... 240 V AC		
Description			
Output voltage	12 V DC ... 15 V DC	48 V DC ... 56 V DC	48 V DC ... 56 V DC
Output current	15 A	5 A	10 A
Static boost	17.5 A	6.25 A	12.5 A
Dynamic boost	20 A (5 s)	10 A (5 s)	15 A (5 s)
SFB Technology	60 A (15 ms)	30 A (15 ms)	60 A (15 ms)
Dimensions W x H x D [mm]	50 x 130 x 125	50 x 130 x 125	70 x 130 x 125
Type	QUINT4-PS/1AC/12DC/15	QUINT4-PS/1AC/48DC/5	QUINT4-PS/1AC/48DC/10
Order No.	2904608	2904610	2904611

Electronic circuit breakers for universal application

The PTCB electronic circuit breakers are ideally suited for simple, space-saving potential distribution. You can combine the narrow, single-channel devices with the CLIPLINE complete terminal block system. You can choose between adjustable and fixed nominal current versions.

Push-in Technology 
 Designed by PHOENIX CONTACT










Your advantages

- Simple application setup, thanks to bridging option to the CLIPLINE complete terminal block range
- More space in the control cabinet: narrowest protection on just 6 mm width
- Flexible use and reduction of inventory, thanks to adjustable amp values on each device for a wide range of applications

Main features

- 6 mm overall width
- Determination of operating state via LED display in traffic light colors
- Individually adjustable: 1 A ... 8 A
- Fixed nominal current versions with 2, 3, 4, and 6 A
- Satisfies requirements in accordance with NEC Class 2
- Flexible use
- Integrated remote signaling function

 Web code: #1775						
	Device circuit breakers with adjustable nominal currents			Device circuit breakers with fixed nominal currents		
Description						
Nominal current	1 ... 3 A	1 ... 4 A	1 ... 8 A	2 A	4 A	6 A
Operating voltage	18 ... 27.5 V DC			18 V DC ... 30 V DC		
NEC Class 2	X	-	-	X	-	-
Backup fuse	4 A		15 A	4 A		15 A
Type	PTCB E1 24DC/1-3A NO	PTCB E1 24DC/1-4A NO	PTCB E1 24DC/1-8A NO	PTCB E1 24DC/2A NO	PTCB E1 24DC/4A NO	PTCB E1 24DC/6A NO
Order No.	2909909	2908261	2908262	2909903	2909906	2909908

The web code gives you access to additional product versions on our website.

Multi-channel electronic circuit breakers with IO-Link interface

The CBMC electronic circuit breakers can be integrated into the process and monitoring system easily thanks to their IO-Link interface. They combine compact design and individual adjustment of the individual channels. They can thus be used in every application.



Push-in Technology [®]
Designed by PHOENIX CONTACT






Your advantages

- Complete process monitoring and control, thanks to IO-Link interface
- System transparency, thanks to comprehensive diagnostics capabilities
- Worldwide access to the device, thanks to integration into the IO-Link network
- Secure locking, thanks to access blocking

Main features

- 4 independent channels
- Nominal current adjustable in 1 A increments
- Floating remote indication contact
- Individual marking options
- Electronic protection against overload and short-circuit currents
- Rated voltage: 24 V DC
- Push-in connection

 Web code: #1776		
Description	Electronic circuit breaker 1 A ... 4 A	Electronic circuit breaker 1 A ... 10 A
Nominal current	1 A ... 4 A	1 A ... 10 A
Rated current	Max. 16 A DC	Max. 40 A DC
Operating temperature	-20°C ... +60°C	
NEC Class 2	X	-
Type	CBMC E4 24DC/1-4A+ IOL	CBMC E4 24DC/1-10A IOL
Order No.	2910410	2910411

The web code gives you access to additional product versions on our website.

Type 3 surge protection

First device protection with Push-in connection

The world's first type 3 surge protective device with Push-in fast connection technology: PLUGTRAB SEC ensures optimal protection of your power supply with SEC Technology and a floating remote indication contact.









Push-in Technology [®]
Designed by PHOENIX CONTACT

Your advantages

- ✓ Quick, tool-free installation with Push-in connection technology
- ✓ Increased service life and availability of the system, thanks to optimal protection of your industrial power supply
- ✓ Easy maintenance and testing, thanks to pluggable protective devices
- ✓ No mismatching of plugs, thanks to mechanical coding

Main features

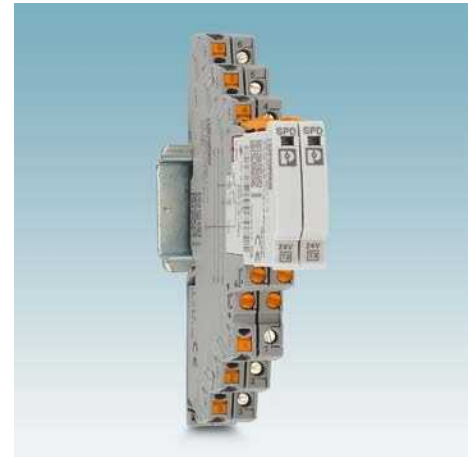
- Visual status indicator
- Floating remote indication contact
- Plugs can be tested with CHECKMASTER 2
- Also available as versions with screw connection

 Web code: #1777					
	Type 3 device protection				
Description					
Nominal voltage U_N	24 V	60 V	120 V	230 V	-
Maximum continuous voltage U_C	34 V	80 V	150 V	240 V	-
Nominal discharge current I_n	1 kA	2 kA	3 kA	3 kA	-
Combined surge U_{oc}	2 kV	4 kV	6 kV	6 kV	-
Type	PLT-SEC-T3-24-FM-PT	PLT-SEC-T3-60-FM-PT	PLT-SEC-T3-120-FM-PT	PLT-SEC-T3-230-FM-PT	CM 2-PA-PLT-UT/PT
Order No.	2907925	2907926	2907927	2907928	1027866

The web code gives you access to additional product versions on our website.

The narrowest surge protection for I/Os and controllers

TERMITRAB complete type 3 is the narrowest surge protective device for power supplies. Based on the 6 mm wide TERMITRAB complete range, the TTC type 3 protects the 24 V power supplies of end devices such as I/Os and controllers against surge voltages from the field.







Push-in Technology [®]
Designed by PHOENIX CONTACT

Your advantages

- ✓ Space saving, thanks to the narrow overall width of just 6 mm
- ✓ Low voltage protection level, thanks to diode technology
- ✓ Easy testing and replacement, thanks to pluggable protection modules
- ✓ Safe disconnection and signaling in the event of overload
- ✓ Variable connection technology

Main features

- Diode-based SPD
- Nominal voltage: 24 V DC
- Overall width: 6 mm
- Pluggable
- Status indicator on the device
- Remote signaling capability
- Push-in or screw connection
- Plugs can be tested with CHECKMASTER 2

 Web code: #1778			
Description	Type 3 device protection with Push-in connection	Type 3 device protection with screw connection	Replacement plug
Nominal voltage U_N	24 V DC		
Nominal load current I_L	6 A		
Type	TTC-6P-T3-24DC-PT-I	TTC-6P-T3-24DC-UT-I	TTC-6P-T3-24DC-I-P
Order No.	1027586	1027584	1027591

The web code gives you access to additional product versions on our website.

Surge protection for end devices in building installation

BLOCKTRAB BLT-SKT is the ideal fixed-installation surge protective device for protecting key end devices in building installation. It protects expensive investments from surge voltage damage and ensures the availability of key processes, in particular in trade and industry.





Your advantages

- ✓ Installation in the fixed installation behind standard sockets
- ✓ Can be used in flat and deep device sockets
- ✓ Safe disconnection and signaling in the event of overload

Main features

- Varistor-based type 3 SPD
- Nominal voltage: 230 V
- For installation on standard sockets
- Audible fault alarm
- Discharge capacity: 3 kA

 Web code: #1779	
Description	Type 3 device protection as a socket insert
Nominal voltage U_N	230 V
Nominal discharge current I_n	3 kA
Type	BLT-SKT-230-A
Order No.	1038842

Surge protection for DC current sources with linear operating characteristics

Protect linear DC current sources with VALVETRAB-SEC DC versions free of leakage current. With just twelve millimeters per channel, the type 2 surge protective device is extremely compact. The powerful disconnect device offers maximum protection for all standard DC applications.








Your advantages

- ✓ Long service life of the protective devices and electrical installation, thanks to SEC Technology
- ✓ Space-saving installation, thanks to the compact design
- ✓ Free of leakage current to ground, thanks to 2+F circuitry
- ✓ Easy replacement during servicing, thanks to consistent pluggable system
- ✓ No mismatching of plugs, thanks to mechanical coding

Main features

- Fuse-free use up to 200 A
- Nominal discharge current: 20 kA
- Plugs can be tested with CHECKMASTER 2
- Floating remote indication contact
- Visual mechanical status indicator

 Web code: #1780				
	Type 2 surge protective device for DC current sources			
Description				
Nominal voltage U_N	48 V DC ... 60 V DC	100 V DC ... 120 V DC	200 V DC ... 220 V DC	350 V DC ... 400 V DC
Maximum continuous voltage U_c	75 V DC	150 V DC	250 V DC	450 V DC
Short-circuit withstand capability I_{SCCR}	50 kA			
Voltage protection level U_p	≤ 1.1 kV	≤ 1.3 kV	≤ 1.9 kV	≤ 1.9 kV
Type	VAL-SEC-T2-2+F-48DC-FM	VAL-SEC-T2-2+F-120DC-FM	VAL-SEC-T2-2+F-220DC-FM	VAL-SEC-T2-2+F-380DC-FM
Order No.	1033786	1033788	1033789	1033790

Surge protection for photovoltaic systems with generator voltages up to 1,500 V

Pluggable VALVETRAB-MS type 2 surge protective devices are now also available for PV applications up to 1,500 V. A high short-circuit withstand capability and an ideally coordinated voltage protection level ensure increased levels of operational safety. A special base element with TORX screws expands the range.







Your advantages

- ✓ Optimum inverter protection, thanks to low voltage protection level
- ✓ Increased operational safety, thanks to high short-circuit withstand capability
- ✓ Secure contacting, thanks to integrated rotating latch
- ✓ Protection against incorrect connection, thanks to coded plugs and base elements
- ✓ Easy replacement, thanks to pluggable arresters

Main features

- High short-circuit withstand capability
- Visual mechanical status indicator
- With or without floating remote indication contact
- Can be used at altitudes up to 3000 m
- KEMA and UL approval

 Web code: #1781			
Description	Complete module with remote indication contact		Surge protection plug
Maximum continuous voltage U_c	1500 V DC		750 V DC
Nominal discharge current I_n	15 kA		
Voltage protection level U_p	≥5 kV		≥2.5 kV
Short-circuit withstand capability I_{SCP}	2000 A		
Type	VAL-MS 1500DC-PV/2+V-FM	VAL-MS 1500DC-PV/2+V	VAL-MS 1500DC-PV-ST/3
Order No.	1033725	1033708	1033727

The web code gives you access to additional product versions on our website.

Surge protection for photovoltaic systems for space-saving PCB installation

PRINTRAB PV are surge protective devices for direct PCB mounting in string inverters. The type 2 protective devices feature powerful protection in the smallest space, thanks to their high short-circuit withstand capability and the low voltage protection level.




Your advantages

- ✓ Minimal space required, thanks to very small footprint
- ✓ Can be used at altitudes up to 5000 m in accordance with EN 50539-11
- ✓ Permanent function monitoring, thanks to integrated remote indication contact

Main features

- High short-circuit withstand capability
- Visual mechanical status indicator
- Can be soldered directly to the PCB

<p>i Web code: #1782</p>	
Description	Type 2 surge protection for printed-circuit boards
Highest continuous voltage U_{CPV}	1170 V DC
Discharge surge current I_n	20 kA
Voltage protection level U_p	3.7 kV
Short-circuit withstand capability I_{SCPV}	2000 A
Type	PRT-PV-1000
Order No.	2908900

Surge protection for PV rooftop systems

Modular string combiner box concept

With its pre-assembled sets, Phoenix Contact offers reliable system solutions for surge protection for PV rooftop systems. These PV sets are in accordance with the standard for low-voltage switchgear and controlgear assemblies and have the CE Declaration of Conformity.










Push-in Technology [®]
Designed by PHOENIX CONTACT

Your advantages

- ✓ Fast installation and startup
- ✓ Large portfolio of string combiner boxes in stock
- ✓ Application-oriented consultation
- ✓ Standard-compliant switchgear and controlgear assembly, thanks to application of DIN EN 61439

Main features

- Push-in connection
- T1/T2 surge protection
- System voltage 1000 V DC
- Ambient temperature (operation): -20°C ... +50°C
- Conductor cross section, string input: 2.5 mm² ... 6 mm²
- IP65 degree of protection
- Protection class II

 Web code: #1786						
	String combiner boxes for PV rooftop systems					
Description						
Number of string inputs	1 (per MPP tracker)	2 (per MPP tracker)	2 (per MPP tracker)	2 (per MPP tracker)	1 (per MPP tracker)	2 (per MPP tracker)
Current per string	40 A (I _{max})	20 A (I _{max})	20 A (I _{max})	16 A (I _{max})	40 A (I _{max})	20 A (I _{max})
Number of outputs	1 (per MPP tracker)	1 (per MPP tracker)	1 (per MPP tracker)	1 (per MPP tracker)	1 (per MPP tracker)	1 (per MPP tracker)
Number of supported MPP trackers	6	2	2	2	3	2
Type	SOL-SC-1ST-0-DC-6MPPT-1001SE	SOL-SC-2ST-0-DC-2MPPT-1001SE	SOL-SC-2ST-0-DC-2MPPT-1001	SOL-SC-2ST-0-DC-2MPPT-1101	SOL-SC-1ST-0-DC-3MPPT-1001	SOL-SC-2ST-0-DC-2MPPT-1000SE
Order No.	1022360	1016813	2404295	2404569	2404301	1016812

The web code gives you access to additional product versions on our website.

Surge protection for power supplies

Specially designed for North American grid types

The surge protective devices of the VALVETRAB MS range are designed to satisfy the requirements of the American markets. The nominal voltages of the protective devices are tailored to power supply systems designed to US standards. Their variance covers the common system voltages.










Your advantages

- ✓ Specially developed for power supply systems in accordance with North American standards
- ✓ Easy to use, thanks to UL-listed type 1 approbation
- ✓ Protection against incorrect connection, thanks to coded plugs and base elements
- ✓ Easy replacement, thanks to pluggable arresters

Main features

- High total discharge surge currents of up to 320 kA
- With or without floating remote indication contact
- Visual mechanical status indicator
- Plugs can be tested with CHECKMASTER 2

 Web code: #1783						
	Type 2 surge protection for North American grid types					
Description						
Nominal voltage U_N	120 V AC	240 V AC	277 V AC	277 V AC	347 V AC	480 V AC
Discharge surge current I_{max}	40 kA	40 kA	40 kA	80 kA	30 kA	30 kA
Total discharge surge current I_{total}	120 kA	160 kA	160 kA	320 kA	90 kA	90 kA
Voltage protection level U_p (L-G)	1800 V	1200 V	2000 V	1500 V	2000 V	2000 V
Type	VAL-US-120/40/2+1-FM	VAL-US-240HLD/40/3+1-FM	VAL-US-277/40/3+1-FM	VAL-US-277/80/4+0-FM	VAL-US-347/30/3+0-FM	VAL-US-480D/30/3+0-FM
Order No.	2910352	2910371	2910374	2910380	2910383	2910386

The web code gives you access to additional product versions on our website.

Surge protection plugs for MCR technology applications

Replacement plugs for various voltage and circuitry versions are now also available for the TERMITRAB complete product range. The devices protect almost all standard interfaces used in measurement and control technology.










Your advantages

- ✓ Space saving, thanks to the narrow overall width of just 6 mm
- ✓ Safe disconnection and signaling in the event of overload
- ✓ High degree of flexibility, thanks to the large variety of products
- ✓ Secure positioning in the base element, thanks to coordinated latching hook
- ✓ One product range for virtually all applications in MCR technology

Main features

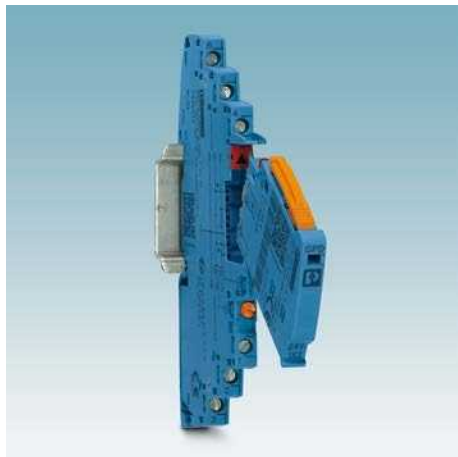
- Mechanical status indicator on the device
- Various switching possibilities
- Plugs can be tested with CHECKMASTER 2
- Optional remote signaling capability

 Web code: #1784						
	Surge protection plug					
Description						
Application	Current loops / analog signals		Digital signals / switch contacts		HF applications and telecommunications interfaces	
Nominal voltage U_N	12 V DC	24 V DC	24 V DC	24 V DC	12 V DC	24 V DC
Rated current	600 mA					
Type	TTC-6P-1X2-12DC-I-P	TTC-6P-1X2-24DC-I-P	TTC-6P-2X1-24DC-I-P	TTC-6P-2-HC-24DC-I-P	TTC-6P-3-HF-12DC-I-P	TTC-6P-3-HF-24DC-I-P
Order No.	2907839	2907840	2907843	2907845	2907846	2907847

The web code gives you access to additional product versions on our website.

Surge protection plugs for MCR technology Ex applications

The new TERMITRAB complete replacement plugs for potentially explosive applications with Ex i type of protection are available in various voltage and circuitry versions. A partition plate for maintaining the clearance is also included in the portfolio.









Your advantages

- ✓ Can be used in intrinsically safe signal circuits
- ✓ Space saving, thanks to the narrow overall width of just 6 mm
- ✓ Safe disconnection and signaling in the event of overload
- ✓ Secure positioning in the base element, thanks to coordinated latching hook
- ✓ One product range for virtually all applications in MCR technology

Main features

- ATEX and IECEx approval
- Mechanical status indicator on the device
- Various switching possibilities
- Plugs can be tested with CHECKMASTER 2
- Optional remote signaling capability

 Web code: #1785					
Description	Surge protection plug for Ex applications				Partition plate
Application	Current loops / analog signals	Digital signals / switch contacts	HF applications and telecommunications interfaces		Maintaining the clearance
Nominal voltage U_N	24 V DC	24 V DC	12 V DC	24 V DC	-
Rated current	600 mA				-
Type	TTC-6P-1X2-EX-24DC-I-P	TTC-6P-2X1-EX-24DC-I-P	TTC-6P-3-HF-EX-12DC-I-P	TTC-6P-3-HF-EX-24DC-I-P	TTC-EX-PP
Order No.	2907831	2907832	2907833	2907834	1011977

The web code gives you access to additional product versions on our website.

Axioline F I/O components for extreme conditions

Further I/O components with an extended temperature range and coated printed-circuit boards are now also available for the fast, particularly robust Axioline F I/O system with high signal density. Thus, Axioline F opens up an even broader field of application to you.

Push-in Technology 
Designed by PHOENIX CONTACT






Your advantages

- Far-reaching range of applications, thanks to comprehensive temperature range
- The coated printed-circuit boards withstand even the toughest ambient conditions
- High noise immunity, even in environments subjected to strong electromagnetic influences

Main features

- Extended temperature range:
-40°C ... +70°C
- Permissible humidity (operation):
5% ... 95%
- Noise emission:
Class B in accordance with EN 61000-6-3
- Noise immunity:
8 kV air discharge in accordance with EN 61000-4
- Maximum altitude: 3000 m above sea level without derating

 Web code: #1794		
Description	Bus coupler for PROFIBUS	I/O module for temperature measurement
I/O functionality	-	8 temperature inputs, UTH
Connection technology	-	2-conductor
Type	AXL F BK PB XC	AXL F UTH8 XC 1F
Order No.	2702463	2702464

Axioline F I/O module for energy and power measurement

Acquire precise energy and power data with the Axioline F I/O system. The standard parameters are preset to facilitate easy startup. Axioline F supports all popular Ethernet-based network protocols and is fast, robust, and easy to install.

Push-in Technology 
Designed by PHOENIX CONTACT





Your advantages

- ✓ Direct connection of voltages up to 400 V / 690 V and currents up to 5 A, without converter
- ✓ Secure isolation from neighboring I/O modules, without additional isolation measures
- ✓ Extensive grid analysis, thanks to measurement of the harmonics
- ✓ Easy startup, thanks to preset parameters, changes via PDI objects possible

Main features

- Certified in accordance with EN 61010-1 and EN 61010-2-030 (Low-Voltage Directive)
- 4 inputs for phase currents and neutral conductor current up to 5 A AC
- 3 inputs for phase conductor voltages up to 690 V AC, direction connection supported
- Harmonics analysis
- Determination of maximum values
- Power meter

 Web code: #1795	
Description	I/O module for energy data acquisition
I/O functionality	3-phase energy and power measurement
Type	AXL F PM EF 1F
Order No.	2702671

Axioline F I/O modules for digital output and weighing technology

Axioline F is the fast, particularly robust I/O system with high signal density for the control cabinet. The product range has been extended to include two new output modules and a function module for evaluating strain gauges.







Push-in Technology [®]
Designed by PHOENIX CONTACT

Your advantages

- ✓ Use in safety applications, thanks to safe disconnection of the supply voltage via DO16/2
- ✓ Saves space in the control cabinet, thanks to the high signal density in an overall width of 35 mm
- ✓ Increase in data quality, thanks to precise measurement of strain gauges
- ✓ Fast connection of actuators and strain gauges, thanks to Push-in Technology

Main features

- Vibration resistance: 5g in accordance with IEC 60068-2-6
- Shock resistance: 30g in accordance with IEC 60068-2-27
- Noise emission: Class B in accordance with EN 55022
- Noise immunity:
8 kV air discharge in accordance with IEC 61000-4-2
- Push-in connection

 Web code: #1796			
Description	I/O module for digital output		I/O module for weighing
I/O functionality	16 digital outputs	32 digital outputs	2 inputs for strain gauge
Connection technology	2-conductor	1-conductor	4 and 6-conductor
Type	AXL F DO16/2 2H	AXL F DO32/1 2H	AXL F SGI2 1H
Order No.	1027904	1004925	2702911

Axioline E IO-Link boxes for digital input and output in the field

Axioline E is the block-modular I/O system for field installation. The portfolio has been expanded by adding both an eight-channel input and an eight-channel output device for acquiring and issuing digital signals in the field.






IO-Link

Your advantages

- ✓ Fast connection of sensors and actuators, thanks to the SPEEDCON fast locking system
- ✓ Downtimes minimized, thanks to a high level of mechanical robustness
- ✓ Increase in the variety of potential applications, thanks to a wide temperature range of -25°C to $+60^{\circ}\text{C}$

Main features

- IO-Link specification v1.1.2
- Connection of up to eight channels
- Diagnostics and status indicators
- Short-circuit and overload protection of the sensor supply
- Device rating plate stored
- Degree of protection IP65, IP67

 Web code: #1797		
Description	I/O device for digital input	I/O device for digital output
I/O functionality	8 digital inputs	8 digital outputs
Connection method	M12 connectors, A-coded	M12 connectors, A-coded
IO-Link port	Type A	Type B
Type	AXL E IOL DI8 M12 6P	AXL E IOL DO8 M12 6P
Order No.	2702658	2702659

Cloud IoT Gateway

Direct connection to the cloud

The gateway connects new and existing systems to the Internet of Things without interfering with the automation logic. It collects and processes sensor and process data, and transmits this to the Proficloud. This data can be used, for example, for machine monitoring or data analysis.



PROFICLOUD
Professional Cloud Solutions

Your advantages

- Direct connection to the Proficloud
- Easy configuration, thanks to web-based management
- Various protocols supported, e.g. Modbus/TCP
- Robust hardware for use in the industrial environment
- Secure transmission, thanks to TLS encryption (Transport Layer Security)

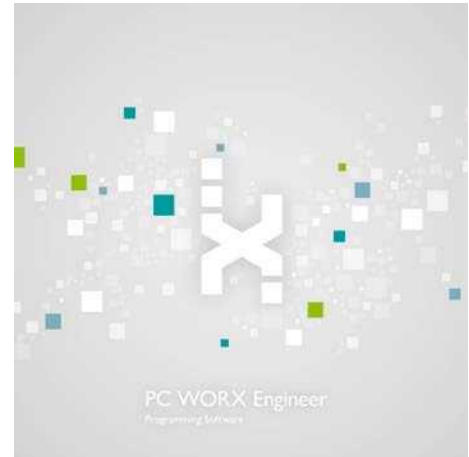
Main features

- Open IoT platform
- Dashboard for easy visualization of sensor and process data
- Web-based management for configuring the Cloud IoT Gateway

 Web code: #1810	
Description	IoT Gateway for Proficloud
Type	CLOUD IOT GATEWAY
Order No.	1031235

Modular software platform for customized engineering

PC Worx Engineer is a flexible engineering platform for programming in accordance with IEC 61131-3. In addition to programming, you can now perform all other engineering tasks using this platform, such as configuration, visualization, and diagnostics of your complete system.




PC WORX Engineer
Programming Software

Your advantages

- ✓ Time and cost savings, thanks to fully integrated programming in a single interface
- ✓ Less work and training required, thanks to an optimized user interface
- ✓ Flexible engineering, thanks to the integration of individual function add-ins in the free basic version
- ✓ Simplified engineering process, thanks to the use of automation modules and object-oriented programming

Main features

- One software program for all engineering tasks
- Programming in accordance with IEC 61131-3
- Secure programming, certified in accordance with IEC 61508
- Security by design, with the controllers from the PLCnext Control range

<p>i Web code: #1809</p>	
<p>Description</p>	<p>Modular software platform</p>
<p>Type</p>	<p>PC WORX ENGINEER 7</p>
<p>Order No.</p>	<p>1046008</p>

Controller with PLCnext Technology

Limitless automation

The high-performance PLCnext Control is the first controller to incorporate PLCnext Technology. Thanks to the open control platform, you can implement automation projects without the limits of proprietary systems. You work freely with your favorite programming languages and development tools.

PLCnext Technology TM
 Designed by PHOENIX CONTACT




Your advantages

- ✓ PLC-typical real time performance and data consistency, also for high-level languages and model-based code
- ✓ Limitless adaption capability through quick, simple integration of open-source software, apps, and future technologies
- ✓ Intelligent networking through cloud connection and integration of current and future communication standards
- ✓ Quick application development: several developers work independently in different programming languages

Main features

- Convenient engineering with favorite programming tools
- First controller with two processor cores: ARM® Cortex®-A9, 2x 800 MHz
- 512 MB RAM
- 2 Ethernet interfaces
- Up to 63 Axioline F I/O modules can be aligned
- Trusted Platform Module for security
- PROFINET, OPC UA
- Direct connection to the Proficloud

<p>i Web code: #1806</p>	
Description	Controller with PLCnext Technology
Ambient temperature	-25°C ... +60°C
Type	AXC F 2152
Order No.	2404267

The first customers of PLCnext Control benefit exclusively from an external memory expansion module free of charge. This is a voluntary, time-limited offer that can be revoked at any time.

Controller for PC Worx Engineer Programmable with new engineering software

The AXC F 1050 Axioccontrol controller is now even more convenient to program. With the PC Worx Engineer modular software platform, you can accelerate the programming process in accordance with IEC 61131-3. PC Worx Engineer combines the basic functions necessary for configuration, visualization, and diagnostics.



Your advantages

- ✓ Improved engineering with PC Worx Engineer in accordance with the IEC 61131-3 standard
- ✓ Reduced compilation times, thanks to online compilation
- ✓ Clear application configuration
- ✓ Can be extended flexibly with Axioline F system I/O modules

Main features

- User-friendly and intuitive programming with PC Worx Engineer in accordance with IEC 61131
- Integrated UPS for controlled shutdown
- Up to 63 Axioline F I/O modules can be aligned

<p>i Web code: #1807</p>	
<p>Description</p>	<p>Axioccontrol controller, programmable with PC Worx Engineer</p>
<p>Ambient temperature</p>	<p>-25°C ... +60°C</p>
<p>Type</p>	<p>AXC F 1050</p>
<p>Order No.</p>	<p>2404701</p>

High-performance controller for PROFI-safe Solution for complex safety tasks

The RFC 480S PN 4TX safety controller is the PLC in the portfolio with the highest performance thanks to powerful multicore technology. You can integrate the latest safety devices using the PROFI-safe profile 2.6.1. The OPC UA server enables modern communication with higher-level SCADA systems.



Your advantages

- Operation of devices, with the latest PROFI-safe profile
- Rapid processing of CPU-intensive applications
- Modern communication with SCADA systems, thanks to OPC UA
- Convenient operation, thanks to the touch display
- Communication in up to three separate subnets

Main features

- Intel® Core™ i5-6300U 2 x 2.4 GHz (dual-core)
- 3 MAC addresses and transmission speeds of up to 1 Gbps via LAN 1 and LAN 2
- New PROFI-safe profile 2.6.1
- OPC UA embedded server

<p>i Web code: #1808</p>	
<p>Description</p>	<p>Safety controller</p>
<p>Type</p>	<p>RFC 480S PN 4TX</p>
<p>Order No.</p>	<p>2404577</p>

Secure remote maintenance of machines worldwide Scalable with the mGuard Secure Cloud

Secure online remote maintenance of your machines with the mGuard Secure Cloud: confidentiality, authenticity, and integrity of data between devices is guaranteed thanks to IPsec VPN connections. The hosting service, operated in Germany, makes the cloud available worldwide.







Your advantages

- ✓ Turnkey VPN infrastructure for operators and machine builders
- ✓ Easy startup, thanks to configuration wizards
- ✓ Intuitive web interface operation
- ✓ Compatible with all mGuard security appliances, TC Cloud clients, and certified VPN clients
- ✓ Supports iOS devices, such as iPads and iPhones

Main features

- Highly secure IPsec VPN communication
- Two-factor authentication
- User management for access to various customers and systems
- Superior availability worldwide
- Operated in Germany in accordance with the most stringent security and data protection standards
- Industry-proven mGuard security technology

 Web code: #1787			
Description	Cloud-based remote maintenance platform for connecting service technicians and machinery		VPN connection from the PC to the mGuard Secure Cloud
Type	mGuard Secure Cloud PREMIUM	mGuard Secure Cloud BASIC	mGuard Secure VPN client software
Order No.	https://start.cloud.mguard.com		2702579

Device servers and gateways

Integrate serial protocols into PROFINET

Four new versions have been added to the product family of 16 serial device servers and gateways. You can use these to connect any type of serial data and devices to the PROFINET protocol. Thus, you can access devices that previously did not feature native support of the PROFINET protocol.








Your advantages

- ✓ Integration of serial devices into PROFINET
- ✓ Secure network communication, thanks to 256-bit AES encryption
- ✓ Easy configuration via web-based management
- ✓ Powerful diagnostics options for the ports
- ✓ Each port can be used universally – either as RS-232, RS-485 or RS-422

Main features

- Up to 4 serial ports per device
- Up to 2 Ethernet ports per device
- Extended temperature range: -40°C ... +70°C

 Web code: #1790				
Description	Protocol converter / gateway			
Interfaces	1 x Ethernet, 1 x RS-232/RS-422/RS-485	1 x Ethernet, 2 x RS-232/RS-422/RS-485	2 x Ethernet, 2 x RS-232/RS-422/RS-485	2 x Ethernet, 4 x RS-232/RS-422/RS-485
Type	GW PN/ASCII 1E/1DB9	GW PN/ASCII 1E/2DB9	GW PN/ASCII 2E/2DB9	GW PN/ASCII 2E/4DB9
Order No.	1021080	1021058	1021056	1020882

When you enter the web code stated above, you will also find suitable accessories, such as mounting kits and cables.

HART USB modem

Commissioning and monitoring

With the new HART USB modem, HART devices can be configured quickly and easily via standard USB interfaces. The modem is thus an alternative to existing RS-232 HART modems and a cost-effective alternative to expensive hand-held devices.




Your advantages

- ✓ Cost-effective alternative to hand-held programming devices
- ✓ Power supply via USB
- ✓ Fast configuration of HART devices and rapid diagnostics

Main features

- USB 2.0 interface
- A separate power supply is not necessary

 Web code: #1791	
Description	HART USB modem
Type	GW HART USB MODEM
Order No.	1003824

PROFIBUS PA I/O gateway

Integrating I/Os directly into PROFIBUS PA

Integrate analog and digital I/Os into the PROFIBUS PA system via the PA head station, Radioline I/O modules, and the four-channel NAMUR input module. Since all signals are transferred to the control room from the field via PROFIBUS PA, you can perform the entire installation with standard PROFIBUS PA cables.






Your advantages

- ✓ No additional software necessary, thanks to the preconfigured head station
- ✓ Connection of all I/Os in the field via PROFIBUS PA cables
- ✓ Integration into the host system via an EDD or GSD file
- ✓ Five application-specific head stations enable easy implementation in the field
- ✓ Scalable as necessary

Main features

- Approvals: ATEX Zone 2, IECEx Zone 2, UL Class I, Division 2
- Extended temperature range: -40°C ... +70°C
- Corrosive resistance in accordance with ANSI-ISA 71.04-1985, severity level G3
- Module replacement without interfering with software or configuration

 Web code: #1792						
Description	PROFIBUS PA head station					NAMUR input module
Function	Valve controller	Temperature and/or analog inputs	Analog I/O and temperature	Combination digital and analog I/O	24 high-density digital inputs	4 NAMUR digital inputs
Type	FB-MUX/HS/DIO-NAM/PA	FB-MUX/HS/AI/PA	FB-MUX/HS/AIOTEMP/PA	FB-MUX/HS/DAIO/PA	FB-MUX/HS/DI24/PA	FB-DI4/NAM-IFS
Order No.	2316270	1005331	1005330	1005329	1005332	2316275

HART gateways for PROFIBUS DP/PA and FOUNDATION Fieldbus

Using the HART gateways, you can connect HART devices to the FOUNDATION Fieldbus, PROFIBUS DP, and PROFIBUS PA process fieldbuses. With one gateway, you can access the four types of HART data (PV, SV, TV, and QV) of up to four HART devices.







Your advantages

- ✓ Integration of proven HART devices into the modern digital fieldbus
- ✓ Up to four HART devices supported with just one gateway
- ✓ Can operate both passive and active HART devices
- ✓ Easy installation and commissioning via software such as Siemens PDM or an FDT container

Main features

- Approvals: ATEX Zone 2, IECEx Zone 2, UL Class I, Division 2
- Extended temperature range: -40°C ... +85°C
- Satisfies the NAMUR recommendation NE107
- Screw connection
- HART test point on the front panel

 Web code: #1793			
Description	HART gateways		
Protocol	FOUNDATION Fieldbus	PROFIBUS PA	PROFIBUS DP
Speed	31.25 kbps	31.25 kbps	9.6 kbps ... 12 Mbps
Type	GW PL FF/HART	GW PL PA/HART	GW PL DP/HART
Order No.	2316360	2316361	2316362

Ethernet patch panels

Secure connection made fast

The patch panels serve as interface modules between the field and control cabinet cabling. The new DIN rail devices provide various connection options and integrated surge protection. Save a great deal of installation time thanks to the tool-free shield connection technology.

Push-in Technology 
 Designed by PHOENIX CONTACT








Your advantages

- Quick and easy mounting
- Large selection of different connection technologies
- Protective functions for high system availability
- Concealed wiring space, thanks to front cover
- Compact design

Main features

- Versions with IDC, Push-in, screw, and RJ45 connection
- Tool-free cable shield contacting and strain relief
- Integrated surge protection
- Shield current monitoring via diagnostic indicator

 Web code: #1788				
Description	Ethernet patch panel			
Connection method	RJ45 / IDC	RJ45 / Push-in	RJ45 / screw	RJ45 / RJ45
Type	PP-RJ-IDC...	PP-RJ-SCC...	PP-RJ-SC...	PP-RJ-RJ...
Order No. standard	2703019	2703018	2703016	2703015
Order No. with surge protection	2703023	2703022	2703021	2703020

The web code gives you access to additional product versions on our website.

Power over Ethernet injectors

Reliable and easy supply

The new range of 12 Power over Ethernet (PoE) injectors supply devices in the field with data and power via one cable. The alternative IDC, Push-in or screw connection technologies simplify the installation of the field cable significantly.

Push-in Technology 
 Designed by PHOENIX CONTACT










Your advantages

- Quick and easy mounting
- Large selection of different connection technologies
- Protective functions for high system availability
- Concealed wiring space, thanks to front cover
- Electrical isolation of the internal power supply unit

Main features

- PoE supply up to 60 W
- Supply voltage: 18 ... 57 V DC
- Versions with IDC, Push-in, screw, and RJ45 connection
- Tool-free cable shield contacting and strain relief
- Integrated surge protection
- Shield current monitoring via diagnostic indicator

 Web code: #1789						
	PoE injector INJ 1000			PoE injector INJ 2000		
Description	RJ45 / RJ45	RJ45 / RJ45	RJ45 / RJ45	RJ45 / IDC	RJ45 / Push-in	RJ45 / screw
Connection method	RJ45 / RJ45	RJ45 / RJ45	RJ45 / RJ45	RJ45 / IDC	RJ45 / Push-in	RJ45 / screw
Temperature range	0°C ... +60°C	-40°C ... +75°C	-40°C ... +75°C	-40°C ... +75°C	-40°C ... +75°C	-40°C ... +75°C
Electrical isolation of the power supply unit	No			Yes		
Surge protection, shield current diagnostics	No			Yes		
Type	INJ 1000	INJ 1000-T	INJ 1100-T	INJ 2102-T	INJ 2103-T	INJ 2101-T
Order No. PoE at/af, 15/30 W	2703005	2703006	2703009	2703012	1004065	2703011
Type	INJ 1010	INJ 1010-T	INJ 1110-T	INJ 2112-T	INJ 2113-T	INJ 2111-T
Order No. PoE bt, 60 W	2703007	2703008	2703010	2703014	1004066	2703013

The web code gives you access to additional product versions on our website.

Power over Ethernet switches

Transmit data and power at the same time

Supply PoE-capable end devices with current and data at the same time via just one cable with Power over Ethernet switches. New Managed Switches and Unmanaged Switches are now available with gigabit transmission speeds.










Your advantages

- ✓ Versatile in use, thanks to gigabit transmission and SFP ports
- ✓ Connect numerous devices flexibly and supply them with current, thanks to a large power budget of up to 240 W
- ✓ Individual configuration possibilities for Managed Switches, thanks to user-friendly web-based management

Main features

- Extended temperature range for harsh environments
- Compliant with IEEE 802.3at
- Gigabit uplink ports
- Processing of jumbo frames possible
- Broad input voltage range of 18 to 57 V DC with Unmanaged Switches
- 60 W output power per port with Managed Switches

 Web code: #1800						
	Unmanaged PoE Switches			Managed PoE Switches		
Description						
Ports	2 x RJ45 (PoE) 2 x SFP	4 x RJ45 (PoE) 1 x RJ45	8 x RJ45 (PoE) 2 x SFP	4 x RJ45 (PoE) 1 x SFP	8 x RJ45 (PoE) 2 x SFP	8 x RJ45 (PoE) 4 x RJ45 4 x SFP
Transmission speed	10/100/1000 Mbps			10 / 100 Mbps (RJ45) 1000 Mbps (SFP)		10/100/1000 Mbps
Power budget	30 W per port, max. 120 W			60 W per port, max. 180 W		60 W per port, max. 240 W
Type	FL SWITCH 1000T-2POE-GT- 2SFP	FL SWITCH 1001T-4POE-GT	FL SWITCH 1000T-8POE-GT- 2SFP	FL SWITCH 4000T-4POE-SFP	FL SWITCH 4000T-8POE- 2SFP	FL SWITCH 4004T-8POE- 4SFP
Order No.	1026765	1026937	1026929	1026924	1026923	1026922

The web code gives you access to additional product versions on our website.

Managed Switches with 16 ports and PROFINET

Flexible, needs-driven networking

Managed Switches of the 2000 series offer the ideal range of functions, version types, and approvals for automation applications. With 16 port versions, extended PROFINET functions and PROFINET versions, you can use the switches even more flexibly.



Push-in Technology[®]
Designed by PHOENIX CONTACT






Your advantages

- ✓ Simple and varied configuration options
- ✓ Use in PROFINET Class B networks, thanks to PROFINET device and DCP protocol
- ✓ Versatile, thanks to approvals for maritime applications and the process industry
- ✓ Flexible network configuration, thanks to a high number of ports, various connection methods, and combo ports

Main features

- IP20 degree of protection
- Extended temperature range: -40°C ... +70°C
- Redundant power supply
- MRP protocol in accordance with IEC 62439
- IGMP snooping/querier
- HTTPS/SNMPv3
- Port/pool-based DHCP server, DHCP option 82

 Web code: #1799						
	Managed Switches with 16 ports				Managed Switches with preconfigured PROFINET functions	
Description						
Ports	16 x RJ45	14 x RJ45 2 x SC MM	14 x RJ45 2 x SFP	12 x RJ45 2 x combo 2 x SFP	6 x RJ45 2 x SFX	16 x RJ45
Transmission speed	10/100 Mbps		10/100/1000 Mbps		10/100 Mbps	10/100/1000 Mbps
PROFINET conformance class	B					
Type	FL SWITCH 2216	FL SWITCH 2214-2FX	FL SWITCH 2314-2SFP	FL SWITCH 2312-2GC-2SFP	FL SWITCH 2206-2SFX PN	FL SWITCH 2316 PN
Order No.	2702904	2702905	1006191	2702910	1044028	1031673

The web code gives you access to additional product versions on our website.

Compact WLAN module

Wireless communication in harsh environments

The WLAN 2100 wireless module combines an Access Point and antenna in a single device. It features protection up to IP68 and an extended operating temperature range for use in harsh industrial environments. With the WLAN 2100 module, you can connect up to 60 WLAN devices in the Access Point mode.



Push-in Technology [®]
 Designed by PHOENIX CONTACT

Your advantages

- ✓ Space savings in the control cabinet, thanks to installation directly on machines, mobile vehicles or control cabinets
- ✓ Fast and reliable communication, thanks to powerful antenna technology
- ✓ Quick and easy connection, thanks to single-hole mounting
- ✓ Extremely robust housing, impact resistant in accordance with IK08

Main features

- WLAN access point and client
- IEEE 802.11 a/b/g/n
- Frequency band: 2.4 GHz and 5 GHz
- 2 integrated antennas with MIMO technology
- Power supply: 9 V DC ... 32 V DC
- Extended temperature range: -40°C ... +60°C
- Degree of protection: IP65, IP66, IP67, IP68

 Web code: #1801		
Description	WLAN wireless module	
Approval	Europe	USA, Canada
Type	FL WLAN 2100	FL WLAN 2101
Order No.	2702535	2702540

Ethernet port adapter WLAN and Bluetooth in one device

With the Ethernet port adapter (EPA), Ethernet-capable automation devices can communicate wirelessly with PROFINET, Modbus/TCP, and EtherNet/IP™ control networks. The new generation EPA modules support both WLAN and Bluetooth communication in just one device.







Your advantages

- ✓ WLAN and Bluetooth support in just one device
- ✓ Easy installation, thanks to integrated antenna and M12 connections
- ✓ Reliable transmission of safety signals over long distances
- ✓ Easy and safe setup, thanks to largely automatic configuration
- ✓ Robust IP65 industrial housing

Main features

- WLAN client
- IEEE 802.11 a/b/g
- Frequency band: 2.4 GHz and 5 GHz
- Bluetooth 2.1 EDR Access Point and client
- Extended temperature range: -40°C ... +65°C
- Integrated antenna
- Power supply: 9 V DC ... 30 V DC
- Degree of protection: IP65

 Web code: #1802			
Description	Combined WLAN and Bluetooth wireless module		Bluetooth wireless module
WLAN	2.4 GHz and 5 GHz		-
Bluetooth	Bluetooth 2.1 + EDR, 4.0 prepared		
Antenna connection	Internal	External	Internal
Type	FL EPA 2	FL EPA 2 RSMA	FL BT EPA 2
Order No.	1005955	1005957	1005869

New generation Basicline industrial PCs

Cost-effective implementation of industrial applications

The new generation compact box PCs and robust panel PCs are optimized for automation applications in the lower price bracket. The IPCs are suitable for HMI applications, assembly stations, warehousing and logistics, for production data and energy data collection, and for production networking.






Your advantages

- ✓ High system availability, thanks to a design suitable for industrial use
- ✓ Easy integration into existing systems, thanks to proven design with unchanged dimensions
- ✓ Long-term availability, thanks to the latest Intel processors of the 7th generation
- ✓ Space saving, thanks to new M.2 storage technology
- ✓ Wireless connection, thanks to optional WLAN module (WLAN-capable)

Main features

- 12", 15" and 17" displays with analog resistive touch technology (BL2 PPC)
- Intel® Celeron® N3350, Pentium® N4200, Core™ i5-7442EQ processors
- M.2 SSD data storage technology
- Windows 10 IoT ENT LTSB 2016
- DIN rail, wall or VESA100 mounting
- WLAN in accordance with IEEE 802.11 a/b/g/n (optional)

 Web code: #1811						
	Box PC			Panel PC		
Designation						
Display	None			12.1" (1024 x 768), 15" (1024 x 768), 17" (1280 x 1024)		
Processor	Intel® Celeron® N3350 1.1/2.4 GHz	Intel® Pentium® N4200 1.1/2.4 GHz	Intel® Core™ i5-7442EQ 2.1/2.9 GHz	Intel® Celeron® N3350 1.1/2.4 GHz	Intel® Pentium® N4200 1.1/2.4 GHz	Intel® Core™ i5-7442EQ 2.1/2.9 GHz
Type	BL2 BPC 1000	BL2 BPC 2000	BL2 BPC 7000	BL2 PPC 1000	BL2 PPC 2000	BL2 PPC 7000
Order No.	2404777	2404844	1016240	2404845	2404846	1016236

HMI for outdoor applications

Use in demanding environments

The new HMI devices for applications in harsh ambient conditions with new processor generation and glass-film-glass touch screens provide performance and robustness for demanding applications. Operate and monitor your system in any environment thanks to the ATEX/C1D2 certification.










Your advantages

- Display can be read in direct sunlight
- Resistant to UV and IR radiation
- Extended temperature range of -32°C to +70°C
- Resistant to environmental influences, such as salt spray, termites, and chemicals
- Can be operated when wearing work gloves

Main features

- IP67 degree of protection
- Approved for use in Ex zone Class I, Div. 2
- Processor: ARM Cortex A8, 1 GHz
- Mass storage: 1 GB Flash
- Software: Windows® Embedded Compact 7, VISU+ RT, AX OPC server

 Web code: #1813						
	Description	Touch panel 4.3"	Touch panel 5.7"	Touch panel 7"	Touch panel 12"	Touch panel 12"
Resolution [pixels]	480 x 272	640 x 840	800 x 480	800 x 600	1280 x 800	1024 x 768
Type	TP 3043W/WT	TP 3057V/WT	TP 3070W/WT	TP 3121S/WT	TP 3120W/WT	TP 3150S/WT
Order No.	2404286	2403464	2403465	2403466	1029308	1029281

KVM extenders for distances up to 90 m

Solution for remote operator interfaces

The VL KVM EXTENDER enables data transmission between an industrial PC and an operator panel across a distance of up to 90 m. With just one standard Ethernet cable, you can transmit video, audio, and USB signals without losses between a remote operator panel and a control cabinet PC.





Your advantages

- ✓ Flexible, thanks to remote operating solutions up to 90 m
- ✓ Cost-effective, thanks to elimination of cable and mounting costs
- ✓ Increased system availability, thanks to the use of purely passive displays
- ✓ Industry-capable, thanks to an extended temperature range of -20°C to +50°C
- ✓ Fast startup, thanks to a solution consisting purely of hardware

Main features

- Transmission of video, audio, and USB signals up to 90 m
- Max. resolution 1920 pixels x 1080 pixels at 60 Hz (Full HD)
- External dimensions 150 mm x 80 mm x 43 mm
- Wall, portrait or DIN rail mounting
- Interfaces: 1 x DVI-D, 1 x DP++
- 24 V DC ±20%

 Web code: #1812	
Description	KVM extender
Equipment	VL KVM EXTENDER (TX), VL KVM EXTENDER (RX), one cable 1.8 m USB-A to USB-B, one cable 1.8 m DP++ and one cable USB-A to micro-USB-B (for service connection)
Type	VL KVM EXTENDER
Order No.	2404770

When you enter the web code stated above, you will also find suitable accessories, such as mounting kits and cables.

Audible elements for PSD signal towers

Clear indication of system states

Increase the availability of your machines and systems. Modular signal towers – also referred to as signal lights – can be used to clearly indicate your machine and system states. The optimized audible elements feature a new, more compact design for ideal sound emission.



Your advantages

- ✓ Increased machine and system availability, thanks to clear audible status message
- ✓ The right signal for every application, thanks to extensive signal diversity
- ✓ Increased perceptibility even in locations with high noise levels, thanks to the high signal volume
- ✓ Optimum audible perceptibility in all directions, thanks to symmetrical sound emission

Main features

- Input voltage 24 V AC/DC \pm 10%
- Degree of protection: IP65, when mounted
- Ambient temperature: -20°C ... +50°C
- UL approval
- Height: 54 mm

 Web code: #1798		
Description	Audible element	Audible element
Volume	102 dB(A)	105 dB(A)
Tone type	8 tones selectable via DIP switch	Continuous tone / alternating continuous tone
Type	PSD-S AE SM8-6 102DB/1	PSD-S AE SM2-7 105DB/1
Order No.	2702997	2702998

GB/T DC charging cable

Fast charging according to the new Chinese standard

The DC charging cables for the Chinese market have been adapted to the new standard GB/T 20234.3-2015. The vehicle connector thus features the capability of being able to be locked in the bracket on the charging station. It is thus protected against vandalism, even during pauses between charging.






Your advantages

- ✓ Protection against vandalism, thanks to locking in the bracket
- ✓ Convenient handling, thanks to ergonomic design
- ✓ Safe, thanks to temperature measurement directly at the power contacts
- ✓ Reliable weather protection, thanks to IP54 (with protective cap)
- ✓ Individual design, thanks to the use of your own logo

Main features

- Standard: GB/T 20234.3-2015
- Rated voltage: 750 V
- Color: gray-black
- Cable length: 5 m (additional lengths on request)
- Silver-plated surface of the power and signal contacts
- Low insertion and withdrawal forces

 Web code: #1818		
Description	GB/T DC charging cable	
Rated current	80 A	125 A
Cable diameter	25.5 mm (± 0.4 mm)	29.7 mm (± 0.4 mm)
Type	EV-GBM4C-DC80A-5,0M16ESBK00	EV-GBM4C-DC125A-5,0M35ESBK00
Order No.	1015173	1015174

CCS type 2 DC charging cable

Convenient handling, easy maintenance

The second generation DC charging cables are based on the established CCS standard for fast charging in Europe. The vehicle connector features an even more ergonomic, sophisticated design. Extensive maintenance work is no longer necessary, thanks to the mating face frame being easy to replace.








Your advantages

- ✓ Convenient handling, thanks to improved ergonomic design
- ✓ Flexible charging cable, thanks to optimized conductor cross sections
- ✓ Maintenance-friendly, thanks to replaceable mating face frames
- ✓ Safe, thanks to temperature measurement directly at the power contacts
- ✓ Individual design, thanks to the use of your own logo

Main features

- Standard: IEC 621963
- Rated voltage: 1000 V DC
- Color: gray-black or single color black
- Cable length: 5 m (additional lengths on request)
- Silver-plated surface of the power and signal contacts
- Low insertion and withdrawal forces

 Web code: #1815				
Description	CCS type 2 DC charging cable of the second generation			
Color of the vehicle connector	Gray-black		Single color black	
Rated current	60 A	125 A	60 A	125 A
Cable diameter	21.2 mm (± 0.4 mm)	25.8 mm (± 0.4 mm)	21.2 mm (± 0.4 mm)	25.8 mm (± 0.4 mm)
Type	EV-T2G4CC-DC60A-5,0M16ESBK01	EV-T2G4CC-DC125A-5,0M35ESBK01	EV-T2G4CC-DC60A-5,0M16ESBK11	EV-T2G4CC-DC125A-5,0M35ESBK11
Order No.	1627733	1627734	1044870	1044869

GB/T AC infrastructure socket outlets

Building cost-effective charging stations

AC infrastructure socket outlets for the Chinese market are now available with a cost-effective locking actuator. Thanks to their basic functionality, they satisfy the requirements for secure locking. In accordance with the new GB/T standard, every power contact has integrated temperature sensors.





Your advantages

- ✓ High cost savings, thanks to the basic design of the actuator
- ✓ Safe, thanks to temperature measurement at every power contact
- ✓ Easy design-in, with market-standard installation height and depth
- ✓ Reliable weather protection, thanks to IP54 (with protective cover)
- ✓ Manual unlocking in the event of power failure or error function

Main features

- Standard: GB/T 20234.2-2015
- Color: black
- 3-pos. locking actuator
- Actuator power supply: 12 V
- Suitable for front/rear mounting
- Drainage system with discharge nozzles
- Various protective covers and attachment frames available as options

 Web code: #1814		
Description	GB/T AC infrastructure socket outlet with locking actuator	
Rated current	32 A, 1-phase	32 A, 3-phase
Rated voltage	250 V AC	440 V AC
Type	EV-GBM3SL12-1AC32A-0,7M6,0E10T	EV-GBM3SL12-3AC32A-0,7M6,0E10T
Order No.	1039245	1050941

AC charging controllers with backend integration

All functions in one device

EV Charge Control Advanced Plus combines all relevant controller, communication, and monitoring functions in one compact housing. The AC charging controller is available as an option with integrated 3G modem and OCPP interface, for effortless integration into backend systems of operators.



Your advantages

- ✓ Simple charging station design, thanks to integrated functions
- ✓ Easy integration into backend systems, via OCPP interface
- ✓ Enables the use of a cost-effective type A residual-current operated circuit breaker
- ✓ High availability, thanks to automatic reset in the event of residual currents
- ✓ Automatic connector release in the event of voltage failure

Main features

- Charging in accordance with IEC 61851-1, Mode 3
- Available with 2G/3G modem and OCPP 1.6J as an option
- Residual current monitoring: 6 mA DC
- Connection of power meters and RFID readers via RS-485 (Modbus/RTU)
- Local RFID whitelist for up to 20 users
- Remote access via Ethernet (Modbus/TCP)
- Configuration via web interface

<p>i Web code: #1819</p>		
<p>Description</p>	<p>AC charging controller with extended function scope</p>	
<p>2G/3G modem and OCPP 1.6J</p>	<p>No</p>	<p>Yes</p>
<p>Type</p>	<p>EV-CC-AC1-M3-CBC-RCM-ETH</p>	<p>EV-CC-AC1-M3-CBC-RCM-ETH-3G</p>
<p>Order No.</p>	<p>1018701</p>	<p>1018702</p>

Worldwide service and support: We are there for you

At Phoenix Contact, the focus is always on you, the customer. With 50 subsidiaries and over 30 agencies, we are always close-by. This enables us to provide you with expert first-hand advice and prompt delivery.

We develop special solutions in accordance with your specific requirements. This is made possible by our extensive manufacturing capabilities, combined with the expertise of our developers.



From the initial idea to the tailor-made solution

No matter where you are in the world, we'll provide you with the ideal solution for your application quickly and reliably: a complete package of high-quality, optimally coordinated, and carefully chosen components. Naturally, we are also there for you after your purchase with our comprehensive after-sales services.



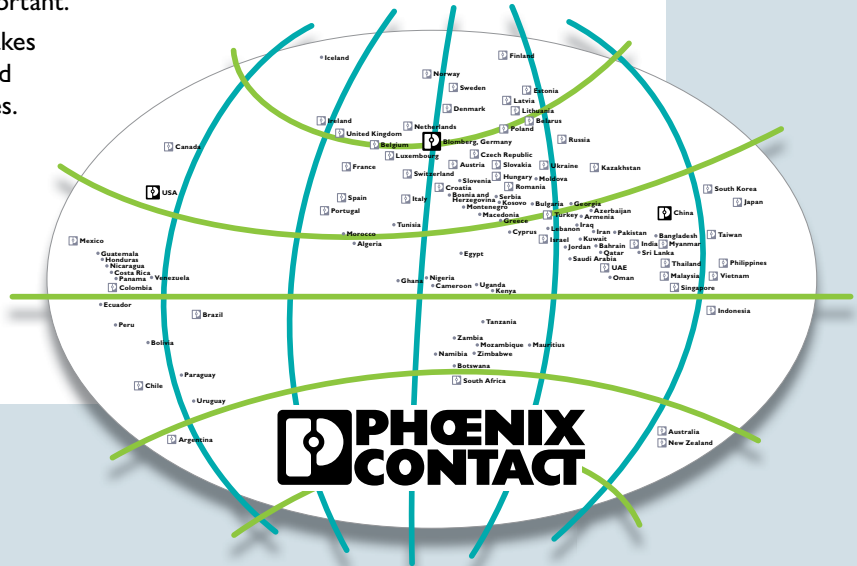
PHOENIX CONTACT



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 15,000 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:
phoenixcontact.com

Also discover the new products for 2018 interactively on your tablet.



PHOENIX CONTACT GmbH & Co. KG
Flachmarktstraße 8
32825 Blomberg, Germany
Phone: +49 52 35 3-00
Fax: +49 52 35 3-4 12 00
E-mail: info@phoenixcontact.com
phoenixcontact.com