



**COMPLETE
CABINET
CONFIDENCE**

BUILD WITH CONFIDENCE



Quick Reference Guide

2024





Build with complete confidence

Phoenix Contact is a global market leader in industrial electronics and automation technologies with a comprehensive product and service offering that ensures the most functional, reliable, innovative, future proof, and cost-effective control cabinet solution.

Partnering with Phoenix Contact ensures an unparalleled offering, consisting of:

- ★ **Lifetime Warranty**
The industry's most comprehensive warranty program, guarantees you long-term reliability of your systems and applications.
- ★ **Price Guarantee**
The perfect combination of price and features.
- ★ **Availability Guarantee**
We help you build effective and efficient systems fast by providing you products right when you need them.
- ★ **E-Platform**
Information at your fingertips enables automatic checking and direct ordering.
- ★ **Industry 4.0/IoT Readiness**
Be ready now and for the future with Phoenix Contact.



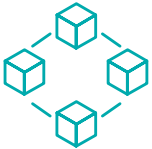
Value-Added Centre

- Order complete solutions fully assembled under a single article number.
- Complete terminal strips assembled, marked and with all accessories installed.
- Ready to install and connect.
- Increase efficiency of procurement and stock management processes.
- A flexible and efficient approach to supply chain management.



Complete DIN-Rail Assembly Design

- Intuitive user interface for configuring terminal strips with intelligent functions such as auto correction, speed marking, or 3D visualisation of projects.
- Professional software for marking of labelling materials for terminal blocks, conductors, cables, devices, and systems.
- Perfect integration, thanks to optimised interfaces to all common CAE programs and spreadsheet formats.
- Equipped with an official template designer which allows users to create their own markings and adapt existing material descriptions.



Complete Product Portfolio

- Optimises control cabinet design and construction.
- Technologically leading products.
- Minimise logistics costs by reducing the variety of parts, thanks to standardised marking, bridging, and testing accessories.

Five Functional Areas

Power Reliability



The heart of your installation, all control systems are dependent on being properly powered and protected. Surge and circuit protection, UPS backup, and redundant power solutions are the foundation on which reliable control systems should be built.

Connectivity, Switching and Conversion



Never take a good connection for granted, the connection of those wires, the switching and/or isolation of the signals are only as reliable as the quality of the terminations and electronics.

Automation, Networks and Safety



From single components to complete integrated systems, Phoenix Contact provides cost-effective, reliable solutions for Industrial networking, Automation and Safety.

Shopfloor Productivity



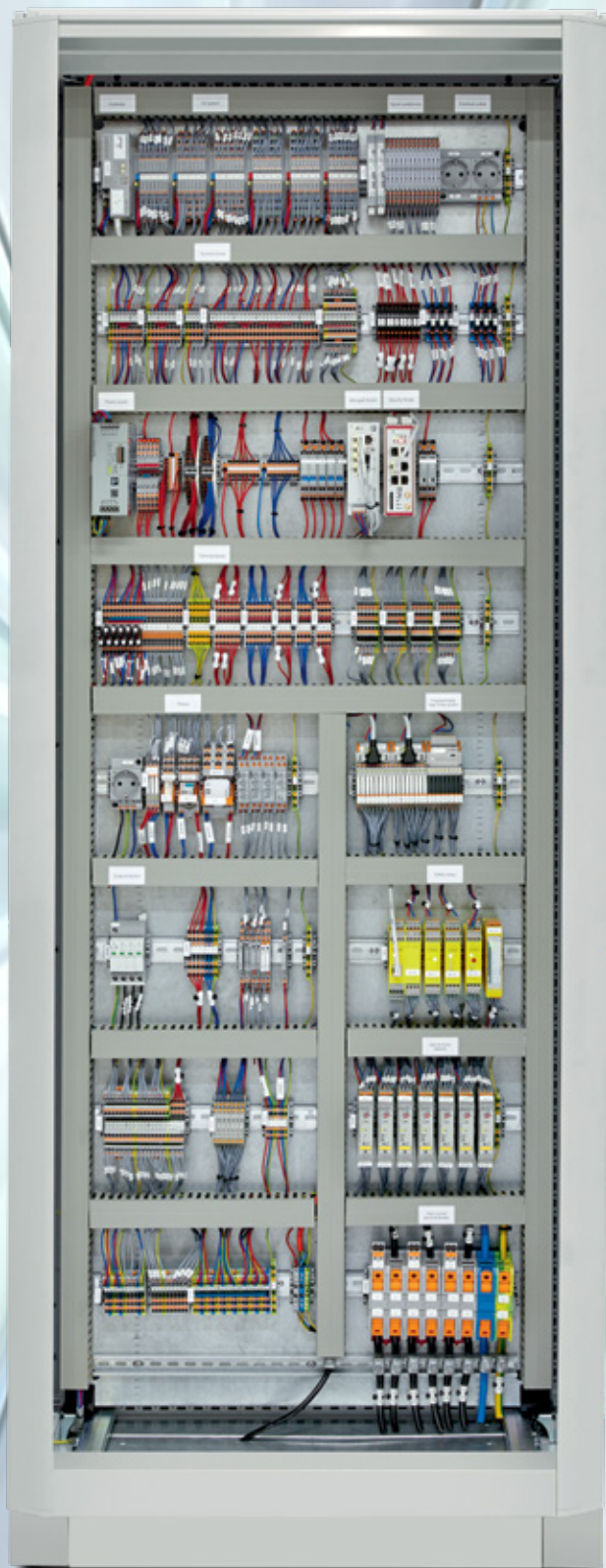
Efficiently building a quality control cabinet starts with what you use to build it. A thoughtful selection of products to reduce cost and save time translates directly to the bottom-line profitability of any shop floor.

Device Connectors



Discover our wide range of new products for the transmission of signals, data, and power. Reliable and cost effective solutions including Circular Connectors, Data ports, Connectors for Energy Storage and many more.

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Device Connectors

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Download:
[Power Reliability Catalogue](#)

Do you need a single-phase or a three-phase power supply?							
What is the output DC voltage?			Basic Functionality: Compact with standard functionality	Standard Functionality: Robust & Reliable with standard functionality	Maximum Functionality: Powerful, and with superior functionality		
What is your output current (Amps)?							
What functionality do you require?							
Have you considered surge protection with a Lifetime Warranty?							
Resulting Phoenix Contact part number							
Phase	Output Voltage	Output Current	Description	Connection Technology	Order #		
1-Phase	5 V DC	3A	STEP3-PS/1AC/5DC/3/PT	Push-in	1170954		
		5A	UNO-PS/1AC/ 5DC/ 25W	Screw	2904374		
		5A	QUINT-4-PS/1AC/5DC/5/PT	Push-in	2904595		
		6.5A	STEP-PS/ 1AC/ 5DC/6.5	Screw	2868541		
		1.3A	STEP3-PS/1AC/12DC/1.3/PT	Push-in	1170952		
	12 V DC	2.5A	STEP3-PS/1AC/12DC/2.5/PT	Push-in	1170953		
		2.5A	UNO-PS/1AC/12DC/ 30W	Screw	2902998		
		2.5A	QUINT4-PS/1AC/12DC/2.5/PT	Push-in	2904605		
		3A	STEP-PS/ 1AC/12DC/3	Screw	2868570		
		5A	STEP-PS/ 1AC/12DC/5	Screw	2868583		
		5A	TRIO-PS-2 G/1AC/12DC/5/C2LPS	Push-in	2903157		
		7.5A	QUINT-4-PS/1AC/12DC/7.5D/PT	Push-in	2904607		
		8.3A	UNO-PS/1AC/12DC/100W	Screw	2902997		
		10A	TRIO-PS-2G/1AC/12DC/10	Push-in	2903158		
		15A	QUINT-4-PS/1AC/12DC/15	Screw	2904608		
		20A	QUINT-PS/1AC/12DC/20	Screw	2866721		
		15 V DC	2.0A	UNO-PS/1AC/15DC/30W	Screw	2903000	
			4.0A	STEP-PS/1AC/15DC/4	Screw	2868619	
			24 V DC	0.63A	STEP3-PS/1AC/24DC/0.63/PT	Push-in	1088495
				1.25A	UNO-PS/1AC/24DC/ 30W	Screw	2902991
	1.3A			STEP3-PS/1AC/24DC/1.3/PT	Push-in	1088494	
	1.3A	QUINT4-PS/1AC/24 DC/1.3/PT		Push-in	2909575		
	1.3A	QUINT4-PS/1AC/24 DC/1.3/SC		Screw	2904597		
	2.5A	STEP3-PS/1AC/24DC/2.5/PT		Push-in	1088491		
	2.5A	UNO-PS/1AC/24DC/ 60W		Screw	2902992		
	2.5A	TRIO-PS/1AC/24 DC/2.5		Push-in	2866268		
	2.5A	QUINT4-PS/1AC/24DC/2.5/PT		Push-in	2909576		
	2.5A	QUINT4-PS/1AC/24DC/2.5/SC		Screw	2904598		
	3A	TRIO-PS-2G/1AC/24DC/3/C2LPS		Push-in	2903147		
	3.125A	PS-EE-2G/1AC/24DC/75W/SC		NEW Screw	1234301		
	3.8A	QUINT4-PS/1AC/24DC/3.8/PT		Push-in	2909577		
	3.8A	QUINT4-PS/1 AC/24 DC/3.8/SC		Screw	2904599		
	4A	STEP3-PS/1AC/24DC/4/PT		Push-in	1140066		
	4.2A	UNO-PS/1AC/24DC/100W		Screw	2902993		
	5A	STEP3-PS/1AC/24DC/5/PT		Push-in	1088478		
	5A	ESSENTIAL-PS/1AC/24DC/120W/EE		Screw	2910586		
	5A	UNO2-PS/1AC/24DC/120W		Screw	1110466		
	5A	TRIO3-PS/1AC/24DC/5		NEW Push-in	1159037		
	5A	QUINT4-PS/1AC/24DC/5	Screw	2904600			
	10A	ESSENTIAL-PS/1AC/24DC/240W/EE	Screw	2910587			
	10A	UNO2-PS/1AC/24DC/240W	Screw	1096432			
	10A	TRIO3-PS/1AC/24DC/10	NEW Push-in	1159038			
	10A	QUINT4-PS/1AC/24DC/10	Screw	2904601			
	20A	ESSENTIAL-PS/1AC/24DC/480W/EE	Screw	2910588			
	20A	UNO2-PS/1AC/24DC/480W	Screw	2910105			
	20A	TRIO3-PS/1AC/24DC/20	Push-in	1159039			
	20A	QUINT4-PS/1AC/24DC/20	Screw	2904602			
	40A	UNO2-PS/1AC/24DC/960W	NEW Screw	1110043			
	40A	QUINT4-PS/1AC/24DC/40	Screw	2904603			
	48 V DC	1.25A	UNO-PS/1AC/48DC/ 60W	Screw	2902995		
		2.1A	UNO-PS/1AC/48DC/100W	Screw	2902996		
		5A	UNO2-PS/1AC/48DC/240W	Screw	1110155		
		5A	TRIO-PS-2G/1AC/48DC/5	Push-in	2903159		
		5A	QUINT4-PS/1AC/48DC/5	Screw	2904610		
		10A	TRIO-PS-2G/1AC/48DC/10	Push-in	2903160		
		10A	QUINT4-PS/1AC/48DC/10	Screw	2904611		
		20A	QUINT4-PS/1AC/48DC/20	Screw	2904612		
		4A	QUINT4-PS/1AC/110DC/4	Screw	2904613		
		110 V DC	4A	QUINT4-PS/1AC/110DC/4	Screw	2904613	
	Phase	Output Voltage	Output Current	Description	Connection Technology	Order #	
3-Phase	24 V DC	5A	TRIO-PS-2G/3AC/24DC/5	Push-in	2903153		
		5A	QUINT4-PS/3AC/24DC/5	Screw	2904620		
		10A	ESSENTIAL-PS/3AC/24DC/240W/EE	Screw	2910588		
		10A	TRIO3-PS/3AC/24DC/10	NEW Push-in	1159042		
		10A	QUINT4-PS/3AC/24 DC/10	Screw	2904621		
		20A	ESSENTIAL-PS/3AC/24DC/480W/EE	Screw	2910588		
		20A	TRIO3-PS/3AC/24DC/20	NEW Push-in	1159044		
		20A	QUINT4-PS/3AC/24DC/20	Screw	2904622		
		20A	ESSENTIAL-PS/3AC/24DC/960W/EE	Screw	2910588		
		40A	TRIO3-PS/3AC/24DC/40	NEW Push-in	1159045		
	40A	QUINT4-PS/3AC/24DC/40	Screw	2904623			
	48 V DC	20A	QUINT4-PS/3AC/48DC/20	Screw	2904627		

QUINT4 Power Supplies



TRIO Power Supplies



UNO Power Supplies



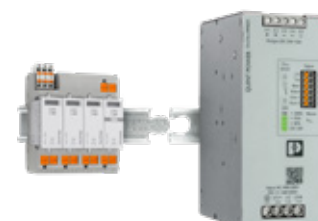
Essential Power Supplies



STEP Power Supplies



The Unbeatable Team!



**LIFETIME
WARRANTY**

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Power supply

DC Input to DC Output



Download:
[Power Supply Solutions Catalogue](#)

What is your Input DC Voltage ?			Standard Functionality: Robust & Reliable with standard functionality	Maximum Functionality: Powerful, and with superior functionality	
What is the output DC voltage?					
What is your output current (Amps)?					
What functionality do you require?					
Have you considered surge protection with a Lifetime Warranty?					
Resulting Phoenix Contact part number					
Input Voltage	Output Voltage	Output Current	Description	Connection Technology	Order #
12-24 V DC	5 -15 V DC	2A	MINI-PS- 12- 24DC/ 5-15DC/2	Screw	2320018
		2.5A	QUINT4-PS/12-24DC/5-15DC/2.5/PT	Push-in	1066704
12 V DC	12 V DC	8A	QUINT-PS/12DC/12DC/8	Screw	2905007
24 V DC	12 V DC	8A	QUINT4-PS/24DC/12DC/8/PT	Push-in	2910122
12-24 V DC	24 V DC	1.3A	QUINT4-PS/12-24DC/24DC/1.3/PT	Push-in	1066716
		1.3A	QUINT4-PS/12-24DC/24DC/1.3/SC	Screw	1066703
		2.5A	QUINT4-PS/12-24DC/24DC/2.5/PT	Push-in	1066714
		2.5A	QUINT4-PS/12-24DC/24DC/2.5/SC	Screw	1066718
12 V DC	24 V DC	5A	QUINT4-PS/12DC/24DC/5/PT	Push-in	2910124
		5A	QUINT-PS/12DC/24DC/ 5	Screw	2320131
24 V DC	24 V DC	5A	QUINT4-PS/24DC/24DC/5/PT	Push-in	2910119
		5A	QUINT4-PS/24DC/24DC/5/SC	Screw	1046800
		10A	QUINT4-PS/24DC/24DC/10/PT	Push-in	2910120
		10A	QUINT4-PS/24DC/24DC/10/SC	Screw	2903158
		20A	QUINT4-PS/24DC/24DC/20/PT	Push-in	2910121
		20A	QUINT4-PS/24DC/24DC/20/SC	Screw	1046805
48-60 V DC	24 V DC	1.0A	MINI-PS- 48- 60DC/24DC/1	Screw	2866271
48-110 V DC	24 V DC	2.5A	QUINT4-PS/48-110DC/24DC/2.5/PT	Push-in	1066708
96-110 V DC	24 V DC	10A	QUINT-PS/96-110DC/24DC/10	Screw	2905010
48 V DC	24 V DC	5A	QUINT-PS/48DC/24DC/ 5	Screw	2320144
		5A	QUINT4-PS/48DC/24DC/5/PT	Push-in	2910125
12-24 V DC	48 V DC	0.7A	MINI-PS- 12- 24DC/48DC/0.7	Screw	2320021
24-48 V DC	48 V DC	2A	QUINT4-PS/24-48DC/48DC/2/PT	Push-in	1098676
		5A	QUINT4-PS/24DC/48DC/5/PT	Push-in	2910123
24 V DC	48 V DC	5A	QUINT-PS/24DC/48DC/ 5	Screw	2320128
		5A	QUINT4-PS/48DC/48DC/5/PT	Push-in	2910128
48 V DC	48 V DC	5A	QUINT-PS/48DC/48DC/5	Screw	2905008

QUINT4 DC-DC Converters



Mini Power DC-DC Converters



DC-DC Converters for Photovoltaics



DC to DC Converters for Photovoltaic Applications					
Input Voltage	Output voltage	Output Current	Description	Connection Technology	Order #
350 - 900 V DC	24 V DC	2.5A	UNO-PS/350-900DC/24DC/60W	Screw	2906300
1500 V DC	24 V DC	1.5A	TRIO-PS-2G/1500DC/24DC/1.5	Push-in	1107892
1500 V DC	24 V DC	8A	TRIO-PS-2G/1500DC/24DC/8	Push-in	1075240

Recommended Surge Protection for LIFETIME WARRANTY

Recommended Surge Protection on Power Supply Input for Lifetime Warranty**						
Phase	Voltage	Max Surge Current (IMAX)	Load Current	Type Description	Connection Technology	Order #
1-phase	230 V AC	10 kA	26A	PLT-SEC-T3-230-FM-PT*	Push-in	2907928
	230 V AC	10 kA	26A	PLT-SEC-T3-230-FM-UT*	Screw	2907919
	230 V AC	40 kA	NA	VAL-MS 230/1+1	Screw	2804429
	230 V AC	40 kA	NA	VAL-MS 230/1+1-FM*	Screw	2804432
3-phase	230/400 V AC	40 kA	NA	VAL-MS 230/3+1-PT	Push-in	1248961
	230/400 V AC	40 kA	NA	VAL-MS 230/3+1 FM-PT*	Push-in	1248960
	230/400 V AC	40 kA	NA	VAL-MS 230/3+1	Screw	2838209
	230/400 V AC	40 kA	NA	VAL-MS 230/3+1-FM*	Screw	2838199

* FM - Remote relay alarm output. ** Go to www.phoenixcontact.com/en-au/au-lifetime-warranty for full details

The Unbeatable Team!



Recommended Surge Protection on Power Supply Input for Lifetime Warranty**						
Power Supply Input Voltage	Voltage	Max Surge Current (IMAX)	Load Current	Type Description	Connection Technology	Order #
48-110 V DC	120 V AC / DC	10 kA	26A	PLT-SEC-T3-120-FM-PT*	Push-in	2907927
	120 V AC / DC	10 kA	26A	PLT-SEC-T3-120-FM-UT*	Screw	2907918
48 V DC	60 V AC / DC	4 kA	26A	PLT-SEC-T3-60-FM-PT*	Push-in	2907926
	60 V AC / DC	4 kA	26A	PLT-SEC-T3-60-FM-UT*	Screw	2907917
12-24 V DC	24 V AC / DC	4 kA	26A	PLT-SEC-T3-24-FM-PT*	Push-in	2907925
	24 V AC / DC	4 kA	26A	PLT-SEC-T3-24-FM-UT*	Screw	2907916
	24 V DC	1 kA (In)	6A	TTC-6P-T3-24DC-PT-I	Push-in	1027586
	24 V DC	1 kA (In)	6A	TTC-6P-T3-24DC-UT-I	Screw	1027584

* FM - Remote relay alarm output. ** Go to www.phoenixcontact.com/en-au/au-lifetime-warranty for full details



LIFETIME WARRANTY

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COMPLETE CABINET CONFIDENCE

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Redundancy

For maximum operational safety. To prevent failures and downtime of complex applications, redundant power supply solutions are necessary. Two power supplies connected in parallel can be decoupled with either active or passive redundancy modules.



Monitored
Not Monitored

QUINT SINGLE-ORING active redundancy module (S-ORING)

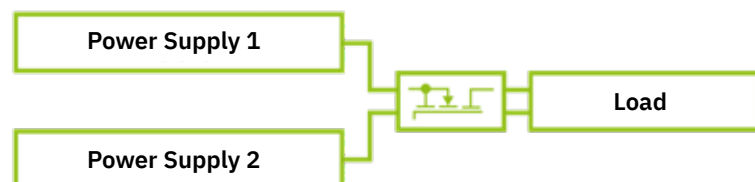
Fully monitored single channel MOSFET technology redundancy.



Nominal Input-Output Voltage	Input Current	Output Current	Description	OVP Limit	Order #	
12-24 V DC	1 x 40A	1 x 40A	QUINT4-S-ORING/12-24DC/1X40	Standard	2907752	
12-24 V DC	1 x 40A	1 x 40A	QUINT4-S-ORING/12-24DC/1X40/VP	<30 V DC	1043418	
12-24 V DC	1 x 40A	1 x 40A	QUINT4-S-ORING/12-24DC/1X40/+	<28.8 V DC	2907753	

QUINT ORING active redundancy module with ACB Technology

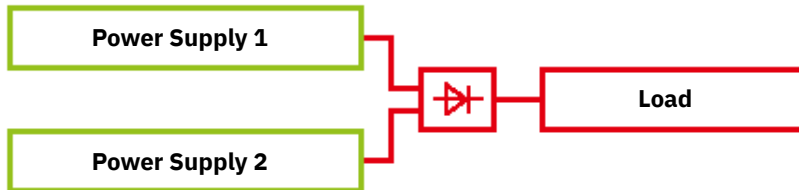
Fully-monitored dual channel MOSFET technology with Auto Current Balancing - doubling the service life of your power supplies.



Nominal Input-Output Voltage	Input Current	Output Current	Description	Order #	
12-24 V DC	2 x 10A	2 x 10A (Redundancy) 1 x 20A (Increased Power)	QUINT4-ORING/12-24DC/2X10/2X10	1088206	
12-24 V DC	2 x 20A	2 x 20A (Redundancy) 1 x 40A (Increased Power)	QUINT4-ORING/12-24DC/2X20/2X20	1088207	
18-24 V DC	2 x 40A	2 x 40A (Redundancy) 1 x 80A (Increased Power)	QUINT-ORING/24DC/2X40/1X80	2902879	

Redundancy

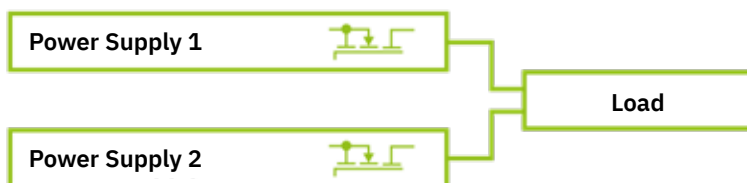
Passive Redundancy modules: choose from **QUINT**, **TRIO**, **UNO**, or **STEP POWER** Diodes for easy decoupling. Rugged and reliable DIODE technology from 5 to 48V DC.



Nominal Input-Output Voltage	Input Current	Output Current	Description	Order #	
12-24 V DC	2 x 20A	2 x 20A (Redundancy) 1 x 40A (Increased Power)	QUINT4-DIODE/12-24DC/2X20/1X40	2907719	
48 V DC	2 x 20A	2 x 20A (Redundancy) 1 x 40A (Increased Power)	QUINT4-DIODE/48DC/2X20/1X40	2907720	
12-24 V DC	2 x 20A	2 x 20A (Redundancy) 1 x 40A (Increased Power)	TRIO2-DIODE/12-24DC/2X20/1X40	2907379	
12-24 V DC	2 x 10A	2 x 10A (Redundancy) 1 x 20A (Increased Power)	TRIO2-DIODE/12-24DC/2X10/1X20	2907380	
5-24 V DC	2 x 10A	2 x 10A (Redundancy) 1 x 20A (Increased Power)	UNO-DIODE/5-24DC/2X10/1X20	2905489	
5-24 V DC	2 x 5A	2 x 5A (Redundancy) 1 x 10A (Increased Power)	STEP-DIODE/5-24DC/2X5/1X10	2868606	

QUINT POWER Plus with inbuilt Active redundancy

Fully-monitored single channel MOSFET technology built into the QUINT4 Power Supply - as well as double over-voltage protection (OVP), protective coating, Ex-rated and SIL3 rated and extreme temperature range.



Nominal Input-Output Voltage	Output Voltage	Output Current	Description	OVP Limit	Order #	
1 Phase / 230V AC	24 V DC	10A	QUINT4-PS/1AC/24DC/10/+	<30 V DC	2904616	
		20A	QUINT4-PS/1AC/24DC/20/+	<30 V DC	2904617	
		40A	QUINT4-PS/1AC/24DC/40/+	<30 V DC	2904618	
24 V DC	24 V DC	20A	QUINT4-PS/24DC/24DC/20/SC/+	<30 V DC	1046881	





Power Reliability

Uninterruptible Power Supplies (UPS)

DC power For critical applications, uninterruptible power supplies (UPS) can provide a lifeline to keep your system up and running.



+ UPS module

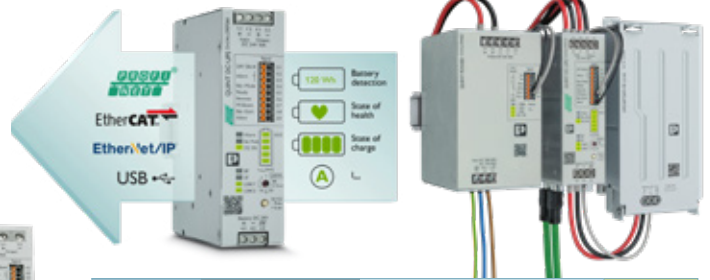
Selected based on output requirements

DC QUINT Power Supply

Select UPS Type (Comms)

What Input-Output Voltage / Amps?

Comms	Input/Output/Amps	Description	Order #
None	24DC/24DC/5A	QUINT4-UPS/24DC/24DC/5	2906990
None	24DC/24VDC/10A	QUINT4-UPS/24DC/24DC/10	2907066
None	24DC/24VDC/20A	QUINT4-UPS/24DC/24DC/20	2907071
None	24DC/24VDC/40A	QUINT4-UPS/24DC/24DC/40	2907077
USB	24DC/24DC/5A	QUINT4-UPS/24DC/24DC/5/USB	2906991
USB	24DC/24VDC/10A	QUINT4-UPS/24DC/24DC/10/USB	2907067
USB	24DC/24VDC/20A	QUINT4-UPS/24DC/24DC/20/USB	2907072
USB	24DC/24VDC/40A	QUINT4-UPS/24DC/24DC/40/USB	2907078
ETHERNET IP	24DC/24DC/5A	QUINT4-UPS/24DC/24DC/5/EIP	2906994
ETHERNET IP	24DC/24VDC/10A	QUINT4-UPS/24DC/24DC/10/EIP	2907069
ETHERNET IP	24DC/24VDC/20A	QUINT4-UPS/24DC/24DC/20/EIP	2907074
ETHERNET IP	24DC/24VDC/40A	QUINT4-UPS/24DC/24DC/40/EIP	2907080



Comms	Input/Output/Amps	Description	Order #
PROFINET	24DC/24DC/5A	QUINT4-UPS/24DC/24DC/5/PN	2906993
PROFINET	24DC/24VDC/10A	QUINT4-UPS/24DC/24DC/10/PN	2907068
PROFINET	24DC/24VDC/20A	QUINT4-UPS/24DC/24DC/20/PN	2907073
PROFINET	24DC/24VDC/40A	QUINT4-UPS/24DC/24DC/40/PN	2907079
ETHERCAT	24DC/24DC/5A	QUINT4-UPS/24DC/24DC/5/EC	2906996
ETHERCAT	24DC/24VDC/10A	QUINT4-UPS/24DC/24DC/10/EC	2907070
ETHERCAT	24DC/24VDC/20A	QUINT4-UPS/24DC/24DC/20/EC	2907076
ETHERCAT	24DC/24VDC/40A	QUINT4-UPS/24DC/24DC/40/EC	2907081

USB



EtherNet/IP

PROFINET

EtherCAT

QUINT4 - BATTERY CHARGER			Order #
Input/Output/Amps	Description		
230 V AC IN / 24 V DC OUT / 10A	QUINT4-CHARGER/1AC/24DC/10	NEW	2907990

UPS Energy Storage Selection Guides

	UPS-BAT/PB						
W x H x D in mm	54 x 157 x 113	85 x 191 x 110	135 x 202 x 110	202 x 202 x 110	155 x 168 x 183	333 x 173 x 199	350 x 214 x 332
Capacity	1.2 Ah	4 Ah	7 Ah	12 Ah	20 Ah	40 Ah	110 Ah
Type	UPS-BAT/PB/24DC/1.2AH	UPS-BAT/PB/24DC/4AH	UPS-BAT/PB/24DC/7AH	UPS-BAT/PB/24DC/12AH	UPS-BAT/PB/24DC/20AH	UPS-BAT/PB/24DC/40AH	UPS-BAT/PB/24DC/110AH
Order #	1274520	1274117	1274118	1274119	1348516	1354641	1474660

Buffer times for your QUINT DC UPS with the following PB energy storage devices:

Select your energy storage device for 24 V DC applications here. Example: 7 A is to be buffered for one hour.



QUINT4-UPS/24DC/24DC/10A and UPS-BAT/PB/24DC/12AH



Load Current	Buffer Time																			
	Seconds										Minutes									
	10	15	30	1	2	3	5	6	7	8	9	10	20	30	40	45	50	1	2	3
1 A																				
2 A																				
3 A																				
5 A																				
7 A																				
10 A																				
15 A																				
20 A																				
25 A																				
30 A																				
35 A																				
40 A																				

1+1: Two energy storage devices of the same capacity are required in this case. The data is based on an ambient temperature of +20°C.



Download:
[Power Supply Solutions Catalogue](#)

UPS Energy Storage Selection Guides (DC UPS Continued)

	UPS-BAT/LI-ION	UPS-BAT/VRLA-WTR	
			
W x H x D in mm	135 x 202 x 110	172 x 177 x 178	358 x 174 x 169
Capacity	128 Wh	13 Ah	26 Ah
Type	UPS-BAT/LI/24DC/128WH	UPS-BAT/VRLA-WTR/24DC/13AH	UPS-BAT/VRLA-WTR/24DC/26AH
Order #	1396415	2320416	2320429

Buffer times for your QUINT DC UPS with the following energy storage devices: LI-ION and VRLA-WTR

Select your energy storage device for 24 V DC applications here. Example: 20 A is to be buffered for 6 minutes.

→ 
→  QUINT4-UPS/24DC/24DC/20A and
UPS-BAT/LI-ION/24DC/128WH

Load Current	Buffer Time																									
	Seconds						Minutes														Hours					
	10	15	30	1	2	3	5	6	7	8	9	10	20	30	40	45	50	1	2	3	5	8	10	15	20	
1 A																										
2 A																										
3 A																										
5 A																										
7 A																										
10 A																										
15 A																										
20 A																										
25 A																										
30 A																										
35 A																										
40 A																										

1+1: Two energy storage devices of the same capacity are required in this case.
The data is based on an ambient temperature of +20°C.

DC UPS with Integrated Power Supply

Power supply	+ UPS module
AC-to-DC, DC-to-DC power supplies and UPS	Selected based on output requirements

Phase	Output Voltage	Output Current	Description	Applicable Battery Size	Comms	Order #
1-Phase	24 VDC	5A	TRIO-UPS-2G/1AC/24DC/5	1.2 to 12 Ah	USB	2907160
		10A	TRIO-UPS-2G/1AC/24DC/10	1.2 to 40Ah	USB	2907161
		20A	TRIO-UPS-2G/1AC/v24DC/20	4 to 40 Ah	USB	1105556
3-Phase		20A	TRIO-UPS-2G/3AC/24DC/20	4 to 40Ah	USB	2906367



Buffer times for your TRIO DC UPS with the following PB energy storage devices:

Select your energy storage device for your TRIO DC UPS here. Example: 10 A is to be buffered for 10 minutes.

→ 
→  TRIO-UPS-2G/1AC/24DC/10 and UPS-BAT/
PB/24DC/4AH

Load Current	Buffer Time																									
	Seconds			Minutes															Hours							
	10	15	30	1	2	3	5	6	7	8	9	10	20	30	40	45	50	1	2	3	5	8	10	15	20	
1 A																										
2 A																										
3 A																										
5 A																										
7 A																										
10 A																										
15 A																										
20 A																										

The data is based on an ambient temperature of +20°C.



Uninterruptible Power Supplies (UPS)

Note: Can be connected in parallel for 2kVA Capacity. (See manual for details)

Power Reliability

AC Power - 1 kVA Capacity - ONLINE UPS. For use with AC QUINT power supply

Select UPS

What input voltage?

What output power/current?

QUINT UPS

QUINT IQ Technology

State of Charge: Describes current charging state and remaining runtime

State of Health: Provides information on the energy storage device life expectancy

Input Voltage	Output	Description	Order #
120 V AC/230 V AC	120 V AC/230 V AC - 1 kV A	QUINT4-UPS/1 AC/1 AC/1 kV A	2320283

What type of energy-storage device: VRLA, CAP, or LI-ION?

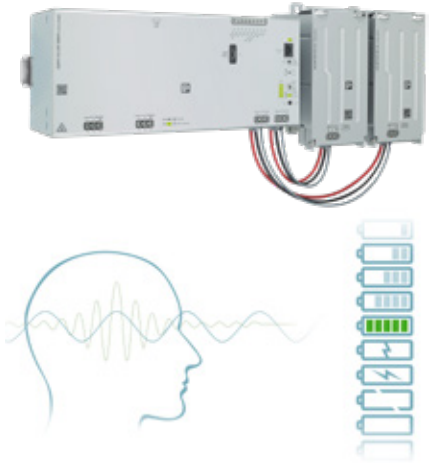
How much current does the battery need to supply the system and for how long? See chart below.

Energy-storage type

VRLA

UPS-BAT/PB

	4 Ah	7 Ah	12 Ah	20 Ah	40 Ah	110 Ah
W x H x D in mm	85 x 191 x 110	135 x 202 x 110	202 x 202 x 110	155 x 168 x 183	333 x 173 x 199	350 x 214 x 332
Capacity	4 Ah	7 Ah	12 Ah	20 Ah	40 Ah	110 Ah
Type	UPS-BAT/PB/ 24DC/4AH	UPS-BAT/PB/ 24DC/7AH	UPS-BAT/PB/ 24DC/12AH	UPS-BAT/PB/ 24DC/20AH	UPS-BAT/PB/ 24DC/40AH	UPS-BAT/PB/ 24DC/110AH
Order #	1274117	1274118	1274119	1348516	1354641	1474660



Buffer times for your QUINT AC UPS/1KVA with the following PB energy storage devices:

Select your energy storage device for your QUINT AC UPS/1KVA (120/230V application) here.

Example: 400 W needs to be buffered for 50 minutes:

1+1
QUINT4-UPS/1AC/1AC/1KVA and
2 x UPS-BAT/PB/24DC/12AH

Performance	Buffer Time																	
	Minutes														Hours			
	2	3	4	5	8	10	15	20	25	30	40	50	1	1.5	2	3	4	6
100 W	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1
200 W	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1
300 W	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1
400 W	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1
500 W	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1
600 W	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1
700 W	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1
800 W	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1
900 W	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1

1+1: For the QUINT AC UPS/1KVA, two energy storage devices of the same capacity are always required. The data is based on an ambient temperature of +20°C.

	UPS-BAT/LI-ION	UPS-BAT/VRLA-WTR
W x H x D in mm	135 x 202 x 110	172 x 177 x 178
Capacity	128 Wh	13 Ah
Type	UPS-BAT/LI-ION/ 24DC/128WH	UPS-BAT/VRLA-WTR/ 24DC/13AH
Order #	2320351	2320416

358 x 174 x 169	26 Ah	UPS-BAT/VRLA-WTR/ 24DC/26AH	2320429
-----------------	-------	--------------------------------	---------

Buffer times for your QUINT AC UPS/1KVA with the following energy storage devices: LI-ION and VRLA-WTR

Select your energy storage device for your QUINT AC UPS/1KVA (120 / 230 V application) here. Example: 400 W is to be buffered for three hours.

1+1
QUINT4-UPS/1AC/1AC/1KVA and
2 x UPS-BAT/LI-ION/24DC/924WH

Performance	Buffer Time																	
	Minutes														Hours			
	2	3	4	5	8	10	15	20	25	30	40	50	1	1.5	2	3	4	6
100 W	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1
200 W	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1
300 W	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1
400 W	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1
500 W	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1
600 W	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1
700 W	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1
800 W	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1
900 W	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1

1+1: For the QUINT AC UPS/1KVA, two energy storage devices of the same capacity are always required. The data is based on an ambient temperature of +20°C.



Power Reliability



Download:
[Power Supply
Solutions Catalogue](#)

AC Power - 500 VA Capacity - OFFLINE UPS. For use with AC QUINT Power Supply			
Select UPS			
What input voltage?			
What output power/current?			
QUINT UPS			
QUINT IQ Technology			
State of Charge: Describes current charging state and remaining runtime			
State of Health: Provides information on the energy-storage device life expectancy			
Input Voltage	Output	Description	Order #
120 V AC/230 V AC	120 V AC/230 V AC - 400 W/500 V A	QUINT4-UPS/1AC/1AC/500VA/USB	1067327
+			
What type of energy-storage device: VRLA, CAP, or LI-ION?			
How much current does the battery need to supply the system and for how long? See chart below.			
Energy-Storage Type			
VRLA			



Buffer times for your QUINT AC UPS/500VA with the following PB energy storage devices:

Select your energy storage device for your QUINT AC UPS/500VA (120 / 230 V application) here. Example: 125 is to be buffered for one hour.

→ QUINT4-UPS/1AC/1AC/500VA/USB and UPS-BAT/VRLA/24DC/20AH

Performance	Buffer Time																											
	Seconds								Minutes										Hours									
	0.2	0.4	2	8	15	20	40	1	2	3	5	10	20	30	40	45	50	1	2	3	5	8	10	15	20			
15 W																												
35 W																												
55 W																												
90 W																												
125 W																												
180 W																												
275 W																												
400 W																												

1+1: Two energy storage devices of the same capacity are required in this case. The data is based on an ambient temperature of +20°C.

Buffer times for your QUINT AC UPS/500VA with the following energy storage devices: LI-ION, and VRLA-WTR

Select your energy storage device for your QUINT AC UPS/500VA (120 / 230 V application) here. Example: 125 W is to be buffered for one hour.

→ QUINT4-UPS/1AC/1AC/500VA/USB and UPS-BAT/VRLA-WTR/24DC/26AH

Performance	Buffer Time																								
	Seconds								Minutes										Hours						
	0.2	0.4	2	8	15	20	40	1	2	3	5	10	20	30	40	45	50	1	2	3	5	8	10	15	20
15 W																									
35 W																									
55 W																									
90 W																									
125 W																									
180 W																									
275 W																									
400 W																									

1+1: Two energy storage devices of the same capacity are required in this case. The data is based on an ambient temperature of +20°C.

AC Power - 750 VA Capacity - OFFLINE UPS with Internal 4AH UPS Battery

For use with AC QUINT Power Supply			
Select UPS			
What input voltage?			
What output power/current?			
TRIO UPS 1 Phase with USB Interface			
TRIO AC UPS with INCLUDED 4AH UPS Battery (Additional External 4AH UPS Battery may also be added for increased capacity)			
Input Voltage	Output	Description	Order #
98 - 138 VAC	120 V AC / 750 VA	TRIO-UPS-2G/1AC/1AC/120V/750VA	2905908
184 - 264 VAC	230 V AC / 750VA	TRIO-UPS-2G/1AC/1AC/230V/750VA	2905909
+			
Additional optional 4AH UPS-BAT/PB/24DC/4AH (1274117) External UPS Battery if required			



How much current does the battery need to supply the system and for how long? See chart below.

Buffer times for TRIO AC UPS:

1+1: An additional energy storage device of the same capacity (4 Ah) of type UPS-BAT/PB/24DC/4AH (1274117) is required in this case

Performance	Buffer Time													
	Minutes										Hours			
	1	1.5	2	4	6	8	10	15	20	30	40	50	1	1.5
50 W														
100 W														
150 W														
200 W														
250 W														
300 W														
400 W														
500 W														
600 W														

Surge Protection - Power

FLT-SEC Series

FLT-MB Carbon Spark Gap series

NEW

VAL-MS 100kA Series

PLT-SEC-T3 Series



Network Type		Voltage	AS/NZS 1768		Category		Surge Protection Device		Relay Alarm Output	Order #
			C	B	A	+ FUSE	Description	Features		
3-Phase	N / E Separated  TN-S / TT	230V / 400V	✓	✓	✓		FLT-MB-T1-264/25-3+1-UT-R	Iimp = 25kA Carbon Spark Gap	✓	1461304
			✓	✓			FLT-SEC-P-T1-3S-264/50-FM	Iimp = 50kA	✓	2909589
			✓	✓		✓	FLT-SEC-H-T1-3C-264/25-FM	Inbuilt SPD Fuse	✓	2905871
							FLT-SEC-P-T1-N/PE-350/100-FM	ADD N-E SPD Module	✓	2905472
			✓	✓			FLT-SEC-P-T1-3S-350/25-FM	Iimp = 25kA / Imax = 100kA	✓	2905421
			✓	✓			FLT-SEC-T1+T2-3S-350/25-FM	T1 and T2 Special SPD	✓	2905470
			✓	✓			VAL-MS-3+1-100-320-A	Imax = 100kA	✓	1274064
			✓	✓			VAL-ME-3+1-100-275-A	Imax = 100kA	✓	1106017
			✓	✓	✓		VAL-MS-3+1-50-275-A	Imax = 50kA	✓	1105734
			✓	✓	✓		VAL-SEC-T2-3S-350-FM	Imax = 40kA / Small Size	✓	2905340
			✓	✓	✓		VAL-MS 230/3+1 FM-PT	Imax = 40kA / Push-in	✓	1248960
			✓	✓	✓		VAL-MS 230/3+1	Imax = 40kA / Low Price		2838209
3-Phase	N-E Combined (MEN)  TN-C	230V / 400V	✓	✓	✓		FLT-MB-T1-264/25-3+1-UT-R	Iimp = 25kA Carbon Spark Gap	✓	1461302
			✓	✓			FLT-SEC-P-T1-3C-264/50-FM	Iimp = 50kA	✓	2907390
			✓	✓		✓	FLT-SEC-H-T1-3C-264/25-FM	Inbuilt SPD Fuse	✓	2905871
			✓	✓			FLT-SEC-P-T1-3C-350/25-FM	Iimp = 25kA / Imax = 100kA	✓	2905419
			✓	✓			FLT-SEC-T1+T2-3C-350/25-FM	T1 and T2 Special SPD	✓	2905469
			✓	✓			VAL-MS-3-100-320-A	Imax = 100kA	✓	1274066
			✓	✓	✓		VAL-MS-3-50-275-A	Imax = 50kA	✓	1105739
			✓	✓	✓		VAL-SEC-T2-3C-350-FM	Imax = 40kA / Small Size	✓	2905339
			✓	✓	✓		VAL-MS 320/3+0	Imax = 40kA / Low Price		2920230
1-Phase	N / E Separated  TN-S / TT	230V	✓		✓		FLT-MB-T1-264/25-1+1-UT-R	Iimp = 25kA Carbon Spark Gap	✓	1461300
			✓	✓			FLT-SEC-P-T1-1S-264/50-FM	Iimp = 50kA	✓	2907388
			✓	✓		✓	FLT-SEC-H-T1-1C-264/25-FM	Inbuilt SPD Fuse	✓	2801615
							FLT-SEC-P-T1-N/PE-350/100-FM	ADD N-E SPD Module	✓	2905472
			✓	✓			FLT-SEC-P-T1-1S-350/25-FM	Iimp = 25kA / Imax = 100kA	✓	2905415
			✓	✓			FLT-SEC-T1+T2-1S-350/25-FM	T1 and T2 Special SPD	✓	2905466
			✓	✓			VAL-MS-1+1-100-320-A	Imax = 100kA	✓	1274067
			✓	✓	✓		VAL-MS-1+1-50-275-A	Imax = 50kA	✓	1105737
			✓	✓	✓		VAL-SEC-T2-1S-350-FM	Imax = 40kA / Small Size	✓	2905341
			✓	✓	✓		VAL-MS 230/1+1	Imax = 40kA / Low Price		2804429
				✓	✓		PLT-SEC-T3-230-FM-PT	Push-in Terminals	✓	2907928
				✓	✓		PLT-SEC-T3-230-FM-UT	Screw Terminals	✓	2907919
					✓		SFP 1-20/230AC	EMC Filter plus Surge Protection	✓	2859987
1-Phase	N-E Combined (MEN)  TN-C	230V	✓				FLT-SEC-P-T1-1C-264/50-FM	Iimp = 50kA	✓	2907387
			✓	✓		✓	FLT-SEC-H-T1-1C-264/25-FM	Inbuilt SPD FUSE	✓	2801615
			✓	✓			FLT-SEC-P-T1-1C-350/25-FM	Imax = 100kA	✓	2905414
			✓	✓			FLT-SEC-T1+T2-1C-350/25-FM	Special T1 & T2	✓	2905465
			✓	✓			VAL-MS-1-100-320-A	Imax = 100kA	✓	1274072
			✓	✓	✓		VAL-MS-1-50-275-A	Imax = 50kA	✓	1105740
			✓	✓	✓		VAL-MS 230	Imax = 40kA / Low Price	✓	2839127
DC	24VDC +/-GND	24V DC			✓		PLT-SEC-T3-24-FM-PT	Push-in 26A	✓	2907925
					✓		PLT-SEC-T3-24-FM-UT	Screw-in 26A	✓	2907916
					✓		TTC-6P-T3-24DC-PT-I	Push-in 6A	OPT.	1027586
					✓		TTC-6P-T3-24DC-UT-I	Screw-in 6A	OPT.	1027584



ImpulseCheck - Surge Transient measurement and SPD remote monitoring device			
IPCH-4X-PCL-TCP-24DC-UT	Surge Measure and Record	✓	1045379
Sensor - IPCH-SC-1.5	1.5M Sensor for ImpulseCheck		1045379
Sensor - IPCH-SC-3.0	3.0M Sensor for ImpulseCheck		1069191



i Learn more:
[MCR Configurator](#)

i Download:
[Surge Protection Catalogue](#)

What type of signal? Floating (e.g., Analogue 4-20mA / 0-10V / Relay etc), Common Reference (e.g., Digital), Antenna, or Data											
Do you require a Push-in, Screw, RJ45, or D-Sub (9 pin) connection?					What is the Voltage or Frequency - Data Rate you require?						
What is the Voltage or Frequency - Data Rate you require?					What width do you require?		Do you need a Direct or Floating (Indirect) Ground?				
Pluggable or Non-Pluggable SPD?			Do you require SPD monitoring ? None, Local, or Remote (Single or Dual Stage)?					Resulting Phoenix Contact part number			
Plugtrab (PT-IQ)											
Signal	Connection	Voltage	Type	Width (mm)	Ground	Design	Monitoring	Description	Order #	Plugtrab (PT-IQ)	
MASTER (Mandatory)	Screw	20-30 VDC	MASTER	17.7mm	N/A	Pluggable	Remote 2 Stage	PT-IQ-PTB-UT	2800768		
	Push-in			17.7mm		Pluggable	Remote 2 Stage	PT-IQ-PTB-PT	2801296		
Floating (Analogue / Loop / Relay Contact)	Screw	12 VDC	2X2	17.7mm	Floating	Pluggable	Remote 2 Stage	PT-IQ-2X2+F-12DC-UT	2800985		
		24 VDC		17.7mm	Direct	Pluggable	Remote 2 Stage	PT-IQ-2X2-24DC-UT	2800980		
		24 VDC		17.7mm	Floating	Pluggable	Remote 2 Stage	PT-IQ-2X2+F-24DC-UT	2801264		
	Push-in	24 VDC	2X2	17.7mm	Direct	Pluggable	Remote 2 Stage	PT-IQ-2X2-24DC-PT	2801263		
		24 VDC		17.7mm	Floating	Pluggable	Remote 2 Stage	PT-IQ-2X2+F-24DC-PT	2801263		
		48 VDC		17.7mm	Floating	Pluggable	Remote 2 Stage	PT-IQ-2X2+F-48DC-PT	2801266		
Common Reference (Digital)	Screw	24 VDC	2X1	17.7mm	Direct	Pluggable	Remote 2 Stage	PT-IQ-2X1-24DC-UT	2800787		
		24 VDC		17.7mm	Direct	Pluggable	Remote 2 Stage	PT-IQ-4X1-24DC-UT	2800982		
		24 VDC	4X1	17.7mm	Floating	Pluggable	Remote 2 Stage	PT-IQ-4X1+F-24DC-UT	2801264		
		48 VDC		17.7mm	Direct	Pluggable	Remote 2 Stage	PT-IQ-4X1-48DC-UT	2801219		
	Push-in	24 VDC	2X1	17.7mm	Direct	Pluggable	Remote 2 Stage	PT-IQ-2X1-24DC-PT	2801247		
		24 VDC		17.7mm	Direct	Pluggable	Remote 2 Stage	PT-IQ-4X1-24DC-PT	2801271		
		24 VDC	4X1	17.7mm	Floating	Pluggable	Remote 2 Stage	PT-IQ-4X1+F-24DC-PT	2801272		
		48 VDC		17.7mm	Floating	Pluggable	Remote 2 Stage	PT-IQ-4X1+F-48DC-PT	2801274		
Data	Screw	5 VDC	5-HF	17.7mm	Direct	Pluggable	Remote 2 Stage	PT-IQ-5-HF-5DC-UT	2800797		
		12 VDC		17.7mm	Floating	Pluggable	Remote 2 Stage	PT-IQ-5-HF+F-12DC-UT	2800801		
		12 VDC		17.7mm	Floating	Pluggable	Remote 2 Stage	PT-IQ-3-HF+F-12DC-PT	2801289		
	Push-in	12 VDC	5-HF	17.7mm	Direct	Pluggable	Remote 2 Stage	PT-IQ-5-HF-12DC-PT	2801293		
		12 VDC		17.7mm	Floating	Pluggable	Remote 2 Stage	PT-IQ-5-HF+F-12DC-PT	2801295		
		TERMITRAB Complete (TTC)									
Signal	Connection	Voltage	Type	Width	Ground	Design	Monitoring	Description	Order #		TERMITRAB Complete (TTC)
Optional Remote Signalling Set	Screw	10-36 VDC	FMRS	6.2mm x 2	Direct	NA	Remote Relay	TTC-6-FMRS-UT	2907811		
	Push-in			6.2mm x 2		NA	Remote Relay	TTC-6-FMRS-PT	2907811		
Floating (Analogue / Loop / Relay Contact)	Screw	12 VDC	1X2	6.2mm	Direct	Pluggable	Local (Flag)	TTC-6P-1X2-12DC-UT-I	2908192		
		24 VDC	1X2	6.2mm	Direct	Non-Pluggable	None	TTC-6-1X2-24DC-UT	2906798		
		24 VDC	1X2	6.2mm	Direct	Pluggable	Local (Flag)	TTC-6P-1X2-24DC-UT-I	2906809		
		24 VDC	1X2	6.2mm	Floating	Pluggable	Local (Flag)	TTC-6P-1X2-F-24DC-UT-I	1065317		
		48 VDC	1X2	6.2mm	Direct	Pluggable	Local (Flag)	TTC-6P-1X2-48DC-UT-I	2908194		
	Push-in	5 VDC	3	6.2mm	Direct	Pluggable	Local (Flag)	TTC-6P-3-5DC-PT-I	1061385		
		12 VDC	1X2	6.2mm	Direct	Pluggable	Local (Flag)	TTC-6P-1X2-12DC-PT-I	2908193		
		24 VDC	1X2	3mm	Direct	Non-Pluggable	None	TTC-3-1X2-24DC-PT	2907325		
		24 VDC	1X2	6.2mm	Floating	Pluggable	Local (Flag)	TTC-6P-1X2-F-24DC-PT-I	1065318		
		24VDC	2X2	6.2mm	Direct	Pluggable	Local (Flag)	TTC-6P-2X2-24-PT-I	NEW 1334595		
Common Reference (Digital)	Screw	48 VDC	1X2	6.2mm	Direct	Pluggable	Local (Flag)	TTC-6P-1X2-48DC-PT-I	2908195		
		12 VDC	2X1	6.2mm	Direct	Pluggable	Local (Flag)	TTC-6P-2X1-12DC-UT-I	2908201		
		24 VDC	2X1	6.2mm	Direct	Pluggable	Local (Flag)	TTC-6P-2X1-24DC-UT-I	2906810		
		24 VDC	2X1	6.2mm	Floating	Pluggable	Local (Flag)	TTC-6P-2X1-F-24DC-UT-I	1065319		
		48 VDC	2X1	6.2mm	Floating	Pluggable	Local (Flag)	TTC-6P-2X1-F-48DC-UT-I	2908208		
	Push-in	24 VDC	2X1	3mm	Direct	Non-Pluggable	None	TTC-3-2X1-24DC-PT	2907326		
		24 VDC	2X1	6.2mm	Floating	Pluggable	Local (Flag)	TTC-6P-2X1-F-M-24DC-PT-I	2906794		
		24 VDC	4X1	6.2mm	Direct	Pluggable	Local (Flag)	TTC-6P-4X1-24-PT-I	NEW 1334594		
		48 VDC	2X1	6.2mm	Direct	Pluggable	Local (Flag)	TTC-6P-2X1-48DC-PT-I	2908204		
		12 VDC	HF	6.2mm	Direct	Pluggable	Local (Flag)	TTC-6P-3-HF-M-12DC-UT-I	2906744		
Data (1 Mbps)	Screw	12 VDC	HF	6.2mm	Floating	Pluggable	Local (Flag)	TTC-6P-3-HF-F-M-12DC-UT-I	2906786		
		12 VDC	HF	6.2mm	Direct	Pluggable	Local (Flag)	TTC-6P-3-HF-M-24DC-PT-I	2906756		
	Push-in	12 VDC	HF	6.2mm	Floating	Pluggable	Local (Flag)	TTC-6P-3-HF-F-M-24DC-PT-I	2906797		
		12 VDC	HF	6.2mm	Direct	Pluggable	Local (Flag)	TTC-6P-3-HF-F-M-24DC-PT-I	2906797		
High Current (6A)	Screw	24 VDC	HC	6.2mm	Floating	Pluggable	Local (Flag)	TTC-6P-2-HC-M-24DC-UT-I	2906743		
Push-in	24 VDC	HC	6.2mm	Floating	Pluggable	Local (Flag)	TTC-6P-2-HC-M-24DC-PT-I	2906755			
Add-on Fuse Holder	Screw	60 VDC	6.3A max	6.2mm	N/A	5x20mm Fuse	N/A	TTC-6-FC-UT	1054762		
Coaxial Surge Protection (CN)											
Signal	Connection	Voltage	Frequency	Current	Ground	Design	Monitoring	Description	Order #	Coaxial (CN)	
Coaxial / Antenna	N-Connector Socket - Socket	70 VDC	6dB	10A	Direct	Non-replaceable	None	CN-UB-70DC-6-BB	2803166		
		280 VDC	3dB	5A	Direct	Replaceable GDT	None	CN-UB-280DC-3-BB	2801050		
		<55 Vp	380-470 MHz	5A	Direct	Non-replaceable	None	CN-LAMBDA/4-0.47-BB	2800021		
		<18 Vp	0.8-2.25 GHz	5A	Direct	Non-replaceable	None	CN-LAMBDA/4-2.25-BB	2801057		
		<11 Vp	2.4-7.6 GHz	5A	Direct	Non-replaceable	None	CN-LAMBDA/4-5.9-BB	2838490		
DATA / Communication Surge Protection (DT)											
Signal	Connection	Voltage	Current	Ground	Design	Monitoring	Description	Order #	Data (DT)		
CAT6+ / 10 Gbps	RJ45	<3.3 VDC / 60 VDC PoE++	1.5A	Direct	Non-replaceable	None	DT-LAN-CAT.6+	2881007			
CAT 5-6 / 1 Gbps	RJ45	<5 VDC / 57 VDC PoE+	1.5A	Direct	Non-replaceable	None	D-LAN-CAT.5-HC	2800763			
VDSL & Analogue / 50 Mbps	RJ45/12/11 & Screw	185 VDC / 130 VAC	380mA	Direct	Non-replaceable	None	DT-TELE-RJ45	2882925			
RS-485	D-SUB (9 Pin)	12 VDC	380mA	Direct	Non-replaceable	None	DT-UFB-485/BS	2920612			
RS-485	Push-in	12 VDC	HF	600mA	Floating	Pluggable	Local (Flag)	TTC-6P-3-HF-F-M-24DC-PT-I		2906797	
RS-485	Screw	12 VDC	HF	600mA	Floating	Non-Pluggable	Local (Flag)	TTC-6-3-HF-F-M-12DC-UT-I	2906769		

Circuit Breakers: Industrial and Device

Thermal-magnetic miniature circuit breakers (MCBs)
(For AC and DC industrial use only)

■ Do you require 7.5kA or 10kA SSC Rating?					
■ How many poles are required?					
■ What trip-curve characteristic is required?					
■ What current rating is required?					
■ Resulting Phoenix Contact part number					
TMC 7 Series: Thermal-Magnetic Industrial Miniature Circuit Breakers (MCB's)					
SSC	# of poles	Trip curve	Current rating	Type description	Order #
7.5kA	1	B	10A	TMC 71B 10A	1019916
			20A	TMC 71B 20A	1019921
			32A	TMC 71B 32A	1019924
		C	1A	TMC 71C 01A	1019972
			6A	TMC 71C 06A	1019977
			10A	TMC 71C 10A	1019980
			16A	TMC 71C 16A	1019984
			20A	TMC 71C 20A	1019985
			32A	TMC 71C 32A	1019988
			40A	TMC 71C 40A	1019989
			50A	TMC 71C 50A	1019990
			63A	TMC 71C 63A	1019992
		D	10A	TMC 71D 10A	1020045
			20A	TMC 71D 20A	1020052
			32A	TMC 71D 32A	1020055
	2	C	50A	TMC 71D 50A	1020057
			63A	TMC 71D 63A	1020059
	3	C	6A	TMC 72C 06A	1019999
			10A	TMC 72C 10A	1020002
			10A	TMC 73C 10A	1020023
			20A	TMC 73C 20A	1020028
		D	32A	TMC 73C 32A	1020031
			50A	TMC 73C 50A	1020033
			63A	TMC 73C 63A	1020036
			20A	TMC 73D 20A	1020097
10kA	1, 2, 3	B, C, D	1-63A sizes not listed above	TMC 7XX XXA	Contact Sales
	1,2,3	B,C,D	1-63A	TMC 8XX XXA	Contact Sales

Both TMC 7 Series (7.5kA) and TMC 8 Series (10kA) available in Current Ratings 1-63A, B-C-D Trip Curves and 1-2-3 Poles (table shows only a small selection of most common sizes)

Please contact customer service or your local Sales Rep for other specific sizes / types if required

Full range of accessories available - BUSBARS, AUX CONTACT, ALARM CONTACT, SHUNT TRIPS, LOCK-OUTS etc.



Download: [Device Circuit Breakers Catalogue](#)



TMC 7-Series



TMC 8-Series



ACCESSORIES



LOTO

Electronic Circuit Breakers (ECBs)

Electronic Circuit Breakers Module (CBM)				
Channels	Amp	Function	Description	Order #
4	0.5-10A	Full feature/function model	CBM E4 24DC/0.5-10A NO-R	2905743
8	0.5-10A	Full feature/function model	CBM E8 24DC/0.5-10A NO-R	2905744

Electronic Circuit Breakers Module Compact (CBMC)				
Channels	Amp	Function	Description	Order #
4	1-4A	Remote reset version	CBMC E4 24DC/1-4A S-R	1065727
4	1-10A	Remote reset version	CBMC E4 24DC/1-10A S-R	1065729
4	1-4A	Status output version	CBMC E4 24DC/1-4A NO	2906031
4	1-10A	Status output version	CBMC E4 24DC/1-10A NO	2906032
4	1-4A	I/O link version	CBMC E4 24DC/1-4A+ IOL	2910410
4	1-10A	I/O link version	CBMC E4 24DC/1-10A IOL	2910411
4	1-8A	Galvanically isolated version	CBMC EG4 24DC/1-8A NO	1065730

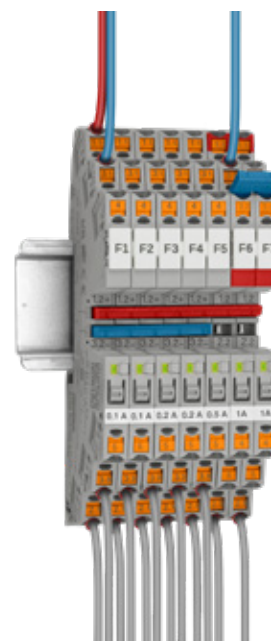
Single Channel Electronic Circuit Breakers (PTCB)							
Channels	Volts (DC)	Amp	Adjustable	Description	Order #	Status Output	Reset Input
1	24	1-4A	✓	PTCB E1 24DC/1-4A SI-R	1135753	✓	✓
1	24	1-8A	✓	PTCB E1 24DC/1-8A SI-R	1135752	✓	✓
1	24	1A		PTCB E1 24DC/1A SI-R	1135751	✓	✓
1	24	2A		PTCB E1 24DC/2A SI-R	1135749	✓	✓
1	24	4A		PTCB E1 24DC/4A SI-R	1135745	✓	✓
1	24	6A		PTCB E1 24DC/6A SI-R	1135740	✓	✓
1	24	8A		PTCB E1 24DC/8A SI-R	1135734	✓	✓
1	24	1-3A	✓	PTCB E1 24DC/1-3A NO	2909909	Relay NO	
1	24	1-4A	✓	PTCB E1 24DC/1-4A NO	2908261	Relay NO	
1	24	1-8A	✓	PTCB E1 24DC/1-8A NO	2908262	Relay NO	
1	24	1-8A	✓	PTCB E1 24DC/1-8A NO2 NEW	1388391	Relay NC	
1	24	1A		PTCB E1 24DC/1A NO	2909902	Relay NO	
1	24	2A		PTCB E1 24DC/2A NO	2909903	Relay NO	
1	24	3A		PTCB E1 24DC/3A NO	2909904	Relay NO	
1	24	4A		PTCB E1 24DC/4A NO	2909906	Relay NO	
1	24	6A		PTCB E1 24DC/6A NO	2909908	Relay NO	
1	24	8A		PTCB E1 24DC/8A NO	2909910	Relay NO	

Single Channel Electronic Circuit Breakers "e-FUSE" (PTCB e-fuse) - 12 and 24 VDC							
Channels	Volts (DC)	Amp	Adjustable	Description	Order #	Status Output	Reset Input
1	12 - 24	0.1 - 0.63A	✓	PTCB E1 24DC/0.1-0.63A SI-R NEW	1441496	✓	✓
1	12 - 24	0.1A		PTCB E1 24DC/0.1A SI-R NEW	1464483	✓	✓
1	12 - 24	0.2A		PTCB E1 24DC/0.2A SI-R NEW	1361049	✓	✓
1	12 - 24	0.5A		PTCB E1 24DC/0.5A SI-R NEW	1361051	✓	✓
1	12 - 24	0.63A		PTCB E1 24DC/0.63A SI-R NEW	1464485	✓	✓
1	12 - 24	0.1 - 0.63A	✓	PTCB E1 24DC/0.1-0.63A NO NEW	1441495	Relay NO	
1	12 - 24	0.1A		PTCB E1 24DC/0.1A NO NEW	1464484	Relay NO	
1	12 - 24	0.2A		PTCB E1 24DC/0.2A NO NEW	1361055	Relay NO	
1	12 - 24	0.5A		PTCB E1 24DC/0.5A NO NEW	1361051	Relay NO	
1	12 - 24	0.63A		PTCB E1 24DC/0.63A NO NEW	1464486	Relay NO	

Single Channel Electronic Circuit Breakers (PTCB) - 48 VDC							
Channels	Volts (DC)	Amp	Adjustable	Description	Order #	Status Output	Reset Input
1	48	1 - 6A	✓	PTCB E1 48DC/1-6A NO NEW	1471917	Relay NO	
1	48	2A		PTCB E1 48DC/2A NO NEW	1471918	Relay NO	



PTCB and PTCB "eFuse"



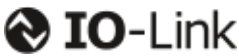
TRIO3 Power Supplies with inbuilt Electronic Circuit Breakers

(With included IO-Link communication)



Power supply

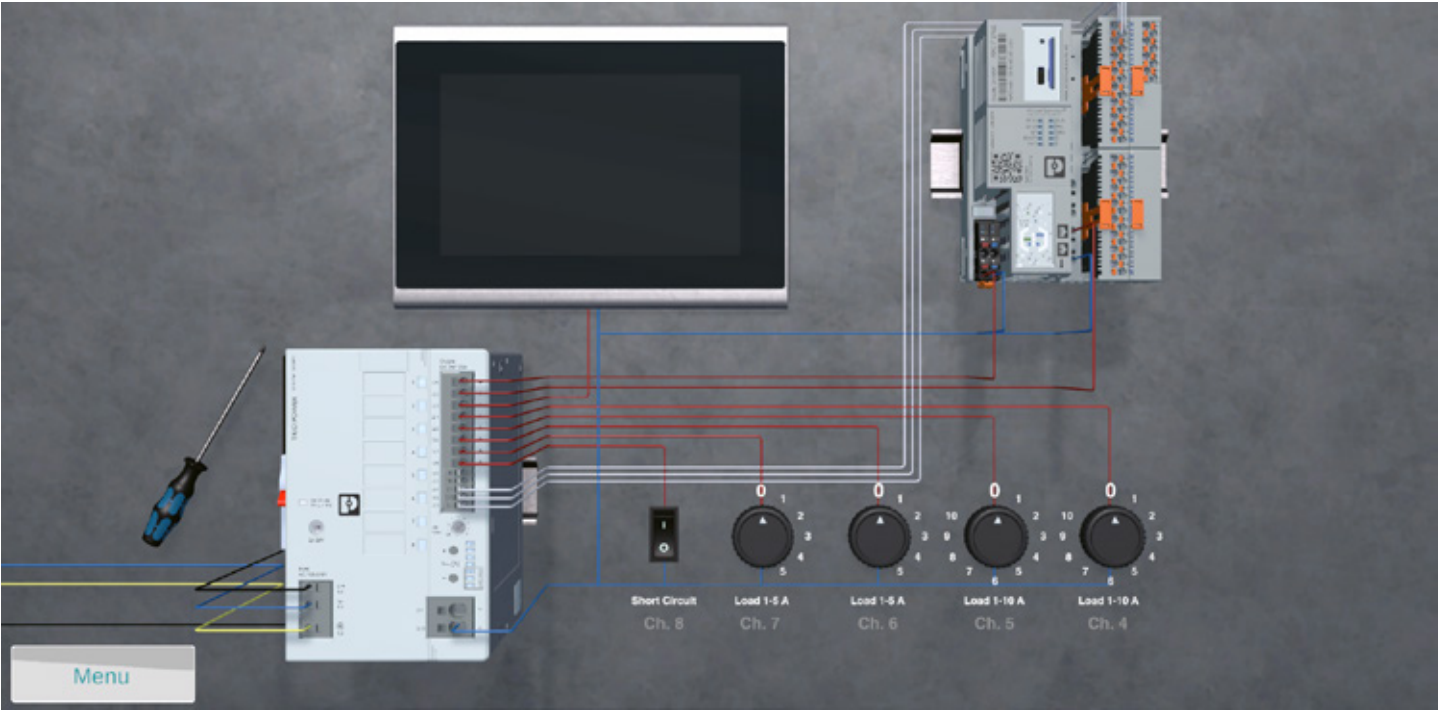
AC Input to DC Output



NEW



Phase	Output Voltage	Output Current	Channels	Channel Current	Description	Connection Technology	Order #
1	24 VDC	10A	4	1-10A	TRIO3-PS/1AC/24DC/10/4C/IOL	NEW Push-In	1252696
1	24 VDC	20A	8	1-10A	TRIO3-PS/1AC/24DC/20/8C/IOL	NEW Push-In	1252697
3	24 VDC	20A	8	1-10A	TRIO3-PS/1AC/24DC/20/8C/IOL	NEW Push-In	1362791
3	24 VDC	40A	8	1-10A	TRIO3-PS/1AC/24DC/40/8C/IOL	NEW Push-In	1362792



Watch: [Live Trio3 PS + ECB Demo](#)



CAPAROC: Modular Electronic Circuit Breaker System

(For 12V and 24V device use)

Power Reliability



Ethernet/IP™



Power Modules

PD 0V

- Choose your required power module - Basic, IO-LINK, or Profinet Comms
- Select your length of current rails for the DIN mounting (based on 6.2mm = 1 slot wide)
- What circuit breaker modules do you require - 4 channel, 2 channel, or 1 channel?
- Do you want a 0V DC distribution module?
- Resulting Phoenix Contact part number

CAPAROC Power Module (Mandatory Item)

Comms	Voltage	Width	Description	Order #
Basic	12 - 24 VDC	2 slots	CAPAROC PM S-R	1115661
IO-LINK			CAPAROC PM IOL	1110986
Profinet		4 slots	CAPAROC PM PN	1110986
Ethernet / IP		4 slots	CAPAROC PM EIP	1393553

CAPAROC Current Rails (TOTAL CURRENT = 45A) (Mandatory Item)

Size	Voltage	Width		Type	Description	Order #
CR8	12 - 24 VDC	8 Slots	49.6mm	Standard	CAPAROC CR 8	1115672
CR20		20 Slots	124mm	Standard	CAPAROC CR 20	1110989
CR4-EXT		4 Slots	24.8mm	Extension	CAPAROC CR EXT4	1110991
CR8-EXT		8 Slots	49.6mm	Extension	CAPAROC CR EXT8	1110990
CR20-EXT		20 Slots	124mm	Extension	CAPAROC CR EXT20	1115674
CR-CON		N/A	N/A	Connector	CAPAROC CR CON	1270955

CAPAROC Electronic Circuit Breaker Modules

Channels	Current Rating	Voltage	Width	Description	Order #
4	1-10A	12 - 24 VDC	2 Slots	CAPAROC E4 12-24DC/1-10A	1115658
4	1-4A		2 Slots	CAPAROC E4 12-24DC/1-4A	1115657
2	2-10A		2 Slots	CAPAROC E2 12-24DC/2-10A	1110984
2	1-4A		2 Slots	CAPAROC E2 12-24DC/1-4A	1115655
1	1-10A		1 Slot	CAPAROC E1 12-24DC/1-10A	1115649
1	1-4A		1 Slot	CAPAROC E1 12-24DC/1-4A	1115415
1	10A		1 Slot	CAPAROC E1 12-24DC/10A	1157284
1	8A		1 Slot	CAPAROC E1 12-24DC/8A	1157279
1	6A		1 Slot	CAPAROC E1 12-24DC/6A	1157286
1	4A		1 Slot	CAPAROC E1 12-24DC/4A	1157285
1	2A		1 Slot	CAPAROC E1 12-24DC/2A	1157290
1	1A		1 Slot	CAPAROC E1 12-24DC/1A	1157288

CAPAROC 0 VDC Distribution Module

Module	Voltage	Width	Description	Order #
Distribution	12 - 24 VDC	1 Slot	CAPAROC PD 0V	1110987



Current Rails and Extensions



4 Channel

2 Channel



1 Channel

Modular Terminal Blocks

CLIPLINE complete: all connection methods – one system

Complete flexibility: terminal blocks with different connection technologies can be freely combined with cost savings, thanks to uniform bridging, marking, and test accessories



■ What connection style best fits your application?	■ Will you be bridging terminals?
■ What wire size are you using? What is your current (Amps) requirement?	■ Resulting Phoenix Contact part number
■ How many connection points?	■ What accessories are needed?
■ How many end covers are needed?	

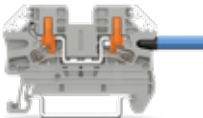
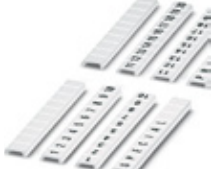
Push-in (PT)														
mm²	I_max	Connections	Description	Order #	Cover	Bridge (2-Position)	Marking							
							Thermomark Card/ Prime		Bluemark ID					
1.5	15	2	PT 1.5/S	3208100	3208142	3213014 FBS 2-3,5	Side	Top	Side	Top				
	-		PT 1.5/S-PE	3208139			0829486 UCT-TMF 3,5	0829484 UCT-TM 3,5	0829486 UCT-TMF 3,5	0829484 UCT-TM 3,5				
	15	3	PT 1.5/S-TWIN	3208155	3208184									
	15	4	PT 1.5/S-QUATTRO	3208197	3208375									
2.5	20	2	PT 2.5	3209510	3030417	3030161 FBS 2-5	0828744 UCT-TMF 5	0828734 UCT-TM 5	0818108 UC-TMF 5	0818108 UC-TM 5				
	-		PT 2.5-PE	3209536										
	20	3	PT 2.5-TWIN	3209549	3030488									
	20	4	PT 2.5-QUATTRO	3209578	3030514									
	20		PTTB 2.5	3210567	3211634									
	-		PTTB 2.5-PE	3210596										
4	30	2	PT 4	3211757	3030420		0828746 UCT-TMF 6	0828736 UCT-TM 6	0828740 UCT-TMF 6	0818085 UC-TM 6				
	-		PT 4-PE	3211766										
	6.3		PT 4-HESI (5X20 FUSE)	3211861										
	6.3		PT 4-HESILED 24 (5X20 FUSE)	3211903										
	30	3	PT 4-TWIN	3211771	3208977	3030336 FBS 2-6								
	30	4	PT 4-QUATTRO	3211797	3208979									
	28		PTTB 4	3211786										
	-		PTTB 4-PE	3211854										



- Simple push-in spring ideal for solid and ferruled wires
- Tool-free termination
- 50 percent lower insertion force
- Orange pushbutton permits easy conductor release using any type of tool, without direct contact with live parts
- Uniformed Push-in Technology available on thousands of Phoenix Contact parts



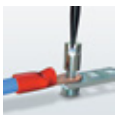
- Simple push-in spring ideal for solid and ferruled wires
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- 50 percent lower insertion force
- Orange pushbutton permits easy conductor release using any type of tool, without direct contact with live parts
- Uniformed Push-in Technology available on thousands of Phoenix Contact parts

Push-In Vertical (PTV)									
mm²	I_Nom	Connections	Description	Order #	End Cover	Bridge (2-Position)	Marking		
							Thermomark Card/ Prime	Bluemark ID	
2.5	24A	2	PTV 2,5	1078960	1088746	3030161 FBS 2-5	0828734 UCT-TM 5	0818108 UC-TM 5	 • Easy and tool-free wiring of conductors with ferrules or solid conductors • Compact design and front connection enable wiring in a confined space 
	-		PTV 2,5 BU	1078962					
	-		PTV 2,5-PE	1078963					
	24A	3	PTV 2,5-TWIN	1078966					
	-		PTV 2,5-TWIN BU	1078971					
	-		PTV 2,5-TWIN-PE	1078991					
	24A	4	PTV 2,5-QUATTRO	1078999					
	-		PTV 2,5-QUATTRO BU	1079006					
-	PTV 2,5-QUATTRO-PE		1079012						
4	32A	2	PTV 4	1088728	1088746	3030336 FBS 2-6	0828736 UCT-TM 6	0818085 UC-TM 6	
	-		PTV 4 BU	1088729					
	-		PTV 4-PE	1088730					
	6,3A		PTV 4-HESI (5x20)	1088742					
	-		PTV 4-HESILED 24 (5X20)	1088743					
	-		PTV 4-HESILA 250 (5x20)	1088745					
	32A	3	PTV 4-TWIN	1088731	1088747				
	-		PTV 4-TWIN BU	1088732					
	-		PTV 4-TWIN-PE	1088733					
	32A	4	PTV 4-QUATTRO	1088734	1088748				
	-		PTV 4-QUATTRO BU	1088735					
	-		PTV 4-QUATTRO-PE	1088736					

Double Level Terminal Block									
2.5	22A	4	PTTBV 2,5	1079073	1083611	3030161 FBS 2-5	0828734 UCT-TM 5	0818108 UC-TM 5	
	-		PTTBV 2,5 BU	1079074					
	-		PTTBV 2,5-PE	1079076					
4	28A		PTTBV 4	1088737		3030336 FBS 2-6	0828736 UCT-TM 6	0818085 UC-TM 6	
	-		PTTBV 4 BU	1088738					
	-		PTTBV 4-PE	1088774					

Push-X Vertical (XTV)									
mm²	I_max	Connections	Description	Order #	Cover	Bridge (2-Position)	Marking		
							Thermomark Card/ Prime	Bluemark ID	
6	41A	2	XTV 6	1329493	1329515	3030284 FBS 2-8	0828740 UCT-TM 8	0818072 UC-TM 8	 • Direct wiring without force or tools with a pre-tensioned contact spring. • Enables the connection of all types of conductors, whether rigid or flexible, with or without ferrules.
	-		XTV 6 BU	1329494					
	-		XTV 6-PE	1329495					
	41A	3	XTV 6-TWIN	1329499	1329516				
	-		XTV 6-TWIN BU	1329506					
	-		XTV 6-TWIN-PE	1329507					
	41A	4	XTV 6-QUATTRO	1329511	1329517				
	-		XTV 6-QUATTRO BU	1329512					
-	XTV 6-QUATTRO-PE		1329513						
10	57A	2	XTV 10	1329547	-	3005947 FBS 2-10	0829142 UCT-TM 10	0818069 UC-TM 10	
	-		XTV 10 BU	1329549	1329608				
	-		XTV 10-PE	1329550	-				
	57A	3	XTV 10-TWIN	1329603	-				
	-		XTV 10-TWIN BU	1329605	1329609				
	-		XTV 10-TWIN-PE	1329606	-				
16	76A	2	XTV 16	1329672	1329675	3005950 FBS 2-12	0829144 UCT-TM 12	0819194 UC-TM 12	
	-		XTV 16 BU	1329673					
	-		XTV 16-PE	1329674					

Modular Terminal Blocks

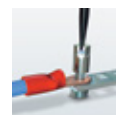
■ What connection style best fits your application?					■ Will you be bridging terminals?				
■ What wire size are you using? What is your current (Amps) requirement?					■ Resulting Phoenix Contact part number				
■ How many connection points?					What accessories are needed?				
■ How many end covers are needed?									
PT Power High-Current									
mm2	I (nom)	Connections	Description	Order #	End Cover	Bridge (2-Position)	Marking		
							Thermomark Card/Prime	Bluemark ID	
35	125A	2	PTPOWER 35	3212064	N/A	3005963 FBS 2-16			 - More easily identifiable connection and conductor marking thanks to lateral conductor routing - Time-saving conductor connection with tool-free push-in direct connection technology
	-		PTPOWER 35 BU	3212065					
	125A	6	PTPOWER 35-3L	3212066					
		8	PTPOWER 35-3L/N	3212068					
50	150A	2	PTPOWER 50	3260050		3260067 EB 2-20/PT	0829142 UCT-TM 10	0818069 UC-TM 10	
	-		PTPOWER 50 BU	3260051					
	150A	6	PTPOWER 50-3L	3260052					
		8	PTPOWER 50-3L/N	3260053					
95	232A	2	PTPOWER 95	3260100		3260157 EB 2-25/PT			
	-		PTPOWER 95 BU	3260103					
	232A	6	PTPOWER 95-3L	3260106					
		8	PTPOWER 95-3L/N	3260109					
185	309A	2	PTPOWER 185	1054722		3215057 EB 2-31/PT			
	309A	8	PTPOWER 185 BU	1054723					
				PTPOWER 185-3L/N					
Screw Clamp (UT)									
2.5	20	2	UT 2.5	3044076	3047028	3030161 FBS 2-5	0828734 UCT-TM 5	0818108 UC-TM 5	 - Universal multi-wire connection with highest pullout force - Save money with uniform bridging, marking, and accessories as part of the Cipline Complete system - Maintenance-free conductor connection with the Reakdyn® principle – there is no need to tighten the terminal block screws
	-		UT 2.5-PE	3044092					
	20	3	UT 2.5-TWIN	3044513					
	20		UT 2.5-QUATTRO	3044542					
	20	4	UTTB 2.5	3044636					
	-		UTTB 2.5-PE	3044665					
	20	6	UT 2.5-3L	3214259					
-	UT 2.5-3PE		3214275						
4	30	2	UT 4	3044102	3047028	3030336 FBS 2-6	0828736 UCT-TM 6	0818085 UCT-TM 6	
	-		UT 4-PE	3044128					
	6.3		UT 4-HESI (5X20 FUSE)	3046032					
	6.3		UT 4-HESI (5X20 FUSE)	3046090					
	30	3	UT 4-TWIN	3044364					
	30		UT 4-QUATTRO	3044571					
	30		UTTB 4	3044814					
6	-	4	UTTB 4-PE	3044759	3047293				
	50		UT 6	3044131					
	-		UT6-PE	3044157					
Bolt Connection (RT)									
2.5	24	2	RT-3	3049013	3049097	3030336 FBS 2-6	0828740 UCT-TM 8	0818072 UC-TM 8	 - Captive hardware with a hinged cover delivers a safe termination - Save money with uniform bridging, marking, and accessories
6	41	2	RT-5	3049026		3030284 FBS 2-8	0829144 UCT-TM 12	0819194 UC-TM 12	
35	125	2	RT-8	3049042	3049194	3005947 FBS 2-10	0829146 UCT-TM 16	0819217 UC-TM 16	



- More easily identifiable connection and conductor marking thanks to lateral conductor routing
- Time-saving conductor connection with tool-free push-in direct connection technology



- Universal multi-wire connection with highest pullout force
- Save money with uniform bridging, marking, and accessories as part of the Clipline Complete system
- Maintenance-free conductor connection with the Reakdyn® principle – there is no need to tighten the terminal block screws

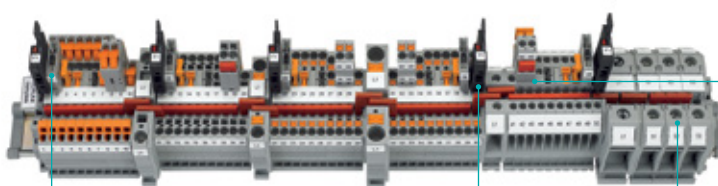


- Captive hardware with a hinged cover delivers a safe termination
- Save money with uniform bridging, marking, and accessories

CLIPLINE Complete: All Connection Methods – One System



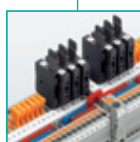
- Disconnect zone:**
- Standardised disconnect zones
 - Accommodates connectors, such as fuse plugs, component connectors, and isolating plugs



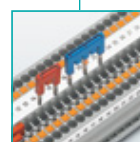
- Plug-in zone:**
- Time-saving and modular configuration
 - Standardized plug-in zone



- Test plugs:**
- Reliable contacting of the test plugs with a 4 mm diameter
 - Modular pluggable test points



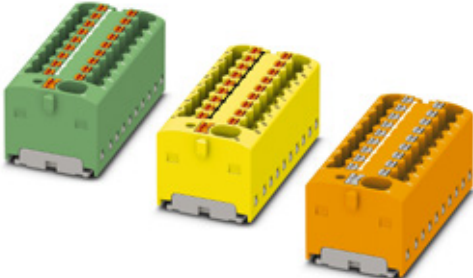
- Fuse plugs:**
- Pluggable 5x20 mm cartridge glass fuses
 - Plugs available with LED indication
 - Common markers between terminals and fuses



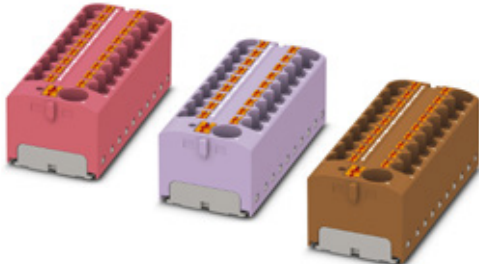
- Plug-in bridging:**
- Tool-free installation
 - 2-50 position bridges
 - Different colour options available
 - Common between termination types
 - Removable teeth for skip-bridging

Distribution Blocks

■ What connection style best fits your application?				■ What colour is needed?	
■ What wire size are you using? What is your current (Amps) requirement?				■ Resulting Phoenix Contact part number	
■ How many connection points?					
Push-in (PTFIX 4/18)					
mm2	I (max)	Connections	Colour	Description	Order #
4	41	19	Grey	PTFIX 4/18X1,5-NS35 GY	1047454
			Blue	PTFIX 4/18X1,5-NS35 BU	1047455
			Red	PTFIX 4/18X1,5-NS35 RD	1047456
			Brown	PTFIX 4/18X1,5-NS35 BN	1047457
			Green	PTFIX 4/18X1,5-NS35 GN	1047458
			Yellow	PTFIX 4/18X1,5-NS35 YE	1047459
			Black	PTFIX 4/18X1,5-NS35 BK	1047460
			White	PTFIX 4/18X1,5-NS35 WH	1047461
			Violet	PTFIX 4/18X1,5-NS35 VT	1047462
			Orange	PTFIX 4/18X1,5-NS35 OG	1047463
			Pink	PTFIX 4/18X1,5-NS35 PK	1047464
			Black/Yellow	PTFIX 4/18X1,5-NS35-FE	1047465
Push-in (PTFIX 6/18)					
6	57	19	Grey	PTFIX 6/18X2,5-NS35 GY	3273110
			Blue	PTFIX 6/18X2,5-NS35 BU	3273112
			Red	PTFIX 6/18X2,5-NS35 RD	3273114
			Brown	PTFIX 6/18X2,5-NS35 BN	3273120
			Green	PTFIX 6/18X2,5-NS35 GN	3273118
			Yellow	PTFIX 6/18X2,5-NS35 YE	3273116
			Black	PTFIX 6/18X2,5-NS35 BK	3273124
			White	PTFIX 6/18X2,5-NS35 WH	3273122
			Violet	PTFIX 6/18X2,5-NS35 VT	3273126
			Orange	PTFIX 6/18X2,5-NS35 OG	3273128
			Pink	PTFIX 6/18X2,5-NS35 PK	3273127
			Black/Yellow	PTFIX 6/18X2,5-NS35-FE	3273130
Push-in (PTFIX 10/18)					
10	63	19	Grey	PTFIX 10/18X4-NS35 GY	3273636
			Blue	PTFIX 10/18X4-NS35 BU	3273638
			Red	PTFIX 10/18X4-NS35 RD	3273640
			Brown	PTFIX 10/18X4-NS35 BN	3273646
			Green	PTFIX 10/18X4-NS35 GN	3273644
			Yellow	PTFIX 10/18X4-NS35 YE	3273642
			Black	PTFIX 10/18X4-NS35 BK	3273650
			White	PTFIX 10/18X4-NS35 WH	3273648
			Violet	PTFIX 10/18X4-NS35 VT	3273652
			Orange	PTFIX 10/18X4-NS35 OG	3273654
			Pink	PTFIX 10/18X4-NS35 PK	3273653
			Black/Yellow	PTFIX 10/18X4-NS35-FE	3273656







- ✓

Ready-to-use blocks for fast assembly without manual bridging, offering time savings of up to 80%
- ✓

Flexible setup in your application, thanks to various mounting options: DIN rail mounting, direct mounting, or adhesive mounting
- ✓

Space savings of up to 50% on the DIN rail, thanks to transverse mounting
- ✓

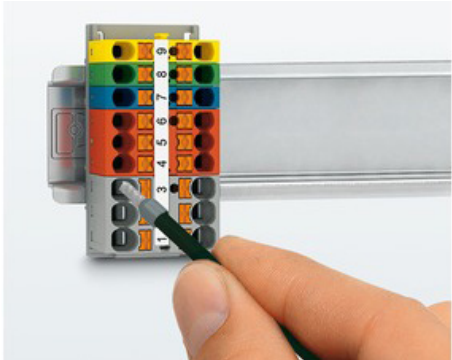
Colour-coded assignment of conductors and terminal points for intuitive and safe installation with eleven colours
- ✓

Time-saving pre-treated and rigid conductor connection, thanks to tool-free push-in direct connection technology
- ✓

Alignment without any loss of pitch and flexible potential extension using standard plug-in bridges



Eleven colour options available



Time saving push-in technology



Easy to bridge

Interposing Relays

■ What application or load are you switching: electromechanical or solid state?	■ What connection technology: screw terminal (UT) or push-in (PT)?
■ What is the input-coil voltage: DC or AC?	■ Which kind of specialty relays: hazardous location, sensor/actuator, filter base?
■ What is your output current (Amps)? (Ratings are for resistive loads)	■ Resulting Phoenix Contact part number
■ How many sets of contacts do you need: SPDT, DPDT, etc.?	■ What accessories are needed?

Electromechanical Relays

Input-Coil Voltage	Output Current	Sets of Contacts	Termination Style	Description	Order #
12 V DC	6 A	SPDT - 6.2 mm	Screw	PLC-RSC-12 DC/21	2966906
			Push-in	PLC-RPT-12 DC/21	2900316
		DPDT - 14 mm	Screw	PLC-RSC-12 DC/21-21	2967235
			Push-in	PLC-RPT-12 DC/21-21	2900329
24 V DC	50 mA	SPDT - 6.2 mm	Screw	PLC-RSC-24 DC/21AU	2966265
			Push-in	PLC-RPT-24 DC/21AU	2900306
		SPDT - 6.2 mm	Screw	PLC-RSC-24 DC/21	2966171
			Push-in	PLC-RPT-24 DC/21	2900299
	6 A	DPDT - 14 mm	Screw	PLC-RSC-24 DC/21-21	2967060
			Push-in	PLC-RPT-24 DC/21-21	2900330
		SPDT 6.2 mm	Screw	PLC-RSC- 24DC/ 1/ACT	2966210
		SPDT 6.2 mm	Screw	PLC-RSC- 24DC/ 1AU/SEN	2966317
	10 A	SPDT - 14 mm	Screw	PLC-RSC-24 DC/21HC	2967620
			Push-in	PLC-RPT-24 DC/21HC	2900291
24 V AC or DC	6 A	SPDT - 6.2 mm	Screw	PLC-RSC-24UC/21	2966184
			Push-in	PLC-RPT-24UC/21	2900300
		DPDT - 14 mm	Screw	PLC-RSC-24UC/21-21	2967073
			Push-in	PLC-RPT-24UC/21-21	2900332
230 V AC	6 A	SPDT - 6.2 mm	Screw	PLC-RSC-230UC/21	2966207
		SPDT - 6.2 mm	Push-in	PLC-RPT-230UC/21	2900305
		DPDT - 14 mm	Screw	PLC-RSC-230UC/21-21	2967099

PLC relay assembly with electromechanical relay



Solid State Relays

5 V DC	3 A	NO ONLY - 6.2 mm	Screw	PLC-OSC-5 DC/24 DC/2/ACT	2980144
			Push-in	PLC-OPT-5 DC/24 DC/2/ACT	2900375
24 V DC	100 mA	NO ONLY - 6.2 mm	Screw	PLC-OSC-24 DC/ 48 DC/100	2966728
			Push-in	PLC-OPT-24 DC/ 48 DC/100	2900352
	3 A	NO ONLY - 6.2 mm	Screw	PLC-OSC-24 DC/ 24 DC/2	2966634
			Push-in	PLC-OPT-24 DC/24 DC/2	2900364
120 V AC or DC	3 A	NO ONLY - 6.2 mm	Screw	PLC-OSC-120UC/24 DC/2	2966650
			Push-in	PLC-OPT-120UC/24 DC/2	2900355

PLC Relay Assembly with Solid State Relay



Note: AC outputs also available

Triple-rated, hazardous location relays (more options available, please enquire)

12 V DC	6 A	SPDT - 6.2 mm	Screw	PLC-RSC-12 DC/21/EX	2909522
	10 A	SPDT - 14 mm	Screw	PLC-RSC-12 DC/21-21/EX	2909517
24 V DC	6 A	SPDT - 6.2 mm	Screw	PLC-RSC-24 DC/21/EX	2909524
			Push-in	PLC-RPT-24 DC/21/EX	2909528
		DPDT - 14 mm	Screw	PLC-RSC-24 DC/21-21/EX	2909509
			Push-in	PLC-RPT-24 DC/21-21/EX	2909514
230 V AC	10 A	SPDT 6.2 mm	Screw	PLC-RSC-230UC/21/EX	2909526
		DPDT 14 mm	Screw	PLC-RSC-230UC/21-21/EX	2909512
		DPDT 14 mm	Screw	PLC-RSC-230UC/21HC/EX	2909521

Note: Additional coil voltages and connection technology options are available

Specialty

120 V AC/DC	6 A	SPDT - 6.2 mm	Screw	PLC-RSC-120UC/21/SO46	5603593
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Note: Other specialty relays available (manual switch, force-guided, filter, high-density, DC motor control, etc.)

Replacement Parts

Mechanical Relays

Input-Coil Voltage	Output Current	Sets of Contacts	Description	Order #
12 V DC	6 A	SPDT - 6.2 mm	REL-MR-12 DC/21	2961150
24 V DC	6 A	SPDT - 6.2 mm	REL-MR-24 DC/21	2961105
		DPDT - 14 mm	REL-MR-24 DC/21-21	2961192
230 V AC	8 A	SPDT - 16 mm	REL-MR-230AC/21-21	2961451
	16 A		REL-MR-230AC/21HC/MS	2987914
	8 A		REL-MR-230AC/21-21/MS	2987972



Solid-State Relays

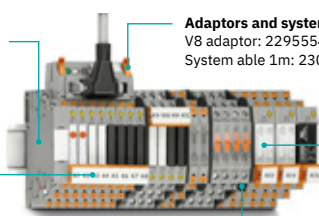
5 V DC	3 A	SPST - 6.2 mm	OPT-5 DC/24 DC/2	2967989
24 V DC	3 A	SPST - 6.2 mm	OPT-24 DC/24 DC/2	2966595
60 V AC	3 A	SPST - 6.2 mm	OPT-60 DC/24 DC/2	2966605



Potential Distribution
2966508 - PLC-ESK GY

Adaptors and system cabling
V8 adaptor: 2295554 - PLC-V8/FLK14/OUT
System able 1m: 2305253 - CABLE-FLK14/OE/0,14/100

Terminal marking
6.2 mm wide: 0828736
14 mm: 0829144



Wide range of solutions
Over 600 standard and specialty relay solutions

Partition plate
2966841 - PLC - ATP-BK

PLC Relay Bridging

Easily bridge relays together with plug-in bridging – no tools required.
Available in 2 positions or in continuous pieces for cutting to custom length.

Colour	2-Pos	500 mm
Red	2966236	2966786
Blue	2966812	2966692
Gray	2966825	2966838



General Purpose and Pluggable Relays

■ What application or load are you switching: electromechanical or solid state?					■ How many sets of contacts do you need? SPDT, DPDT, etc.	
■ What is the input coil voltage: DC or AC?						
■ What is your output current (Amps)?					What accessories are needed?	
RIF Slimline relays						
	Input Voltage	Output Current	Sets of Contacts	Termination Style	Description	Order #
RIF-0	12 V DC	6 A	NO only	Push-in	RIF-0-RPT-12DC/ 1	2903362
	24 V DC	6 A	NO only	Push-in	RIF-0-RPT-24DC/ 1	2903361
RIF-1	12 V DC	11 A	SPDT	Push-in	RIF-1-RPT-LDP-12DC/1X21	2906224
		8 A	DPDT	Push-in	RIF-1-RPT-LDP-12DC/2X21	2906223
	24 V DC	11 A	SPDT	Push-in	RIF-1-RPT-LDP-24DC/1X21	2903342
		8 A	DPDT	Push-in	RIF-1-RPT-LDP-24DC/2X21	2903334
		50 mA	DPDT	Push-in	RIF-1-RPT-LDP-24DC/2X21AU	2903330
	230 V AC	10A	1PDT	Push-in	RIF-1-RPT-LV-230AC/1X21	2903339
		8A	2PDT	Push-in	RIF-1-RPT-LV-230AC/2X21	2903331
RIF Ice-Cube Relays						
	Input Voltage	Output Current	Sets of Contacts	Termination Style	Description	Order #
RIF-2	24 V DC	10 A	2PDT	Push-in	RIF-2-RPT-LDP-24DC/2X21	2903315
		6 A	4PDT	Push-in	RIF-2-RPT-LDP-24DC/4X21	2903308
	230 V AC	5 A	4PDT	Push-in	RIF-2-RPT-LV-230AC/4X21	2903304
RIF-3	24 V DC	8.5 A	3PDT	Push-in	RIF-3-RPT-LDP-24DC/3X21	2903294
	230 V AC	6 A	3PDT	Push-in	RIF-3-RPT-LV-230AC/3X21	2903292
RIF-4	24 V DC	10 A	3PDT	Push-in	RIF-4-RPT-LDP-24DC/3X21	2903278
	230 V AC	8 A	3PDT	Push-in	RIF-4-RPT-LV-230AC/3X21	2903276
Note: Many additional contact arrangement and coil voltage options exist.						



RIF-0
6.2 mm wide
66 mm tall
Lowest profile of all relays



RIF-1
16 mm wide
75 mm tall
Pin contacts



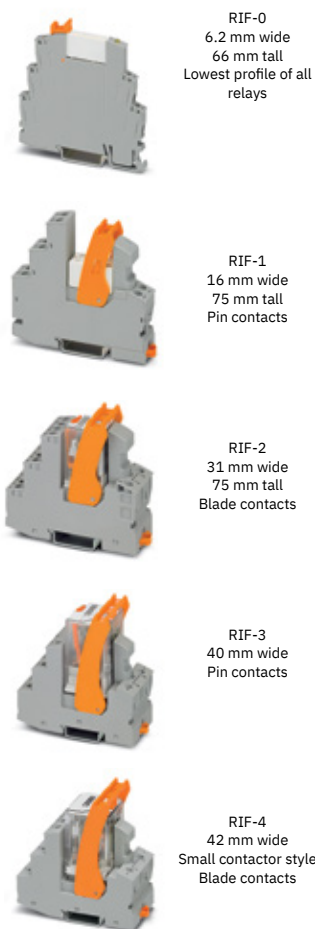
RIF-2
31 mm wide
75 mm tall
Blade contacts



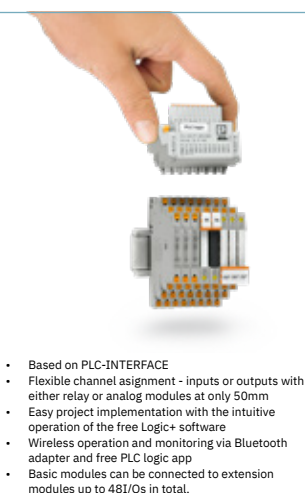
RIF-3
40 mm wide
Pin contacts



RIF-4
42 mm wide
Small contactor style
Blade contacts



Logic modules		
	Description	Order #
	PLC logic stand-alone module, 2nd generation, with 16I/Os, for plug-in connection to eight digital or analog PLC-INTERFACE terminal blocks, cannot be extended, real-time clock, micro USB female connector, accommodates memory module and Bluetooth adapter, screw connection.	2907443
	PLC logic basic module, 2nd generation, with 16I/Os, for plug-in connection to eight digital or analog PLC-INTERFACE terminal blocks, can be extended to 48I/Os, real-time clock, micro USB female connector, accommodates memory module and Bluetooth adapter, screw connection.	2907446
	PLC logic extension module with 16I/Os, for plug-in connection to eight PLC-INTERFACE terminal blocks for extending the basic module (a maximum of two extension modules can be connected to a basic module), screw connection.	2905137
Relay output		
	Description	Order #
	PLC-INTERFACE, consisting of basic terminal block PLC-BSC.../21 with screw connection and plug-in miniature relay with power contact, for assembly on DIN rail NS 35/7,5, 1 changeover contact, input voltage 24 V DC.	2900299
	PLC-INTERFACE, consisting of PLC-BSC.../21 basic terminal block with screw connection and plug-in miniature relay with multi-layer gold contact, for mounting on DIN rail NS 35/7,5, 1 changeover contact, input voltage 24 V DC.	2900306
	PLC-INTERFACE, consisting of basic terminal block PLC-BSC.../ACT with screw connection and plug-in miniature relay with power contact, for assembly on DIN rail NS 35/7,5, 1 N/O contact, input voltage 24 V DC.	2900312
	PLC-INTERFACE with switch (operation: manual) for the functions "manual, zero, and automatic", with screw connection and integrated power contact relay, for mounting on DIN rail NS 35/7,5, 1 N/O contact, input voltage 24 V AC/DC.	2900328
Solid-state relay output		
	Description	Order #
	PLC-INTERFACE, consisting of PLC-BSC.../21 basic terminal block with screw connection and plug-in miniature solid-state relay, for mounting on DIN rail NS 35/7,5, 1 N/O contact, input: 24 V DC, output: 3 ... 48 V DC/100 A.	2900352
	PLC-INTERFACE, consisting of PLC-BSC.../21 basic terminal block with screw connection and plug-in miniature solid-state relay, for mounting on DIN rail NS 35/7,5, 1 N/O contact, input: 24 V DC, output: 3 ... 33 V DC/3 A.	2900364
	PLC-INTERFACE, consisting of PLC-BSC.../21 basic terminal block with screw connection and plug-in miniature solid-state relay, for mounting on DIN rail NS 35/7,5, 1 N/O contact, input: 24 V DC, output: 24 ... 253 V AC/0.75 A.	2900369
	PLC-INTERFACE for output functions, consisting of PLC-BSC.../ACT basic terminal block with screw connection and plug-in miniature solid-state relay, for mounting on DIN rail NS 35/7,5, 1 N/O contact, input: 24 V DC, output: 3 ... 33 V DC/3 A.	2900376
	PLC-INTERFACE with electronic changeover contact, consisting of PLC-BSC.../21 basic terminal block with screw connection and integrated miniature solid-state relay, for mounting on NS 35/7.5 DIN rail, 1 changeover contact, input: 24 V DC, output: 3 V DC...48 V DC/500 mA.	2900378



Hybrid Motor Starters

■ What type of motor start do you need?				■ What are the required functions?						
■ What is the maximum load current?				■ Resulting Phoenix Contact part number (by connection technology)						
■ What is your input voltage?										
		Functions							Connection Technology	
		Direct Starter	Reversing Starter	Motor Protection	Emergency Stop1	Can Be Networked	ATEX	Short-Circuit Protection	Screw	Push-In
Maximum Load Current	Input Voltage2									
Stand-Alone³										
0.6 A	24 V DC	✓		✓	✓		✓		2900566	2903914
		✓	✓	✓	✓		✓		2900582	2903902
		✓	✓	✓	✓		✓	✓	2902746	
		✓		✓					2900542	2903920
		✓	✓	✓					2900573	2903908
2.4 A	24 V DC	✓		✓	✓		✓		2900567	2903916
		✓	✓	✓	✓		✓		2900414	2903904
		✓	✓	✓	✓		✓	✓	2902744	
		✓		✓					2900543	2903922
		✓	✓	✓					2900574	2903910
9 A	24 V DC	✓		✓	✓		✓		2900569	2903918
		✓	✓	✓	✓		✓		2900421	2903906
		✓	✓	✓	✓		✓	✓	2902745	
		✓		✓					2900545	2903924
		✓	✓	✓					2900576	2903912
		✓							2900530	
		✓	✓						2900538	
Network-Capable (Gateway Required)										
0.6 A	24 V DC	✓	✓	✓	✓	✓	✓			2905138
3 A	24 V DC	✓		✓	✓	✓	✓			2905142
		✓	✓	✓	✓	✓	✓			2905139
9 A	24 V DC	✓		✓	✓	✓	✓			2905143
		✓	✓	✓	✓	✓	✓			2905140

¹Dependent on the application up to PL e / SIL 3.

²Also available in 230 V versions. Check Phoenix Contact website for the full range.

³Modular options also available.

¹Dependent on the application up to PL e / SIL 3.

²Also available in 230 V versions. Check Phoenix Contact website for the full range.

³Modular options also available.

Solid State Contactors					
		Functions			
		Direct Starter	Reversing Starter	Single-Phase	3-Phase
Maximum Load Current	Input Voltage				
20 A	24 V DC	✓		1032919	
	230 V AC	✓		1032920	
30 A	24 V DC	✓		1032921	
	230 V AC	✓		1032922	
37 A	24 V DC	✓	✓		2297374
50 A	24 V DC	✓		1032926	
	230 V AC	✓		1032927	

Reverse running

Optional: reversing function including locking circuit and load wiring.



Forward running

Easy control directly via 24 V PLC output cards or 230 V AC signal.

Motor protection

Convenient protection with the electronic motor protection relay with automatic and remote reset function.



Emergency stop

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

CONTACTRON Speed Starter

■ Is the input single- or three-phased?			■ Housing and dimension specifications		
■ What is the size of your motor?			■ Resulting Phoenix Contact part number		
■ What is your nominal current (input/output)?					
Motor Power	Voltage/Current Input	Voltage/Current Output	Housing	Type	Order #
Single-phase load input, with EMC filter ¹					
0.25 kW/0.3 HP	3.5 A	1.7 A	A2	CSS0.25-1/3-EMC	1201520
0.37 kW/0.5 HP	5.3 A	2.5 A	A2	CSS0.37-1/3-EMC	1201600
0.55 kW/0.7 HP	6.7 A	3.2 A	B2	CSS0.55-1/3-EMC	1201602
0.75 kW/1.0 HP	9.1 A	4.3 A	B2	CSS0.75-1/3-EMC	1201613
1.5 kW/2.0 HP	15.8 A	7.5 A	B2	CSS1.5-1/3-EMC	1201642
Three-phase load input, with EMC filter ¹					
0.25 kW/0.3 HP	1.0 A	1.0 A	A2	CSS0.25-3/3-EMC	1201713
0.37 kW/0.5 HP	1.7 A	1.7 A	A2	CSS0.37-3/3-EMC	1201825
0.55 kW/0.7 HP	2.0 A	2.0 A	A2	CSS0.55-3/3-EMC	1201828
0.75 kW/1.0 HP	2.8 A	2.8 A	A2	CSS0.75-3/3-EMC	1201829
1.5 kW/2.0 HP	4.28 A	4.28 A	B2	CSS1.5-3/3-EMC	1201696
Three-phase load input, with EMC filter ¹					

¹Also available without EMC filter. Check Phoenix Contact website for the full range.

Housing2					
					
Description	A1	A2	B1 heatsink	B1 fan	B2
Cooling	Heatsink	Replaceable fan	Heatsink	Replaceable fan	Replaceable fan
Dimensions (H x W x D)	180 x 35 x 165 mm	180 x 35 x 185 mm	180 x 45 x 180 mm	180 x 45 x 180 mm	180 x 45 x 200 mm
² A1, B1 heatsink and B1 fan housing are available for motor starters without EMC filter only. For more details, check Phoenix Contact website.					

Direct Start

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



Reversing Start

Reverse rotation via buttons directly on the device



Motor Protection

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



Safe Torque Off

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



Various Speeds

Speeds can be customised and modified as desired



Ramp Function

Fully-adjustable soft motor start and shutdown.



Watch Speed Starter Virtual Demo:
[Connect, Set, Start!](#)

Signal Conditioners

■ What type of conversion and/or isolation do you need?				
■ What is the module power? (Standard is module powered by separate 24 V DC)				
■ What is your input signal?				
■ What is the output signal?				
■ Resulting Phoenix Contact part number				
Fixed Signal Conversion and Isolation				
Module Power	Input Signal	Output Signal	Description	Order #
Line	0 V ... 10 V	0 V ... 10 V	MINI MCR-2-U-U	2902042
		4 mA ... 20 mA	MINI MCR-2-U-I4	2902029
	4 mA ... 20 mA	0 V ... 10 V	MINI MCR-2-I4-U	2902002
		4 mA ... 20 mA	MINI MCR-2-I-I	2901998
Universal and Configurable Analog Signal conversion and isolation				
Module Power	Input Signal	Output Signal	Description	Order #
Line	0 V ... 10 V	4 mA ... 20 mA	MINI MCR-2-U-I4-PT	2902030
		4 mA ... 20 mA (HART)	4 mA ... 20 mA (HART)	MINI MCR-2-RPSS-I-I
	Voltage	Voltage	MINI MCR-2-U-U-PT	2902043
		Voltage/current	MINI MCR-2-U-UI	2902019
	Voltage/current	Relay	MINI MCR-2-UI-REL-PT	2902035
		Transistor	MINI MCR-2-UNI-UI-UIRO	2902026
		Voltage/current	MINI MCR-2-UI-UI	2902037
			MINI MCR-2-UNI-UI-2UI	2905026
Temperature Signal Conversion and Isolation				
Module Power	Input Signal	Output Signal	Description	Order #
Loop	RTD	Voltage/current	MINI MCR-2-RTD-UI	2902049
	Thermocouple (TC)		MINI MCR-2-TC-UI	2902055
	Temperature (RTD/TC)	Relay	MINI MCR-2-T-REL	2905632
	PT100	4 mA ... 20 mA	MINI MCR-SL-PT100-LP-NC	2810308
Low-Power Signal Conversion and Isolation				
Module Power	Input Signal	Output Signal	Description	Order #
Loop	Voltage/current	4 mA ... 20 mA (passive)	4 mA ... 20 mA (passive)	2902061
	4 mA ... 20 mA	4 mA ... 20 mA (active)	MINI MCR-2-2I-2I-ILP	2901994
			MINI MCR-2-UI-I-OLP	2901996
	4 mA ... 20 mA	4 mA ... 20 mA (passive)	MINI MCR-2-RPS-I-I-OLP	2906446
			MINI MCR-2-RPS-2I-2I-OLP	2906448
Specialty Signal Conversion and Isolation				
Module Power	Input Signal	Output Signal	Description	Order #
Line	4 mA ... 20 mA (HART)	4 mA ... 20 mA (HART)	MINI MCR-2-RPSS-I-2I	2905628
	Voltage/current	Frequency/transistor	MINI MCR-2-UI-FRO	2902031
	Frequency and PWM	Transistor	MINI MCR-2-F-UI	2902056
	Potentiometer	Voltage/current	MINI MCR-2-POT-UI	2902016
	Voltage/current	Relay	MINI MCR-2-UI-REL	2902033

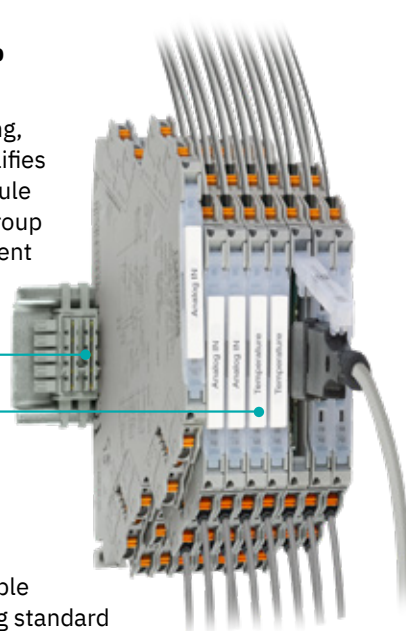
MINI MCR-2



Discover:
the new highly compact
MINI Analog Pro Ex i signal
conditioners - A milestone
in miniaturization!

Rapid power bridging and group error messaging

In addition to rapid power bridging, the DIN rail connector also simplifies wiring, system extension, or module replacement during operation. Group error messaging enables convenient diagnostics.

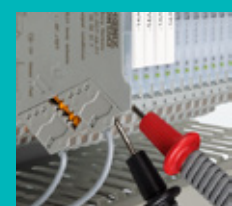


Service-friendly

Large-surface marking areas enable complete loop identification using standard marking material. All status and error indicators are always visible and provide an instant overview on site.



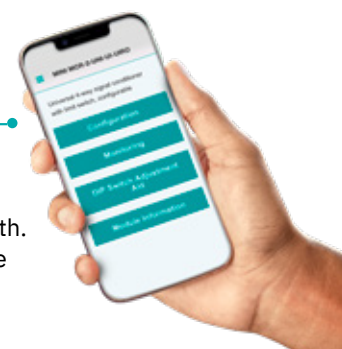
Easily accessible terminal points and FASTCON Pro plug-in connection terminal blocks



Measure signals during operation, without disconnecting the current loops.

Smart parameterisation and monitoring

Depending on the product type, you can access the devices wirelessly: via NFC and Bluetooth. Benefit from the comprehensive functions of the MINI Analog Pro app and parameterise the modules directly on site or read the current measured values during operation.



Heavy-Duty Connectors

Standard (Metal) Evo (Plastic)



Selector Guide (Pick 4 Parts)

1	2	3	4			
INSERT (M&F)	BASE	SLEEVE HOUSING	CABLE GLAND			
	+		+		+	

How many poles do you need?

What connection technology do you prefer?

Gender (Male / Female)?

Panel mounting with or without cover?

Hood - top or lateral entry?

HEAVYCON STANDARD											
Poles	Technology	Socket (F)		Plug (M)		Panel Mounting Base		Hood - Top Entry		Hood - Lateral Entry	
		Part Number	Description	Part Number	Description	With Cover	W/O Cover	Low Profile	High Profile	Low Profile	High Profile
6 poles	Screw	1648128	HC-B 6-I-UT-F	1648115	HC-B 6-I-UT-M	1411319	1411318	1412574 (M20)	1412566 (M25)	1412570 (M20)	1412562 (M25)
	Push-in	1407727	HC-B 6-I-PT-F	1407728	HC-B 6-I-PT-M	1411319	1411318	1412574 (M20)	1412566 (M25)	1412570 (M20)	1412562 (M25)
	Crimp	1648160	HC-B 6-I-CT-F	1648157	HC-B 6-I-CT-M	1411319	1411318	1412574 (M20)	1412566 (M25)	1412570 (M20)	1412562 (M25)
10 poles	Screw	1648186	HC-B 10-I-UT-F	1648173	HC-B 10-I-UT-M	1411321	1411320	1412629 (M20)	1412605 (M32)	1412625 (M25)	1412600 (M25)
	Push-in	1407729	HC-B 10-I-PT-F	1407730	HC-B 10-I-PT-M	1411321	1411320	1412629 (M20)	1412605 (M32)	1412625 (M25)	1412600 (M25)
	Crimp	1605569	HC-B 10-I-CT-F	1605624	HC-B 10-I-CT-M	1411321	1411320	1412629 (M20)	1412605 (M32)	1412625 (M25)	1412600 (M25)
16 poles	Screw	1648241	HC-B 16-I-UT-F	1648238	HC-B 16-I-UT-M	1411325	1411324	1412730 (M32)	1412689 (M32)	1412726 (M32)	1412679 (M32)
	Push-in	1407731	HC-B 16-I-PT-F	1407732	HC-B 16-I-PT-M	1411325	1411324	1412730 (M32)	1412689 (M32)	1412726 (M32)	1412679 (M32)
	Crimp	1648283	HC-B 16-I-CT-F	1648270	HC-B 16-I-CT-M	1411325	1411324	1412730 (M32)	1412689 (M32)	1412726 (M32)	1412679 (M32)
24 poles	Screw	1648306	HC-B 24-I-UT-F	1648296	HC-B 24-I-UT-M	1411332	1411331	1412779 (M32)	1412754 (M32)	1412774 (M32)	1412750 (M32)
	Push-in	1407735	HC-B 24-I-PT-F	1407736	HC-B24-I-PT-M	1411332	1411331	1412779 (M32)	1412754 (M32)	1412774 (M32)	1412750 (M32)
	Crimp	1648348	HC-B 24-I-CT-F	1648335	HC-B 24-I-CT-M	1411332	1411331	1412779 (M32)	1412754 (M32)	1412774 (M32)	1412750 (M32)

HEAVYCON EVO											
Poles	Technology	Socket (F)		Plug (M)		Panel Mounting Base		Hood - Top And Lateral Entry			
		Part Number	Description	Part Number	Description	With Cover	W/O Cover	Low Profile		High Profile	
6 poles	Screw	1648128	HC-B 6-I-UT-F	1648115	HC-B 6-I-UT-M	1407622	1407621	1407619		1407620	
	Push-In	1407727	HC-B 6-I-PT-F	1407728	HC-B 6-I-PT-M	1407622	1407621	1407619		1407620	
	Crimp	1648160	HC-B 6-I-CT-F	1648157	HC-B 6-I-CT-M	1407622	1407621	1407619		1407620	
10 poles	Screw	1648186	HC-B 10-I-UT-F	1648173	HC-B 10-I-UT-M	1407633	1407632	1407626		1407627	
	Push-In	1407729	HC-B 10-I-PT-F	1407730	HC-B 10-I-PT-M	1407633	1407632	1407626		1407627	
	Crimp	1605569	HC-B 10-I-CT-F	1605624	HC-B 10-I-CT-M	1407633	1407632	1407626		1407627	
16 poles	Screw	1648241	HC-B 16-I-UT-F	1648238	HC-B 16-I-UT-M	1407647	1407646	1420931		1407642	
	Push-In	1407731	HC-B 16-I-PT-F	1407732	HC-B 16-I-PT-M	1407647	1407646	1420931		1407642	
	Crimp	1648283	HC-B 16-I-CT-F	1648270	HC-B 16-I-CT-M	1407647	1407646	1420931		1407642	
24 poles	Screw	1648306	HC-B 24-I-UT-F	1648296	HC-B 24-I-UT-M	1407662	1407661	1420935		1407657	
	Push-In	1407735	HC-B 24-I-PT-F	1407736	HC-B24-I-PT-M	1407662	1407661	1420935		1407657	
	Crimp	1648348	HC-B 24-I-CT-F	1648335	HC-B 24-I-CT-M	1407662	1407661	1420935		1407657	

ACCESSORIES - Cable Gland

HEAVYCON STANDARD	
M20	1411163
M25	1411165
M32	1411166
M40	1411167

HEAVYCON EVO	
7-13mm	1407669 (M20 equivalent)
9-17mm	1407670 (M25 equivalent)
11-21mm	1407671 (M32 equivalent)
19-28mm	1407672 (M40 equivalent)

M12 Connectors

A comprehensive range of M8 and M12 flush-type connectors and panel feed-through has emerged as a result of the various requirements for sensor/actuator device connection technology in industrial environments.

Customer-specific developments for assembly enable optimum adaptation to individual device concepts.

- ✓ 3 to 17 positions
- ✓ A, B, D, or X coding
- ✓ Available in Screw, Insulation displacement, Push-in, and Crimp connection



M8						
	Positions	Connection Tech	Gender	Diameter	Order #	Description
3-position Female  Male 	3-Pos.	Screw	Male Straight	3.5-5 mm	1501252	SACC-M 8MS-3CON-M-SW
			Female Straight		1506888	SACC-M 8FS-3CON-M-SW
		Insulation Displacement	Male Straight	2.5-5 mm	1441008	SACC-M 8MS-3QO-0,25-M
			Female Straight		1441066	SACC-M 8FS-3QO-0,5-M
4-position Female  Male 	4-Pos.	Screw	Male Straight	3.5-5 mm	1681169	SACC-M 8MS-4CON-M
			Female Straight		1506891	SACC-M 8FS-4CON-M-SW
		Insulation Displacement	Male Straight	3.5-5 mm	1441037	SACC-M 8MS-4QO-0,5-M
			Female Straight		1521601	SACC-FS-4QO-0,75-M SCO
M12						
	Positions	Connection Tech	Head	Diameter	Order #	Description
4-position Female  4-position Male 	4-Pos.	Screw	Male Straight	4-6 mm	1662528	SACC-M12MS-4CON-PG 7-M
			Male Angled		1681101	SACC-M12MR-4CON-PG7-M
			Female Straight		1681127	SACC-M12FS-4CON-PG7-M
			Female Angled		1681143	SACC-M12FR-4CON-PG7-M
		Insulation Displacement	Male Straight	4-8 mm	1641785	SACC-M12MS-4QO-0,75-M
			Female Straight		1641772	SACC-M12FS-4QO-0,75-M
		Push-In	Male Straight	4-8 mm	1424657	SACC-MS-4PL M SCO
			Male Angled		1424654	SACC-M12MR-4PL M
Female Straight	1424655		SACC-M12FS-4PL M			
Female Angled	1424656		SACC-M12FR-4PL M			
5-position Female  5-position Male 	5-Pos.	Screw	Male Straight	4-6 mm	1663116	SACC-M12MS-5CON-PG 7-M
			Male Angled	6-8 mm	1681460	SACC-M12MS-5CON-PG 9-M
			Female Straight	4-6 mm	1663129	SACC-M12MR-5CON-PG 7-M
			Female Angled		1662968	SACC-M12FS-5CON-PG 7-M
		Push-In	Male Straight	4-8 mm	1662984	SACC-M12FR-5CON-PG 7-M
			Female Straight		1424649	SACC-M12MS-5PL M
			Male Angled		1424652	SACC-M12FS-5PL M
			Female Angled		1424651	SACC-M12MR-5PL M
8-position Female  8-position Male 	8-Pos.	Screw	Female Straight	6-8 mm	1513347	SACC-M12FS-8CON-PG9-M
			Male Straight		1513334	SACC-M12MS-8CON-PG9-M

Cordsets



■ What thread size do you need on your cordset: M8 or M12?												
■ How many positions (wires) are required?												
■ What gender should the connectors be: female or male?												
■ Is the head orientation straight or right angle?												
■ What is the desired cordset length?												
■ Resulting Phoenix Contact part numbers (shielded and non-shielded)												
■ Select CMAT: Allows you to configure cable type/length (enter into extranet tool)												
■ Do you need a mating front- or rear-mount receptacle with the cordset?												
**Locknut not included with front mount. M8 locknuts (8 mm) = 1504071. M12 locknuts (16 mm) = 1504097												
M8												
	Positions	Gender	Head Orientation	Length	Non-Shielded PUR Jacket Part #	Non-Shielded CMAT #	Shielded PUR Jacket Part #	Shielded CMAT #	Front-Mount Receptacle	Rear-Mount Receptacle		
3-Position Female  Male 	3-Pos.	Male/Female	Straight	1.5 m	1681923	1405935	1455285	1405828	1500350	1453449		
		Female	Straight	5 m	1669628	1405956	1521737	1405834	1500334	1453478		
			Right Angle		1669631	1405957	1521782	1405835	1500334	1453478		
		Male	Straight		1681680	1405939	1521630	1405830	1500350	1453449		
			Right Angle		1681716	1405944	1521685	1405833	1500350	1453449		
		Female	Straight	10 m	1694101	1405956	1521740	1405834	1500334	1453478		
			Right Angle		1694169	1405957	1521795	1405835	1500334	1453478		
		Male	Straight		1693584	1405939	1521643	1405830	1500350	1453449		
			Right Angle		1694114	1405944	1521698	1405833	1500350	1453449		
		4-position Female  Male 	4-Pos.	Male/Female	Straight	1.5 m	1682168	1405902	1455735	1405810	1500363	1453452
				Female	Straight	5 m	1681868	1405923	1521931	1405822	1500347	1453481
					Right Angle		1681897	1405924	1521986	1405823	1500347	1453481
Male	Straight			1681800	1405906		1521834	1405818	1500363	1453452		
	Right Angle			1681839	1405911		1521889	1405821	1500363	1453452		
Female	Straight			10 m	1683484	1405923	1521944	1405822	1500347	1453481		
	Right Angle				1694172	1405924	1521999	1405823	1500347	1453481		
Male	Straight				1694143	1405906	1521847	1405818	1500363	1453452		
	Right Angle				1694156	1405911	1521892	1405821	1500363	1453452		
M12												
	Positions			Gender	Head Orientation	Length	Non-Shielded PUR Jacket Part #	Non-Shielded CMAT #	Shielded PUR Jacket Part #	Shielded CMAT #	Front-Mount Receptacle	Rear-Mount Receptacle
3-Position Female  Male 	3-Pos.			Male/Female	Straight	1.5 m	1681525		1500826			
		Female	Straight	5 m	1683510	1405947	1682809	1405927	1523434	1419632		
			Right Angle		1694525	1405959	1682838	1405934	1523450	1419629		
		Male	Straight		1668030	1405949	1682676	1405929	1523434	1419632		
			Right Angle		1668153	1405955	1682702	1405932	1523434	1419632		
		Female	Straight	10 m	1693034	1405958	1500680	1405933	1523450	1419629		
			Right Angle		1694538	1405959	1500693	1405934	1523450	1419629		
		Male	Straight		1682566	1405949	1500664	1405929	1523434	1419632		
			Right Angle		1694444	1405955	1500677	1405932	1523434	1419632		
		4-position Female  Male 	4-Pos.	Male/Female	Straight	1.5 m	1668373		1500868			
				Female	Straight	5 m	1668124	1405925	1682867	1405900	1523450	1419629
					Right Angle		1668247	1405926	1682922	1405901	1523450	1419629
Male	Straight			1668069	1405916		1682647	1405896	1523434	1419632		
	Right Angle			1668182	1405922		1682896	1405899	1523434	1419632		
Female	Straight			10 m	1683002	1405925	1500716	1405900	1523450	1419629		
	Right Angle				1681389	1405926	1500729	1405901	1523450	1419629		
Male	Straight				1682993	1405916	1694389	1405896	1523434	1419632		
	Right Angle				1694457	1405922	1500703	1405899	1523434	1419632		
5-position Female  Male 	5-Pos.			Male/Female	Straight	1.5 m	1681606	1405886	1500907	1405877	1520039	1419658
				Female	Straight	5 m	1669848	1405892	1682951	1405884	1520055	1419645
					Right Angle		1669877	1405893	1682980	1405885	1520055	1419645
		Male	Straight	1669783	1405888		1682731	1405879	1520039	1419658		
			Right Angle	1669819	1405891		1682773	1405883	1520039	1419658		
		Female	Straight	10 m	1683374	1405886	1500758	1405877	1520039	1419658		
			Right Angle		1694541	1405892	1500761	1405884	1520055	1419645		
		Male	Straight		1683361	1405893	1500732	1405885	1520055	1419645		
			Right Angle		1694460	1405888	1500745	1405879	1520039	1419658		
		8-position Female  Male 	8-Pos.	Male/Female	Straight	1.5 m	1522697	1405891	1522985	1405883	1520039	1419658
				Female	Straight	5 m	1520369	1405851	1522888	1405843	1523492	1419687
					Right Angle		1522642	1405852	1522930	1405844	1523492	1419687
Male	Straight			1522516	1405847		1526981	1405839	1523476	1419690		
	Right Angle			1522561	1405850		1522833	1405842	1523476	1419690		
Female	Straight			10 m	1520372	1405851	1522891	1405843	1523492	1419687		
	Right Angle				1522655	1405852	1522943	1405844	1523492	1419687		
Male	Straight				1522529	1405847	1522794	1405839	1523476	1419690		
	Right Angle				1522574	1405850	1522846	1405842	1523476	1419690		

M8/M12 Distributor Boxes

Use distributor boxes for quick and clear cabling in the field. Distributor boxes bundle several cables into one master cable that is connected to the controller. Thanks to the status indicator, you have an overview of a large number of signals.

- ✓ Increased machine availability, thanks to easy diagnostics
- ✓ Safety in the field, thanks to molded housing and high degree of protection
- ✓ Flexible cabling, thanks to the wide product range and various master cable connections

M8 Metal Thread

 8 Positions Single Occupancy ✓ LED			 8 Positions Double Occupancy ✓ LED		
Connection Type			Connection Type		
Master Cables	Cable Glands	Connectors	Master Cables	Cable Glands	Connectors
1197232 (5m)	1197611 (Screw)	1197575 (M12 to M8)	1197314 (5m)	1197617 (Screw)	N/A
1197236 (10m)	1197616 (Spring)	1166980 (M16 to M8)	1197319 (10m)	1197620 (Spring)	

M12 Metal Thread

 8 Positions Single Occupancy ✗ LED			 8 Positions Double Occupancy ✗ LED			 8 Positions Single Occupancy ✓ LED			 8 Positions Double Occupancy ✓ LED		
Connection Type			Connection Type			Connection Type			Connection Type		
Master Cables	Cable Glands	Connectors	Master Cables	Cable Glands	Connectors	Master Cables	Cable Glands	Connectors	Master Cables	Cable Glands	Connectors
1517042 (5m)	1516881	N/A	1517068 (5m)	1516894	N/A	1517165 (5m)	1516823	N/A	1517181 (5m)	1516836	N/A
1517055 (10m)			1517071 (10m)			1517178 (10m)			1517194 (10m)		

M12 Plastic Thread

 8 Positions Single Occupancy ✗ LED			 8 Positions Double Occupancy ✗ LED			 8 Positions Single Occupancy ✓ LED			 8 Positions Double Occupancy ✓ LED		
Connection Type			Connection Type			Connection Type			Connection Type		
Master Cables	Cable Glands	Connectors	Master Cables	Cable Glands	Connectors	Master Cables	Cable Glands	Connectors	Master Cables	Cable Glands	Connectors
1452518 (5m)	1452783	N/A	1452547 (5m)	1452796 (Screw)	1692844 (M23 to M12)	1452699 (5m)	1452848 (Screw)	N/A	1452725 (5m)	1452851 (Screw)	1692459 (M23 to M12)
1452521 (10m)			1452550 (10m)	1452974 (Spring)		1452709 (10m)	1453025 (Spring)		1452738 (10m)	1453038 (Spring)	

Accessories

Master Cable Ring for Sensor/Actuator boxes

 Cross Section		
1503344	50m	PUR/PVC Black

Master Cable M23 Plug Connection

 19 pos.		
1684056	5m	PUR/PVC Black

Ethernet Switches

Unmanaged Switches

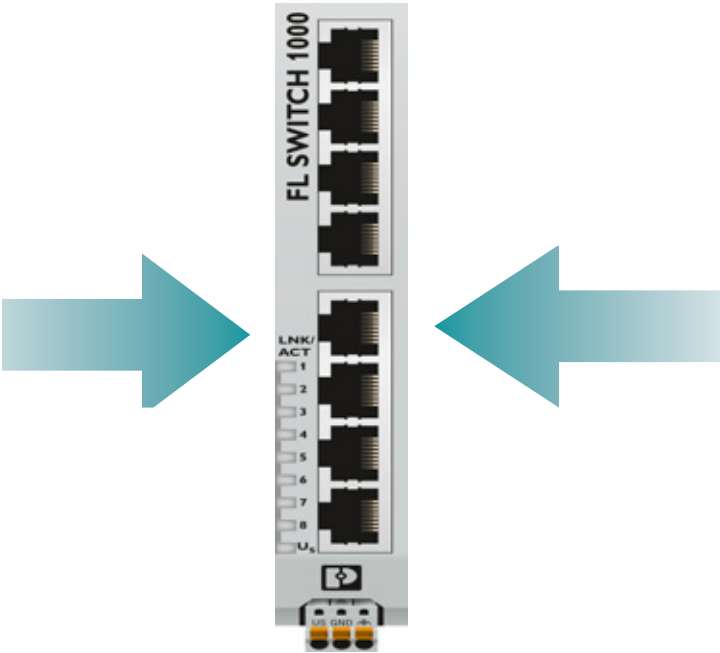
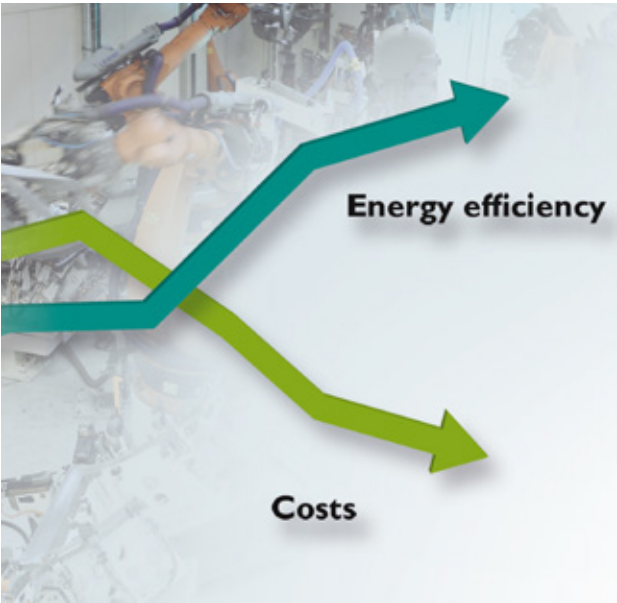
■ How many copper ports are required?				■ Is higher IP rating needed in the application?			
■ Are specialty ports required: Power Over Ethernet (PoE) and/or fiber optic?				■ Is extended temperature needed?			
■ What are the total number of ports required?				■ Resulting Phoenix Contact part number			
■ What speed is required in the network?							
Unmanaged Switch 1000							
Copper Ports	Specialty Ports	Total Ports	Speed	IP65 / IP67	Extended Temperature	Type Description	Order #
4	1 x SC	5	10/100	N	N	FL SWITCH 1004N-FX SM	1085214
4	1 x ST	5	10/100	N	N	FL SWITCH 1004N-FX ST	1085179
4	1 x SC-D	5	10/100	N	N	FL SWITCH 1004N-FX	1084159
4	1 x SFP	5	Gigabit	N	N	FL SWITCH 1104N-SFP	1085173
4	1 x SFP	5	Gigabit	N	Y	FL SWITCH 1104NT-SFP	1343023
4	1 x SFP	5	10/100	N	N	FL SWITCH 1004N-SFX	1085177
4	1 x SFP	5	10/100	N	Y	FL SWITCH 1004NT-SFX	1085169
5	-	5	10/100	N	N	FL SWITCH 1005N	1085039
5	-	5	Gigabit	N	N	FL SWITCH 1105N	1085254
5	-	5	10/100	N	Y	FL SWITCH 1005NT	1085170
5	-	5	Gigabit	N	Y	FL SWITCH 1105NT	1085163
5	2 x SFP	7	Gigabit	N	N	FL SWITCH 1105N-2SFP	1085171
5	2 x SFP	7	10/100	N	N	FL SWITCH 1005N-2SFX	1085176
5	2 x SFP	7	10/100	N	Y	FL SWITCH 1005NT-2SFX	1085164
5	2 x SFP	7	Gigabit	N	Y	FL SWITCH 1105NT-2SFP	1343025
8	-	8	10/100	N	N	FL SWITCH 1008N	1085256
8	-	8	Gigabit	N	N	FL SWITCH 1108N	1085243
8	-	8	10/100	N	Y	FL SWITCH 1008NT	1085165
8	-	8	Gigabit	N	N	FL SWITCH 1108N	1085243
-	8 x M12	8	10/100	Y	N	FL SWITCH 1608	1196227
-	8 x M12	8	Gigabit	Y	N	FL SWITCH 1708	1196228
12	2 x SFP	14	10/100	N	Y	FL SWITCH 1012NT-2SFP	1249598
16	-	16	10/100	N	N	FL SWITCH 1016N	1085255
16	-	16	Gigabit	N	N	FL SWITCH 1116N	1085219
16	-	16	Gigabit	N	Y	FL SWITCH 1116T	1085115
24	-	24	10/100	N	Y	FL SWITCH 1024T	1343027





Phoenix Contact Ethernet Unmanaged Switch conforms to Energy-Efficiency Ethernet Standard IEEE 802.3az

Space-saving due to reduced width



Managed Switches

■ How many copper ports are required?			■ What special features are included?				
■ How many fiber optic ports are required?			■ What is the designation of the FL Switch?				
■ What are the total number of combo ports?			■ Resulting Phoenix Contact part number				
■ What is the speed?							
Copper Ports	Fiber Optic Ports	Combo Ports	Port Speed	Special Features	Designation	Order #	
Intelligent Switches for the Machine: Switch 2000 and 2100							
Supply voltage: 18-32 V DC (redundant), temperature range: -0°C to +60°C, IP20, front port outlet direction							
5 x RJ45	-	-	10/100 Mbps	-	FL SWITCH 2005	2702323	
8 x RJ45	-	-		-	FL SWITCH 2008	2702324	
16 x RJ45	-	-		-	FL SWITCH 2016	2702903	
5 x RJ45	-	-	10/100/1,000 Mbps	-	FL SWITCH 2105	2702665	
8 x RJ45	-	-		-	FL SWITH 2108	2702666	
16 x RJ45	-	-		-	FL SWITCH 2116	2702908	
Intelligent Switches for Universal Use: Switch 2200 and 2300							
Supply voltage: 12-57 V DC (redundant), temperature range: -40°C to +70°C, IP20, front port outlet direction, PROFINET Class B Approvals: DNV/GL, BV, ABS, LR, RINA, IECEx, ATEX Zone 2							
5 x RJ45	-	-	10/100 Mbps	Digital alarm output Fast Ring Detection, Large Tree Support, MRP Manager, up to 32 static VLANs, pool-based DHCP server and option 82	FL SWITCH 2205	2702326	
6 x RJ45	2 x SC MM	-			FL SWITCH 2206-2FX	2702330	
6 x RJ45	2 x SCMM	-			FL SWITCH 2206C-2FX	1095628	
6 x RJ45	2 x SFP	-			FL SWITCH 2206-2SFX PN	1044028	
7 x RJ45	1 x SC SM	-			FL SWITCH 2207-FX SM	2702329	
7 x RJ45	1 x SC MM	-			FL SWITCH 2207-FX	2702328	
8 x RJ45	-	-			FL SWITCH 2208	2702327	
8 x RJ45	-	-			FL SWITCH 2208 PN	1044024	
8 x RJ45	-	-			FL SWITCH 2208C	1095627	
6 x RJ45	2 x ST SM	-			FL SWITCH 2206-2FX SM ST	2702333	
6 x RJ45	2 x ST MM	-			FL SWITCH 2206-2FX ST	2702332	
4 x RJ45	2 x SFP	2			FL SWITCH 2204-2TC-2SFX	2702334	
6 x RJ45	2 x SC SM	-			FL SWITCH 2206-2FX SM	2702331	
6 x RJ45	2 x SFP	-			FL SWITCH 2206-2SFX	2702969	
14 x RJ45	2 x SC SM	-			FL SWITCH 2214-2FX SM	2702906	
14 x RJ45	2 x SC MM	-			FL SWITCH 2214-2FX	2702905	
14 x RJ45	2 x SFP	-			FL SWITCH 2214-2SFX	1006188	
14 x RJ45	2 x SFP	-			FL SWITCH 2214-2SFX PN	1044030	
16 x RJ45	-	-			FL SWITCH 2216	2702904	
16 x RJ45	-	-			FL SWITCH 2216 PN	1044029	
12 x RJ45	2 x SFP	2			FL SWITCH 2212-2TC-2SFX	2702907	
8 x RJ45	-	-			10/100/1,000 Mbps	FL SWITCH 2308	2702652
4 x RJ45	2 x SFP	2	FL SWITCH 2304-2GC-2SFP			2702653	
6 x RJ45	2 x SFP	-	FL SWITCH 2306-2SFP			2702970	
6 x RJ45	2 x SFP	-	FL SWITCH 2306-2SFP PN			1009222	
14 x RJ45	2 x SFP	2	FL SWITCH 2312-2GC-2SFP			2702910	
14 x RJ45	2 x SFP	-	FL SWITCH 2314-2SFP			1006191	
14 x RJ45	-	-	FL SWITCH 2314-2SFP PN			1031683	
IP65/IP66/IP67 Intelligent Switches for Universal Use: Switch 2600 and 2700							
Supply voltage: 12-57 V DC (redundant), temperature range: -40°C to +70°C, IP20, front port outlet direction, PROFINET Class B Approvals: DNV/GL, BV, ABS, LR, RINA, IECEx, ATEX Zone 2							
8 x M12	-	-	10/100 Mbps	IP65/IP66/IP67	FL SWITCH 2608	1106500	
8 x M12	-	-			FL SWITCH 2608 PN	1106616	
8 x M12	-	-	10/100/1,000 Mbps		FL SWITCH 2708	1106615	
8 x M12	-	-			FL SWITCH 2708 PN	1106610	



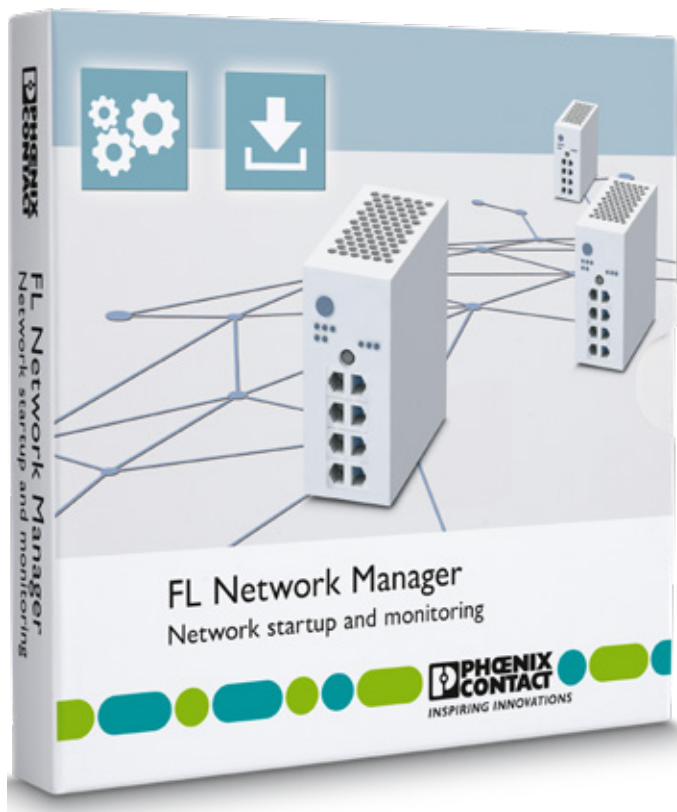


Managed Switches (cont.)

Stainless Steel Intelligent Switches for Universal Use: Switch 2400 and 2500						
Supply voltage: 12-57 V DC (redundant), temperature range: -40°C to +70°C, IP20, front port outlet direction, PROFINET Class B Approvals: DNV/GL, BV, ABS, LR, RINA, IECEX, ATEX Zone 2						
8 x RJ45	-	-	10/100 Mbps	Digital alarm output Fast Ring Detection, Large Tree Support, MRP Manager, up to 32 static VLANs, pool-based DHCP server and option 82	FL SWITCH 2408	1043412
8 x RJ45	-	-			FL SWITCH 2408 PN	1089133
6 x RJ45	2 x SFP	-			FL SWITCH 2406-2SFX	1043414
6 x RJ45	2 x SFP	-			FL SWITCH 2406-2SFX PN	1089126
4 x RJ45	2 x SFP	2			FL SWITCH 2404-2TC-2SFX	1088853
16 x RJ45	-	-			FL SWITCH 2416	1043416
16 x RJ45	-	-			FL SWITCH 2416 PN	1089150
14 x RJ45	2 x SFP	-			FL SWITCH 2414-2SFX	1043423
14 x RJ45	2 x SFP	-			FL SWITCH 2414-2SFX PN	1089139
12 x RJ45	2 x SFP	2			FL SWITCH 2412-2TC-2SFX	1088875
4 x RJ45	2 x SFP	2			FL SWITCH 2504-2GC-2SFP	1088872
6 x RJ45	2 x SFP	-			FL SWITCH 2506-2SFP	1043491
6 x RJ45	2 x SFP	-	FL SWITCH 2506-2SFP PN		1089135	
8 x RJ45	-	-	FL SWITCH 2508		1043484	
8 x RJ45	-	-	FL SWITCH 2508 PN		1089134	
14 x RJ45	2 x SFP	-	FL SWITCH 2514-2SFP		1043499	
14 x RJ45	2 x SFP	-	FL SWITCH 2514-2SFP PN		1089154	
12 x RJ45	2 x SFP	2	FL SWITCH 2512-2GC-2SFP		1088856	
16 x RJ45	-	-	FL SWITCH 2516		1043496	
16 x RJ45	-	-	FL SWITCH 2516 PN		1089205	
						



FL Network Manager



The FL NETWORK MANAGER simplifies configuration and company management. Commission your network quickly and easily with the FL NETWORK MANAGER network management software.

The software provides support for the following steps:

- Scanning an existing network
- IP assignment and device configuration
- Multi-device configuration
- Configuration file handling
- Firmware update
- SNMP scripting

PoE and Installation Technology

■ How many copper ports are required?	■ Are dual-power input and alarm contacts required?							
■ Are specialty ports required: Power Over Ethernet (PoE) and/or fiber optic?	■ Does the application require unmanaged or managed switch?							
■ What are the total number of ports required?	■ Resulting Phoenix Contact part number							
■ What speed is required in the network?								
POE SWITCH								
Copper Ports	Specialty Ports	Total Ports	Speed	Power Alarm	Type	Description	Order #	
1 x RJ45	4 PoE+	5	10/100	Y	Unmanaged	FL SWITCH 1001T-4POE	2891064	
-	2 PoE+/2 Fiber SFP	4	Gigabit	Y	Unmanaged	FL SWITCH 1000T-2POE-GT-2SFP	1026765	
-	8 PoE+/2 Fiber SFP	10		Y	Unmanaged	FL SWITCH 1000-8POE-GT	1102079	
1 x RJ45	4 PoE+/1 Fiber SFP	6		Y	Unmanaged	FL SWITCH 1001T-4POE-GT-SFP	1026932	
1 x RJ45	4 PoE+	5		Y	Unmanaged	FL SWITCH 1001-4POE-GT	1102077	
1 x RJ45	4 PoE+	5		Y	Unmanaged	FL SWITCH 1001T-4POE-GT	1026937	
-	4 PoE+/1 Fiber SFP	5		Y	Managed	FL SWITCH 4000T-4POE-SFP	1026924	
-	8 PoE+/2 Fiber SFP	10		Y	Managed	FL SWITCH 4000T-8POE-2SFP	1026923	
4 x RJ45	8 PoE+/4 Fiber SFP	16		Y	Managed	FL SWITCH 4004T-8POE-4SFP	1026922	
-	8 PoE+	8		N	Unmanaged	FL SWITCH 1000-8POE	1342622	
-	8 PoE+	8		N	Unmanaged	FL SWITCH 1100-8POE	1343034	
-	5 PoE+ / 2 Fiber SFP	7		N	Unmanaged	FL SWITCH 1100-5POE-2SFP	1342621	
-	8 PoE+ / 2 Fiber SFP	10		N	Unmanaged	FL SWITCH 1100T-8POE-2SFP	1467018	

■ What connection methods does it have?			■ What PoE standard does it comply to?					
■ What is the temperature rating?			■ What is the designation?					
■ What is the max power allowed?			■ Resulting Phoenix Contact part number					
■ Does it have any special features?								
POE Injector								
	Connection Method	Temperature Range	Power Budget	Special Features	PoE Standard	Designation	Order #	
	RJ45/RJ45	0°C to +60°C	15/30 W	-	IEEE 802.3 af/at (PoE+)	INJ 1000	2703005	
		-40°C to +75°C	60 W	Electrical isolation in the power supply unit	Prepared for PoE bt (PoE++)	INJ 1010	2703007	
			15/30 W	Electrical isolation in the power supply unit, surge protection and shield current diagnostics	IEEE 802.3 af/at (PoE+)	INJ 1000-T	2703006	
			60 W		Prepared for PoE bt (PoE++)	INJ 1010-T	2703008	
			15/30 W		IEEE 802.3 af/at (PoE+)	INJ 1100-T	2703009	
			60 W		Prepared for PoE bt (PoE++)	INJ 1110-T	2703010	
	RJ45/IDC		15/30 W		IEEE 802.3 af/at (PoE+)	INJ 2102-T	2703012	
			60 W		Prepared for PoE bt (PoE++)	INJ 2112-T	2703014	
			15/30 W		IEEE 802.3 af/at (PoE+)	INJ 2103-T	1004065	
	RJ45/Push-In		15/30 W		IEEE 802.3 af/at (PoE+)	INJ 2101-T	2703011	
								60W
	RJ45/Screw		60 W		Prepared for PoE bt (PoE++)	INJ 2111-T	2703013	

What connection methods does it have?				Does it have surge protection?					
What type of patch panel is this?				What is the designation?					
How is it shielded?				Resulting Phoenix Contact part number					
How is the shield connected?									
Patch Panels									
	Connection Method	Description	Shielding	Cable Shield Connection	Surge Protection	Designation	Order #		
	RJ45 / RJ45	"Standard ethernet patch panel, 8-Pos., 10/100/1,000 Mbps"	Right on the DIN rail	Using a RJ45 socket	No	PP-RJ-RJ	2703015		
	RJ45/Screw			Toolless using shield contact spring		PP-RJ-SC	2703016		
	RJ45/Push-In					PP-RJ-SCC	2703018		
	RJ45/IDC					PP-RJ-IDC	2703019		
	RJ45 / RJ45	"Function variant ethernet patch panels 8-Pos., 10/100/1,000 Mbps With surge protection and shield current diagnostics"		Using a RJ45 socket	YES	PP-RJ-RJ-F	2703020		
	RJ45/Screw			Toolless using shield contact spring		PP-RJ-SC-F	2703021		
	RJ45/Push-In					PP-RJ-SCC-F	2703022		
	RJ45/IDC					PP-RJ-IDC-F	2703023		



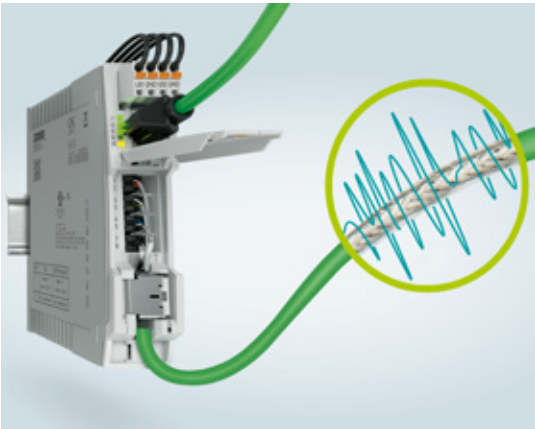
Toolless Shield Connection

Connect the cable shielding to the DIN rail without tools - with strain relief assured at the same time.



Shield Current Diagnostics

The reliable display of hazardous shield currents increases the safety of the installation.

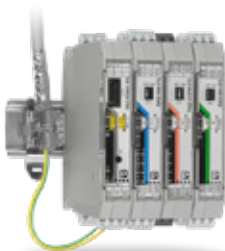


Overvoltage Protection

The integrated surge protection protects the application against sudden high voltages in the data cable and improves system reliability and availability.

Industrial Wireless

■ What's the voltage range?			■ What wireless technology used?			
■ What's the temperature range?			■ Does the Application requires internal or external antenna?			
■ What's the wireless frequency?			■ Resulting Phoenix Contact part number			
Wireless Ethernet						
Voltage Range	Temperature Range	Wireless Frequency	Wireless Technology	Antenna / IO	Description	Order #
9-32 VDC	-40°C to 60°C	2.4 / 5 GHz	WLAN a, b, g, n	external	FL WLAN 2010	1119246
9-32 VDC	-40°C to 60°C	2.4 / 5 GHz	WLAN a, b, g, n	internal	FL WLAN 2100	2702535
9-32 VDC	0°C to 60°C	2.4 / 5 GHz	WLAN a, b, g, n	external	FL WLAN 1010	2702899
9-32 VDC	0°C to 60°C	2.4 / 5 GHz	WLAN a, b, g, n	internal	FL WLAN 1100	2702534
9-30 VDC	0°C to 60°C	2.4 / 5 GHz	Bluetooth/WLAN a, b, g, n	internal	FL EPA 2	1005955
9-30 VDC	-40°C to 65°C	2.4 / 5 GHz	Bluetooth/WLAN a, b, g, n	external	FL EPA 2 RSMA	1005957
9-32 VDC	-30 C to 60 C	2.4 / 5 GHz	Wifi 6	external	FL WLAN 1020	2702992
9-32 VDC	-30 C to 60 C	2.4 / 5 GHz	Wifi 6	internal	FL WLAN 1120	1386091
Wireless Serial / IO						
19.2-30.5 VDC	-40°C to 70°C	2.4 GHz	Trusted Wireless	-	FL WLAN 1120	2901541
19.2-30.5 VDC	-20°C to 70°C	2.4 GHz	Trusted Wireless	-	RAD-EE-2400-RS485	1081818
10.8-30.5 VDC	-40°C to 70°C	900 MHz	Trusted Wireless	-	RAD-900-IFS-AU	2702878
19.2-30.5 VDC	-40°C to 70°C	-	-	-	RAD-RS485-IFS	2702184
19.2-30.5 VDC	-40°C to 70°C	-	-	Digital Inputs	RAD-DI4-IFS	2901535
19.2-30.5 VDC	-40°C to 70°C	-	-	Relay Outputs	RAD-DOR4-IFS	2901536
19.2-30.5 VDC	-40°C to 70°C	-	-	Digital Inputs	RAD-DI8-IFS	2901539
19.2-30.5 VDC	-40°C to 70°C	-	-	Digital Transistor Outputs	RAD-DO8-IFS	2902811
19.2-30.5 VDC	-40°C to 70°C	-	-	Analogue Inputs	RAD-AI4-IFS	2901537
19.2-30.5 VDC	-40°C to 70°C	-	-	Analogue Outputs	RAD-AO4-IFS	2901538
19.2-30.5 VDC	-40°C to 70°C	-	-	Digital Inputs and Outputs, 1 Analogue Input and Output	RAD-DAIO6-IFS	2901533
19.2-30.5 VDC	-40°C to 70°C	-	-	RTD PT100 Inputs	RAD-PT100-4-IFS	2904035
19.2-30.5 VDC	-40°C to 70°C	-	-	NAMUR Digital Inputs	RAD-NAM4-IFS	2316275



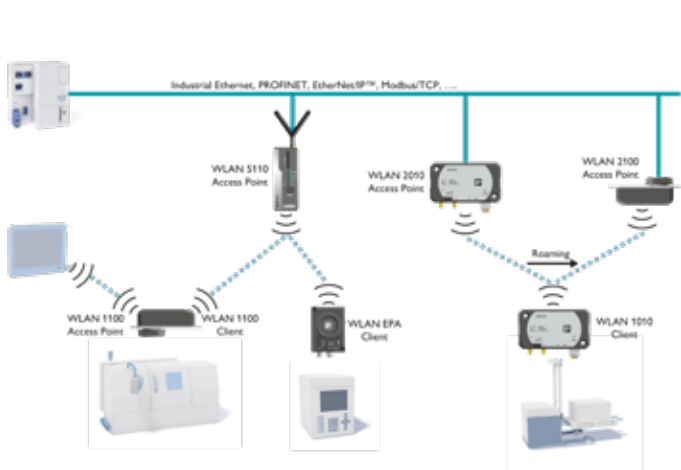


WLAN

Secure and reliable ethernet wireless connections for industrial application.

TRUSTED WIRELESS

Quick and easy startup and configuration in Mesh networks of up to 250 devices and 32 Km range.



Industrial Wireless (cont.)

SMS Relay

4G/LTE mobile interface. Switching via phone call and SMS, alerting via SMS and email, message in the event of power failure					
Voltage Supply	Analog Input	Digital Input	Relay Output	Designation	Order #
DC supply (10 V DC ... 60 V DC)	2	4	4	TC MOBILE I/O X200-4G	1038567
AC supply (93 V AC ... 250 V AC)	-	4	4	TC MOBILE I/O X200-4G AC	1038568



Antennas

■ What's the antenna type?	■ What's the connection?
■ What's the frequency?	■ Resulting Phoenix Contact part number
■ What's the antenna gain?	

Wireless Accessories - Antenna					
Antenna Type	Frequency	Gain	Connection	Description	Order #
Omnidirectional	2.4 GHz	2 dBi	RSMA (Male)	RAD-ISM-2400-ANT-OMNI-2-1-RSMA	2701362
Omnidirectional	2.4 GHz/5 GHz	2.5 dBi/5 dB	N (Female)	ANT-OMNI-2459-02	2701408
Omnidirectional	2.4 GHz/5 GHz / 6 GHz	2.0 dBi/2.5 dBi/3.0 dBi	N (Male)	ANT-OMNI-2459-04	1284780
Omnidirectional	2.4 GHz	6 dBi	N (Female)	RAD-ISM-2400-ANT-OMNI-6-0	2885919
Directional	2.4 GHz/5 GHz	9 dBi	N (Female)	ANT-DIR-2459-01	2701186
Omnidirectional	900 MHz	2 dBi	RSMA (Male)	RAD-900-ANT-OMNI-2-2-RSMA	2904801
Directional	900 MHz	5 dBi	N (Female)	RAD-ISM-900-ANT-YAGI-3-N	2867801
Directional	900 MHz	8.5 dBi	N (Female)	RAD-ISM-900-ANT-YAGI-6.5-N	2867814



■ What's the connection type?			■ What's the attenuation of the cable?	
■ What's the length of the cable?			■ Resulting Phoenix Contact part number	

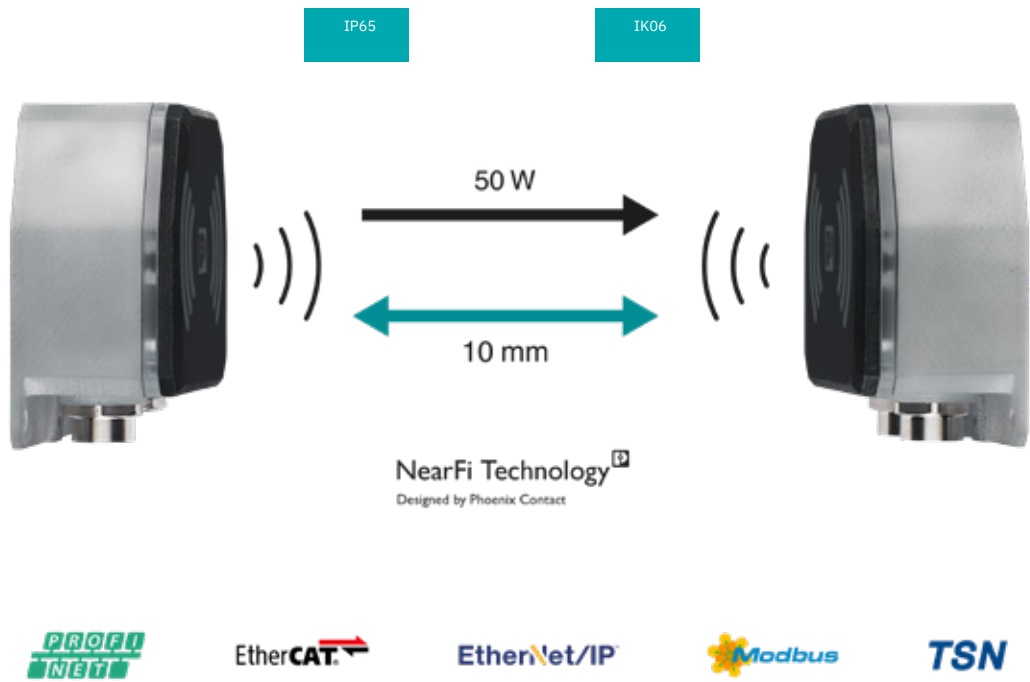
Wireless Accessories - Coaxial cable				
Connection	Length	Attenuation	Description	Order #
N (Male) -> RSMA (Male)	0.5 m	0.5 / 0.8 / 1.1 dB at 0.9 / 2.4 / 5.8 GHz	RAD-PIG-RSMA/N-0.5	2903263
N (Male) -> RSMA (Male)	1 m	0.5 / 0.8 / 1.1 dB at 0.9 / 2.4 / 5.8 GHz	RAD-PIG-RSMA/N-1	2903264
N (Male) -> RSMA (Male)	2 m	0.5 / 0.8 / 1.1 dB at 0.9 / 2.4 / 5.8 GHz	RAD-PIG-RSMA/N-2	2903265
N (Male) -> RSMA (Male)	3 m	0.5 / 0.8 / 1.1 dB at 0.9 / 2.4 / 5.8 GHz	RAD-PIG-RSMA/N-3	2903266
N (Male) -> RSMA (Male)	5 m	0.5 / 0.8 / 1.1 dB at 0.9 / 2.4 / 5.8 GHz	RAD-PIG-RSMA/N-5	2702140
2x N (Male)	3 m	1.0 / 1.5 / 2.1 dB at 0.9 / 2.4 / 5.8 GHz	RAD-CAB-PFP240-10	5606124
2x N (Male)	6 m	1.0 / 1.5 / 2.1 dB at 0.9 / 2.4 / 5.8 GHz	RAD-CAB-PFP400-20	5606125



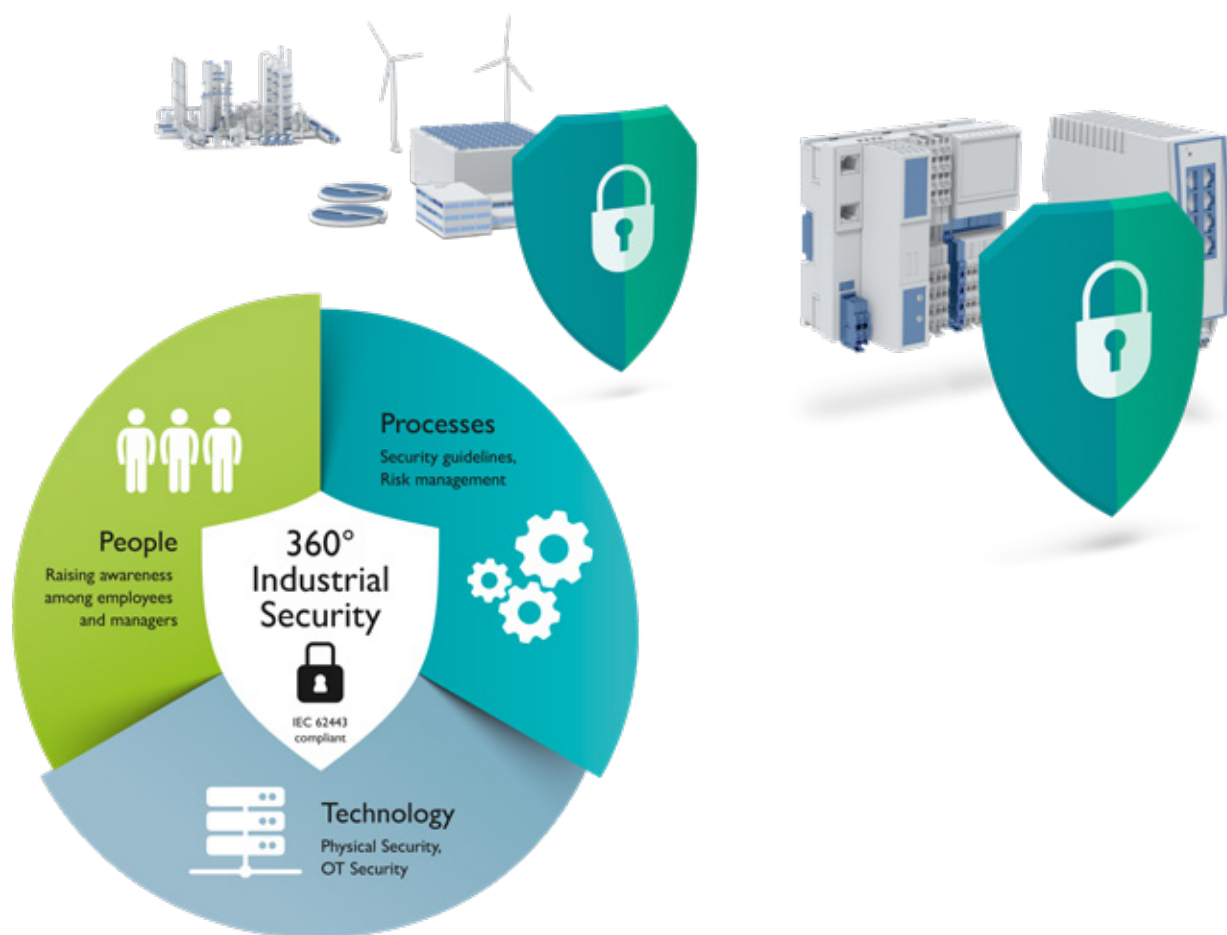
■ What is the input voltage?	■ What is the type of wireless transmission the application requires?				
■ What is distance between coupler and remote devices?	■ Resulting Phoenix Contact part number				
■ What is the type of coupler?					
NearFi – Power and Data contactless transmission					
Input Voltage	Distance (at 25°)	Type	Wireless Transmission	Description	Order #
24 VDC	0 ... 12 mm	Remote	Power + Data	NEARFI PD 2A ETH R	1234225
24 VDC		Base	Power + Data	NEARFI PD 2A ETH B	1234224
24 VDC		Remote	Power	NEARFI P 2A R	1234229
24 VDC		Base	Power	NEARFI P 2A B	1234226
24 VDC	0 ... 40 mm	Remote	Data	NEARFI D ETH R	1234234
24 VDC		Base	Data	NEARFI D ETHB	1234232



NearFi Technology – Contactless Ethernet Real-time Data and Power Transmission



Secure Remote Connectivity



Phoenix Contact Order #	mGuard cloud compatible?					Does it have DMZ capability?				
Can it be installed in a hazardous location?	What external memory type does it have?					Is it cellular capable?				
How many copper ports does it have?	Does it have a full stateful firewall?					Can it fall over from a wired connection to cellular network?				
What is the temperature rating?	Is it VPN hub capable?									
mGuard										
										
Model	FL mGuard RS2000	FL mGuard RS2005	TC mGuard RS2000	FL mGuard RS4000	FL mGuard RS4004	TC mGuard RS4000	FL mGuard 1102	FL mGuard 1105	FL mGuard 2102	FL mGuard 4302
Order #	2700642	2701875	2903588	2200515	2701877	2903586	1153079	1153078	1357828	1357840
C1D2	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No
LAN Ports Available	1	5	4	1	4	4	2	5	2	2
Temperature	-20°C -> +60°C	-20°C -> +60°C	-40°C -> +60°C	-20°C -> +60°C	-20°C -> +60°C	-40°C -> +60°C	0°C -> 60°C	0°C -> 60°C	-20°C -> +60°C	-40°C -> +60°C
mGuard Secure Cloud Compatible	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No
External Memory	SD	SD	SD	SD	SD	SD	SD	SD	SD	SD
Full Stateful Firewall				Yes	Yes	Yes	Yes	Yes	Yes	Yes
VPN Hub Capability									Yes	Yes
DMZ Capability				Yes	Yes	Yes				
Cellular and GPS Capability					Yes	Yes				
Failover from Wired to Cell			Yes			Yes				



mGuard Device Manager

Device management software for security routers and firewalls



From fieldbus through to Industrial Ethernet

Use device servers to convert serial interfaces such as RS-232, RS-422, and RS-485 to other standards, such as Ethernet (RJ45), with protocol transparency. Gateways and protocol converters convert various fieldbus and Ethernet protocols (e.g., PROFIBUS to PROFINET), thus enabling the easy integration of legacy serial devices and fieldbuses into modern Ethernet networks.

■ What protocol do you need to convert?		■ Does the application require special approvals or special features?				
■ How many Ethernet interfaces does the application need?		■ What is the designation?				
■ How many Serial interfaces does the application need?		■ Phoenix Contact order number				
	Protocol	Ethernet Interface	Serial Interface	Special Features	Designation	Item #
	Protocol Transparent	1 x RJ45	1 x D-SUB 9	ATEX, IECEx, UL (C1D2)	GW DEVICE SERVER 1E/1DB9	2702758
			2 x D-SUB 9		GW DEVICE SERVER 1E/2DB9	2702760
		2 x RJ45	2 x D-SUB 9		GW DEVICE SERVER 2E/2DB9	2702761
			4 x D-SUB 9		GW DEVICE SERVER 2E/4DB9	2702763
	MODBUS RTU/ASCII to MODBUS TCP	1 x RJ45	1 x D-SUB 9	ATEX, IECEx, UL (Class I, Division 2)	GW MODBUS TCP/ RTU 1E/1DB9	2702764
			2 x D-SUB 9		GW MODBUS TCP/ RTU 1E/2DB9	2702765
		2 x RJ45	2 x D-SUB 9		GW MODBUS TCP/ RTU 2E/2DB9	2702766
			4 x D-SUB 9		GW MODBUS TCP/ RTU 2E/4DB9	2702767
	Modbus RTU/ ASCII/TCP to EtherNet/IP™	1 x RJ45	1 x D-SUB 9		GW EIP/MODBUS 1E/1DB9	1062540
			2 x D-SUB 9		GW EIP/MODBUS 1E/2DB9	1062423
		2 x RJ45	2 x D-SUB 9		GW EIP/MODBUS 2E/2DB9	1062380
			4 x D-SUB 9		GW EIP/MODBUS 2E/4DB9	1062388
	Modbus RTU/ AS CII/TCP to PROFINET	1 x RJ45	1 x D-SUB 9		GW PN/MODBUS 1E/1DB9	1105707
			2 x D-SUB 9		GW PN/MODBUS 1E/2DB9	1105708
		2 x RJ45	2 x D-SUB 9		GW PN/MODBUS 2E/2DB9	1105709
			4 x D-SUB 9		GW PN/MODBUS 2E/4DB9	1105710
	PROFIBUS DP to PROFINET	1x RJ45	1x D-SUB 9	FDT/DTM	GW PN/DP 1E/2DB9	1108712
			1x D-SUB 9			
	IO-Link to PROFINET, Modbus/TCP, and OPC UA	2 x RJ45	8 x DI	-	IOL MA8 PN DI8	1072838
	IO-Link to EtherNet/IP™, Modbus/TCP, and OPC UA				IOL MA8 EIP DI8	1072839

PLCnext Technology[®]

Designed by PHOENIX CONTACT

PLCnext Control devices enable you to work flexibly with your preferred programming languages, whether it's IEC 61131-3 or high-level languages. Unlimited flexibility with the quick and easy integration of open source software and apps, current and future communication standards, and intelligent networking through connection to the cloud afford maximum freedom for your transition into the digital age.



PLCnext Control



PLCnext Engineer



PLCnext Store



PLCnext Community



What is the CPU?	CPU Designation
What is the main feature the application requires?	Resulting Phoenix Contact part number

PLCnext Control			
CPU	Feature	Designation	Order #
2152*	Standard Application	AXC F 2152	2404267
3152*	3 independent Ethernet Interfaces	AXC F 3152	1069208
4072S*	Integrated PROFIsafe Safety Controller	AXC F 4072S	1051328
4072R*	Redundancy functionality	AXC F 4072R	1136419
1502	Standard Edge PC	EPC 1502	1185416
1522	Edge PC with Serial ports	EPC 1522	1185423
9102S	Box PC with integrated PROFIsafe safety Controller	BPC 9102S	1246285



*Depending on the application, a Program / Configuration memory is required. (Part number: 1061701, 1043501, 1151112 or 1151111)

■ What CPU is compatible to the functionality?		■ CPU Designation	
■ What new functionality is required by the application?		■ Resulting Phoenix Contact part number	
Left-alignable PLCnext Extension Modules*			
Compatible CPU	Functionality	Designation	Order #
2152 / 3152	Interbus	AXC F XT IB	2403018
2152 / 3152	Profibus	AXC F XT PB	1091657
2152	Ethernet	AXC F XT ETH 1TX	2403115
2152 / 3152	Safety	AXC F XT SPLC 1000	1159811
3152	Machine Learning	AXC F XT ML 1000	1259849
2152 / 3152	PCIe	AXC F XT EXP	1139999



*AXC BS L 2 – 1064312 required to connect left alignable modules

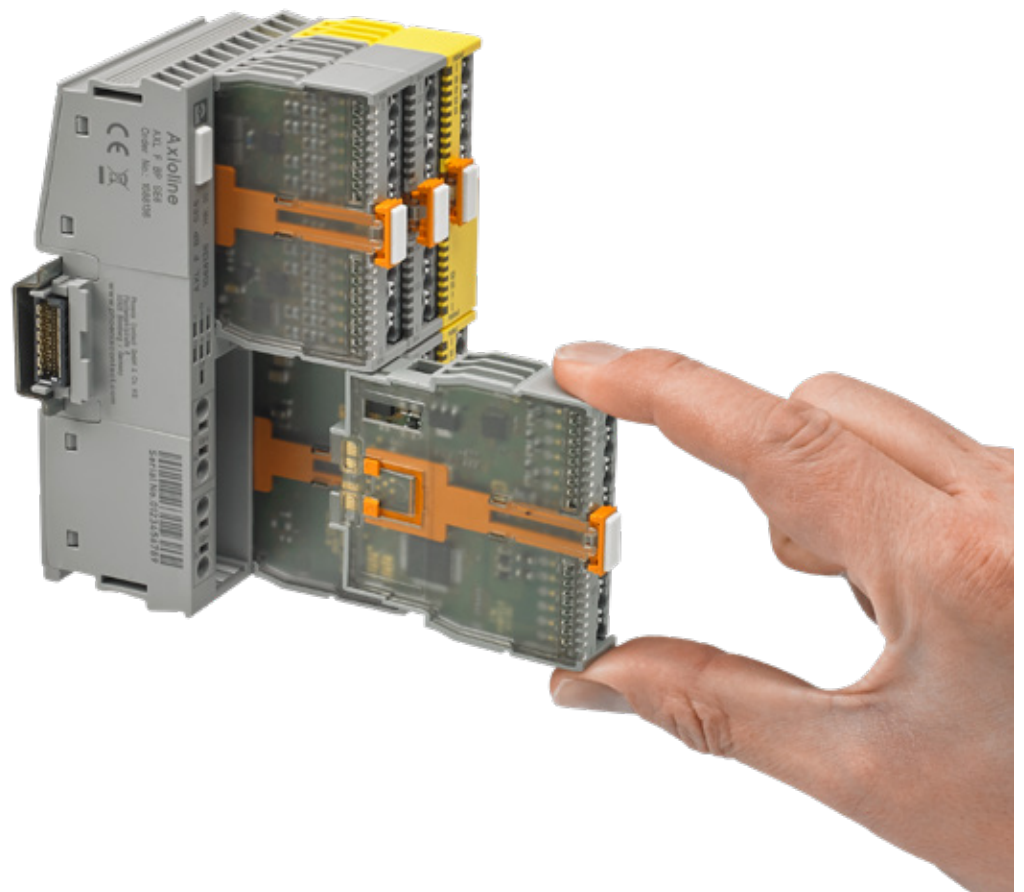
Axioline F I/O Modules

What is the description of the product model?				
What is the designation?				
Resulting Phoenix Contact part number				
Digital Data				
	DI Digital Input 16 to 64 channels - High-speed inputs 54 mm and 35 mm design width	Description	Designation	Order #
		16 Digital Inputs, 1-Wire	AXL F DI16/1 1H	2688310
		16 Digital Inputs, 1-Wire, High Speed	AXL F DI16/1 HS 1H	2701722
		16 Digital Inputs, 4-Wire	AXL F DI16/4 2F	2688022
		32 Digital Inputs, 1-Wire	AXL F DI32/1 1F	2688035
	DO Digital Output 8 to 32 channels 2 A outputs 54 mm and 35 mm design width	64 Digital Inputs, 1-Wire	AXL F DI64/1 2F	2701450
		8 Digital Outputs, 2-Wire, 2 A	AXL F DO8/2 2A 1H	2688381
		16 Digital Outputs, 1-Wire	AXL F DO16/1 1H	2688349
		16 Digital Outputs, 3-Wire	AXL F DO16/3 2F	2688048
	DI DO Digital Input/Output 35 mm	32 Digital Outputs, 1-Wire	AXL F DO32/1 1F	2688051
		8 Digital Inputs, 8 Digital Outputs, 1-Wire	AXL F DI8/1 DO8/1 1H	2701916
Analog Data				
	AI Analog Input 4 to 8 channels 54 mm and 35 mm design width	4 Analog Inputs, Current	AXL F AI4 I 1H	2688491
		4 Analog Inputs, Voltage	AXL F AI4 U 1H	2688501
		8 Analog Inputs, Current/Voltage	AXL F AI8 1F	2688064
		4 Temperature Inputs, RTD	AXL F RTD4 1H	2688556
		4 Temperature Inputs, UTH	AXL F UTH4 1H	2688598
		8 Temperature Inputs, RTD	AXL F RTD8 1F	2688077
		8 Temperature Inputs, UTH	AXL F UTH8 1F	2688417
	AO Analog Output 4 to 8 channels 54 mm and 35 mm design width	4 Analog Outputs, Current/Voltage	AXL F AO4 1H	2688527
		8 Analog Outputs, Current/Voltage	AXL F AO8 1F	2688080
Special Function Modules				
	FKT Special Function Modules 54 mm and 35 mm design width	1 Interface can be configured as RS-485/RS-422 or RS-232	AXL F RS UNI 1H	2688666
		2 Counter Inputs, 2 Incremental Encoder Inputs	AXL F CNT2 INC2 1F	2688093
		1 SSI Interface, 1 Analog Output	AXL F SSI1 AO1 1H	2688433

Axioline Smart Elements IO

The pluggable Axioline Smart Elements are system-free modules without bus communication. The individual element only supports the I/O function. Only in combination with a backplane, which functions similarly to an adapter, bus communication for the respective I/O system is realised. The Axioline Smart Elements are therefore universal and flexible in use.

Description	Type	Input	Output	Order #
AXL F BP SE4	Backplane 4 slots	-	-	1088135
AXL F BP SE6	Backplane 6 slots	-	-	1088136
AXL SE DI16/1	Digital	16	-	1088127
AXL SE DI16/1 NPN	Digital	16	-	1105559
AXL SE DO16/1	Digital	-	16	1088129
AXL SE DO16/1 NPN	Digital	-	16	1105560
AXL SE DO4/2 2A EF	Digital	-	4	1181790
AXL SE DOR2 W 230	Digital	-	2	1105562
AXL SE INC1 ASYM	Encoder Inc	1	-	1182185
AXL SE INC1 SYM	Encoder Inc	1	-	1088130
AXL SE CNT1	Counter	1	-	1088131
AXL SE AI4 I 4-20	Analog	4	-	1088062
AXL SE AI4 I 0-20	Analog	4	-	1296378
AXL SE AI4 U 0-10	Analog	4	-	1088104
AXL SE AO4 I 4-20	Analog	-	4	1088123
AXL SE AO4 I 0-20	Analog	-	4	1296372
AXL SE AO4 U 0-10	Analog	-	4	1088126
AXL SE RTD4 PT100	Temperature	4	-	1088106
AXL SE RTD4 PT1000	Temperature	4	-	1182190
AXL SE UTH4 EF	Temperature	4	-	1182068
AXL SE PSDI8/3	PROFIsafe	8	-	1079241
AXL SE PSDO4/2 2A	PROFIsafe	-	4	1079231
AXL SE SSDI8/3	SafetyBridge	8	-	1190012
AXL SE SSDO4/2 2A	SafetyBridge	-	4	1190017
AXL SE IOL4	IO-Link	-	-	1088132
AXL SE RS485	RS 485	-	-	1088128
AXL SE RS232	RS 232	-	-	1181787
AXL SE SC	Slot Cover	-	-	1167159
AXL SE SC-A	Slot Cover	-	-	1088134



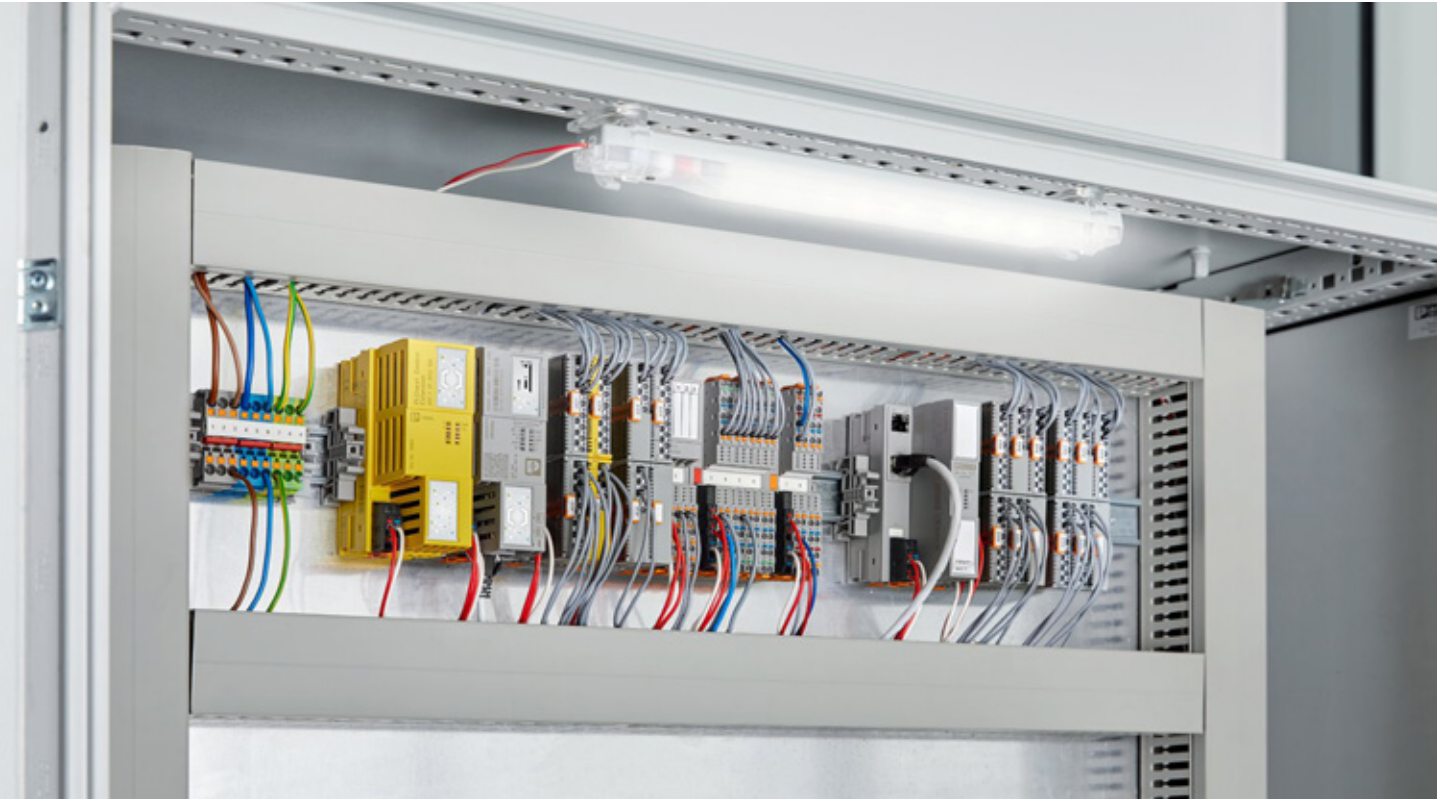
Enclosure Lights

The enclosure lights from Phoenix Contact provide optimum lighting for your control cabinet, and are easy to install without tools. In particular, the lower third of the control cabinet is ideally lit via a high-quality lens and prismatic reflector. Choose the lights tailored to your needs from two performance classes and a particularly flexible product range.

Class 409 PLD Enclosure Lights		
Model View		
Type	PLD E 409 W 350	PLD E 409 W 350 MS
Order #	1319569	1319573
Dimensions L x W x H	350 mm x 30 mm x 40 mm	350 mm x 30 mm x 40 mm
Luminous Flux	700 lm (Net Luminous Flux)	700lm (Net Luminous Flux)
Protection Class	II	II
Power Consumption	6 W	6 W
Motion Sensor	No	Yes

Advantages

- Optimum illumination of the entire control cabinet thanks to high-quality optics
- Worldwide 400-class application possibilities thanks to wide-range power supply
- UL approval also enables use in the North American market
- The 400-class push-in connection enables time savings during cabling
- The long LED service life eliminates maintenance work and replacing lights



Human-Machine Interface (HMI)

Resulting Phoenix Contact part number	How many hours of operation do you require?	What level of protection is needed?
What size screen do you need?	What type of touch functionality do you require?	What kind of special approvals are needed?
What resolution is required?	What type of processing power is needed?	
What is the minimum brightness required?	What temperature range is needed?	

HMIs for HTML5 Applications			
Model View			
Designation	BWP 2043W	BWP 2070W	BWP2102W
Order #	1060549	1060632	1060630
Display (in inches)	4.3	7	10.1
Colours	16.7 Million		
Resolution (W x H in pixels)	480 x 272 (WQVGA)	800 x 480 (WVGA)	1024 x 600 (WVGA)
Brightness (in cd/m2)	400	350	
Backlight (MTTF in h)	20,000	25,000	
Touch Technology	Polyester, Analog Resistive		
Processor	i.MX 6DualLite, 454 MHz		
Temperature Range	Operation: 0°C to +50°C Storage: -20°C to +85°C		
Degree of Protection (Front/Back)	IP66/IP20		
Approvals	UL/cUL		

HMIs for HTML5 Applications						
Model View						
Designation	WP 6070-WVPS	WP 6101-WXPS	WP 6121-WXPS	WP 6156-WHPS	WP 6185-WHPS	WP 6215-WHPS
Order #	1290800	1290801	1290802	1290807	1290807	1290809
Display (in inches)	7	10.1	12.1	15.6	18.5	21.5
Colours	16.7 Million					
Resolution (w x h in pixels)	800 x 480 (WQVGA)	1280 x 800 (WVGA)		1920 x 1080 (Full HD)		
Brightness (in cd/m²)	500	500	400	450	350	400
Backlight (MTTF in h)	50,000					
Touch Technology	Projective-Capacitive (PCAP)					
Processor	Arm® Cortex®-A53, 1.6 GHz					
Temperature Range	Operation: -20°C to +50°C, Storage: -25°C to +60°C					
Degree of Protection (Front/Back)	IP66/IP20					
Approvals	UL/cUL					



 Download:
[HMIs & Industrial PCs Catalogue](#)



 Download:
[Compact Industrial PCs Product List](#)

Human-Machine Interface (HMI)

Resulting Phoenix Contact part number	How many hours of operation do you require?	What level of protection is needed?
What size screen do you need?	What type of touch functionality do you require?	What kind of special approvals are needed?
What resolution is required?	What type of processing power is needed?	
What is the minimum brightness required?	What temperature range is needed?	

Visu+ Touch Panel for Basic Application			
Model View			
Designation	BTP 2043W	BTP 2070W	BTP2102W
Order #	1050387	1046666	1046667
Display (in inches)	4.3	7	10.1
Colours	262,144		
Resolution (W x H in pixels)	480 x 272 (WQVGA)	800 x 480 (WVGA)	1024 x 600 (WVGA)
Brightness (in cd/m2)	400	300	
Backlight (MTTF in h)	25,000		
Touch Technology	Polyester, Analog Resistive		
Processor	Arm® Cortex®-A7, 700 MHz i.MX6 UL		
Temperature Range	Operation: 0°C to +50°C Storage: -20°C to +85°C		
Degree of Protection (Front/Back)	IP65/IP20		
Approvals	UL/cUL		

Visu+ Touch Panel for Standard Application						
Model View						
Designation	TP 6070-WVPS	TP 6101-WXPS	TP 6121-WXPS	TP 6156-WHPS	TP 6185-WHPS	TP 6215-WHPS
Order #	1189629	1190417	1190420	1190421	1190423	1190424
Display (in inches)	7	10.1	12.1	15.6	18.5	21.5
Colours	16.7 Million					
Resolution (w x h in pixels)	800 x 480 (WQVGA)	1280 x 800 (WVGA)		1920 x 1080 (Full HD)		
Brightness (in cd/m2)	500	500	400	450	350	400
Backlight (MTTF in h)	50,000					
Touch Technology	Projective-Capacitive (PCAP)					
Processor	Arm® Cortex®-A9, 800 MHz					
Temperature Range	Operation: -20°C to +50°C, Storage: -25°C to +60°C					
Degree of Protection (Front/Back)	IP66/IP20					
Approvals	UL/cUL					

Industrial PC (IPC)



VL3 Series IPC - A configurable IPC that truly suits your application with the best-in-class technology

- Celeron and Intel i3, Intel i5 or Intel i7 11th Gen Processors Options
- Panel PC size from 15,6" to 21,5"
- SSD M.2 up to 960 GB
- Optional TPM 2.0 technology
- Optional Additional Serial Ports
- Optional WLAN Mini PCIE

Functional Safety



Safety switch
Use our non-contact safety switches with RFID technology for intelligent safety door and position monitoring.



Safety relay modules
If you require just a small number of safety functions, you can choose from our large range of safety relays, safe signal conditioners, and safe motor starters.



Configurable safety systems
The PSRmodular configurable safety system is a flexible safety solution for monitoring your machine or system.



Safe I/Os
Integrate functional safety into your existing network, whether in the control cabinet or in the field. With SafetyBridge Technology, the safety function is processed directly in the I/O modules.



Safe control technology
With our safe high-performance controllers, you can integrate reliable functional safety into PROFIsafe networks for applications with special demands on safety and availability.



Safe power supplies
Our high-performance QUINT POWER power supplies ensure superior availability of your system and satisfy all functional safety requirements.

	Emergency stop		Solenoid switch		Start/restart		Changeover contact
	Safety door switch, mechanical		Two-hand function		Enabling current path / N/O contact		Contact with dropout delay
	Light grid		Transponder switch		N/C contact		

PSRmini: Highly compact safety relays for machine building																
Type	Applications							Output Contacts				Safety Approvals		Width	Order #	
												PL in accordance with EN ISO 13849-1	SILCL in accordance with EN 62061	In mm	Screw connection	Push-in connection
PSR-MS201) 24 V DC	●	●	–	●	–	–	A	1	–	–	1	c4)	14)	6.8	2904950	–
PSR-MS251) 24 V DC	●	●	–	●	–	–	M	1	–	–	1	c4)	14)	6.8	2904951	–
PSR-MS403) 24 V DC	●	●	–	–	–	●	A	1	–	–	1	e	3	6.8	2904954	–
PSR-MS603) 24 V DC	●	●	●	●	–	●	A	2	–	–	–	e	3	6.8	2904958	–
PSR-MC32 24...230 V DC	●	●	●	●	–	●	A/M	3	–	1	–	e	3	22.5	2700524	–

PSRclassic: Conventional safety relays for machine building																
												PL in accordance with EN ISO 13849-1	SILCL in accordance with EN 62061	In mm	Screw connection	Push-in connection
PSR-ESA2-B 24 V AC/DC	●	●	–	–	–	–	A	4	–	1	–	c2)	12)	–	2963802	2963954
PSR-ESAM4/3X1-B Voltage variants	●	●	–	–	–	–	A/M	3	–	1	–	e	3	–	See catalogue for ordering data	
PSR-ESL4 ¹⁾ 24 V AC/DC	●	●	●	–	–	●	A/M	3	–	1	–	e	3	–	2981059	2981062
PSR-THC4 ⁵⁾ 24 V AC/DC	–	●	–	–	●	–	A	2	–	1	–	e	3	–	2963721	2963983
PSR-URM4 42 to 230 V AC/DC	Contact extension							4	–	2	–	e3)	33)	–	2702924	2702925
PSR-URM4 24 V AC/DC	Contact extension							5	–	2	–	e3)	33)	–	2963734	2964005

	Emergency stop		Solenoid switch		Start/restart		Changeover contact
	Safety door switch, mechanical		Two-hand function		Enabling current path / N/O contact		Contact with dropout delay
	Light grid		Transponder switch		N/C contact		

PSRmini: Highly compact, safe coupling relays for the process industry															
Type	Applications	Output Contacts			Diagnostics/Proof Test				Safety Approvals				Width	Order #	
	Highly compact, safe coupling relays for failsafe controllers				Visual via LED	Active Error Acknowledgment via A12)	Measurement on the Device	Self-Monitoring with Interlocking	SIL in Accordance with IEC 61508 / 61511	SIL in Accordance with IEC 50156	ATEX / IECEx / Class I Zone 2	G3 in Accordance with ANSI / ISA-571.04	GL	In mm	Screw Connection
PSR-PS20 24 V DC	For safety-related shutdown (ESD)	1	1	1	●	●	●	–	3	3	●	●	●	6.8	2700356
PSR-PS21 24 V DC		1	1	1	●	●	●	–	2	2	●	●	●	6.8	2700357
PSR-PS23 24 V DC		1	1	–	●	–	●	–	3	3	●	●	●	6.8	2702663

PSRclassic: Classic, safe coupling relays for the process industry															
	Highly compact, safe coupling relays for failsafe controllers				Visual via LED	Active Error Acknowledgment via A12)	Measurement on the Device	Self-Monitoring with Interlocking	SIL in accordance with IEC 61508 / 61511	SIL in Accordance with IEC 50156	ATEX / IECEx / Class I Zone 2	G3 in Accordance with ANSI / ISA-571.04	GL	In mm	Screw Connection
PSR-FSP 24 V DC	For safety-related shutdown (ESD)	1	1	–	–	–	●	–	3	3	–	–	●	17.5	2981978
PSR-FSP/2x1 24 V DC		2	1	–	–	–	●	–	3	3	–	–	●	17.5	2986960

PSRMotion: Relays for motion monitoring														
Type	Sensor Type			Application		Output Contacts		Safe Standards			Order #			
				n=0	n<n _{max}			Category in accordance with EN ISO 13849-1	PL in accordance with EN ISO 13849-1	SIL in accordance with EN 62061	Screw connection	Push-in connection		
PSR-MS25 24 V DC	●	–	–	●	–	1	2	3	e	3	2702355	2702356		
PSR-MM30 24 V DC	–	●	●	●	●	2	2	4	e	3	2702357	2702358		
PSR-MM35 24 V DC	●	–	–	–	●	1	1	4	e	3	1249515	1249516		

Force-guided Contact Relays

■ What application or load are you switching: electromechanical or solid state?			■ What connection technology: screw terminal (UT) or push-in (PT)?		
■ What is the input-coil voltage: DC or AC?			■ Resulting Phoenix Contact part number		
■ What is your output current (Amps)? (Ratings are for resistive loads)					
■ How many sets of contacts do you need: SPDT, DPDT, etc.?					
Electromechanical Relays					
Input-Coil Voltage	Output Current	Sets of Contacts	Termination Style	Description	Order #
24 V DC	6 A	DPDT - 14 mm	Screw	PLC-RSC- 24DC/2X21/FG	2910535
			Push-In	PLC-RPT- 24DC/2X21/FG	2910537
RIF Slimline Relays					
24 V DC	6 A	DPDT - 14 mm	Screw	RIF-1-RSC-LDP-24DC/2X21/FG	2909848
			Push-In	RIF-1-RPT-LDP-24DC/2X21/FG	2908215
Replacement Parts					
Mechanical Relays					
Input-Coil Voltage	Output Current	Sets of Contacts	Description	Order #	
24 V DC	6 A	DPDT - 14 mm	REL-MR-24 DC/21-21	2961192	
PSRswitch: Non-Contact Safety Switches					
Type	Description	Coding Type/Function	Connection Technology		
			Screw Connection	Spring-Cage Connection	M12 Connection
PSR-CT-F-SEN-1-8	Safety Sensor	Fixcode: The sensor accepts a single actuator. This actuator is taught in by the user during commissioning. It is not possible to teach in further actuators.	-	-	2702976
PSR-CT-C-SEN-1-8		Unicode: The sensor accepts one actuator. The actuator is taught in by the user during commissioning. It is possible to teach in an unlimited number of further actuators in succession. Previously taught in actuators are blocked by the sensor. They can no longer be used.	-	-	2702972
PSR-CT-M-SEN-1-8		Multicode: The sensor accepts all actuators. It is not necessary to teach them in during commissioning.	-	-	2702975
PSR-CT-C-ACT	Actuator	Coded, suitable for all sensor coding types	-	-	2702973
PSR-MC42	Safety Relay	With integrated IO-Link interface	2702901	2702902	-
SAC-8PY-M/2XF BK 1-PSR	Y Distributor	Type 1 for series connection of PSR-CT safety circuits	-	-	1054338
SAC-8PY-M/2XF BK 2-PSR		Type 2 for manual startup behaviour	-	-	1054339
SAC-8PY-M/2XF BK 3-PSR		Type 3 for integrated diagnostics via signal contact with PSR-CT safety circuits	-	-	1054341
SAC-5P-M12MS BK BR 1-2-4	Bridge Plug	Dummy plug for every sensor circuit	-	-	1054366

■ What type of application will the Safe I/O will control?						■ Which safety levels does the device / system need to conform?							
■ How Many safe inputs / Outputs are needed?						■ What is the degree of protection needed for the application?							
■ Which Safety Protocol will be needed to integrate with the control system?						■ Resulting Phoenix Contact part number							
Type	Application	Input/Outputs				Protocol		Safety Approval				Degree of Protection	Order#
		Safeinputs	Safeoutputs	Clockoutputs	Relayoutputs	SafetyBridge Technology	PROFIsafe	Category/inaccordance with EN ISO 13849-1	PLinaccordance with EN ISO 13849-1	SILinaccordance with EN 62061	SILinaccordance with IEC 61508		
AXL F SSDI8/4 1F 24 V DC	Input module	8	–	8	–	Yes	–	4	e	3	3	IP20	2702263
AXL F PSDOR4/2 1F	Relay module	–	–	–	4	–	Yes	4	e	3	3	IP20	2702858
AXL F SSDOR4/2 1F	Relay module	–	–	–	4	Yes	–	4	e	3	3	IP20	2702859
AXL F SSDO8/3 1F 24 V DC	Output module	–	8	–	–	Yes	–	4	e	3	3	IP20	2702264
AXL F PSDI8/4 1F 24 V DC	Input module	8	–	8	–	–	Yes	4	e	3	3	IP20	2701559
AXL F PSDO8/3 1F 24 V DC	Output module	–	8	–	–	–	Yes	4	e	3	3	IP20	2701560
AXL F LPSD08/3 IF 24 V DC	Logic module with SafetyBridge Technology V3	–	8	–	–	Yes	–	4	e	3	3	IP20	2702171
AXL F PSAI8/2 1F	Input module with 8 safe analog inputs	–	–	–	–	–	Yes	4	e	3	3	IP20	1061424
AXL E IOL SDI8 SDO4 2A M12 L	Input and output module	8	4	8	–	Yes	Yes	4	e	3	3	IP65	1185380



SafetyBridge Technology

Designed by Phoenix Contact

PSRModular - Configurable Safety System



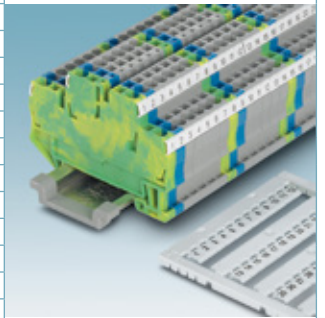
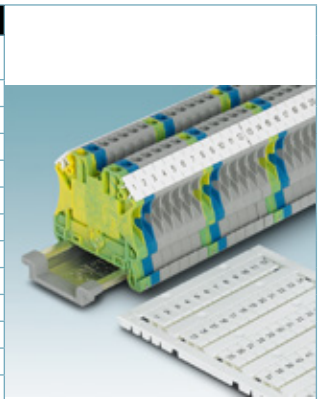
Type	Description	Inputs/Outputs				Safety Approval		Connection Technology	
		Inputs/EDM reset inputs	Outputs	Clock outputs	Signal outputs	PL in accordance with EN ISO 13849	SiL in accordance with EN 62061/IEC 61508	Screw connection	Push-in connection
Basic modules									
PSR-M-B1	Base module	8/2	2 (pair)	4	2	e	3	1104981	1104972
PSR-M-B2	Base module (with large program memory)	8/4	2 (pair) or 4 (single)	4	4	e	3	1104974	1104975
PSR-M-B3	Base module (with integrated gateway)	8/4	4 (single)	4	4	e	3	-	1337855
Safe extension modules									
PSR-M-EF1	Failsafe extension module	8/4	2 (pair) or 4 (single)	4	4	e	3	1104890	1104889
PSR-M-EF2	Failsafe extension module	16	-	4	-	e	3	1104888	1104887
PSR-M-EF3	Failsafe extension module for safety shut-off mats	12	-	8	-	e	3	1104885	1104884
PSR-M-EF4	Failsafe extension module	-/4	4 pairs	-	4	e	3	1104856	1104868
PSR-M-EF5	Failsafe extension module	-/4	2 (pair) or 4 (single), each 2 A	-	8	e	3	1104976	1104977
PSR-M-EF6	Failsafe extension module	-/4	4 relays	-	-	e	3	1104982	1104983
PSR-M-EF7	Failsafe extension module	4 analog	-	-	-	e	3	1104985	1104986
PSR-M-EF8	Failsafe extension module	8/2	2 (pair)	4	2	e	3	1105522	1105523
PSR-M-E1	Non-safe extension module	-	-	-	8	-	-	1105132	1105133
PSR-M-E2	Non-safe extension module	-	-	-	16	-	-	1105134	1105136
PSR-M-TBUS1	TBUS extension module	1 connection channel for local bus extension (up to 50 m per segment)				e	3	1105095	1105096
PSR-M-TBUS2	TBUS extension module	2 connection channels for local bus extension (up to 50 m per segment)				e	3	1105097	1105098

PSRModular - Configurable Safety System

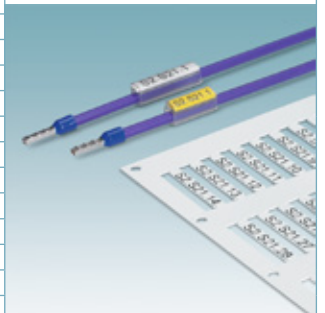
Type	Description	Safety function in accordance with EN 61800-5-2				Sensor type				Encoder interfaces	Safety approval		Connection technology	
		SOS	SLS	SSR	SDI	Proximity switch	TTL	HTL	Sin/Cos		PLin accordance with EN ISO 13849	SILin accordance with EN 62061/IEC 61508	Screw connection	Push-in connection
Safe motion monitoring														
PSR-M-EM1	Motion – PROXIMITY extension module	●	●	●	-	●	-	-	-	-	e	3	1104987	1104988
PSR-M-EM2	Motion – TTL extension module	●	●	●	●	●	●	-	-	1	e	3	1104989	1104990
PSR-M-EM3	Motion – HTL extension module	●	●	●	●	●	-	●	-	1	e	3	1105009	1105010
PSR-M-EM4	Motion – SINCOS extension module	●	●	●	●	●	-	-	●	1	e	3	1105011	1105012
PSR-M-EM5	Motion – TTL extension module	●	●	●	●	●	●	-	-	2	e	3	1105014	1105015
PSR-M-EM51	Extension module Motion – TTL Without voltage monitoring	●	●	●	●	●	●	-	-	2	e	3	1300906	1300905
PSR-M-EM6	Motion – HTL extension module	●	●	●	●	●	-	●	-	2	e	3	1105016	1105017
PSR-M-EM7	Motion – SINCOS extension module	●	●	●	●	●	-	-	●	2	e	3	1105018	1105093
Gatwas for PSR-M-B1 and PSR-M-B2														
PSR-M-GW-PB	Gateway – PROFIBUS												1105099	1105100
PSR-M-GW-PN	Gateway – PROFINET												1105101	1105102
PSR-M-GW-DNET	Gateway – DeviceNet™												1105103	1105473
PSR-M-GW-CAN	Gateway – CANopen®												1105104	1105105
PSR-M-GW-ETH	Gateway – EtherNet/IP™												1105106	1105107
PSR-M-GW-MODTCP	Gateway – Modbus/TCP												1105108	1105127
PSR-M-GW-CCLINK	Gateway – CC-Link												1105128	1105129
PSR-M-GW-ECAT	Gateway – EtherCAT®												1105130	1105131

Marking

Terminal Marking						
Order #	Description	Thermomark Card 2.0	Thermomark Prime	Bluemark ID	Bluemark ID Colour	Topmark Neo
0829484	UCT-TM 3,5	✓	✓	✓	✓	✓
0828734	UCT-TM 5	✓	✓	✓	✓	✓
0828736	UCT-TM 6	✓	✓	✓	✓	✓
0828740	UCT-TM 8	✓	✓	✓	✓	✓
0829142	UCT-TM 10	✓	✓	✓	✓	✓
0829144	UCT-TM 12	✓	✓	✓	✓	✓
0829146	UCT-TM 16	✓	✓	✓	✓	✓
0818108	UC-TM 5			✓	✓	
0818085	UC-TM 6			✓	✓	
0818072	UC-TM 8			✓	✓	
0818069	UC-TM 10			✓	✓	
0819194	UC-TM 12			✓	✓	
0819217	UC-TM 16			✓	✓	
0829486	UCT-TMF 3,5	✓	✓	✓	✓	✓
0828744	UCT-TMF 5	✓	✓	✓	✓	✓
0828746	UCT-TMF 6	✓	✓	✓	✓	✓
0828748	UCT-TMF 8	✓	✓	✓	✓	✓
0829204	UCT-TMF 10	✓	✓	✓	✓	✓
0829214	UCT-TMF 12	✓	✓	✓	✓	✓
0829218	UCT-TMF 16	✓	✓	✓	✓	✓
0818153	UC-TMF 5			✓	✓	
0818140	UC-TMF 6			✓	✓	
0818137	UC-TMF 8			✓	✓	
0818124	UC-TMF 10			✓	✓	
0819233	UC-TMF 12			✓	✓	
0819262	UC-TMF 16			✓	✓	



Wire/Cable						
Order #	Description	Thermomark Card 2.0	Thermomark Prime	Bluemark ID	Bluemark ID Colour	Topmark Neo
0801430	UCT-WMT (10X4)	✓	✓	✓	✓	✓
0801438	UCT-WMT (12X4)	✓	✓	✓	✓	✓
0801446	UCT-WMT (15X4)	✓	✓	✓	✓	✓
0801462	UCT-WMT (18X4)	✓	✓	✓	✓	✓
0801453	UCT-WMT (23X4)	✓	✓	✓	✓	✓
0801422	UCT-WMT (30X4)	✓	✓	✓	✓	✓
0819372	UC-WMT (10X4)			✓	✓	
0823517	UC-WMT (12X4)			✓	✓	
0819398	UC-WMT (15X4)			✓	✓	
0820293	UC-WMT (18X4)			✓	✓	
0819411	UC-WMT (23X4)			✓	✓	
0801422	UC-WMT (30X4)			✓	✓	
0828765	US-WMT (10X4)	✓	✓	✓	✓	
0828766	US-WMT (12X4)	✓	✓	✓	✓	
0828767	US-WMT (15X4)	✓	✓	✓	✓	
0828768	US-WMT (18X4)	✓	✓	✓	✓	
0828769	US-WMT (23X4)	✓	✓	✓	✓	
0828770	US-WMT (30X4)	✓	✓	✓	✓	



Wire/Cable Sleeves						
Conductor Diameter	10 mm	12 mm	15 mm	18 mm	23 mm	30 mm
0.6-1.2 mm	PATG 0/10 1013795	PATG 0/12 0827076	PATG 0/15 1013740	PATG 0/18 0820507	PATG 0/23 0828046	
1.5-2.5 mm	PATG 1/10 1013805	PATG 1/12 0827077	PATG 1/15 1013025	PATG 1/18 0820510	PATG 1/23 1013847	PATG 1/30 0822440
2-4 mm	PATG 2/10 1013818	PATG 2/12 0827078	PATG 2/15 1013038	PATG 2/18 0820523	PATG 2/23 1013850	PATG 2/30 0822453
4-7 mm	PATG 3/10 1013821	PATG 3/12 0827079	PATG 3/15 1013041	PATG 3/18 0820536	PATG 3/23 1013863	PATG 3/30 0822466
6-10 mm		PATG 4/12 0827080	PATG 4/15 1013054	PATG 4/18 0820549	PATG 4/23 0808011	PATG 4/30 0822479
10-14 mm			PATG 5/15 1013067	PATG 5/18 0828059	PATG 5/23 0808024	PATG 5/30 0822482
14-22 mm			PATG 6/15 1013070	PATG 6/18 0828062	PATG 6/23 0808037	
22-30 mm			PATG 7/15 1013083		PATG 7/23 0808040	
30-35 mm			PATG 8/15 1013096		PATG 8/23 0808053	
35-45 mm			PATG 9/15 1013106			



Printing

■ How to select a printer				
■ What are you marking and with what material: CARD or ROLL material?				
■ How many labels do you need to print: volume?				
■ Do you need a desktop or mobile printer: size?				
NOTE: Card printers require magazine that matches the card material				
Printing Solutions				
Material	Volume	Size	Description	Order #
Card and Sheet	Manual Feed	Desktop	THERMOMARK CARD 2.0	1085267
Card and Sheet	Manual Feed	Desktop and Portable	THERMOMARK Prime	5148888
Roll	< 50,000 Labels/yr.	Desktop	THERMOMARK Roll 2.0	1085260
Roll	> 50,000 Labels/yr.	Large/Desktop	THERMOMARK ROLLMASTER	0804501
Cartridge	Low	Handheld	THERMOMARK GO.K	1184146
Cartridge	Low	Handheld	THERMOMARK GO.K SET	1184148
Cartridge	Low	Portable	THERMOMARK GO	1090747
Cartridge	Low	Portable	THERMOMARK GO SET	1221548



Print Ribbon					
Printer	Print Materials	Width (mm)	Length (mm)	Description	Order #
Thermomark Roll 2.0 Thermomark E Series	TML..., WML..., WML HF..., WML-FLAG..., EML..., EML-ESD..., EML-RM..., EML-HA..., EMLS..., EMLC..., EMLP... and PMM...	110	300	THERMOMARK-RIBBON 110	5145384
	WMS... and WMS-2 HF...	64	300	THERMOMARK-RIBBON 64-WMSU	0801360
	WMS... and WMS-2 HF...	110	300	THERMOMARK-RIBBON 110-WMSU	0801358
	WMTB HF..., WMS-2 HF..., TMT..., EMT..., EMLF..., PML...	110	300	THERMOMARK-RIBBON 110-WMTB HF	5148007
	EML-HT...	110	300	THERMOMARK-RIBBON 110-EML-HT	0800342
Thermomark Card 2.0	UCT..., US..., and UM...	110	300	THERMOMARK-RIBBON 110-TC	0801371
	UCT..., US..., and UM...	110	70	TMP-RIBBON 110 BK 100	0803374
Thermomark Prime	US(2)-TM(F)..., US-TM(F)L..., US-WMTB..., US-EML..., US-EML(S)P..., US-EMLP-HA..., US-EM(S)P..., US-EML-RS...	110	60	TMP-RIBBON 110 BK 101	0803714



Print Ribbon					
Printer	Description	Width/Diameter	Length (m)	Description	Order #
Thermomark GO and Thermomark GO.K	Shrink Sleeve, White, Black Printing, 3:1 ratio	Cable Diameter 1-3.2 mm	1.8m	MM-WMS 3,2 (EX5)R C1 WH/BK	0803923
		Cable Diameter 1.6-4.8 mm		MM-WMS 4,8 (EX9)R C1 WH/BK	0803924
		Cable Diameter 2.1-6.4 mm		MM-WMS 6,4 (EX10)R C1 WH/BK	0803925
		Cable Diameter 3.2-9.5 mm		MM-WMS 9,5 (EX16)R C1 WH/BK	0803926
	Fabric Label, White, Black Printing, Adhesive	10 mm	6m	MM-EMLC (EX10)R C1 WH/BK	0803933
		18 mm		MM-EMLC (EX18)R C1 WH/BK	0803936
	Label, White, Black Printing, Adhesive	10 mm	8m	MM-EML (EX10)R C1 WH/BK	0803970
		12 mm		MM-EML (EX12)R C1 WH/BK	0803971
		18 mm		MM-EML (EX18)R C1 WH/BK	0803972
		24 mm		MM-EML (EX24)R C1 WH/BK	0803973
	Label, White, Black Printing, Highly Flexible, Adhesive	10 mm	8m	MM-EMLF (EX10)R C1 WH/BK	0803937
		12 mm		MM-EMLF (EX12)R C1 WH/BK	0803938
		18 mm		MM-EMLF (EX18)R C1 WH/BK	0803939
		24 mm		MM-EMLF (EX24)R C1 WH/BK	0803940
	Label, White, Black Printing, Highly Flexible, Adhesive	10 mm	8m	MM-EMLF (EX10)R C1 YE/BK	0803941
		12 mm		MM-EMLF (EX12)R C1 YE/BK	0803942
		18 mm		MM-EMLF (EX18)R C1 YE/BK	0803943
		24 mm		MM-EMLF (EX24)R C1 YE/BK	0803944

Shopfloor Productivity

Installation

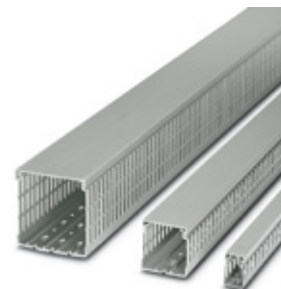
■ What do you use to cut conductors, cables, and cable binders?						
■ Do you ferrule wires? What size wire are you crimping?						
■ What do you use to strip wires and multi-conductor cables?						
■ What tools do you need to terminate conductors?						
Installation						
Cut	Function	Conductor Size		Description	Order #	
	Cable-Cutting Tool	Up to 35 mm²		CUTFOX 12	1212128	
	Cable-Cutting Tool	Up to 50 mm²		CUTFOX 18	1212129	
	Cable Tie Tool	For plastic cable ties 2.2-4.8 mm wide, up to 1.6 mm thick		UNIFOX-CT 4,8P	1212609	
	Cable Tie Tool	For steel cable ties up to 7.9 mm wide, up to 0.3 mm thick		UNIFOX-CT 7,9M	1212610	
	1000V Rated Insulation					
	Combination Plier	VDE 1000V AC/1500V DC 180mm		UNIFOX-C VDE	1212202	
	Side Cutter	VDE 1000V AC/1500V DC 160mm		CUTFOX-S VDE	1212207	
	Side Cutter	VDE 1000V AC/1500V DC 200mm		CUTFOX-SP VDE	1212206	
	Cable Cutting Tool	Up to 16mm2 VDE 1000V AC/1500V DC 160mm		CUTFOX 16 VDE	1212126	
Long Nose Plier	VDE 1000V AC/1500V DC 170mm		UNIFOX-P VDE	1212204		
Strip	Single conductor					
	Function	Conductor Size	Cable Type	Description	Order #	
	Self-Adjusting Stripping Tool	0.1-4 mm²	Especially for rubber and silicone insulation	WIREFOX 4	1212156	
	Self-Adjusting Stripping Tool	1.5-6 mm²	Especially for cables protected against short circuits and ground leakages	WIREFOX 6SC	1212158	
	Self-Adjusting Stripping Tool	0.02-10 mm²		WIREFOX 10	1212150	
	Multi-Conductor					
	Strips Sensor/Actuator Cables	Diameter 4.4-7 mm	Sensor/Actuator cables with PUR and PVC insulation	WIREFOX SAC	1212623	
	Strips Multi-Conductor Cables	Diameter 2.5-11 mm, up to 1 mm insulation	Multicore signal, control, and fiberglass wires	WIREFOX-D 11	1212160	
Strips Large, Multi-Conductor Cables	Diameter 4.5-40 mm, up to 4.5 mm insulation		WIREFOX-D 40	1212161		
Crimp	Crimping Tools					
	Conductor Size		Crimp Shape	Description	Order #	
	0.14-6 mm²		Square	CRIMPFOX CENTRUS 6S	1213144	
	0.14-10 mm²		Square	CRIMPFOX CENTRUS 10S	1213154	
0.14-10 mm²		Trapezoid	CRIMPFOX DUO 10	1031721		
Assemble	Assembling Tools					
	Tool			Description	Order #	
	Torque Screw Driver, Manual, Accuracy as per EN ISO 6789 Standard, Adjustable from 0.3 - 1.2 Nm			TSD-M 1,2NM	1212224	
	Torque Screw Driver, Manual, Accuracy as per EN ISO 6789 Standard, Adjustable from 1.2 - 3 Nm			TSD-M 3NM	1212225	
	Torque Screw Driver, Manual, Accuracy as per EN ISO 6789 Standard, Adjustable from 3 - 6 Nm			TSD-M 6NM	1212226	
	Micro Screwdriver, Flat Blade, Size: 0.4 x 2.0 mm x 60 mm Long Shaft, 2-Component Grip, with Non-Slip Grip and Twist Cap			SZS 0,4X2,0	1205202	
	Actuation Tool, for ST Terminal Blocks, also Suitable for Use as a Bladed Screwdriver, Size: 0.6 x 3.5 x 100 mm, 2-Component Grip, with Non-Slip Grip			SZF 1-0,6X3,5	1204517	
	Bit Screwdriver Set with Quick-Action Chuck, 17 Pieces of 89 mm Length Slotted, Crosshead (PZ and PH), Hex and Torx® bits			SF-M SET	1212543	
	Bit Screwdriver Set with Quick-Action Chuck, 17 Pieces of 89 mm Length Slotted, Crosshead, Hex and Torx® bits			SF-M SET 2	1212756	
	Cordless Screwdriver in Case, Including Battery, Charging Device 100-240 V, 2 bits, Two-Speed Gearbox, Forward/Reverse Running and 16-Stage Clutch Up to 450 rpm, Hexagonal Fast Connection.			SF-ASD 16 SET	1200295	
	Combination Pliers, Notched Gripping Surface, VDE 1000 V AC/1500 V DC Tested, Size: 180 mm			UNIFOX-C VDE	1212202	
	Offset Screwdriver Set, Hex, Metric, SW 1.5; 2; 2.5; 3; 4; 5; 6; 8, and 10 mm, with Ball Head, Matt Chrome-Plated, 9-art, in Practical Holder			SF-LHEX SET	1212544	
	Tape measure, 5 m			MEASURING TAPE 5M	1200298	
	Actuation Tool, for all 2.5 mm2 - 4.0 mm2 spring cages			ST-BW	1207608	
	Needle-Nose Pliers with Blade, Notched Grip Area, VDE 1000 V AC/1500 V DC Tested			UNIFOX-P VDE	1212701	
	Screwdrivers 7 piece, VDE-insulated, Flat blade 0.6 x 3.5, 0.8 x 4.0, 1.0 x 5.5; Phillips PH1 , PH2; Pozidriv® + bladed PZSL 1, PZSL 2			SF-SL/PH/PZ-SL SET S-VDE	1212701	



Cable Termination								
Ferrules	Bootlace Ferrules							
	Size	Colour	Standard Pack		Description	Order #		
	0.5 x 8 mm	White	100		AI 0,5-8 WH	3200014		
	0.75 x 8 mm	Blue	100		AI 0,75-8 BU	3200027		
	0.75 x 12 mm	Grey	100		AI 0,75-12 GY	3200849		
	1 x 8 mm	Red	100		AI 1-8 RD	3200030		
	1 x 12 mm	Red	100		AI 1-12 RD	3200674		
	1.5 x 8 mm	Black	100		AI 1,5-8 BK	3200043		
	1.5 x 18 mm	Black	100		AI 1,5-18 BK	3200056		
	2.5 x 8 mm	Blue	100		AI 2,5-8 BU	3200522		
	2.5 x 8 mm	Grey	100		AI 2,5-8 GY	3200069		
	2.5 x 18 mm	Blue	100		AI 2,5-18 BU	3200580		
	4 x 10 mm	Grey	100		AI 4-10 GY	3200535		
	4 x 18 mm	Grey	100		AI 4-18 GY	3200593		
	6 x 12 mm	Green	100		AI 6-12 GN	3200108		
	6 x 18 mm	Green	100		AI 6-18 GN	3200111		
	Twin 0.5 x 8 mm	White	100		AI-TWIN 2X 0,5-8 WH	3200933		
	Twin 0.75 x 12 mm	Grey	100		AI-TWIN 2X 0,75-10 GY	3200975		
	Twin 1 x 10 mm	Red	100		AI-TWIN 2X 1-10 RD	3200988		
	Twin 1.5 x 12 mm	Black	100		AI-TWIN 2X 1,5-12 BK	3200991		
	Twin 2.5 x 13 mm	Blue	100		AI-TWIN 2X 2,5-13 BU	3200878		
	0.5 x 8 mm	White	1000		AI 0,5-8 WH-B	3201369		
	0.75 x 8 mm	Blue	1000		AI 0,75-8 BU-B	3201547		
	0.75 x 8 mm	Grey	1000		AI 0,75-8 GY-B	3201372		
	1 x 8 mm	Red	1000		AI 1-8 RD-B	3201385		
	1.5 x 8 mm	Black	1000		AI 1,5-8 BK-B	3201398		
	2.5 x 8 mm	Blue	500		AI 2,5-8 BU-B	3201408		
	2.5 x 8 mm	Grey	500		AI 2,5-8 GY-B	3201550		
Insulated Lugs	Ring Insulated Lugs							
	Conductor Size	Colour	Ring Size	Standard Pack	Description	Order #		
	0.5 - 1.5	Red	M3	100	C-RCI 1,5/M3	3240016		
	0.5 - 1.5	Red	M4	100	C-RCI 1,5/M4	3240018		
	0.5 - 1.5	Red	M6	100	C-RCI 1,5/M6	3240020		
	1.5 - 2.5	Blue	M3	100	C-RCI 2,5/M3	3240021		
	1.5 - 2.5	Blue	M4	100	C-RCI 2,5/M4	3240023		
	1.5 - 2.5	Blue	M6	50	C-RCI 2,5/M6	3240025		
	4 - 6	Yellow	M4	50	C-RCI 6/M4	3240027		
	4 - 6	Yellow	M6	25	C-RCI 6/M6	3240029		
	4 - 6	Yellow	M8	25	C-RCI 6/M8	3240030		
	Fork Insulated Lugs							
	Conductor Size	Colour	Fork Size	Standard Pack	Description	Order #		
	0.5 - 1.5	Red	3mm	100	C-FCI 1,5/M3	3240032		
	0.5 - 1.5	Red	4mm	100	C-FCI 1,5/M4	3240034		
	0.5 - 1.5	Red	6mm	100	C-FCI 1,5/M6	3240036		
	1.5 - 2.5	Blue	3mm	100	C-FCI 2,5/M3	3240037		
	1.5 - 2.5	Blue	4mm	100	C-FCI 2,5/M4	3240039		
1.5 - 2.5	Blue	6mm	50	C-FCI 2,5/M6	3240041			
4 - 6	Yellow	4mm	50	C-FCI 6/M4	3240042			
4 - 6	Yellow	6mm	25	C-FCI 6/M6	3240044			
4 - 6	Yellow	8mm	25	C-FCI 6/M8	3240045			
Cable Management								
Cable Ties and Cable Tie Base	Cable Ties							
	Width	Length	Standard Pack		Description	Order #		
	2.5mm	98mm	100		WT-UV HF 2,5x98 BK	3240831		
	3.6mm	140mm	100		WT-UV HF 3,6x140 BK	3240832		
	3.6mm	200mm	100		WT-UV HF 3,6x200 BK	3240833		
	4.5mm	200mm	100		WT-UV HF 4,5x200 BK	3240834		
	7.8mm	365mm	100		WT-UV HF 7,8x365 BK	3240837		
	Cable Tie Bases							
	Width	Length	Standard Pack		Description	Order #		
	19mm	19mm	Black	100	WT-BASE LS HF 4 BK	3240707		
	19mm	19mm	Transparent	100	WT-BASE LS HF 4	3240706		
	27mm	27mm	Black	100	WT-BASE LS HF 6 BK	3240709		
	27mm	27mm	Transparent	100	WT-BASE LS HF 6	3240708		

Cable Duct and Din Rail

Cable Duct						
Height (mm)	Width (mm)	Length (m)	Colour	Quantity Per Box	Description	Order #
25 mm	25 mm	2m	Gray	25	CD 25x25	3240187
40 mm	25 mm	2m	Gray	24	CD 25x40	3240188
60 mm	25 mm	2m	Gray	15	CD 25x60	3240191
80 mm	25 mm	2m	Gray	10	CD 25x80	3240197
40 mm	40 mm	2m	Gray	25	CD 40x40	3240189
60 mm	40 mm	2m	Gray	20	CD 40x60	3240192
80 mm	40 mm	2m	Gray	10	CD 40x80	3240198
100 mm	40 mm	2m	Gray	10	CD 40x100	3240294
40 mm	60 mm	2m	Gray	20	CD 60x40	3240190
60 mm	60 mm	2m	Gray	12	CD 60x60	3240193
80 mm	60 mm	2m	Gray	10	CD 60x80	3240199
100 mm	60 mm	2m	Gray	8	CD 60x100	3240263
60 mm	80 mm	2m	Gray	10	CD 80x60	3240194
80 mm	80 mm	2m	Gray	6	CD 80x80	3240200
100 mm	80 mm	2m	Gray	8	CD 80x100	3240264
80 mm	100 mm	2m	Gray	6	CD 100x80	3240201
100 mm	100 mm	2m	Gray	6	CD 100x100	3240205



DIN Rail				
Length (m)	Quantity Per Box	Description	Long Description	Order #
2m	10	NS 35/7,5 PERF 2000MM	Steel, Galvanized, Passivated with a Thick Layer	0843103
2m	10	NS 35/7,5 UNPERF 2000MM	Steel, Galvanized, Passivated with a Thick Layer	0843101
2m	10	NS 35/15 PERF 2000MM	Steel, Galvanized, Passivated with a Thick Layer	0843113
2m	10	NS 35/15 UNPERF 2000MM	Steel, Galvanized, Passivated with a Thick Layer	0843112
2m	10	NS 15 PERF 2000MM	Steel, Galvanized, Passivated with a Thick Layer	1401682



DIN Rail Accessories				
Quantity Per Box	Description	Long Description	Order #	
100	NS 35/ 7,5 CAP	DIN Rail End Piece, for DIN Rail NS 35/7.5	1206560	
100	NS 35/ 15 CAP	DIN Rail End Piece, for DIN Rail NS 35/15	1206573	
50	CLIPFIX 35	Quick Mounting End Clamp for NS 35/7,5 DIN Rail or NS 35/15 DIN Rail	3022218	
50	CLIPFIX 35-5	Quick Mounting End Clamp for NS 35/7,5 DIN Rail or NS 35/15 DIN Rail	3022276	
10	E/AL-NS 35	Aluminium End Clamp, for NS35 Fixed with 2 Screws	1201662	
50	E/NS 35 N	End Clamp for NS 35/7,5 DIN Rail or NS 35/15 DIN Rail	0800886	
50	CLIPFIX 15	Quick Mounting End Clamp for NS 15	3022263	

DIN Rail and Cable Duct Cutters		
Description	Long Description	Order #
PPS COMPACT	Profile cutter for cutting standard DIN rails NS 35/7,5 and NS 35/15 to length (see 1105211 for measuring bar)	1104980
PPS COMPACT/SCALE-SET I/M	Measuring bar version: inches/metric	1105211
PPS BASIC I/M	Profile cutter for cutting standard DIN rails to length, NS 15 / NS 35/7,5 / NS 35/15, and for cutting the NLS-CU 3/10 neutral busbar to length, with inch/metric measuring rail	1207585
PPS STANDARD M	Profile cutter for cutting and stamping holes in standard DIN rails, NS 32 / NS 35/7,5 / NS 35/15, and for cutting the NS 15 and NLS-CU 3/10 neutral busbar to length. Can accommodate 2 stamping bits, with metric measuring rail, delivered without stamping bits	1206175
PPS CLASSIC M	Profile cutter for cutting to length and stamping holes in standard DIN rails, NS 32 / NS 35/7,5 / NS 35/15, and for cutting the NS 15 and NLS-CU 3/10 neutral busbar to length. Can accommodate 2 stamping bits, bits easily exchangeable, with metric measuring rail, delivered without stamping bits	1206243
PPS CD M	Cable duct cutter for burr-free cutting cable ducts and their covers. can be used up to a width of 125 mm	1207569
CUTFOX-CD	Cable duct cutter, for cutting plastic cable ducts, covers, and profiles, 45° limit stop also for bevel cuts, 75 mm cutting length	1212474

PPS BASIC I/M



PPS CD M



CUTFOX-CD



Circular Connectors

Circular Connectors in Metric sizes M5 to M12 have become standard in numerous industries and areas of application. The board product range from Phoenix Contact enables uniform connection solutions for signal, data and power transmission in the device.

- ✓ Data rates up to 10 Gbps
- ✓ Signal up to 17 - Positions
- ✓ Power up to 16 A/690 V
- ✓ Locking System - Locking with a click, Push-Lock, Insulation displacement, Crimp, Screw & Pierce connection
- ✓ Shielded and Angled Female Connector Options Available

Power - Assembled Cables with M12 Connectors						
Coding	S	T	L	L	K	M
No. of Position	3+PE	4	4	4+PE	4+PE	5+PE
Cross-section	1.5 mm ²	1.5 mm ²	2.5 mm ²	2.5 mm ²	2.5 mm ²	1.5 mm ²
Cable Length						
Straight Male Connector, Free cable end unshielded						
2m	1408836	1408813	-	-	-	-
3m	-	-	1425066	1414887	1414870	1414953
5m	1408837	1408814	1425067	1414891	1414875	1414957
10m	1408838	1408815	1425028	1414895	1414879	1414961
Straight Female Connector, Free cable end unshielded						
2m	1408844	1408824	-	-	-	-
3m	-	-	1425074	1414790	1414788	1414910
5m	1408845	1408825	1425075	1414806	1414804	1414918
10m	1408846	1408826	1425076	1414823	1414821	1414926

Signal - Assembled cables with M12 Push - Pull Connectors (PUR)						
Cable Length	3 - Pos	4 - Pos	5 - Pos	3 - Pos Shielded	4 - Pos Shielded	5 - Pos Shielded
Straight Male Connector, Free cable end						
1.5m	1384594	1392638	1393925	1476550	1476855	1476903
3m	1385536	1392698	1395703	1476806	1476854	1476902
5m	1385538	1392709	1395709	1476805	1476853	1476901
10m	1385625	1392713	1395710	1476803	1476851	1476900
Angled male connector, free cable end						
1.5m	1385626	1392735	1395742	1476802	1476850	1476899
3m	1385643	1392755	1395750	1476800	1476848	1476898
5m	1385646	1392829	1395803	1476798	1476846	1476897
10m	1385647	1392834	1395805	1476796	1476845	1476895
Straight female connector, free cable end						
1.5m	1385782	1392839	1395814	1476794	1476844	1476893
3m	1385791	1393005	1395817	1476792	1476843	1476892
5m	1385792	1393026	1395822	1476791	1476842	1476890
10m	1385968	1393032	1395827	1476788	1476841	1476889
Angled female connector, free cable end						
1.5m	1386380	1393038	1395830	1476786	1476840	1476888
3m	1386394	1393047	1395831	1476785	1476839	1476886
5m	1386513	1393072	1395834	1476784	1476838	1476885
10m	1386514	1393169	1395835	1476782	1476837	1476884

Data - Assembled Network Cables with M12 Connectors (PUR)							
Cable Length	X-Coded	D-Coded	Push-Pull D-Coded	Y-Coded	D-Coded	B-Coded	A-Coded
	Ethernet Cat6	Ethernet	Ethernet	Ethernet	PROFINET	PROFIBUS	"DeviceNet CANopen"
Straight Male Connector, free cable end							
1m	1407467	1407356	1476008	1407487	1407495	-	-
2m	1407468	1407357	1476012	1407488	1407496	1507243	1507421
5m	1407469	1407358	1476013	1407489	1407497	1507256	1507434
10m	1407470	1407359	1476014	1407490	1407498	1507269	1507447
15m	-	-	-	-	-	1507272	1507450
Variable	1408648	1408713	-	1408642	1408640	1538047	1538102
Straight Female Connector, free cable end							
1m	-	1407380	1476016	-	1407528	-	-
2m	-	1407381	1476018	-	1407529	1507298	1507476
5m	-	1407382	1476019	-	1407530	1507308	1507489
10m	-	1407383	1476020	-	1407531	1507311	1507492
15m	-	-	-	-	-	1507324	1507502
Variable	-	1408679	-	-	1408623	1538063	1538128



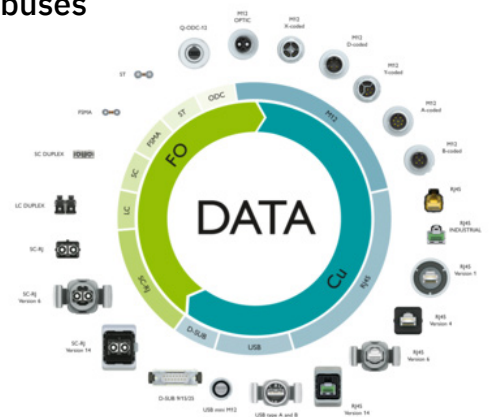
Data Connectors

The world is becoming increasingly networked. And that means more interfaces on devices. Phoenix Contact offers a comprehensive portfolio of data connectors from RJ45 to USB, HDMI, and D-SUB, up to coaxial and FO connections, as well as for SPE. Expert advice and excellent services for all aspects of device connection supplement the product range – the ideal basis for networking smart devices.

Copper - Based & Fibre Optic Data Cables for Networks and Fieldbuses

RJ45 Connectors				
Protocol	Ethernet		PROFINET	Ethernet
Connection Technology	IDC Insulation Displacement Connectors			Crimp
Conection Range	AWG 26 ... AWG 24	AWG 26 ... AWG 23	AWG 22	AWG 27 ... AWG 24
CAT5		1656725	1658008	1414382
CAT6	1419001			1414395

RJ45 INDUSTRIAL Connectors								
Connection Technology	IDC Insulation Displacement Connectors							
Protocol	PROFINET				Ethernet			
Connection Range	AWG 23 ...AWG 22				AWG 26 ... AWG 24			
Category	CAT5			CAT6	CAT5			CAT6
Cable Outlet	Straight	Upward	Downward	Straight	Straight	Upward	Downward	Straight
Part Number	1421126	1421127	1421128	1149847	1421607	1421876	1421877	1149846



SPE Connectors, IP20					
Description	SPE PCB Connector 180	SPE PCB Connector 90	SPE PCB Connector 90 LED	SPE Network Cable	SPE-IDC Connector
Type of Contact	Male			Female	Female
Conection Method	THR and Wave Soldering			-	IDC Insulation Displacement Connection
LED	-	-	Yes	-	-
Part Number	1163798	1163797	1215778	1183808 (2m)	1343953

RJ45 Standard Patch Cables - Webcode #2676			RJ45 Standard Patch Cables - Webcode #2676		
Length	CAT5	CAT6	Length	CAT5 upto 100 Mbps	CAT6 up to Gbps
0.3m	1227558	1227572		93B	94F
0.5m	1227559	1227573	0.5m	1112877	1113823
1m	1227560	1227575	1.0m	1112876	1112909
1.5m	1227561	1227578	2.0m	1112875	1112908
2m	1227562	1227580	3.0m	1112874	1112907
3m	1227563	1227581	5.0m	1112873	1112906
5m	1227564	1227583	CAT5 (100Mbps) 93B, 93C, 93K, 93M, 93R CAT5 (1 Gbps) 94B, 94C, 94D CAT6 (10 Gbps) 94F		CAT5 (100Mbps) - PROFINET/EtherCAT/Sercos CAT6 (10 Gbps) - Ethernet
7.5m	1227565	1227585			
10m	1227566	1227588			
12.5m	1227567	1227590			
15m	1227570	1227591			
20m	1227571	1227593			

Electronic Housing

BC Modular Electronic Housing						
With the new upper housing parts from the BC modular series, you benefit from the convenient operation of the Push-in connection technology on the front of the housing						
Description	BC Modular Upper Part		Push-in PCB Terminal Block		Filler for SPT 1.5	Fillers for SPT 2.5
Horizontal Pitch	4 HP	6 HP	-			
Part Number	1340864	1340863	1135348	1822448	1340862	1340861

OCS Outdoor Housing Webcode #3249						
Large-volume OCS series electronics housings are the ideal choice for autonomous device systems in extreme environments. The certified housings made from polycarbonate are lightweight and resistant. They permanently and reliably protect your electronics against humidity, heat, UV radiation, and mechanical strain.						
Version	Cover, Light gray	Cover, transparent	Cover, light gray	Cover, transparent	Cover, light gray	Cover, transparent
Size	8" x 6" x 4"	8" x 6" x 4"	10" x 8" x 6"	10" x 8" x 6"	12" x 10" x 8"	12" x 10" x 8"
Part Number	1471770	1471772	1471773	1471774	1471775	1471776



Structure of an energy storage system

Power Control Unit

At rack level, the Power Control Unit controls the individual battery modules.

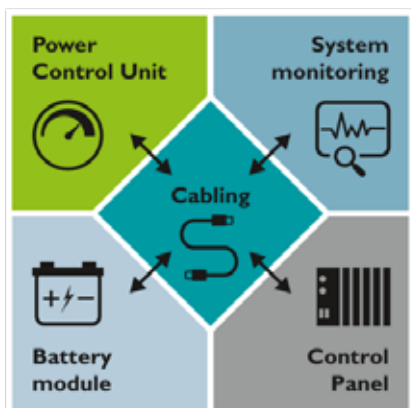
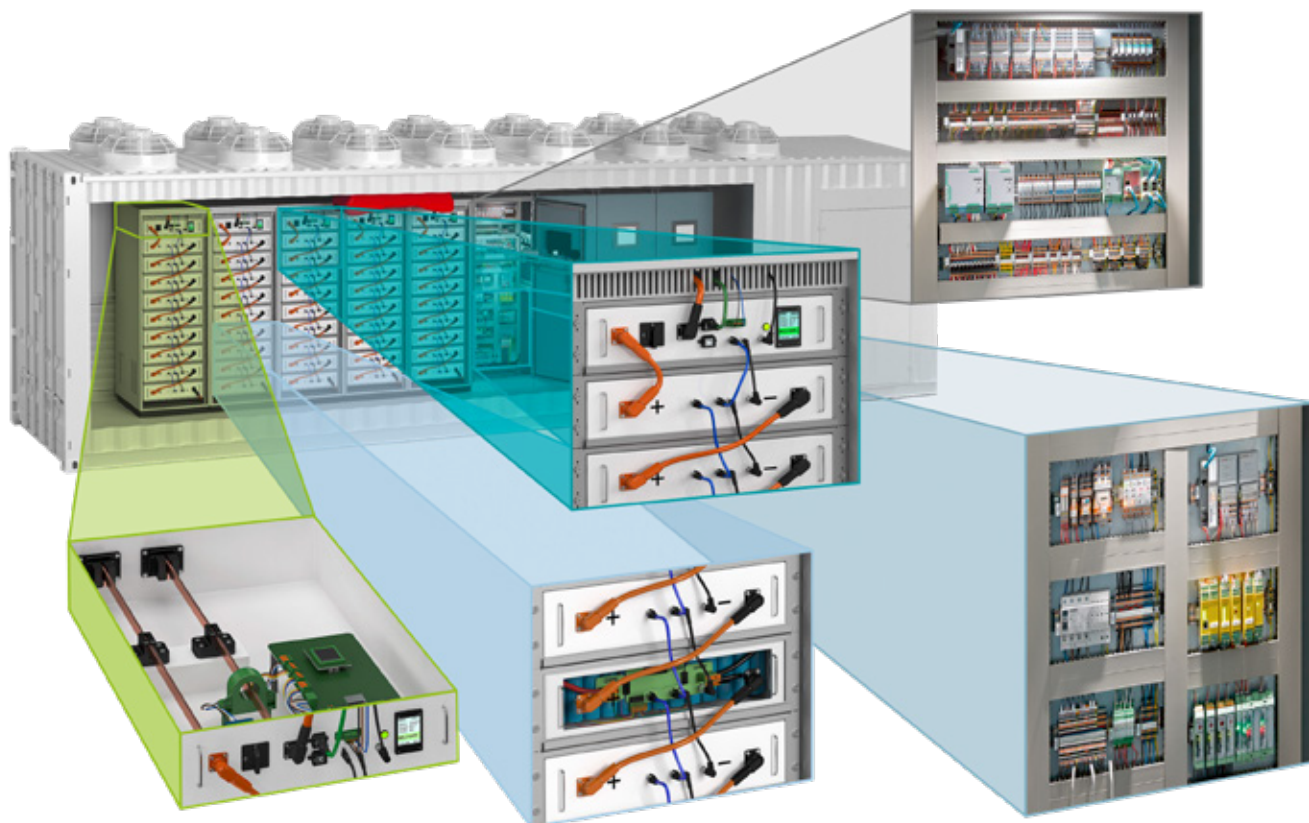
It is used to organize the charging and discharging processes of the battery modules and ensure their safe operating state. To do this, it monitors currents and voltages and the temperatures inside the modules.

Cabling

All components, modules, and organization levels within an energy storage system are electrically interconnected. This is either done directly or using pre-assembled cabling solutions for data, signals, and power as well as based on busbars.

System control

At the highest organizational level of an energy storage system, the system control coordinates all the processes within the system. This ensures that both the Power Control Units of the enclosed racks and the auxiliary units are addressed. In addition, the system control handles the external communication.



Battery module

Battery modules are the core element of the energy storage system. They contain battery cells in which the electrical charge is stored as chemical energy. Each battery module features cell balancing, which ensures that all the battery cells maintain an equal state of charge. Sensors monitor the temperature.



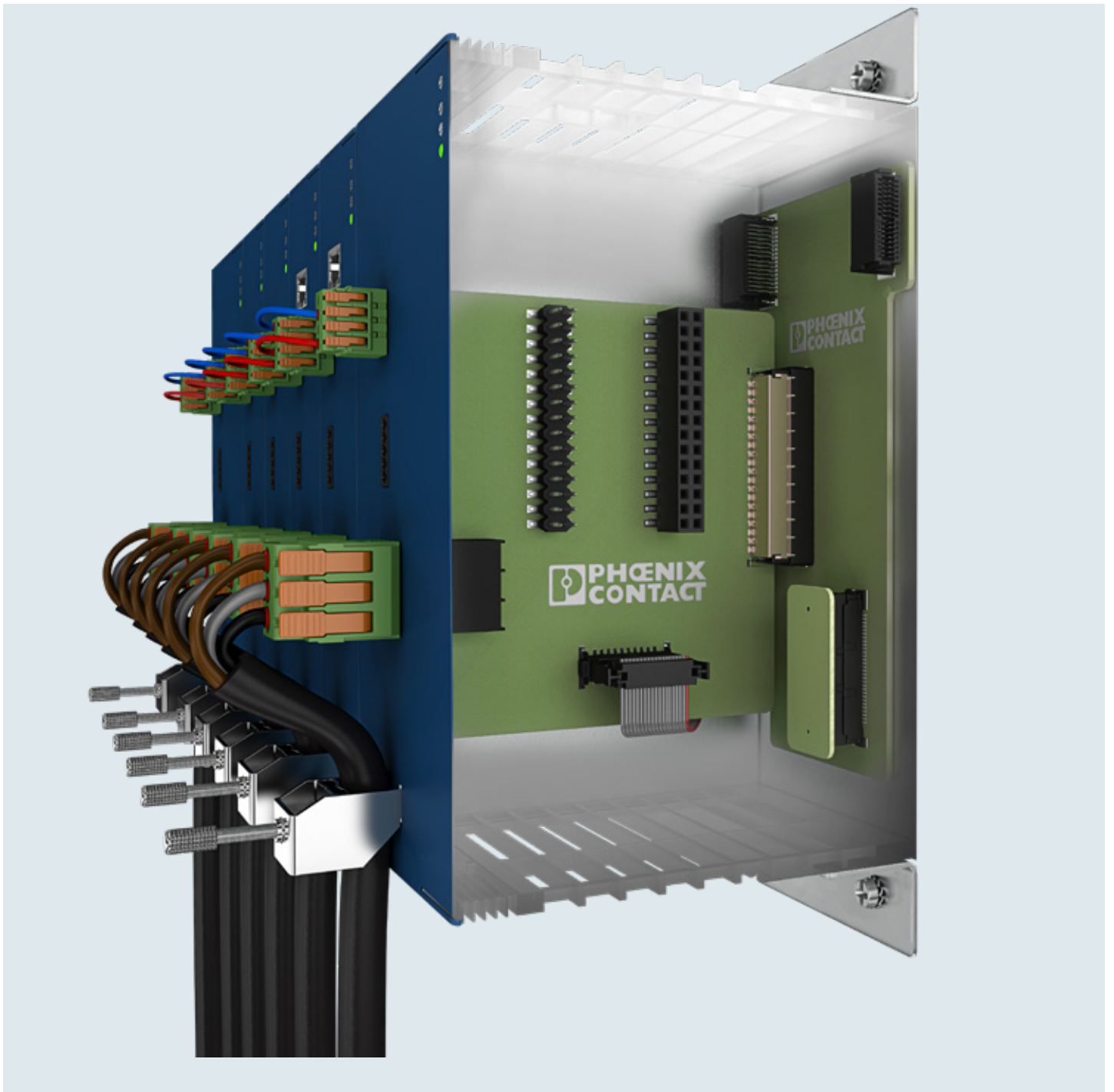
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System monitoring

For reasons of safety and efficiency, processes and states are monitored with a high degree of accuracy on all levels of an energy storage system. This begins with measuring the temperatures inside the battery modules and continues all the way to monitoring external influencing factors.



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PCB Terminal Block & Connectors

PCB terminal blocks and PCB connectors are fundamental components of all electronic devices. Our portfolio provides the right connection technology for the transmission of signals, data, and power for almost all applications.

Finepitch Board to Board connectors - This allows you to implement individual PCB orientations in all dimensions with different designs, stack heights, and numbers of positions in different pitches from 0.635 mm to 2.54 mm. Mezzanine, coplanar connections, and mother-daughter cards are also possible.



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Our engineers are constantly developing new products. See more than 100 small and large innovations in connection technology, device connection technology, and automation technology.



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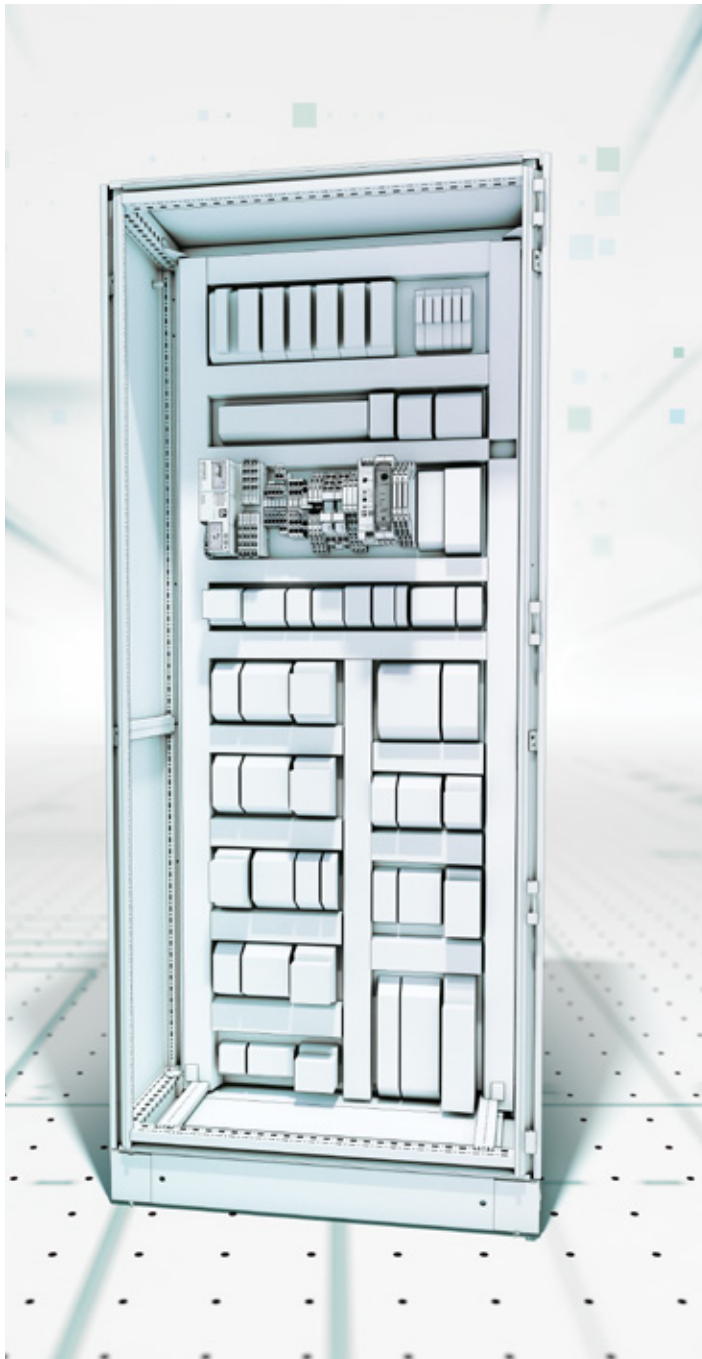
Step inside our Complete Cabinet Confidence Infomobile and take part in a virtual control-cabinet experience, plus multiple hands-on product opportunities.

Phoenix Contact is a global market leader in industrial electronics and automation technologies. Our expertise and commitment to innovation across a wide range of industries enable you to build your control cabinet with confidence.

With a focus on cost-effectiveness, quality, flexibility, and performance, Phoenix Contact delivers.

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i Lifetime Warranty
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Lifetime Warranty

Choose Phoenix Contact with confidence

Phoenix Contact engineers durable and reliable products for your control cabinet. A dedication to quality and innovation, united with our strong commitment to provide customers peace of mind, form the foundation of this exclusive Phoenix Contact warranty program.

For customers participating in our Complete Cabinet Confidence Lifetime Warranty (LW) program, Phoenix Contact Australia will warrant many of our products to be free from defects in workmanship and materials for the lifetime of the product. Registration is required, and certain restrictions apply. Improperly applied or installed products may void warranty. See the complete terms and conditions for full details.

Our goal is to be your most trusted partner in building your control cabinet. We believe that achieving peace of mind should be easy!

Simple Three Step Registration

To assure your Phoenix Contact products are covered under our exclusive Lifetime Warranty, follow these steps:

Step 1: Submit your registration

(www.phoenixcontact.com/en-au/au-lifetime-warranty).

Step 2: Select and install Phoenix Contact products in accordance with our recommendations.

Step 3: Make sure all electronics are powered and protected with appropriate Phoenix Contact power supplies and surge protection.

For participation in the Phoenix Contact Complete Cabinet Confidence Lifetime Warranty (LW) program, customer registration is required. Certain restrictions apply. Coverage of products in the program is limited to Phoenix Contact products sold in Australia. Improperly applied or installed products may void warranty.

To review the Lifetime Warranty Terms & Conditions, go to:
www.phoenixcontact.com/en-au/au-lifetime-warranty

Ongoing communication with customers and partners worldwide

Phoenix Contact is a global, market leader based in Germany.

Our group is known for its future-oriented components, systems, and solutions in the fields of electrical engineering, electronics, and automation.

With a global network reaching across more than 100 countries and 22,000 employees, we can stay in close contact with our customers, something we believe is essential to success. The wide variety of our innovative products makes it easy for our customers to find future-oriented solutions for multiple applications and industries. We especially focus on the fields of energy, infrastructure, process, and factory automation.



You will find our complete product range at:

www.phoenixcontact.com.au

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Unit 1 8-12 Butler Way
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Unit 9, 56 Lavarack Avenue
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LIFETIME WARRANTY

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