

COMPLETE line



Solutions for the Control Cabinet

Quick reference guide

COMPLETE line

Time for the New Standard

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



Scan the QR
code to learn
more online



Choose Phoenix Contact with Confidence

Customers have trusted Phoenix Contact and our products for over 100 years. We are now elevating our commitment to that trust with our new Limited Lifetime Warranty (LLW).



LIMITED LIFETIME WARRANTY

BUILD WITH CONFIDENCE

It's our promise to you that the components you install in your control cabinets are free from defects and built to last. Our goal is to be your most trusted partner by improving the long term reliability of your machines, equipment, and systems.

Phoenix Contact is a world leader in industrial connection and automation technologies, electronic interface systems, and low-voltage power products. This Limited Lifetime Warranty commitment is an extension of the trust customers have come to rely on.



How to Register



Submit your registration online:



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



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

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Power Reliability

Endless power for your application: With true power reliability, we provide you with coordinated solutions consisting of surge protection, power supply, and device protection. Tailored to your system for maximum Power Reliability for many of today's industry sectors.



POWER RELIABILITY



- Power Supplies
- Surge Protection
- Circuit Breakers

Scan the QR code to learn more online









Power Supplies — DIN Mount

Power supply model	Output voltage	Output current	Noted attribute	Description	Order no.
QUINT POWER High availability for critical systems 	SINGLE PHASE				
	5 V DC	5 A	—	QUINT4-PS/1AC/5DC/5/PT	2904595
	12 V DC	2.5 A	—	QUINT4-PS/1AC/12DC/2.5/PT	2904605
	12 V DC	7.5 A	—	QUINT4-PS/1AC/12DC/7.5/PT	2904607
	12 V DC	15 A	—	QUINT4-PS/1AC/12DC/15	2904608
	12 V DC	20 A	—	QUINT-PS/1AC/12DC/20	2866721
	24 V DC	1.3 A	NEC Class 2	QUINT4-PS/1AC/24 DC/1.3/PT	2909575
	24 V DC	1.3 A	NEC Class 2	QUINT4-PS/1AC/24 DC/1.3/SC	2904597
	24 V DC	2.5 A	NEC Class 2	QUINT4-PS/1AC/24DC/2.5/PT	2909576
	24 V DC	2.5 A	NEC Class 2	QUINT4-PS/1AC/24DC/2.5/SC	2904598
	24 V DC	2.5 A	T-BUS, integrated MOSFET	QUINT4-SYS-PS/1AC/24DC/2.5/SC	2904614
	24 V DC	3.5 A	—	QUINT-PS/1AC/24DC/3.5	2866747
	24 V DC	3.8 A	NEC Class 2	QUINT4-PS/1 AC/24 DC/3.8/SC	2904599
	24 V DC	3.8 A	NEC Class 2	QUINT4-PS/1AC/24DC/3.8/PT	2909577
	24 V DC	5 A	—	QUINT4-PS/1AC/24DC/5	2904600
	24 V DC	10 A	—	QUINT4-PS/1AC/24DC/10	2904601
	24 V DC	10 A	Coated, integrated MOSFET	QUINT4-PS/1AC/24DC/10/+	2904616
	24 V DC	10 A	Conformal coated	QUINT4-PS/1AC/24DC/10/CO	2904625
	24 V DC	20 A	—	QUINT4-PS/1AC/24DC/20	2904602
	24 V DC	20 A	Coated, integrated MOSFET	QUINT4-PS/1AC/24DC/20/+	2904617
	24 V DC	40 A	—	QUINT4-PS/1AC/24DC/40	2904603
	24 V DC	40 A	Coated, integrated MOSFET	QUINT4-PS/1AC/24DC/40/+	2904618
	48 V DC	5 A	—	QUINT4-PS/1AC/48DC/5	2904610
	48 V DC	10 A	—	QUINT4-PS/1AC/48DC/10	2904611
	48 V DC	10 A	Conformal coated	QUINT4-PS/1AC/48DC/10/CO	2904626
	48 V DC	20 A	—	QUINT4-PS/1AC/48DC/20	2904612
	THREE PHASE				
	24 V DC	5 A	—	QUINT4-PS/3AC/24DC/5	2904620
	24 V DC	10 A	—	QUINT4-PS/3AC/24 DC/10	2904621
	24 V DC	20 A	—	QUINT4-PS/3AC/24DC/20	2904622
24 V DC	20 A	IO-Link	QUINT4-PS/3AC/24DC/20/IOL	1151048	
24 V DC	40 A	—	QUINT4-PS/3AC/24DC/40	2904623	
24 V DC	40 A	IO-Link	QUINT4-PS/3AC/24DC/40/IOL	1151047	
48 V DC	20 A	—	QUINT4-PS/3AC/48DC/20	2904627	
TRIO POWER Premium standard for machine control cabinets 	SINGLE PHASE				
	12 V DC	5 A	NEC Class 2	TRIO3-PS/1AC/12DC/5/C2LPS	1362789
	12 V DC	10 A	—	TRIO-PS-2G/1AC/12DC/10	2903158
	24 V DC	3 A	NEC Class 2	TRIO3-PS/1AC/24DC/3/C2LPS	1362785
	24 V DC	5 A	—	TRIO3-PS/1AC/24DC/5	1159037
	24 V DC	10 A	—	TRIO3-PS/1AC/24DC/10	1159038
	24 V DC	10 A	4 ch circuit breaker, IO-Link	TRIO3-PS/1AC/24DC/10/4C/IOL	1252696
	24 V DC	20 A	—	TRIO3-PS/1AC/24DC/20	1159039
	24 V DC	20 A	8 ch circuit breaker, IO-Link	TRIO3-PS/1AC/24DC/20/8C/IOL	1252697
	48 V DC	5 A	—	TRIO-PS-2G/1AC/48DC/5	2903159
	48 V DC	10 A	—	TRIO3-PS/1AC/48DC/10	1362786
	THREE PHASE				
	24 V DC	5 A	—	TRIO3-PS/3AC/24DC/5	1362783
	24 V DC	10 A	—	TRIO3-PS/3AC/24DC/10	1159042
	24 V DC	20 A	—	TRIO3-PS/3AC/24DC/20	1159044
	24 V DC	40 A	—	TRIO3-PS/3AC/24DC/40	1159045
	24 V DC	20 A	8 ch circuit breaker, IO-Link	TRIO3-PS/3AC/24DC/20/8C/IOL	1362791
	24 V DC	40 A	8 ch circuit breaker, IO-Link	TRIO3-PS/3AC/24DC/40/8C/IOL	1362792
	48 V DC	20 A	—	TRIO3-PS/3AC/48DC/20	1362784



Power Supplies — DIN Mount

Power supply model	Output voltage	Output current	Noted attribute	Description	Order no.	
UNO POWER Standard power supply for a variety of applications 	SINGLE PHASE					
	5 V DC	5 A	NEC Class 2	UNO-PS/1AC/5DC/25 W	2904374	
	5 V DC	8 A	—	UNO-PS/1AC/5DC/40 W	2904375	
	12 V DC	2.5 A	—	UNO-PS/1AC/12DC/30 W	2902998	
	12 V DC	2.5 A	—	UNO2-PS/1AC/12DC/30W/PT	1399935	
	12 V DC	4.6 A	—	UNO-PS/1AC/12DC/55 W	2902999	
	12 V DC	8.3 A	—	UNO-PS/1AC/12DC/100 W	2902997	
	12 V DC	10 A	—	UNO2-PS/1AC/12DC/120W/SC	1399940	
	15 V DC	2 A	NEC Class 2	UNO-PS/1AC/15DC/30W	2903000	
	15 V DC	3.67 A	—	UNO-PS/1AC/15DC/55W	2903001	
	15 V DC	6.67 A	—	UNO-PS/1AC/15DC/100W	2903002	
	24 V DC	1.3 A	NEC Class 2	UNO-PS/1AC/24 DC/30W	2902991	
	24 V DC	1.3 A	NEC Class 2	UNO2-PS/1AC/24DC/30W/PT	1399932	
	24 V DC	2.5 A	NEC Class 2	UNO-PS/1AC/24 DC/60W	2902992	
	24 V DC	2.5 A	NEC Class 2	UNO2-PS/1AC/24DC/60W/PT	1399933	
	24 V DC	3.75 A	NEC Class 2	UNO-PS/1AC/24 DC/90W/C2LPS	2902994	
	24 V DC	3.75 A	NEC Class 2	UNO2-PS/1AC/24DC/90W/PT	1399934	
	24 V DC	4.2 A	—	UNO-PS/1AC/24 DC/100W	2902993	
	24 V DC	5 A	—	UNO2-PS/1AC/24DC/120W	1110466	
	24 V DC	10 A	—	UNO2-PS/1AC/24DC/240W	1096432	
	24 V DC	20 A	—	UNO2-PS/1AC/24DC/480W	2910105	
	24 V DC	40 A	—	UNO2-PS/1AC/24DC/960W	1110043	
	48 V DC	1.25 A	NEC Class 2	UNO-PS/1AC/48DC/60W	2902995	
	48 V DC	2.08 A	—	UNO-PS/1AC/48DC/100W	2902996	
	48 V DC	10 A	—	UNO2-PS/1AC/48DC/240W	1110155	
	ESSENTIAL POWER Basic power supplies for low demand & cost sensitive applications 	SINGLE PHASE				
		12 V DC	6.25 A	—	PS-EE-2G/1AC/12DC/75W/SC	1585280
		12 V DC	10 A	—	PS-EE-2G/1AC/12DC/120W/SC	1585283
12 V DC		20 A	—	PS-EE-2G/1AC/12DC/240W/SC	1585284	
24 V DC		2.5 A	—	PS-EE-2G/1AC/24DC/60W/SC	1394764	
24 V DC		3 A	—	PS-EE-2G/1AC/24DC/75W/SC	1234301	
24 V DC		5 A	—	PS-EE-2G/1AC/24DC/120W/SC	1234302	
24 V DC		10 A	—	PS-EE-2G/1AC/24DC/240W/SC	1234304	
24 V DC		20 A	—	PS-EE-2G/1AC/24DC/480W/SC	1234308	
48 V DC		2.5 A	—	PS-EE-2G/1AC/48DC/120W/SC	1585285	
48 V DC		5 A	—	PS-EE-2G/1AC/48DC/240W/SC	1585286	
48 V DC		10 A	—	PS-EE-2G/1AC/48DC/480W/SC	1585287	
THREE PHASE						
24 V DC		10 A	—	ESSENTIAL-PS-3AC/10A	1018291	
24 V DC		20 A	—	ESSENTIAL-PS-3AC/20A	1018299	
24 V DC		40 A	—	ESSENTIAL-PS-3AC/40A	1018294	

Recommended surge protection/power supply input					
PLT-SEC-T3... 	Phase	Voltage	Output current	Description	Order no.
VAL-US-SPP... 	Single phase	120 V AC	26 A	PLT-SEC-T3-120-FM-UT	2907918
		240 V AC	26 A	PLT-SEC-T3-230-FM-UT	2907919
	Three phase	240/480 V AC	—	VAL-US-SPP-240/50/3+1-R	1790767
		277/480 V AC	—	VAL-US-SPP-277/65/3+1-R	1790779

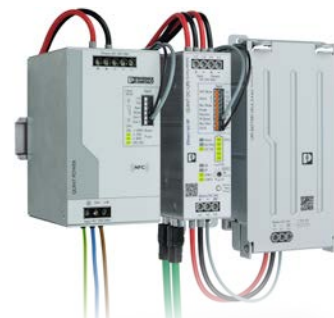



Uninterruptible Power Supplies (UPS)


DC UPS


For critical applications, Uninterruptible Power Supplies (UPS) can provide a lifeline to keep your system up and running.

Comms	Input / Output / Amps	Description	Order no.
—	24 DC / 24 DC / 5 A	QUINT4-UPS/24DC/24DC/5	2906990
—	24 DC / 24 V DC / 10 A	QUINT4-UPS/24DC/24DC/10	2907066
—	24 DC / 24 V DC / 20 A	QUINT4-UPS/24DC/24DC/20	2907071
—	24 DC / 24 V DC / 40 A	QUINT4-UPS/24DC/24DC/40	2907077
USB	24 DC / 24 DC / 5 A	QUINT4-UPS/24DC/24DC/5/USB	2906991
USB	24 DC / 24 V DC / 10 A	QUINT4-UPS/24DC/24DC/10/USB	2907067
USB	24 DC / 24 V DC / 20 A	QUINT4-UPS/24DC/24DC/20/USB	2907072
USB	24 DC / 24 V DC / 40 A	QUINT4-UPS/24DC/24DC/40/USB	2907078
EIP/ModbusTCP	24 DC / 24 V DC / 5 A	QUINT4-UPS/24DC/24DC/5/EIP	2906994
EIP/ModbusTCP	24 DC / 24 DC / 10 A	QUINT4-UPS/24DC/24DC/10/EIP	2907069
EIP/ModbusTCP	24 DC / 24 V DC / 20 A	QUINT4-UPS/24DC/24DC/20/EIP	2907074
EIP/ModbusTCP	24 DC / 24 V DC / 40 A	QUINT4-UPS/24DC/24DC/40/EIP	2907080
PROFINET	24 DC / 24 DC / 5 A	QUINT4-UPS/24DC/24DC/5/PN	2906993
PROFINET	24 DC / 24 V DC / 10 A	QUINT4-UPS/24DC/24DC/10/PN	2907068
PROFINET	24 DC / 24 V DC / 20 A	QUINT4-UPS/24DC/24DC/20/PN	2907073
PROFINET	24 DC / 24 V DC / 40 A	QUINT4-UPS/24DC/24DC/40/PN	2907079
ETHERCAT	24 DC / 24 DC / 5 A	QUINT4-UPS/24DC/24DC/5/EC	2906996
ETHERCAT	24 DC / 24 V DC / 10 A	QUINT4-UPS/24DC/24DC/10/EC	2907070
ETHERCAT	24 DC / 24 V DC / 20 A	QUINT4-UPS/24DC/24DC/20/EC	2907076
ETHERCAT	24 DC / 24 V DC / 40 A	QUINT4-UPS/24DC/24DC/40/EC	2907081

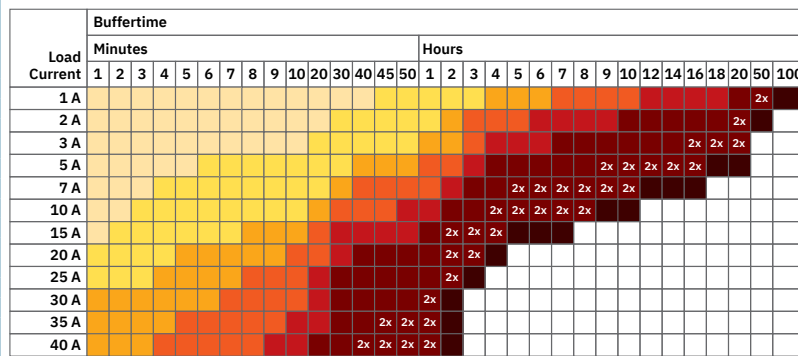


- 
Power supply
 AC-to-DC, DC-to-DC power supplies








- 
UPS module
 Selected based on output requirements

- 
Energy-storage device
 Select the appropriate energy storage for your modular system

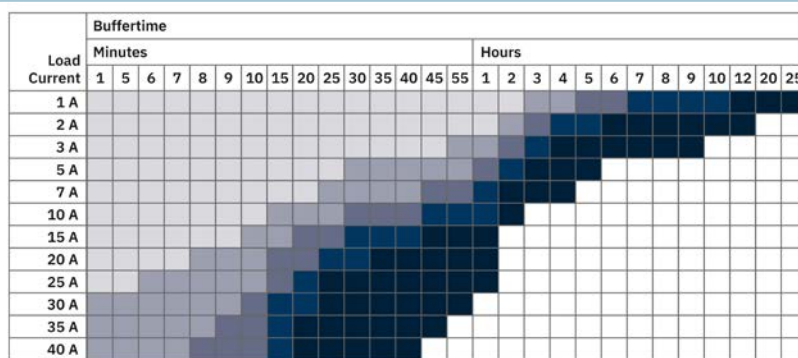
Lead acid batteries








Energy storage

1274520 UPS-BAT/ PB/24DC/1.2AH 54 x 157 x 113 1.2 Ah		1274117 UPS-BAT/ PB/24DC/4AH 85 x 191 x 110 4 Ah		1274118 UPS-BAT/ PB/24DC/7AH 135 x 202 x 110 7 Ah	
1274119 UPS-BAT/ PB/24DC/12AH 202 x 202 x 110 12 Ah		1348516 UPS-BAT/ PB/24DC/20AH 181 x 76 x 166 20 Ah		1354641 UPS-BAT/ PB/24DC/40AH 197 x 165 x 171 40 Ah	
				1474660 UPS-BAT/ PB/24DC/110AH 350 x 214 x 332 110 Ah	

Lithium batteries



Energy storage

1460921 UPS-LI-ION/ LI/24DC/64WH 87 x 197 x 119 128 Wh		1396415 UPS-LI-ION/ 24DC/128WH 54 x 157 x 113 128 Wh			
1460922 UPS-BAT/ LI/24DC/189WH 133 x 197 x 119 128 Wh		1460923 UPS-BAT/ LI/24DC/284WH 179 x 197 x 119 128 Wh			
				1584577 UPS-BAT/ LI/24DC/716WH 260 x 215 x 168 716 Wh	



Wide temperature lead acid batteries

Load Current	Buffertime																									
	Minutes										Hours															
	10	12	15	20	25	30	35	40	45	50	55	1	2	3	4	5	6	7	8	9	10	12	14	16	18	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																										

The data is based on an ambient temperature of +25 °C at the start of use.

Energy storage

2320416

UPS-BAT/VRLA-WTR/24DC/13AH
172 x 177 x 178
13 Ah



2320429

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



IQ Technology

Designed by Phoenix Contact



The intelligent battery management with IQ Technology detects the connected energy storage, collects all relevant information, and alerts you about it.

SOC — State of charge

The current charging state and remaining runtime of the energy storage are constantly measured and displayed.

SOH — State of health

Remaining battery service life is displayed and a failure alert is sent in time, before there is a failure.

Learn more



AC UPS — 500 VA offline



Input voltage
120 V AC/
230 V AC

Output
120 V AC/230 V AC/
500 VA

Description
QUINT4-UPS/1AC/
1AC/500VA/USB

Order no.
1067327

Lead acid batteries

Load Current	Buffertime																			
	Minutes									Hours										
	1	2	3	5	10	20	30	40	45	50	1	2	3	5	8	10	15	24	40	60
15 W																				
35 W																				
55 W																				
90 W																				
125 W																				
180 W																				
275 W																				
400 W																				

The data is based on an ambient temperature of +25 °C at the start of use.

Energy storage

1274117

UPS-BAT/
PB/24DC/4AH
85 x 191 x 110
4 Ah



1274118

UPS-BAT/
PB/24DC/7AH
135 x 202 x 110
7 Ah



1274119

UPS-BAT/
PB/24DC/12AH
202 x 202 x 110
12 Ah



1348516

UPS-BAT/
PB/24DC/20AH
181 x 76 x 166
20 Ah



1354641

UPS-BAT/
PB/24DC/40AH
197 x 165 x 171
40 Ah



1474660

UPS-BAT/
PB/24DC/110AH
350 x 214 x 332
110 Ah



Lithium batteries

Load Current	Buffertime																							
	Minutes					Hours																		
	1	5	7	9	10	15	20	25	30	40	45	50	1	1.5	2	3	3.5	4	5	8	9	10	14	
15 W																								
35 W																								
55 W																								
90 W																								
125 W																								
180 W																								
275 W																								
400 W																								

Energy storage

1460921

UPS-BAT/
LI/24DC/64WH
87 x 197 x 119
128 Wh



1396415

UPS-LI-ION/
24DC/128WH
54 x 157 x 113
128 Wh



1460922

UPS-BAT/
LI/24DC/189WH
133 x 197 x 119
128 Wh



1460923

UPS-BAT/
LI/24DC/284WH
179 x 197 x 119
128 Wh



1584577

UPS-BAT/
LI/24DC/716WH
260 x 215 x 168
716 Wh





Wide temperature lead acid batteries

Load Current	Buffertime																
	Minutes										Hours						
	1	2	3	5	10	20	30	40	45	50	1	2	3	5	8	10	15
15 W																	
35 W																2x	
55 W															2x		
90 W														2x			
125 W													2x	2x			
180 W													2x				
275 W													2x				
400 W													2x				

2x: In this case, two battery modules of the same capacity are required. The data is based on an ambient temperature of +25 °C at the start of use.

Energy storage

2320416		2320429	
UPS-BAT/VRLA-WTR/24DC/13AH		UPS-BAT/VRLA-WTR/24DC/26AH	
172 x 177 x 178 13 Ah		358 x 174 x 169 26 Ah	

AC UPS — 1 kVA double-conversion



Input voltage	Output	Description	Order no.
120 V AC/230 V AC	120 V AC/230 V AC - 1 kVA	QUINT4-UPS/1AC/ 1AC/1kVA	2320283

Lead acid batteries

Load Current	Buffertime																							
	Minutes										Hours													
	1	2	3	4	5	8	10	15	20	25	30	40	50	1	1.5	2	3	4	6	9	10	15	20	24
100 W	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x
200 W	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x
300 W	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x
400 W	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x
500 W	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x
600 W	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x
700 W	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x
800 W	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x
900 W	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x

2x: There are always two battery modules of the same capacity are required. The data is based on an ambient temperature of +25 °C at the start of use.

Energy storage

1274117		1274118		1274119	
UPS-BAT/PB/24DC/4AH		UPS-BAT/PB/24DC/7AH		UPS-BAT/PB/24DC/12AH	
85 x 191 x 110 4 Ah		135 x 202 x 110 7 Ah		202 x 202 x 110 12 Ah	
1348516		1354641		1474660	
UPS-BAT/PB/24DC/20AH		UPS-BAT/PB/24DC/40AH		UPS-BAT/PB/24DC/110AH	
181 x 76 x 166 20 Ah		197 x 165 x 171 40 Ah		350 x 214 x 332 110 Ah	

Lithium batteries

Load Current	Buffertime																						
	Minutes										Hours												
	1	2	3	4	5	8	10	15	20	25	30	40	50	1	1.5	2	3	4	5	6	9		
100 W	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x
200 W	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x
300 W	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x
400 W	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x
500 W	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x
600 W	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x
700 W	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x
800 W	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x
900 W	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x

Energy storage

1460921		1396415		1460922	
UPS-BAT/LI/24DC/64WH		UPS-LI-ION/24DC/128WH		UPS-BAT/LI/24DC/189WH	
87 x 197 x 119 128 Wh		54 x 157 x 113 128 Wh		133 x 197 x 119 128 Wh	
1460923		1584577			
UPS-BAT/LI/24DC/284WH		UPS-BAT/LI/24DC/716WH			
179 x 197 x 119 128 Wh		260 x 215 x 168 716 Wh			

Wide temperature lead acid batteries

Load Current	Buffertime																						
	Minutes										Hours												
	1	2	3	4	5	8	10	15	20	25	30	40	50	1	1.5	2	3	4	6	9			
100 W	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x
200 W	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x
300 W	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x
400 W	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x
500 W	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x
600 W	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x
700 W	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x
800 W	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x
900 W	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x	2x

2x: There are always two battery modules of the same capacity are required. The data is based on an ambient temperature of +25 °C at the start of use.

Energy storage

2320416		2320429	
UPS-BAT/VRLA-WTR/24DC/13AH		UPS-BAT/VRLA-WTR/24DC/26AH	
172 x 177 x 178 13 Ah		358 x 174 x 169 26 Ah	



QUINT AC UPS and Battery Module

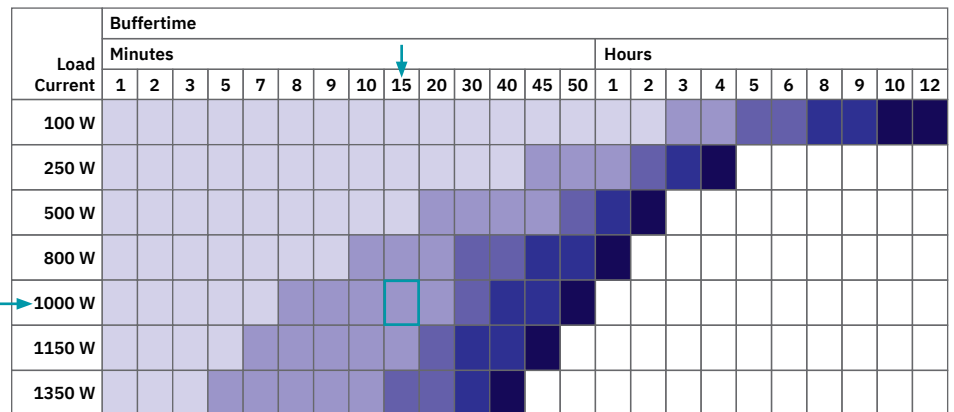
QUINT HP-UPS		QUINT HP-BAT					
W x H x D in mm	150 x 240 x 143	150 x 240 x 143	156.5 x 354 x 143				
	120 AC / 1.5 kVA	230 AC / 1.5 kVA	7 Ah				
No. of battery modules			1x	2x	3x	4x	5x
Description	QUINT-HP-UPS/120AC/1.5KVA/PT	QUINT-HP-UPS/230AC/1.5KVA/PT	QUINT-HP-BAT/PB/48DC/7.0AH/PT				
Order no.	1136804	1136811	1133819				

Buffer times for QUINT HP UPS/1.5 kVA with Pb battery module

Select the battery module for your QUINT HP UPS/1.5 kVA (120/230 V application) here.

Example: 1000 W is to be buffered for 15 minutes.

- QUINT-HP-UPS/230AC/1.5KVA/PT
- 2x QUINT-HP-BAT/PB/48DC/7.0AH/PT



The data is based on an ambient temperature of +25°C at start of use.

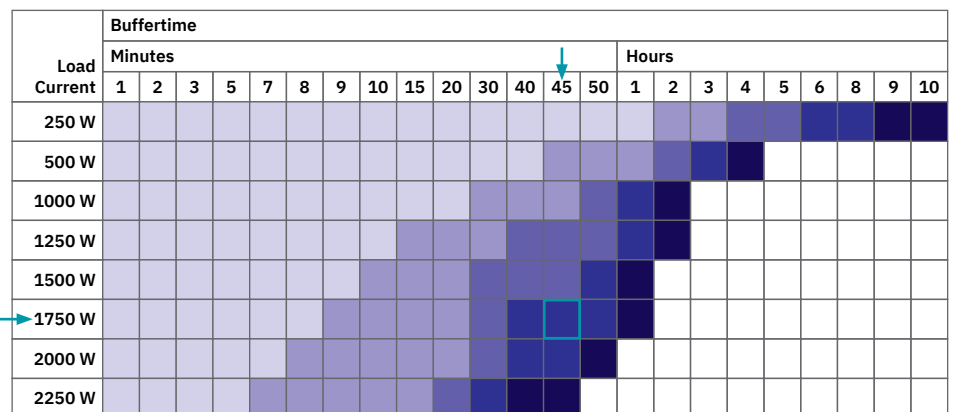
QUINT HP-UPS		QUINT HP-BAT					
W x H x D in mm	188 x 240 x 143	188 x 240 x 143	156.5 x 354 x 143				
	120 AC / 2.5 kVA	230 AC / 2.5 kVA	7 Ah				
No. of battery modules			2x	4x	6x	8x	10x
Description	QUINT-HP-UPS/120AC/2.5KVA/PT	QUINT-HP-UPS/230AC/2.5KVA/PT	QUINT-HP-BAT/PB/48DC/7.0AH/PT				
Order no.	1136813	1136815	1133819				

Buffer times for QUINT HP UPS/2.5 kVA with Pb battery module

Select the battery module for your QUINT HP UPS/2.5 kVA (120/230 V application) here.

Example: 1750 W is to be buffered for 45 minutes.

- QUINT-HP-UPS/230AC/2.5KVA/PT
- 8x QUINT-HP-BAT/PB/48DC/7.0AH/PT



The data is based on an ambient temperature of +25°C at start of use.



DC UPS With Integrated Capacitor

QUINT CAP*			
	22.5 V DC ... 30 V DC	22.5 V DC ... 30 V DC	22.5 V DC ... 30 V DC
Input	22.5 V DC ... 30 V DC	22.5 V DC ... 30 V DC	22.5 V DC ... 30 V DC
W x H x D in mm	85 x 102.5 x 90	94 x 130 x 125	118 x 130 x 125
	24 V / 3.8 A	24 V / 5 A	24 V / 10 A
Description	QUINT4-CAP/24DC/3.8/1KJ/PT	QUINT4-CAP/24DC/5/4KJ	QUINT4-CAP/24DC/10/8KJ
Interface	—	USB	USB
Order no.	2320526	2320539	2320571
Information	Energy storage based on maintenance-free double-layer capacitors		

QUINT CAP*				
	22.5 V DC ... 30 V DC	22.5 V DC ... 30 V DC	22.5 V DC ... 30 V DC	22.5 V DC ... 30 V DC
Input	22.5 V DC ... 30 V DC	22.5 V DC ... 30 V DC	22.5 V DC ... 30 V DC	22.5 V DC ... 30 V DC
W x H x D in mm	244 x 130 x 125	244 x 130 x 125	244 x 130 x 125	244 x 130 x 125
	24 V / 20 A	24 V / 20 A	24 V / 20 A	24 V / 20 A
Description	QUINT4-CAP/24DC/20/16KJ/USB	QUINT4-CAP/24DC/20/16KJ/PN	QUINT4-CAP/24DC/20/16KJ/EIP	QUINT4-CAP/24DC/20/16KJ/EC
Interface	USB	PROFINET	EtherNet/IP™ Modbus/TCP	EtherCAT®
Order no.	1065635	1076860	1076861	1076858
Information	Energy storage based on maintenance-free double-layer capacitors			

*The devices support SFB Technology in mains operation in conjunction with QUINT POWER power supplies of the same performance class.

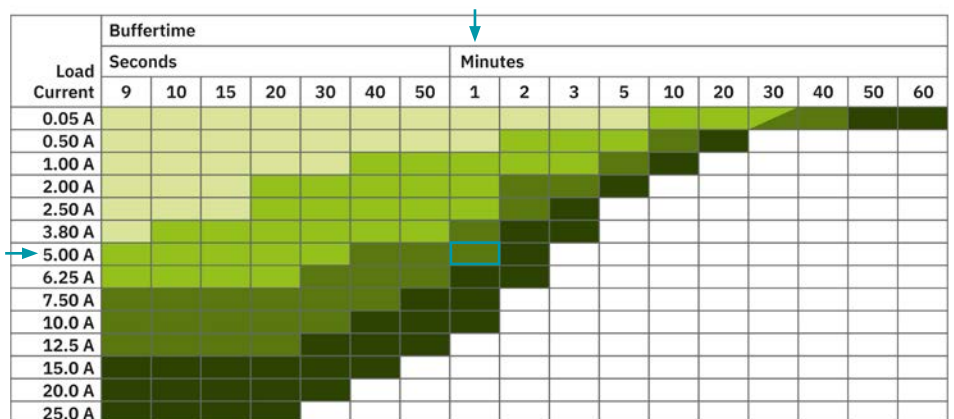
Buffer times for QUINT CAP

Example:

5 A is to be buffered for 1 min.



→ QUINT4-CAP/24DC/10/8KJ



The data is based on an ambient temperature of +25°C.






Surge Protection Power

VAL-US-SPP series

Scan the QR code to learn more online



The VAL-US-SPP series (Safe Protection Plus) is a UL Listed series of pluggable surge protection devices that utilize high-capacity varistors to provide high-quality protection. These devices offer status indication contacts for remote monitoring, as well as hot-swappable plugs with integrated visual status indication for easy maintenance and replacement. Phoenix Contact is already setting the surge protection standards of the future, today. The VAL-US-SPP devices combine forward-thinking installation and safety features that ensure the high availability of your system.

VAL-US-SPP series								
IEC/UL		Configuration	System type	U_N	I_{MAX}	Description	Order no.	
3-phase/Three phase wye		1+0	Split phase / Wye	120 V	50 kA	VAL-US-SPP-120/50/1+0-R	1790744	
TN-S (3+1)			Split phase / Wye		65 kA	VAL-US-SPP-120/65/1+0-R	1790752	
			Split phase / Wye	240 V	50 kA	VAL-US-SPP-240/50/1+0-R	1790763	
			Split phase / Wye	277 V	50 kA	VAL-US-SPP-277/50/1+0-R	1790770	
2-phase/Single split phase		1+1	Split phase / Wye	120 V	50 kA	VAL-US-SPP-120/50/1+1-R	1790745	
TN-C (3+0)			Split phase / Wye		65 kA	VAL-US-SPP-120/65/1+1-R	1790753	
			Split phase / Wye	240 V	50 kA	VAL-US-SPP-240/50/1+1-R	1790764	
			Split phase / Wye	277 V	50 kA	VAL-US-SPP-277/50/1+1-R	1790772	
			Split phase / Wye	120 V	50 kA	VAL-US-SPP-120/50/2+0-R	1790747	
TN-S (2+1)			Split phase / Wye		65 kA	VAL-US-SPP-120/65/2+0-R	1790754	
			Split phase / Wye	240 V	50 kA	VAL-US-SPP-240/50/2+0-R	1790765	
TN-C (2+0)			Delta		50 kA	VAL-US-SPP-240D/50/2+0-R	1790786	
1-phase/Single phase		2+1	Split phase / Wye	120 V	50 kA	VAL-US-SPP-120/50/2+1-R	1790748	
TN-S (1+1)			Split phase / Wye		65 kA	VAL-US-SPP-120/65/2+1-R	1790756	
		Split phase / Wye	120 V	50 kA	VAL-US-SPP-120/50/3+0-R	1790749		
TN-C (1+0)		Split phase / Wye		65 kA	VAL-US-SPP-120/65/3+0-R	1790758		
Delta		3+0	Split phase / Wye	240 V	50 kA	VAL-US-SPP-240/50/3+0-R	1790766	
Corner grounded			Split phase / Wye	277 V	50 kA	VAL-US-SPP-277/50/3+0-R	1790773	
			Split phase / Wye		65 kA	VAL-US-SPP-277/65/3+0-R	1790778	
			Delta	240 V	50 kA	VAL-US-SPP-240D/50/3+0-R	1790787	
			Delta	480 V	40 kA	VAL-US-SPP-480D/40/3+0-R	1790790	
			Delta	600 V	40 kA	VAL-US-SPP-600D/40/3+0-R	1790793	
			4-pole	Split phase / Wye	120 V	50 kA	VAL-US-SPP-120/50/3+1-R	1790750
				Split phase / Wye		65 kA	VAL-US-SPP-120/65/3+1-R	1790760
		Split phase / Wye		240 V	50 kA	VAL-US-SPP-240/50/3+1-R	1790767	
		Split phase / Wye			277 V	50 kA	VAL-US-SPP-277/50/3+1-R	1790774
		Split phase / Wye		65 kA		VAL-US-SPP-277/65/3+1-R	1790779	
		Split phase / Wye		400 V	40 kA	VAL-US-SPP-400/40/3+1-R	1790785	
	High leg delta	240 V	50 kA	VAL-US-SPP-240HLD/50/3+1-R	1790794			
	High leg delta	480 V	40 kA	VAL-US-SPP-480HLD/40/3+1-R	1790795			
	4+0	Split phase / Wye	277 V	50 kA	VAL-US-SPP-277/50/4+0-R	1790776		



Surge Protection

TERMITRAB Complete

Scan the QR code to learn more online



World's thinnest surge protection with a narrow width of just 3.5 mm

TERMITRAB complete is the world's narrowest surge protection for MCR technology. Our product range includes a complete system kit, covering everything from simple, single-stage surge protection to multi-stage, pluggable versions with knife disconnection, signaling, and the option of remote signaling.

TERMITRAB Complete (TTC)

	Signal	Connection	Voltage	Grounding	Pluggable	Monitoring	Description	Order no.
	Analog	Screw	12 V DC	Indirect	✓	✓	TTC-6P-1X2-F-12DC-UT-I	2908196
			24 V DC	Indirect			TTC-6P-1X2-F-M-24DC-UT-I	2906781
			48 V DC	Direct	TTC-6P-1X2-24DC-UT-I		2906809	
				Direct	TTC-6-1X2-24DC-UT		2906798	
				Direct	TTC-6P-1X2-48DC-UT-I		2908194	
				Direct	TTC-6P-1X2-12DC-PT-I		2908193	
		Push-in	12 V DC	Indirect	✓	TTC-6P-1X2-F-M-24DC-PT-I	2906790	
				Direct	TTC-6P-1X2-24DC-PT-I	2906815		
				Direct	TTC-6-1X2-24DC-PT	2906804		
			24 V DC	Direct	×	TTC-3-1x2-24DC-PT	2907325	
				Direct	✓	TTC-6P-1X2-48DC-PT-I	2908195	
				Direct		TTC-6P-2X1-12DC-UT-I	2908201	
	Digital	Screw	12 V DC	Direct	✓	✓	TTC-6P-2X1-F-M-24DC-UT-I	2906784
				Indirect			TTC-6P-2X1-24DC-UT-I	2906810
				Direct	TTC-6-2X1-24DC-UT		2906799	
			24 V DC	Indirect	✓		TTC-6P-2X1-F-48DC-UT-I	2908208
				Direct			TTC-6P-2X1-F-12DC-PT-I	2908206
				Direct	TTC-6P-2X1-F-M-24DC-PT-I		2906794	
		Push-in	12 V DC	Direct	✓	TTC-6P-2X1-24DC-PT-I	2906816	
				Direct		TTC-6-2X1-24DC-PT	2906805	
				Direct	×	TTC-3-2x1-24DC-PT	2907326	
			24 V DC	Direct	✓	TTC-6P-2X1-48DC-PT-I	2908204	
				Direct	✓			
				Direct	✓			

EMC filters

	Nominal load current	1 A	3 A	6 A	10 A	20 A
	Description	FIL-1S-1-1A-230AC	FIL-1S-1-3A-230AC	FIL-1S-1-6A-230AC	FIL-1S-1-10A-230AC	FIL-1S-1-20A-230AC
	Order no. for Push-in	1292328	1292326	1292321	1292319	1292316
	Order no. for screw	1292329	1292327	1292323	1292320	1292318

EMC filters with surge protection

	Nominal load current	5 A	10 A	15 A	20 A
	Description	SFP2-1-5A-120AC	SFP2-1-10A-120AC	SFP2-1-15A-120AC	SFP2-1-20A-120AC
	Order no. for Push-in	1292458	1292455	1292450	1292419
	Order no. for screw	1292315	1292457	1292453	1292421

Ethernet surge protection (DT)

	Signal	Connection	Voltage	Grounding	Pluggable	Monitoring	Description	Order no.	
	Digital	RJ45	<3.3 V DC	Direct	×	×	DT-LAN-CAT.6+	2881007	
			12 V DC				DT-UFB-485/BS	2920612	
			185 V DC/130 V AC				DT-TELE-SHDSL	2801593	
			185 V DC/130 V AC				DT-TELE-RJ45	2882925	
			D-SUB				15 V DC/10 V AC	DT-UFB-V24/S-9-SB	2803069
							5.8 V DC	DT-UFB-IB-RB0	2800056



Thermomagnetic Device Circuit Breakers

Function and design

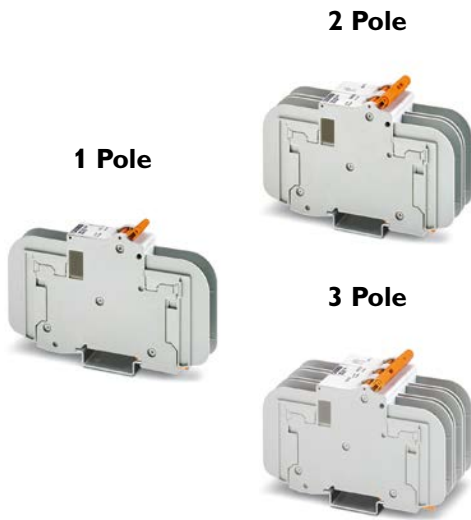
Thermomagnetic device circuit breakers are tripped both thermally and magnetically. The two systems, bimetal and solenoid, operate independently of one another.

This means that in the event of a short circuit, the thermomagnetic device circuit breakers trip more quickly than thermal device circuit breakers.

As a rule, in the event of a short circuit, the tripping mechanism is actuated within 3 to 5 ms.

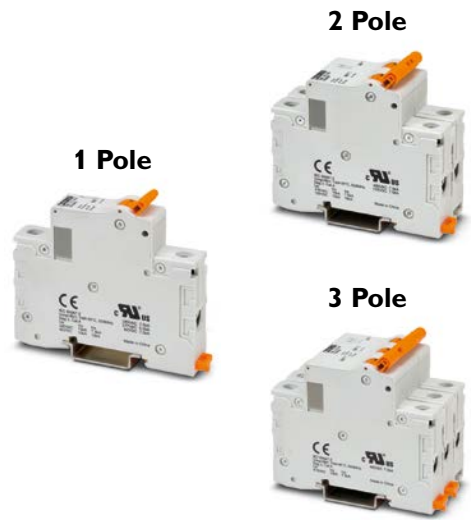


TMC 8 series branch circuit breakers



Ampere rating (A)	B Curve					
	1 Pole		2 Pole		3 Pole	
1	TMC 81B 01A	2907478	TMC 82B 01A	2907502	TMC 83B 01A	2907539
2	TMC 81B 02A	2907479	TMC 82B 02A	2907503	TMC 83B 02A	2907540
3	TMC 81B 03A	2907480	TMC 82B 03A	2907504	TMC 83B 03A	2907542
4	TMC 81B 04A	2907481	TMC 82B 04A	2907505	TMC 83B 04A	2907543
5	TMC 81B 05A	2907482	TMC 82B 05A	2907506	TMC 83B 05A	2907544
6	TMC 81B 06A	2907483	TMC 82B 06A	2907507	TMC 83B 06A	2907545
7	TMC 81B 07A	2907484	TMC 82B 07A	2907508	TMC 83B 07A	2907546
8	TMC 81B 08A	2907485	TMC 82B 08A	2907510	TMC 83B 08A	2907547
10	TMC 81B 10A	2907487	TMC 82B 10A	2907511	TMC 83B 10A	2907548
12	TMC 81B 12A	2907488	TMC 82B 12A	2907512	TMC 83B 12A	2907549
13	TMC 81B 13A	2907489	TMC 82B 13A	2907513	TMC 83B 13A	2907550
15	TMC 81B 15A	2907490	TMC 82B 15A	2907514	TMC 83B 15A	2907551
16	TMC 81B 16A	2907491	TMC 82B 16A	2907515	TMC 83B 16A	2907552
20	TMC 81B 20A	2907492	TMC 82B 20A	2907516	TMC 83B 20A	2907553
25	TMC 81B 25A	2907493	TMC 82B 25A	2907530	TMC 83B 25A	2907555
30	TMC 81B 30A	2907494	TMC 82B 30A	2907531	TMC 83B 30A	2907556
32	TMC 81B 32A	2907495	TMC 82B 32A	2907532	TMC 83B 32A	2907557
35	TMC 81B 35A	2907496	TMC 82B 35A	2907533	—	—
40	TMC 81B 40A	2907497	TMC 82B 40A	2907534	TMC 83B 40A	1010308
50	TMC 81B 50A	2907498	TMC 82B 50A	2907535	TMC 83B 50A	1010307
60	TMC 81B 60A	2907500	TMC 82B 60A	2907536	—	—
63	TMC 81B 63A	2907501	TMC 82B 63A	2907537	—	—

TMC 7 series supplementary protectors



1	TMC 71B 01A	1011962	TMC 72B 01A	1019930	TMC 73B 01A	1019951
2	TMC 71B 02A	1019909	TMC 72B 02A	1019931	TMC 73B 02A	1019952
3	TMC 71B 03A	1019910	TMC 72B 03A	1019932	TMC 73B 03A	1019953
4	TMC 71B 04A	1019911	TMC 72B 04A	1019933	TMC 73B 04A	1019954
5	TMC 71B 05A	1019912	TMC 72B 05A	1019934	TMC 73B 05A	1019955
6	TMC 71B 06A	1019913	TMC 72B 06A	1019935	TMC 73B 06A	1019956
7	TMC 71B 07A	1019914	TMC 72B 07A	1019936	TMC 73B 07A	1019957
8	TMC 71B 08A	1019915	TMC 72B 08A	1019937	TMC 73B 08A	1019958
10	TMC 71B 10A	1019916	TMC 72B 10A	1019938	TMC 73B 10A	1019959
12	TMC 71B 12A	1019917	TMC 72B 12A	1019939	TMC 73B 12A	1019960
13	TMC 71B 13A	1019918	TMC 72B 13A	1019940	TMC 73B 13A	1019961
15	TMC 71B 15A	1019919	TMC 72B 15A	1019941	TMC 73B 15A	1019962
16	TMC 71B 16A	1019920	TMC 72B 16A	1019942	TMC 73B 16A	1019963
20	TMC 71B 20A	1019921	TMC 72B 20A	1019943	TMC 73B 20A	1019964
25	TMC 71B 25A	1019922	TMC 72B 25A	1019944	TMC 73B 25A	1019965
30	TMC 71B 30A	1019923	TMC 72B 30A	1019945	TMC 73B 30A	1019966
32	TMC 71B 32A	1019924	TMC 72B 32A	1019946	TMC 73B 32A	1019967
40	TMC 71B 40A	1019925	TMC 72B 40A	1019947	TMC 73B 40A	1019968
50	TMC 71B 50A	1019926	TMC 72B 50A	1019948	TMC 73B 50A	1019969
60	TMC 71B 60A	1019927	TMC 72B 60A	1019949	TMC 73B 60A	1019970
63	TMC 71B 63A	1019928	TMC 72B 63A	1019950	TMC 73B 63A	1019971



Thermomagnetic Device Circuit Breakers

Trip characteristics

The TMC 7 and TMC 8 series includes a range of trip characteristics for a variety of applications: B-, C-, and D-curves.


Curve	Application
B	<ul style="list-style-type: none"> • Heaters • Sensitive equipment
C	<ul style="list-style-type: none"> • Small transformers • Lighting • Pilot devices • Control circuits and coils
D	<ul style="list-style-type: none"> • Motors • Generators

C Curve						D Curve					
1 Pole		2 Pole		3 Pole		1 Pole		2 Pole		3 Pole	
TMC 81C 01A	2907558	TMC 82C 01A	2907582	TMC 83C 01A	2907607	TMC 81D 01A	2907626	TMC 82D 01A	2907650	TMC 83D 01A	2907674
TMC 81C 02A	2907559	TMC 82C 02A	2907584	TMC 83C 02A	2907608	TMC 81D 02A	2907627	TMC 82D 02A	2907652	TMC 83D 02A	2907675
TMC 81C 03A	2907560	TMC 82C 03A	2907585	TMC 83C 03A	2907609	TMC 81D 03A	2907628	TMC 82D 03A	2907653	TMC 83D 03A	2907676
TMC 81C 04A	2907561	TMC 82C 04A	2907586	TMC 83C 04A	2907610	TMC 81D 04A	2907629	TMC 82D 04A	2907654	TMC 83D 04A	2907678
TMC 81C 05A	2907562	TMC 82C 05A	2907587	TMC 83C 05A	2907611	TMC 81D 05A	2907630	TMC 82D 05A	2907655	TMC 83D 05A	2907679
TMC 81C 06A	2907563	TMC 82C 06A	2907588	TMC 83C 06A	2907612	TMC 81D 06A	2907631	TMC 82D 06A	2907656	TMC 83D 06A	2907681
TMC 81C 07A	2907564	TMC 82C 07A	2907589	TMC 83C 07A	2907613	TMC 81D 07A	2907632	TMC 82D 07A	2907657	TMC 83D 07A	2907682
TMC 81C 08A	2907565	TMC 82C 08A	2907590	TMC 83C 08A	2907614	TMC 81D 08A	2907633	TMC 82D 08A	2907658	TMC 83D 08A	2907683
TMC 81C 10A	2907566	TMC 82C 10A	2907591	TMC 83C 10A	2907615	TMC 81D 10A	2907634	TMC 82D 10A	2907659	TMC 83D 10A	2907684
TMC 81C 12A	2907568	TMC 82C 12A	2907592	TMC 83C 12A	2907616	TMC 81D 12A	2907636	TMC 82D 12A	2907660	TMC 83D 12A	2907685
TMC 81C 13A	2907569	TMC 82C 13A	2907593	TMC 83C 13A	2907617	TMC 81D 13A	2907637	TMC 82D 13A	2907661	TMC 83D 13A	2907686
TMC 81C 15A	2907571	TMC 82C 15A	2907594	TMC 83C 15A	2907618	TMC 81D 15A	2907638	TMC 82D 15A	2907662	TMC 83D 15A	2907687
TMC 81C 16A	2907572	TMC 82C 16A	2907595	TMC 83C 16A	2907620	TMC 81D 16A	2907639	TMC 82D 16A	2907663	TMC 83D 16A	2907688
TMC 81C 20A	2907573	TMC 82C 20A	2907597	TMC 83C 20A	2907621	TMC 81D 20A	2907640	TMC 82D 20A	2907665	TMC 83D 20A	2907689
TMC 81C 25A	2907574	TMC 82C 25A	2907598	TMC 83C 25A	2907623	TMC 81D 25A	2907641	TMC 82D 25A	2907666	TMC 83D 25A	2907690
TMC 81C 30A	2907575	TMC 82C 30A	2907599	TMC 83C 30A	2907624	TMC 81D 30A	2907642	TMC 82D 30A	2907667	TMC 83D 30A	2907691
TMC 81C 32A	2907576	TMC 82C 32A	2907600	TMC 83C 32A	2907625	TMC 81D 32A	2907643	TMC 82D 32A	2907668	TMC 83D 32A	2907692
TMC 81C 35A	2907577	TMC 82C 35A	2907601	TMC 83C 35A	1010303	TMC 81D 35A	2907644	TMC 82D 35A	2907669	TMC 83D 35A	1010290
TMC 81C 40A	2907578	TMC 82C 40A	2907602	TMC 83C 40A	1010305	TMC 81D 40A	2907645	TMC 82D 40A	2907670	TMC 83D 40A	1010289
TMC 81C 50A	2907579	TMC 82C 50A	2907603	TMC 83C 50A	1010302	TMC 81D 50A	2907646	TMC 82D 50A	2907671	TMC 83D 50A	1010284
TMC 81C 60A	2907580	TMC 82C 60A	2907604	TMC 83C 60A	1010301	TMC 81D 60A	2907647	TMC 82D 60A	2907672	TMC 83D 60A	1010288
TMC 81C 63A	2907581	TMC 82C 63A	2907605	TMC 83C 63A	1010291	TMC 81D 63A	2907649	TMC 82D 63A	2907673	TMC 83D 63A	1010287
TMC 71C 01A	1019972	TMC 72C 01A	1019994	TMC 73C 01A	1020015	TMC 71D 01A	1020037	TMC 72D 01A	1020060	TMC 73D 01A	1020082
TMC 71C 02A	1019973	TMC 72C 02A	1019995	TMC 73C 02A	1020016	TMC 71D 02A	1020038	TMC 72D 02A	1020061	TMC 73D 02A	1020083
TMC 71C 03A	1019974	TMC 72C 03A	1019996	TMC 73C 03A	1020017	TMC 71D 03A	1020039	TMC 72D 03A	1020062	TMC 73D 03A	1020084
TMC 71C 04A	1019975	TMC 72C 04A	1019997	TMC 73C 04A	1020018	TMC 71D 04A	1020040	TMC 72D 04A	1020064	TMC 73D 04A	1020085
TMC 71C 05A	1019976	TMC 72C 05A	1019998	TMC 73C 05A	1020019	TMC 71D 05A	1020041	TMC 72D 05A	1020065	TMC 73D 05A	1020086
TMC 71C 06A	1019977	TMC 72C 06A	1019999	TMC 73C 06A	1020020	TMC 71D 06A	1020042	TMC 72D 06A	1020066	TMC 73D 06A	1020087
TMC 71C 07A	1019978	TMC 72C 07A	1020000	TMC 73C 07A	1020021	TMC 71D 07A	1020043	TMC 72D 07A	1020067	TMC 73D 07A	1020088
TMC 71C 08A	1019979	TMC 72C 08A	1020001	TMC 73C 08A	1020022	TMC 71D 08A	1020044	TMC 72D 08A	1020068	TMC 73D 08A	1020090
TMC 71C 10A	1019980	TMC 72C 10A	1020002	TMC 73C 10A	1020023	TMC 71D 10A	1020045	TMC 72D 10A	1020069	TMC 73D 10A	1020091
TMC 71C 12A	1019981	TMC 72C 12A	1020003	TMC 73C 12A	1020024	TMC 71D 12A	1020046	TMC 72D 12A	1020070	TMC 73D 12A	1020093
TMC 71C 13A	1019982	TMC 72C 13A	1020004	TMC 73C 13A	1020025	TMC 71D 13A	1020048	TMC 72D 13A	1020071	TMC 73D 13A	1020094
TMC 71C 15A	1019983	TMC 72C 15A	1020005	TMC 73C 15A	1020026	TMC 71D 15A	1020049	TMC 72D 15A	1020072	TMC 73D 15A	1020095
TMC 71C 16A	1019984	TMC 72C 16A	1020006	TMC 73C 16A	1020027	TMC 71D 16A	1020051	TMC 72D 16A	1020073	TMC 73D 16A	1020096
TMC 71C 20A	1019985	TMC 72C 20A	1020007	TMC 73C 20A	1020028	TMC 71D 20A	1020052	TMC 72D 20A	1020074	TMC 73D 20A	1020097
TMC 71C 25A	1019986	TMC 72C 25A	1020008	TMC 73C 25A	1020029	TMC 71D 25A	1020053	TMC 72D 25A	1020075	TMC 73D 25A	1020098
TMC 71C 30A	1019987	TMC 72C 30A	1020009	TMC 73C 30A	1020030	TMC 71D 30A	1020054	TMC 72D 30A	1020076	TMC 73D 30A	1020099
TMC 71C 32A	1019988	TMC 72C 32A	1020010	TMC 73C 32A	1020031	TMC 71D 32A	1020055	TMC 72D 32A	1020077	TMC 73D 32A	1020100
TMC 71C 40A	1019989	TMC 72C 40A	1020011	TMC 73C 40A	1020032	TMC 71D 40A	1020056	TMC 72D 40A	1020078	TMC 73D 40A	1020101
TMC 71C 50A	1019990	TMC 72C 50A	1020012	TMC 73C 50A	1020033	TMC 71D 50A	1020057	TMC 72D 50A	1020079	TMC 73D 50A	1020103
TMC 71C 60A	1019991	TMC 72C 60A	1020013	TMC 73C 60A	1020035	TMC 71D 60A	1020058	TMC 72D 60A	1020080	TMC 73D 60A	1020104
TMC 71C 63A	1019992	TMC 72C 63A	1020014	TMC 73C 63A	1020036	TMC 71D 63A	1020059	TMC 72D 63A	1020081	TMC 73D 63A	1020105




Electronic Circuit Breakers


Single channel electronic circuit breakers — **NEC Class 2

	Ampere rating	Description	Order no.
	1-3 A	PTCB E1 24DC/1-3A NO**	2909909
	1-4 A	PTCB E1 24DC/1-4A NO	2908261
	1-4 A	PTCB E1 24DC/1-4A SI-R**	1135753
	1-8 A	PTCB E1 24DC/1-8A NO	2908262
	1-8 A	PTCB E1 24DC/1-8A SI-R	1135752
	1 A	PTCB E1 24DC/1A NO**	2909902
	1 A	PTCB E1 24DC/1A SI-R**	1135751
	2 A	PTCB E1 24DC/2A NO**	2909903
	2 A	PTCB E1 24DC/2A SI-R**	1135749
	3 A	PTCB E1 24DC/3A NO**	2909904
	4 A	PTCB E1 24DC/4A NO	2909906
	4 A	PTCB E1 24DC/4A SI-R**	1135745
	6 A	PTCB E1 24DC/6A NO	2909908
	6 A	PTCB E1 24DC/6A SI-R	1135740
8 A	PTCB E1 24DC/8A NO	2909910	
8 A	PTCB E1 24DC/8A SI-R	1135734	


PTCB eFuse — **NEC Class 2

	Ampere rating	Description	Order no.
	0.1 - 0.63 A	PTCB E1 24DC/0.1-0.63A NO**	1441495
	0.1 - 0.63 A	PTCB E1 24DC/0.1-0.63A SI-R**	1441496
	0.1 A	PTCB E1 24DC/0.1A SI-R**	1464483
	0.1 A	PTCB E1 24DC/0.1A NO**	1464484
	0.2 A	PTCB E1 24DC/0.2A SI-R**	1361049
	0.2 A	PTCB E1 24DC/0.2A NO**	1361055
	0.5 A	PTCB E1 24DC/0.5A SI-R**	1361043
	0.5 A	PTCB E1 24DC/0.5A NO**	1361051
	0.63 A	PTCB E1 24DC/0.63A SI-R**	1464485
	0.63 A	PTCB E1 24DC/0.63A NO**	1464486

Electronic circuit breakers module — Class I, Div 2

	Function	Channels	Amp	Description	Order no.
	Full feature/function model	4	0.5-10 A	CBM E4 24DC/0.5-10A NO-R	2905743
		8		CBM E8 24DC/0.5-10A NO-R	2905744

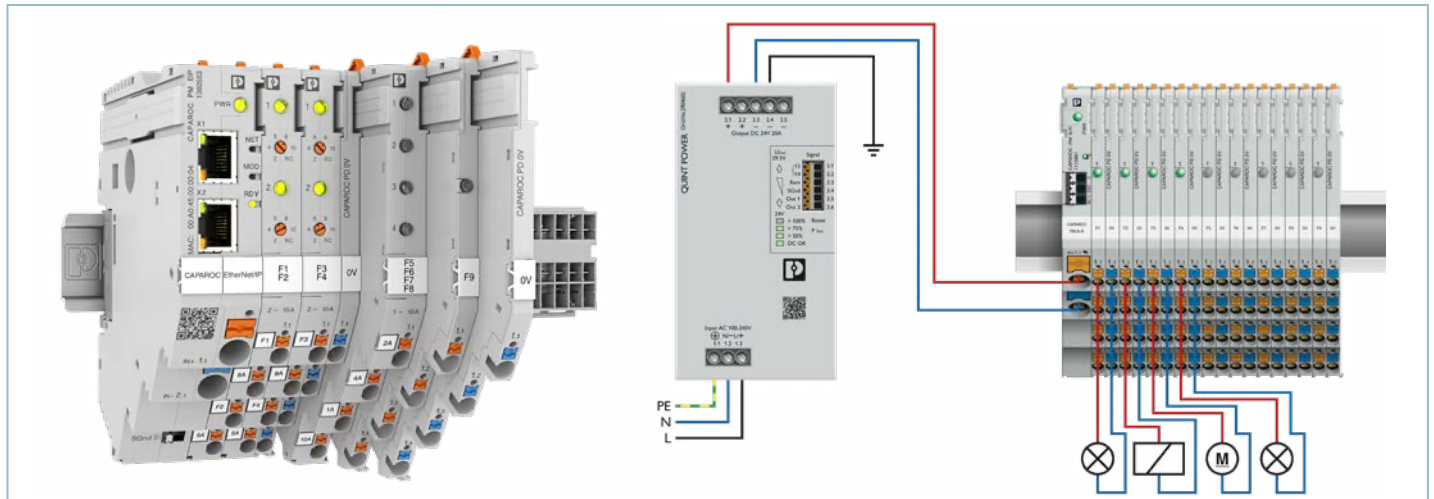
Electronic circuit breakers module compact — **NEC Class 2

	Function	Channels	Amp	Description	Order no.
	Remote reset version	4	1-4 A	CBMC E4 24DC/1-4A S-R**	1065727
			1-10 A	CBMC E4 24DC/1-10A S-R	1065729
	Status output version	4	1-4 A	CBMC E4 24DC/1-4A NO**	2906031
			1-10 A	CBMC E4 24DC/1-10A NO	2906032
	IO-Link version	4	1-4 A	CBMC E4 24DC/1-4A+ IOL**	2910410
			1-10 A	CBMC E4 24DC/1-10A IOL	2910411
	Galvanically isolated version	4	1-8 A	CBMC EG4 24DC/1-8A NO	1065730



Electronic Circuit Breaker System CAPAROC

CAPAROC is your individual modular system for overcurrent protection. With many combination options, intuitive operation, and strikingly simple design-in you will get your very personal standard in device protection. Using this system, you are perfectly positioned for the future.



	Details	Description	# of slots	Order no.
	Power module status/reset	CAPAROC PM S-R	2	1115661
	Power module status/reset HazLoc	CAPAROC PM S-R EX	2	1344363
	Power module IO-Link	CAPAROC PM IOL	2	1115670
	Power module PROFINET	CAPAROC PM PN	4	1110986
	Power module EtherNet/IP™	CAPAROC PM EIP	4	1393553
	Power module with EtherCAT®	CAPAROC PM EC	4	1687560
	Power module with Modbus/TCP	CAPAROC PM MB	4	1687559
	1 channel 10 A	CAPAROC E1 12-24DC/10A	1	1157284
	1 channel 1-10 A	CAPAROC E1 12-24DC/1-10A	1	1115649
	1 channel 1-4 A	CAPAROC E1 12-24DC/1-4A	1	1115415
	1 channel 1 A	CAPAROC E1 12-24DC/1A	1	1157288
	1 channel 2 A	CAPAROC E1 12-24DC/2A	1	1157290
	1 channel 4 A	CAPAROC E1 12-24DC/4A	1	1157285
	1 channel 6 A	CAPAROC E1 12-24DC/6A	1	1157286
	1 channel 8 A	CAPAROC E1 12-24DC/8A	1	1157279
	2 channel 1-4 A EX	CAPAROC E2 12-24DC/1-4A EX	2	1344361
	2 channel 1-4 A	CAPAROC E2 12-24DC/1-4A	2	1115655
	2 channel 2-10 A	CAPAROC E2 12-24DC/2-10A	2	1110984
	2 channel 2-10 A EX	CAPAROC E2 12-24DC/2-10A EX	2	1344364
	4 channel 1-10 A	CAPAROC E4 12-24DC/1-10A	2	1115658
	4 channel 1-4 A	CAPAROC E4 12-24DC/1-4A	2	1115657
0 V module 4 channel	CAPAROC PD 0V	1	1110987	
	20 slot current rail	CAPAROC CR 20	20	1110989
	8 slot current rail	CAPAROC CR 8	8	1115672
	Current rail extension 20 slot	CAPAROC CR EXT20	20	1115674
	Current rail extension 4 slot	CAPAROC CR EXT4	4	1110991
	Current rail extension 8 slot	CAPAROC CR EXT8	8	1110990
	Replacement current rail metal	CAPAROC CR CON	—	1270955



Power Monitoring

Multifunctional energy measuring devices

Scan the QR code to learn more online



The multifunctional EMpro energy measuring devices acquire your energy data and offer numerous options for communicating the data to higher-level control and management systems. Configure and integrate your energy measuring devices in just a few steps using the web-based, user-guided installation wizard. You can also benefit from the simple, direct connection of conventional Rogowski coils, and from the many practice-oriented web server and device functions.



Fast wiring and configuration

The Rogowski measuring input saves you a great deal of time when it comes to wiring and configuration. Connect any conventional Rogowski coil directly: the products process the mV signal directly. The installation wizard starts up automatically when the device is switched on for the first time.



Smart web servers and device functions

Monitor the correct operation of the system and error analysis in the event of service and support actions. In addition to configuring the devices, you can use the web server to log data, assess grid quality, and display the energy flows in clear trend diagrams.



Increased data security

Protect your energy data from unauthorized access by shutting down operating elements at the device will prevent manipulative operations on site. Deactivating the interfaces, you avoid unwanted access to your energy data or unintentional changes of the configuration.


EMpro energy meters

Supply	Current Measurement	Network Interface	Mounting	Screen	Description	Order no.
120 V AC	Rogowski coil	Ethernet IP	DIN rail	✗	EEM-MB371-EIP	2907976
120 V AC	Current transformer	Ethernet IP	DIN rail	✗	EEM-MB370-EIP	2907971
120 V AC	Rogowski coil	Ethernet IP	Panel	✓	EEM-MA771-EIP	2908302
120 V AC	Current transformer	Ethernet IP	Panel	✓	EEM-MA770-EIP	2907953
120 V AC	Rogowski coil	Modbus/TCP	DIN rail	✗	EEM-MB371	2907955
24 V DC	Current transformer	Modbus/TCP	DIN rail	✗	EEM-MB371-24DC	1127055
120 V AC	Rogowski coil	Modbus/TCP	DIN rail	✗	EEM-MB370	2907954
24 V DC	Current transformer	Modbus/TCP	DIN rail	✗	EEM-MB370-24DC	1127061
120 V AC	Rogowski coil	Modbus/TCP	DIN rail	✓	EEM-MA371	2908307
24 V DC	Rogowski coil	Modbus/TCP	DIN rail	✓	EEM-MA371-24DC	1127055
120 V AC	Current transformer	Modbus/TCP	DIN rail	✓	EEM-MA370	2907983
24 V DC	Current transformer	Modbus/TCP	DIN rail	✓	EEM-MA370-24DC	1127059
120 V AC	Rogowski coil	Modbus/TCP	Panel	✓	EEM-MA771	2908286
24 V DC	Rogowski coil	Modbus/TCP	Panel	✓	EEM-MA771-24DC	1127060
120 V AC	Current transformer	Modbus/TCP	Panel	✓	EEM-MA770	2907945
24 V DC	Current transformer	Modbus/TCP	Panel	✓	EEM-MA770-24DC	1127052
120 V AC	Rogowski coil	Profinet	DIN rail	✗	EEM-MB371-PN	2908308
120 V AC	Current transformer	Profinet	DIN rail	✗	EEM-MB370-PN	2907984
120 V AC	Rogowski coil	Profinet	Panel	✓	EEM-MA771-PN	2908301
120 V AC	Current transformer	Profinet	Panel	✓	EEM-MA770-PN	2907946
120 V AC	Rogowski coil	Modbus RTU/TCP	DIN rail	✗	EEM-MB371-R	2907985
120 V AC	Current transformer	Modbus RTU/TCP	DIN rail	✗	EEM-MB370-R	2907980
120 V AC	Rogowski coil	Modbus RTU/TCP	Panel	✓	EEM-MA771-R	2908285
120 V AC	Current transformer	Modbus RTU/TCP	Panel	✓	EEM-MA770-R	2907944
120 V AC	Rogowski coil	Cloud	DIN rail	✗	EEM-SB371-C	1158947
120 V AC	Current transformer	Cloud	DIN rail	✗	EEM-SB370-C	1158951



Current Transformers for Retrofitting


PACT RCP Rogowski coils

	Details	Rogowski coil for current measurement, can be connected directly to energy measuring devices						
	Frequency range	40 Hz ... 20000 Hz						
	Accuracy class	0.2 (IEC 61869-10: A1)						
	Output signal	100 mV AC (no load, at 1000 A AC)						
	Length of measuring coil	300 mm			450 mm		600 mm	
	Length of signal line	3 m	5 m	10 m	3 m	10 m	3 m	10 m
	Order no.	2904890	2910322	2910323	2904891	1033482	2904892	2910324

Accessories


	Details	Description	Order no.
	Clamp to secure Rogowski Coil to busbar of 10...15mm thick	PACT RCP-CLAMP	2904895
	Clamp to secure Rogowski Coil to busbar of 5...10mm thick	PACT RCP-CLAMP-5-10	2907888


PACT SPC current transformers for retrofitting

	Details	Split-core current transformer for retrofitting		
	Order no.	1382378	1382384	1382387
	Length of signal line	2 m	3 m	
	Accuracy class	3	1	0.5
	Primary rated current	0 ... 20 A AC	0 ... 50 A AC	0 ... 100 A AC
	Secondary rated current	0 ... 1 A AC		
	Frequency range	50 Hz / 60 Hz		
	Conductor diameter	13 mm		

Current Transformers for New Installations

PACT current transformers

	Details	Winding current transformer	Bus-bar current transformer	
	Order no.	2277417	2277268	
	Accuracy class	0.5 / 1		
	Primary rated current	0 ... 1 A AC / 0 ... 2 A AC / 0 ... 5 A AC 0 ... 10 A AC / 0 ... 15 A AC / 0 ... 20 A AC 0 ... 25 A AC / 0 ... 30 A AC / 0 ... 40 A AC	0 ... 50 A AC / 0 ... 75 A AC / 0 ... 100 A AC 0 ... 125 A AC / 0 ... 150 A AC / 0 ... 200 A AC 0 ... 250 A AC / 0 ... 300 A AC / 0 ... 400 A AC	
	Secondary rated current	1 A AC / 5 A AC		
	Frequency range	50 Hz / 60 Hz		
	Connection method	Screw connection		
	Conductor diameter	—	20 mm	

	Details	Window-type current transformer				
	Order no.	2277271	2277284	2277297	2277336	2277378
	Primary rated current	0 ... 60 A AC 0 ... 80 A AC 0 ... 100 A AC 0 ... 125 A AC 0 ... 150 A AC 0 ... 200 A AC 0 ... 250 A AC 0 ... 300 A AC 0 ... 400 A AC 0 ... 500 A AC 0 ... 600 A AC 0 ... 750 A AC 0 ... 800 A AC 0 ... 1000 A AC	0 ... 100 A AC 0 ... 150 A AC 0 ... 200 A AC 0 ... 250 A AC 0 ... 300 A AC 0 ... 400 A AC 0 ... 500 A AC 0 ... 600 A AC 0 ... 750 A AC 0 ... 800 A AC 0 ... 1000 A AC	0 ... 100 A AC 0 ... 150 A AC 0 ... 200 A AC 0 ... 250 A AC 0 ... 300 A AC 0 ... 400 A AC 0 ... 500 A AC 0 ... 600 A AC 0 ... 750 A AC 0 ... 800 A AC 0 ... 1000 A AC 0 ... 1250 A AC 0 ... 1500 A AC	0 ... 200 A AC 0 ... 300 A AC 0 ... 400 A AC 0 ... 500 A AC 0 ... 600 A AC 0 ... 750 A AC 0 ... 800 A AC 0 ... 1000 A AC 0 ... 1250 A AC	0 ... 800 A AC 0 ... 1000 A AC 0 ... 1500 A AC 0 ... 2000 A AC 0 ... 2500 A AC 0 ... 3000 A AC 0 ... 4000 A AC
	Secondary rated current	1 A AC / 5 A AC				
	Conductor diameter	28 mm	33 mm	42 mm	52 mm	85 mm
	Rail dimensions	30 mm x 15 mm 20 mm x 20 mm	40 mm x 12 mm 30 mm x 10 mm	50 mm x 12 mm 40 mm x 10 mm	60 mm x 15 mm 50 mm x 10 mm 40 mm x 40 mm	100 mm x 10 mm 80 mm x 64 mm
	Frequency range	50 Hz / 60 Hz				
	Accuracy class	0.5 / 1				
	Connection method	Screw connection				



Automation

The heart of your control cabinet is the logic platform. For OEMs and control engineers alike, it has never been easier to build smaller, smarter machines faster. This also enables builders to free themselves from use of controllers and equipment based solely on prior familiarity or specifications. Industrial PCs/HMIs and scalable controllers can streamline functionality, reduce equipment and costs, and usher in the next generation of intelligent machine automation.



AUTOMATION

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Automation

Programmable controllers

Programmable Logic Controllers (PLCs) from Phoenix Contact are scalable from a simple RTU or data-logger to bumpless, redundant, high-performance automation packages for the most demanding applications. Development is made easy by using either the PC WORX standard IEC 61131 environment or the software platform of your choice with high-level languages (C++, C#, MATLAB, etc.) by using PLCnext Technology. Test and simulation tools, integrated visualization software, and diagnostic tools give developers, users, and technicians an unprecedented level of insight into the running system, along with plenty of flexibility while developing the system.



Remote I/Os and gateways

Let Phoenix Contact help you monitor and control I/O via common industrial protocols like Modbus, PROFINET, PROFIBUS, EtherCAT, and EtherNet/IP. Whether in the cabinet (IP20) or in the field (IP67), Phoenix Contact offers several I/O and gateway variants to meet all your application requirements, including standard digital and analog I/O, as well as safety, intrinsically safe, IO-Link, and special-function applications.



Industrial PCs and HMIs

Industrial PCs from Phoenix Contact are available in a variety of performance classes, screen sizes, and form factors, such as blind-node configurations. Their powerful CPUs, fan-less design, and nonrotating, solid-state drive options make them rugged and reliable, even in the most demanding applications. A wide variety of HMI operator panels connect easily to third-party PLCs. A new generation of HTML5-based web panels connect securely to any web server by simply entering the IP address.



Switching and conditioning devices

Relays and optocouplers enable reliable switching, isolating, and monitoring in automation, offering options like solid-state relays, coupling relays, and logic modules. Signal conditioners and measuring transducers ensure safe, interference-free transmission, with SIL-certified options for explosion protection. For motor control, our starters and electronic switching devices provide fast, wear-free switching and reversing to maximize system availability and ease of use.





PLCnext Control

PLCnext Control devices are PLCs for the open PLCnext Technology ecosystem. They allow the implementation of automation projects without the limitations of proprietary systems. Take advantage of PROFICLOUD integration, or connect to your own third-party cloud provider (AWS, Azure, etc...). PLCnext Control allows for parallel programming and combination of familiar IEC 61131-3 programming languages, with high-level languages such as C/C++, C#, or MATLAB Simulink. PLCnext Control offers you a full suite of tools to take your application into the future.



Linux

- ✓ Fully open YOCTO Linux platform right out of the box
- ✓ Hardened Axioline I/O connection
- ✓ PLCnext Technology seamlessly integrates with Linux
- ✓ Develop in C++, Java, Python, etc... Ready for Docker containers
- ✓ Open-source and community-driven development



IIoT (Industrial Internet of Things) ready

- ✓ Ready with PROFICLOUD integrated into PLCnext Engineer
- ✓ Easily connect to third-party clouds (AWS, Azure, etc...)
- ✓ Edge device with Axioline I/O capability
- ✓ Pull tags from legacy protocols and controllers



Revolutionary

- ✓ Programmed with free PLCnext Engineer software
- ✓ Parallel programming with ladder, ST, FB, C++, and C#
- ✓ HTML5 embedded eHMI
- ✓ Install premade apps from the PLCnext Store





Programmable Controllers



AXC F 1252
Order no. 1646469



AXC F 2152
Order no. 2404267



AXC F 3152
Order no. 1069208

PLCnext Control

Backplane	Processor	No. of PROFINET devices	Left-hand extensions	Protocols	Desc.	Order no.
Axioline	Arm® Cortex® A55	16	No	PROFINET, MODBUS TCP, EtherNet/IP, OPC UA	AXC F 1252	1646469
	Arm® Cortex®-A9 2x 800 MHz	64	Yes		AXC F 2152	2404267
	Intel® Atom™ x5-E3930 2x 1.3 GHz	128	Yes		AXC F 3152	1069208

Hardware extensions, accessories, and software

Type	Application description	Description	Order no.
Left-hand extension module*	Extension for an additional ethernet port	AXC F XT ETH 1TX	2403115
	PROFIsafe add on module	AXC F XT SPLC 1000	1159811
Memory expansion	2 GB expansion SD card	SD FLASH 2GB PLCNEXT MEMORY	1043501
	8 GB expansion SD card	SD FLASH 8GB PLCNEXT MEMORY	1061701
	32 GB expansion SD card	SD FLASH 32GB PLCNEXT MEMORY LIC	1151111
Software	Engineering software for IEC 61131-1 programming	PLCNEXT ENGINEER	1046008

*Please note: When adding a left hand extension module, additional accessories are required. Please consult our website for the required add on accessories

PLCnext Control for edge computing

Edge device with Virtual PLCnext Control as the central data collection and evaluation unit. In addition to the IEC 61131-3 control function, the Linux Ubuntu Pro Desktop offers simple expandability and convenient installation of software for data analysis.

Scan the QR code to learn more online



Your advantages

- ✓ Ubuntu Pro Desktop operating system that can be easily extended
- ✓ Real-time PROFINET controller with PLCnext Technology
- ✓ High performance for data acquisition and analysis
- ✓ Container-based virtual PLCnext Control for flexible and scalable solutions
- ✓ Easy data exchange between PLCnext Technology and Linux



Type	Description	Order no.
Edge Controller	VL3 UPC 2440 EDGE	1760157



Industrial PCs

Industrial PCs/HMIs

IPCs control, process, and visualize vital machine data and provide a rugged and reliable platform for industrial processes. Available in a wide array of performance classes and form factors. Our portfolio consists of ultra-compact box IPCs for IIoT edge applications and high-end multitouch panel PCs for larger manufacturing systems. All feature high-performance CPUs and a wide selection of connectivity options for the most demanding industrial applications.

Scan the QR code to learn more online



Edge IPCs

- ✓ Ultra-compact form factor
- ✓ Rugged, fan-less, all metal design
- ✓ Options for TPM 2.0, Wi-Fi, Cellular, etc...
- ✓ DIN rail mounting



Scan the QR code to learn more online



Box IPCs

- ✓ Compact dimensions
- ✓ Rugged, fan-less, all metal design
- ✓ Various performance classes
- ✓ Various mounting options



Scan the QR code to learn more online



Panel PCs

- ✓ Capacitive touch screen
- ✓ 10" to 21.5" screen sizes
- ✓ Various performance classes
- ✓ Panel mounting



Scan the QR code to learn more online



Direct machine-mount PCs

- ✓ BL2 PPC AIO65 and DL PPC series
- ✓ Various performance classes
- ✓ Capacitive multi-touch screen
- ✓ VESA or POLE mounting options
- ✓ Optional push-button box



View the e-paper online now



Industrial Touch Monitors

- ✓ Capacitive touch monitors
- ✓ Sizes from 10.1 inches to 23.8 inches*
- ✓ Display port, HDMI or VGA connection



Scan the QR code to learn more online



*Staggered release deployment throughout the year



HTML5 Web Panels

Flexible integration into your automation system

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The operator panels with integrated web browser display all web-based visualizations that support the current HTML5 standard. Among other HTML5 visualization tools, you will also find an optimally coordinated system with PLCnext Engineer HMI. Create your own custom web-based visualization very easily. No web skills are required, since the software offers numerous symbols and templates that can be easily extended to suit your needs. Our operator panels with open browsers allow you to display the web-based visualization of your system without any restrictions.

Your advantages

- ✓ BWP 2000 and WWP 6000 series
- ✓ 4.3" to 21.5" screen sizes*
- ✓ Resistive or capacitive touch
- ✓ Simple connection to any web server

HMI panels with integrated embedded browser in kiosk/full-screen mode with optimum HTML5 support enable operation and monitoring options for the high-performance display of web-based content.

HTML5 web panels

	Series	Screen size (in)	Brightness (cd/m ²)	Operating temperature	Description	Order no.
	Web panel	7	500	-20° to +50°C	WPP 6070-WVPS	1290800
		10.1			WPP 6101-WXPS	1290801
		12.1	400		WPP 6121-WXPS	1290802
		15.6	450		WPP 6156-WHPS	1290803
		18.5	350		WPP 6185-WHPS	1290807
		21.5	400		WPP 6215-WHPS	1290809
	Rugged Web panel Sunlight readable	7	10000	-30° to +65°C	WPP 6070-WVPR	1650118
		10.1			WPP 6101-WXPR	1650120
		12.1			WPP 6121-WXPR	1650121
		15.6			WPP 6156-WHPR	1650122

*Please note: Rugged unit variants are newly available. For current approval and certification status, please consult Phoenix Contact directly

Axioline E

Axioline E is the remote I/O system with a block design for field installation with M12 connection technology. A key characteristic of these devices is their openness to all common Ethernet-based communication protocols as well as PROFIBUS with a T-coded power supply.



Power — M12 T coded Page 62	Data — M12 D coded Page 60-64	Signal — M12 A coded Page 60-64

Scan the QR code to learn more online



Axioline E

Network	Details	Description	Order no.
EtherNet/IP	16 channel configurable DI/DO	AXL E EIP DIO16 M12 6P	2701494
EtherNet/IP	8 IO-Link, 4DI	AXL E EIP IOL8 DI4 M12 6P	2701496
EtherNet/IP	8 DI and 8 DO	AXL E EIP DI8 DO8 M12 6P	2701492
EtherCAT	16 channel configurable DI/DO	AXL E EC DIO16 M12 6P	2701522
EtherCAT	8 IO-Link, 4DI	AXL E EC IOL8 DI4 M12 6P	2701524
EtherCAT	8 DI and 8 DO	AXL E EC DI8 DO8 M12 6P	2701520
Modbus	16 channel configurable DI/DO	AXL E ETH DIO16 M12 6P	2701534
Modbus	8 IO-Link, 4DI	AXL E ETH IOL8 DI4 M12 6P	2701536
Modbus	8 DI and 8 DO	AXL E ETH DI8 DO8 M12 6P	2701532



Axioline E — New Generation

The new generation of Axioline E devices are highly robust with their IP65/IP67 degree of protections and a fully-cast zinc die-cast housing. Because of their outstanding resistance to EMI and the robust mechanics, you can minimize downtimes in your system with these devices. Due to their extended temperature range and their strong resistance to environmental influences, common cooling and greasing agents, and welding beads, they can be used in many different applications.



Power — M12 L coded Page 62	Data — M12 D coded Page 60-64	Signal — M12 A coded Page 60-64

Scan the QR code to learn more online



Axioline E — New Generation			
Network	Details	Description	Order no.
PROFINET	16 channel DI	AXL E PN DI16 M12 6M-L	1300834
PROFINET	16 channel configurable DI/DO	AXL E PN DIO16 M12 6M-L	1300915
PROFINET	8 DI and 8 DO (2A)	AXL E PN DI8 DO8 EF M12 6M-L	1300921
PROFINET	4 IO-Link, 4 DI 8 DO	AXL E PN IOL4/0 DIO8 M12 6M-L	1300923
PROFINET	8 IO-Link, 4DI	AXL E PN IOL 4/4 EF M12 6M-L	1300926

IO-Link

What is IO-Link?

IO-Link is the first globally standardized I/O interface. The technology has established itself as the communication standard in machine building and systems manufacturing. The number of products with IO-Link interface used is growing rapidly. The communication standard offers you many advantages, creates new application opportunities, and constitutes an investment in important matters such as the Industrial Internet of Things (IIoT). By definition, IO-Link is an open, serial point-to-point communication protocol for connecting sensors and actuators to an automation system.

Scan the QR code to learn more online



Productivity

IO-Link devices provide the controller with detailed condition data. This data aids maintenance planning because you can identify problems quickly. If you, as a user, receive a warning message from dirty sensors every six months, for example, you can arrange for them to be cleaned twice a year at a convenient time. Furthermore, real-time fault detection of devices enables you to reduce operating costs by minimizing unplanned downtimes.

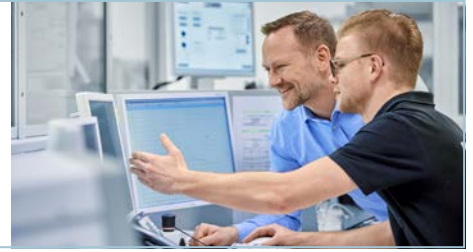
Simplicity

Everything in IO-Link is easy. Installation is simple with standard cables and connectors, and maintenance is effortless with system monitoring and adjustable settings. Using the error detection feature of IO-Link devices, you can determine the cause of a problem quickly and easily. Device replacement is seamless since stored parameters automatically transfer from the controller, getting your system back up and running fast.



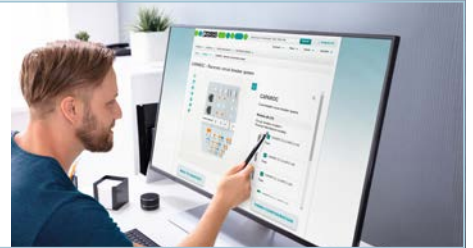
Increased data availability and accuracy

Analog sensors without IO-Link often pass through multiple A/D conversions before data reaches the controller, which may result in errors. In IO-Link devices, there is only one A/D conversion. This increases measuring accuracy and thus the accuracy of the entire process.



Remote configuration

You can modify the parameters of the IO-Link device from your desk by responding to status messages. You therefore no longer have to shut down the production line and physically access the devices in order to rectify faults.



IO-Link devices

Details	Description	Order no.
16 channel configurable DI/DO	AXL E IOL DIO8/8 M12 6M	1480997
8 DI and 8 DO	AXL E IOL DI8 DO4/4 M12 6M	1293246
16 channel DI	AXL E IOL DI16 M12 6M	1480998
4 channel RTD input	AXL E IOL RTD4 M12 3M	1293247
8 channel DI, plastic housing	AXL E IOL DI8 M12 6P	2702658
16 channel DI, plastic housing	AXL E IOL DI16 M12 6P	2702660
8 channel DO, plastic housing	AXL E IOL DO8 M12 6P	2702659

Configurable signal tower with IO-Link

The new signal towers use IO-Link to communicate machine and system states in individually adjustable colors and tones. The signal towers are available in two sizes with nine or 15 segments. The robust design enables them to be used in many applications.

Main features

- Traffic light mode, autoscale mode, level mode, or individual mode
- IO-Link communication
- 10 different signal tones
- RGB color spectrum
- M12 connection technology, 4-pos.
- 9 or 15 segments with and without acoustic element

IO-Link devices

Details	Description	Order no.
Signal Tower 9 segments	PSD-SC IOL S9	1801972
Signal tower 9 segments with siren	PSD-SC IOL S9 AE	1801971
Signal tower 15 segments with siren	PSD-SC IOL S15 AE	1801970



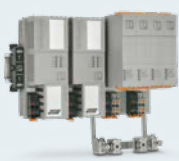


Your advantages






- ✓ High degree of flexibility with individual configurations in one compact tower
- ✓ Easy parameterization
- ✓ Clear signaling with homogenous light pattern and full-surface light fixture
- ✓ Robust industrial design for harsh environments









The I/O Modular System

		
Smart Elements (SE)	Axioline F	Axioline P
<ul style="list-style-type: none"> • Compact • No configuration 	<ul style="list-style-type: none"> • Robust and fast • XC versions available (-40°C ... +70°C) • Variety of approvals 	<ul style="list-style-type: none"> • Hot swappable and redundant • Modular block design

Bus Couplers





Network connection				
	Function description	Type	Description	Order no.
	Bus coupler for Modbus TCP		AXL F BK ETH	2688459
	Bus coupler for EtherCAT®		AXL F BK EC	2688899
	Bus coupler for EtherNet/IP™		AXL F BK EIP EF	2702782
	Bus coupler for PROFINET®		AXL F BK PN TPS	2403869

Axioline Smart Elements

Smart Elements				
	Function description	Type	Description	Order no.
	Analog input, 4 channels, 4-20 mA, single ended	AI	AXL SE AI4 I 4-20	1088062
	Analog input, 4 channels, 0-10 V, single ended	AI	AXL SE AI4 U 0-10	1088104
	Analog input, 4 channels for temperature measurement with PT100	AI	AXL SE RTD4 PT100	1088106
	Analog output, 4 channels, 4-20 mA, single ended	AO	AXL SE AO4 I 4-20	1088123
	Analog output, 4 channels, 0-10 V, single ended	AO	AXL SE AO4 U 0-10	1088126
	Digital input, 16 channels, one-wire connection	DI	AXL SE DI16/1	1088127
	Digital output, 16 channels, one-wire connection	DO	AXL SE DO16/1	1088129
	IO-Link master with 4 channels	Function	AXL SE IOL4	1088132
	Function element with a counter input for 24 V DC sensors	Function	AXL SE CNT1	1088131
	Function element for symmetrical incremental encoders	Function	AXL SE INC1 SYM	1088130






Axioline Smart Elements



	Function description	Type	Description	Order no.
	Function element with a serial interface RS 485	Function	AXL SE RS485	1088128
	Digital safe input, 8 channels (PROFIsafe)	Safety	AXL SE PSDI8/3	1079241
	Digital safe output, 4 channels (PROFIsafe)	Safety	AXL SE PSDO4/2 2A	1079231
	Axioline F backplane, 6 Smart Elements slots	System	AXL F BP SE6	1088136
	Axioline F backplane, 4 Smart Elements slots	System	AXL F BP SE4	1088135
	Backplane covering element for unused slots	System	AXL SE SC-A	1088134

Axioline F for the Control Cabinet


Acquiring digital data

	DI Digital input	Type	Description	Order no.
	<ul style="list-style-type: none"> • 16 to 64 channels • High-speed inputs • 54 mm and 35 mm design width 	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
		64 digital inputs, 1-wire	AXL F DI64/1 2F	2701450
	<ul style="list-style-type: none"> • 8 to 32 channels • 2 A outputs • 54 mm and 35 mm design width 	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
		32 digital outputs, 1-wire	AXL F DO32/1 1F	2688051
	DI DO Digital input / output <ul style="list-style-type: none"> • 35 mm 	8 digital inputs, 8 digital outputs, 1-wire	AXL F DI8/1 DO8/1 1H	2701916

Acquiring analog data

	AI Analog input	Type	Description	Order no.
	<ul style="list-style-type: none"> • 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
			<ul style="list-style-type: none"> • 4 to 8 channels • 54 mm and 35 mm design width 	4 analog outputs, current/voltage
8 analog outputs, current/voltage	AXL F AO8 1F			2688080

Special function modules

	FKT Special function modules	Type	Description	Order no.
	<ul style="list-style-type: none"> • 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

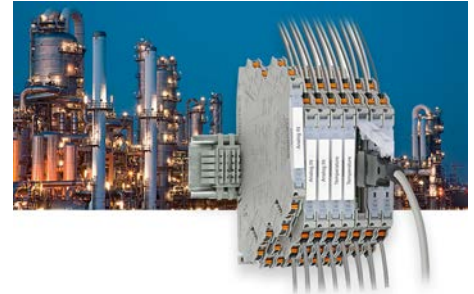


Signal Conditioners

Highly compact signal conditioners

The 6-mm signal conditioners from the MINI Analog range offer the full spectrum of analog signal conditioning. They are also extremely efficient with regard to saving costs, space, and energy. The comprehensive approval package means they can be used in a range of areas. You benefit from saving up to 65% of space when compared to other signal conditioners on the market.

Scan the QR code to learn more online



Your advantages

- ✓ Space savings up to 65% compared to other signal conditioners on the market with the 6.2 mm overall width
- ✓ High energy efficiency and long service life, thanks to low power consumption
- ✓ Flexible power bridging and convenient group error indication by means of DIN rail connector and the fault monitoring system function
- ✓ Convenient configuration and monitoring via DIP switches or software for extended function and monitoring

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.

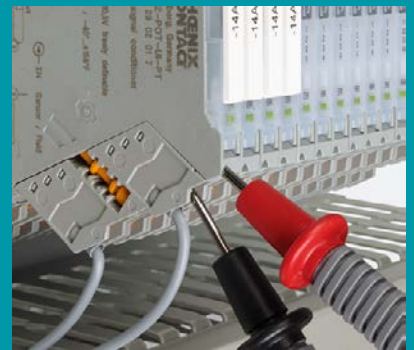


Service-friendly

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



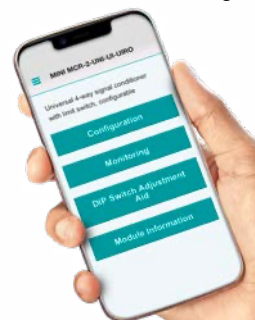
Easily accessible terminal points and FASTCON Pro plug-in connection terminal blocks










Measure signals during operation, without disconnecting the current loops

Smart parameterization 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 parameterize the modules directly on site, or read the current measured values during operation.



Signal Conditioners

Fixed signal conversion and isolation				
	Input signal	Output signal	Description	Order no.
	0-10 V DC	0-10 V DC	MINI MCR-2-U-U	2902042
		Active 4-20 mA	MINI MCR-2-U-I4	2902029
	Active 4-20 mA	0-10 V DC	MINI MCR-2-I4-U	2902002
		Active 4-20 mA	MINI MCR-2-I-I	2901998
Universal and configurable analog signal conversion and isolation				
	Input signal	Output signal	Description	Order no.
	Universal analog	Universal analog	MINI MCR-2-UI-UI	2902037
	Universal analog	Universal analog + Relay	MINI MCR-2-UNI-UI-UIRO	2902026
Temperature signal conversion and isolation				
	Input signal	Output signal	Description	Order no.
	RTD	Universal analog	MINI MCR-2-RTD-UI	2902049
	Thermocouple	Universal analog	MINI MCR-2-TC-UI	2902055
	Universal temperature	N.O. relay set point	MINI MCR-2-T-REL	2905632
Low-power signal conversion and isolation				
	Input signal	Output signal	Description	Order no.
	Active 4-20 mA	Active 4-20 mA	MINI MCR-2-I-I-ILP	2901994
			MINI MCR-2-2I-2I-ILP	2901996
	Active universal analog	Passive 4-20 mA	MINI MCR-2-UI-I-OLP	2902061
	Passive 4-20 mA	Passive 4-20 mA	MINI MCR-2-RPS-I-I-OLP	2906446
			MINI MCR-2-RPS-2I-2I-OLP	2906448
Specialty signal conversion and isolation				
	Input signal	Output signal	Description	Order no.
	4-20 mA/HART	2x 4-20mA/HART	MINI MCR-2-RPSS-I-2I	2905628
	Analog	Frequency and transistor (setpoint)	MINI MCR-2-UI-FRO	2902031
	Frequency and PWM	Active 4-20 mA	MINI MCR-2-F-UI	2902056
	Load cell/strain gage	4-20 ma/0-10 V	MCR-SGA-4/6-DC	5604058
	Potentiometer	Active 4-20 mA	MINI MCR-2-POT-UI	2902016
	Universal analog	2x 4-20 mA	MINI MCR-2-UI-2I-NC	2905026
	Universal analog	Set point/relay out	MINI MCR-2-UI-REL	2902033
HART				
	Input signal	Output signal	Description	Order no.
	4-20 mA/HART	4-20 mA/HART	MINI MCR-2-RPSS-I-I	2902014
Duplicator				
	Input signal	Output signal	Description	Order no.
	Universal analog	Universal analog	MINI MCR-2-UNI-UI-UI	2905026

Note: All signal conditioners are also available with Push-in connection



Slim Line Relays

PLC Relay System



Relay systems from Phoenix Contact form the powerful and reliable interface between control and system peripherals. The lead-frame technology of the PLC-INTERFACE relay series provides the solid foundation for reliably switching, isolating, and amplifying signals. In addition, electromechanical and solid-state relays are used – this combination proves itself day after day in millions of switching operations in a multitude of applications and in relay switching.

Quality is a priority at Phoenix Contact, so even small details are of great importance to us. With our own plastic and metal parts manufacturing facilities, we produce the parts that form the basis of the high-quality components. 100% of the products are tested during the process. To ensure that innovative product ideas are continuously implemented in design and development departments, expertise and in-house skills are being further extended.



Scan the QR code to learn more online




Electromechanical relays — PLC series							
PLC relay assembly with electromechanical relay	Input-coil voltage	Output current	Sets of contacts	Termination style	Description	Order no.	
	12 V DC	6 A	SPDT - 6.2 mm	Screw	PLC-RSC-12DC/21	2966906	
				Push-in	PLC-RPT-12DC/21	2900316	
			DPDT - 14 mm	Screw	PLC-RSC-12DC/21-21	2967235	
				Push-in	PLC-RPT-12DC/21-21	2900329	
	24 V DC	50 mA	SPDT - 6.2 mm	Screw	PLC-RSC-24DC/21AU	2966265	
				Push-in	PLC-RPT-24DC/21AU	2900306	
			6 A	SPDT - 6.2 mm	Screw	PLC-RSC-24DC/21	2966171
					Push-in	PLC-RPT-24DC/21	2900299
		DPDT - 14 mm	Screw	PLC-RSC-24DC/21-21	2967060		
			Push-in	PLC-RPT-24DC/21-21	2900330		
		10 A	SPDT - 14 mm	Screw	PLC-RSC-24DC/21HC	2967620	
				Push-in	PLC-RPT-24DC/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		
120 V AC or DC	6 A	SPDT - 6.2 mm	Screw	PLC-RSC-120UC/21	2966197		
			Push-in	PLC-RPT-120UC/21	2900304		
		DPDT - 14 mm	Screw	PLC-RSC-120UC/21-21	2967086		
			Push-in	PLC-RPT-120UC/21-21	2900335		
Solid-state relays — PLC series							
PLC relay assembly with solid-state relay	Input-coil voltage	Output current	Sets of contacts	Termination style	Description	Order no.	
	5 V DC	3 A	NO ONLY - 6.2 mm	Screw	PLC-OSC-5DC/24 DC/2/ACT	2980144	
				Push-in	PLC-OPT-5DC/24 DC/2/ACT	2900375	
	24 V DC	100 mA	NO ONLY - 6.2 mm	Screw	PLC-OSC-24DC/ 48 DC/100	2966728	
				Push-in	PLC-OPT-24DC/ 48 DC/100	2900352	
		3 A	NO ONLY - 6.2 mm	Screw	PLC-OSC-24DC/ 24 DC/2	2966634	
				Push-in	PLC-OPT-24DC/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	
Please note: AC outputs are also available							




PLC Relay System

Triple-rated, hazardous-location relays

	Input-coil voltage	Output current	Sets of contacts	Termination style	Description	Order no.
	12 V DC	6 A	SPDT - 6.2 mm	Screw	PLC-RSC-12DC/21/EX	2909522
			DPDT - 14 mm	Screw	PLC-RSC-12DC/21-21/EX	2909517
		10 A	SPDT - 14 mm	Screw	PLC-RSC-12DC/21/HC/EX	2909518
	24 V DC	6 A	SPDT - 6.2 mm	Screw	PLC-RSC-24DC/21/EX	2909524
				Push-in	PLC-RPT-24DC/21/EX	2909528
			DPDT - 14 mm	Screw	PLC-RSC-24DC/21-21/EX	2909509
		10 A	SPDT - 14 mm	Push-in	PLC-RPT-24DC/21-21/EX	2909514
				Screw	PLC-RSC-24DC/21/HC/EX	2909519
			Push-in	PLC-RPT-24DC/21/HC/EX	2909532	
	120 V AC or DC	6 A	SPDT - 6.2 mm	Screw	PLC-RSC-120UC/21/EX	2909525
			DPDT - 14 mm	Screw	PLC-RSC-120UC/21-21/EX	2909511
10 A		SPDT - 14 mm	Screw	PLC-RSC-120UC/21/HC/EX	2909520	


Please note: Additional coil voltages and connection technology options are available, please inquire

Open ended cables

	Length	Description	Order no.
	0.5 m	CABLE-FLK14/OE/0,14/ 50	2305761
	1 m	CABLE-FLK14/OE/0,14/ 100	2305253
	2 m	CABLE-FLK14/OE/0,14/ 200	2305279
	3 m	CABLE-FLK14/OE/0,14/ 300	2305295




Note: Cables are available in various other lengths and in double ended versions

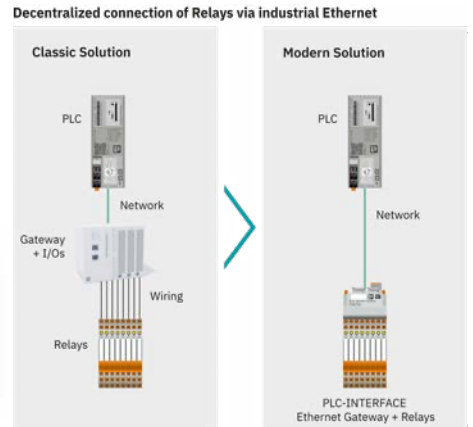
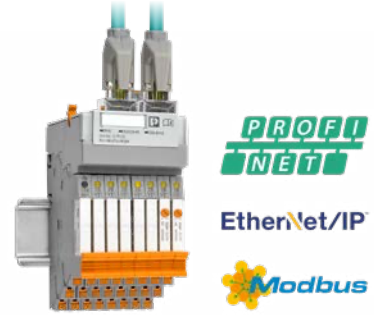
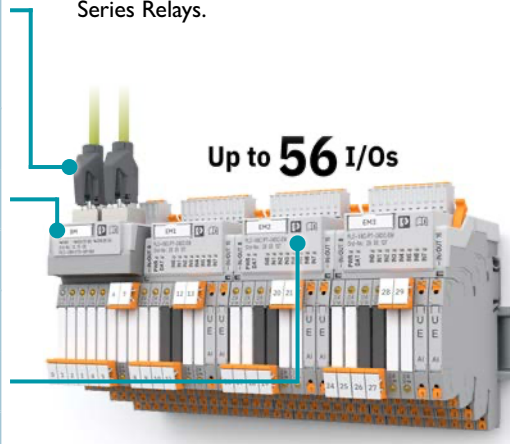
PLC relay bridging

	Colour	Order no. 2-pos.	Order no. 500 mm
	Red	2966236	2966786
	Blue	2966812	2966692
	Gray	2966825	2966838

Remote Relay System

The modular remote relay system with flexible channel assignment for simple applications with up to 56 I/O channels. Benefit from high flexibility and intuitive integration thanks to compatibility with common control software. Compatible with all our 6.2mm slim line PLC Series Relays.

	Ethernet Cables	
	Refer to page: 52	
	Ethernet Gateway Base Module	
	Description	Order no.
	PLC-V8R/ETH-MP/BM	1279135
	Ethernet Gateway Extension Module	
	Description	Order no.
	PLC-V8R/PT-24DC/EM	1487020





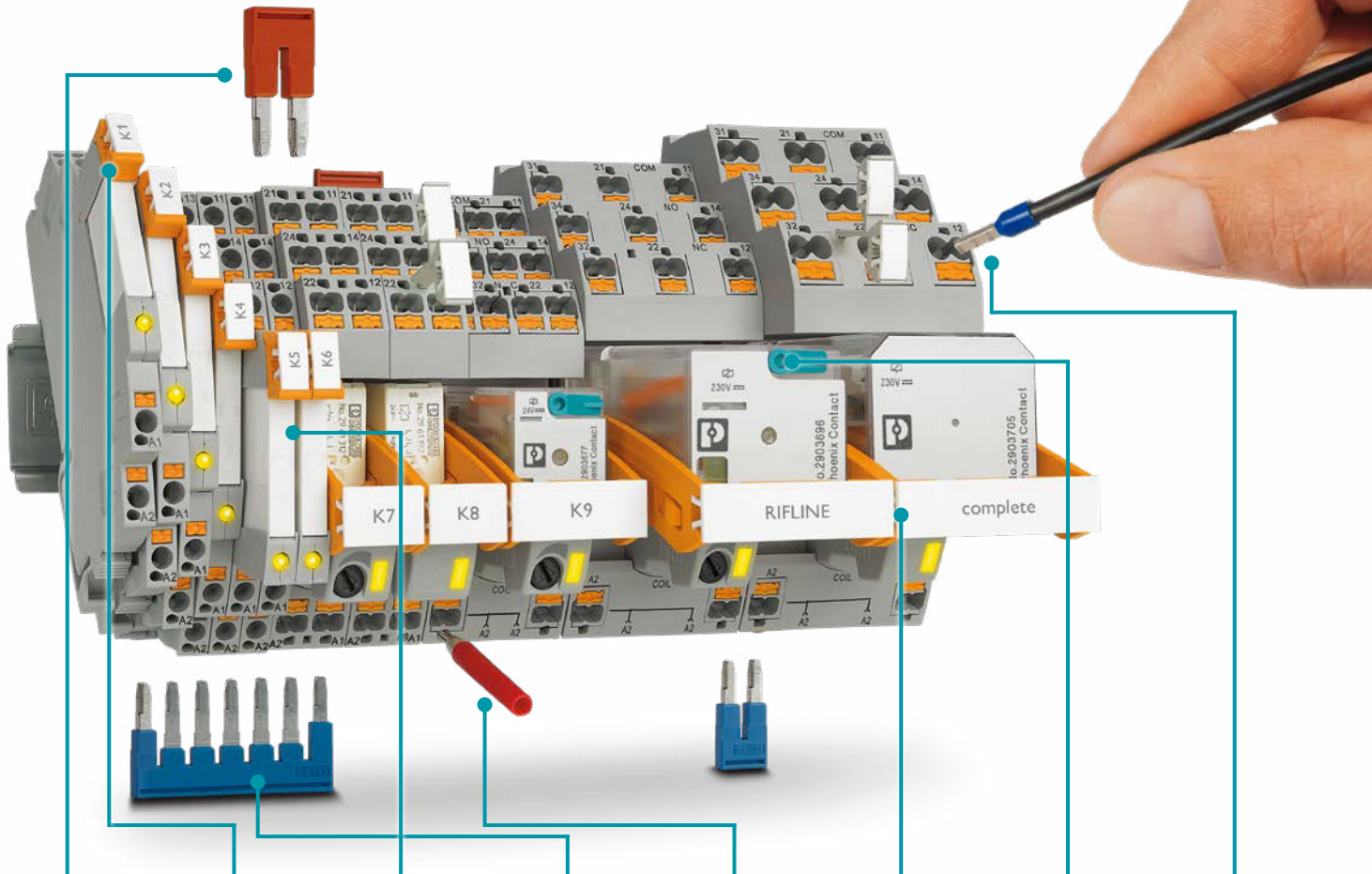
General Purpose and Ice-cube Relays

RIFLINE complete — industrial relay system

Scan the QR code to learn more online



Phoenix Contact RIFLINE complete industrial relay system is a cost-effective modular ice cube relay series with products ranging from a slim 6.2 mm coupling relay to a small power contactor replacement. RIFLINE complete uses familiar technologies and accessories from CLIPLINE complete, such as Push-in technology, plug-in bridges, end clamps, test plugs, and marking accessories, making it an economical choice.



Easy potential distribution using FBS bridging	Wide range of marking options	Slimline relays to ice cube style relays, available in Push-in Technology	Reduced A2 "common" terminal wiring effort using FBS bridging	Test plug adapters	Completely assembled modules include relay, base, retention clip, and inductive kickback protection	Manual operators with push-to-test and twist-to-lock functions	Wide wire range: terminals from 20 AWG to 10 AWG
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Electromechanical relays — RIFLINE

Type	Input voltage	Output current	Sets of contacts	Termination style	Description	Order no.
RIF-0 6.2 mm wide 66 mm tall Lowest profile of all relays	24 V DC	6 A	NO only	Push-in	RIF-0-RPT-24DC/ 1	2903361
RIF-1 16 mm wide 75 mm tall Pin contacts	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



Electromechanical relays — RIFLINE


Type	Input voltage	Output current	Sets of contacts	Termination style	Description	Order no.
RIF-1 16 mm wide 75 mm tall Pin contacts	120 V AC	10 A	SPDT	Push-in	RIF-1-RPT-LV-120AC/1X21	2903340
		8 A	DPDT	Push-in	RIF-1-RPT-LV-120AC/2X21	2903332

Electromechanical ice-cube relays — RIFLINE


RIF-2 31 mm wide 75 mm tall Blade contacts	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
	120 V AC	8.5 A	2PDT	Push-in	RIF-2-RPT-LV-120AC/2X21	2903311
		6 A	4PDT	Push-in	RIF-2-RPT-LV-120AC/4X21	2903305
RIF-3 40 mm wide Pin contacts	24 V DC	8.5 A	3PDT	Push-in	RIF-3-RPT-LDP-24DC/3X21	2903294
	120 V AC	6 A	3PDT	Push-in	RIF-3-RPT-LV-120AC/3X21	2903293
RIF-4 42 mm wide Small contactor style Blade contacts	24 V DC	10 A	3PDT	Push-in	RIF-4-RPT-LDP-24DC/3X21	2903278
	120 V AC	8 A	3PDT	Push-in	RIF-4-RPT-LV-120AC/3X21	2903277

Please note: Additional contact arrangement and coil voltage options are also available


Electromechanical ice-cube relays (with manual switch) — ECOR Faston series

	Type	Input voltage	Output current	Sets of contacts	Description	Order no.
ECOR Faston relay plugs		24 V DC	12 A	1PDT	REL-FO/LD-24DC/1X21MS	1308302
		24 V DC	8 A	2PDT	REL-FO/LD-24DC/2X21/MS	1308298
		120 V AC	12 A	1PDT	REL-FO/LRC-120AC/1X21/MS	1308327
		120 V AC	12 A	2PDT	REL-FO/LRC-120AC/2X21/MS	1308316


Accessories — ECOR-1 Faston

	Type	Description	Order no.
ECOR-1 Faston accessories	Base (SINGLE pole)	ECOR-1-BSC2/FO/1X21	1308331
	Base (DOUBLE pole)	ECOR-1-BSC2/FO/2X21	1308332
	Bracket	ECOR-FO-RH-1H	1325205

Electromechanical ice-cube relays — ECOR-2 series

	Type	Input voltage	Output current	Sets of contacts	Description	Order no.
ECOR 2 relay plugs		24 V DC	12 A	2PDT	REL-IR-BL/L- 24DC/2X21	1032526
		115 V AC	12 A	2PDT	REL-IR-BL/L-115AC/2X21	1109556
		24 V DC	6 A	4PDT	REL-IR-BL/L- 24DC/4X21	1032527
		24 V AC	6 A	4PDT	REL-IR-BL/L- 24AC/4X21	1109563
		115 V AC	6 A	4PDT	REL-IR-BL/L-115AC/4X21	1109564

Accessories — ECOR-2

	Type	Description	Order no.
ECOR-2 accessories	Base (screw terminals)	ECOR-2-BSC3/4X21	2907521
	Bracket	ECOR-RH-2L	1051972

Please note: Rated current values are for standalone relay plugs only. When assembled onto the base, value will default to lowest rated current between the base and plug



Timer Relays

Multifunctional timer relays with OLED display and NFC communication

Benefit from precise adjustment and easy handling with the MACX-TR smart multifunctional timer relays. Control your timer processes easily and reliably via the OLED display and pushbuttons.

Your advantages


- ✓ Easy handling directly on the device with a combination of OLED display and pushbuttons
- ✓ Intuitive time settings – no calculations or checks needed
- ✓ Optional communication via NFC and smartphone app



Scan the QR code to learn more online



MACX-TR series

	Connection	Functions	Description	Order no.
	Screw	Multifunctional timer Single config.	MACX-TR-1T-MUL	1096429
	Push-in	Multifunctional timer Single config.	MACX-TR-1T-MUL-PT	1096431
	Screw	Multifunctional timer Dual config.	MACX-TR-2T-MUL	1103345
	Push-in	Multifunctional timer Dual config.	MACX-TR-2T-MUL-PT	1103355
	Screw	OFF delay timer	MACX-TR-1T-POFF	1119403
	Push-in	OFF delay timer	MACX-TR-1T-POFF-PT	1119399

Monitoring Relays

Versatile monitoring functions with intuitive operation

The smart MACX-MR monitoring relay provides you with many monitoring functions with extended setting options, large measuring ranges, and a broad supply voltage range.

Your advantages


- ✓ High-contrast OLED display for on-site configuration and measured value display
- ✓ Smart configuration and easy transfer of configurations with the MACX-MR app via NFC communication
- ✓ Wide supply voltage range with galvanic isolation from the measuring circuit
- ✓ PIN protection against unauthorized changes



Scan the QR code to learn more online



MACX-MR series

	Connection	Functions	Description	Order no.
	Screw	3 Phase voltage monitoring Up to 690 V	MACX-MR-3V-690	1336410
	Push-in	3 Phase voltage monitoring Up to 690 V	MACX-MR-3V-690-PT	1336412
	Push-in	3 Phase voltage monitoring Up to 900 V	MACX-MR-3V-900-PT	1336547
	Screw	1 Phase voltage monitoring	MACX-MR-V-600	1336426
	Push-in	1 Phase voltage monitoring	MACX-MR-V-600-PT	1336507
	Screw	Phase monitoring	MACX-MR-PH-690	1336404
	Push-in	Phase monitoring	MACX-MR-PH-690-PT	1336408
	Screw	Temperature monitoring	MACX-MR-PTC	1336523
	Push-in	Temperature monitoring	MACX-MR-PTC-PT	1336527



Speed Starters With Intuitive Operation

CONTACTRON

The Speed Starter is the new device class between motor starters and frequency converters with a particularly intuitive operation. This compact solution provides all of the functions necessary for different speeds, soft start, and safe stopping with the Safe Torque Off (STO) function. The CONTACTRON Speed Starter features simple operation with various speeds, and soft start, all the way to energy efficiency and ramping functions. The addition of the analog input terminals allows you to easily vary the speed via a 4-20 mA or 0-10 V signal.



Single phase input models are rated for three phase motors up to a nominal voltage of 240 V AC. Three phase input models are rated for three phase motors up to a nominal voltage of 480 V AC.

Scan the QR code to learn more online



Your advantages with our speed starters

✓ Simple, safe, and efficient	✓ Quick installation and startup	✓ Safe shutdown with Safe Torque Off (STO)	✓ Saving space in the control cabinet	✓ Cost-effective solution



Safe Torque Off



Various speeds



Direct start



Reversing start



Ramp function



Motor protection

Speed starters

Input	Input (V AC)	Output power rating (kW)	Integrated EMC filter	Description	Order no.
Single phase	110.....240	0.25	No	CSS 0.25-1/3	1201132
Single phase	110.....240	0.25	Yes	CSS 0.25-1/3-EMC	1201520
Single phase	110.....240	0.37	No	CSS 0.37-1/3	1201135
Single phase	110.....240	0.37	Yes	CSS 0.37-1/3-EMC	1201600
Single phase	110.....240	0.55	No	CSS 0.55-1/3	1201494
Single phase	110.....240	0.55	Yes	CSS 0.55-1/3-EMC	1201602
Single phase	110.....240	0.75	No	CSS 0.75-1/3	1201509
Single phase	110.....240	0.75	Yes	CSS 0.75-1/3-EMC	1201613
Single phase	110.....240	1.5	No	CSS 1.5-1/3	1201511
Single phase	110.....240	1.5	Yes	CSS 1.5-1/3-EMC	1201642
Three phase	220.....480	0.25	No	CSS 0.25-3/3	1201679
Three phase	220.....480	0.25	Yes	CSS 0.25-3/3-EMC	1201713
Three phase	220.....480	0.37	No	CSS 0.37-3/3	1201683
Three phase	220.....480	0.37	Yes	CSS 0.37-3/3-EMC	1201825
Three phase	220.....480	0.55	No	CSS 0.55-3/3	1201694
Three phase	220.....480	0.55	Yes	CSS 0.55-3/3-EMC	1201828
Three phase	220.....480	0.75	No	CSS 0.75-3/3	1201695
Three phase	220.....480	0.75	Yes	CSS 0.75-3/3-EMC	1201829
Three phase	220.....480	1.5	No	CSS 1.5-3/3	1201650
Three phase	220.....480	1.5	Yes	CSS 1.5-3/3-EMC	1201696



Smart Solutions for Functional Safety

Inputs

Safety sensors initiate the safety function. Safe RFID non-contact door switches offer full SIL 3/PLe safety protection in a series wiring connection. Easily monitor door access and safe position with slim profile, non-contact door switches. PSRswitch allows for up to 30 sensors to be connected in series, with diagnostic status communicated to a controller via IO-Link. Quick and easy connection via M12 cabling makes for a full Phoenix Contact solution.



Logic

Safety logic devices are the brain of the safety system, controlling safety function by monitoring both inputs and outputs. From simple single function, to distributed safe control networks, logic devices ensure proper function and detect any errors from the sensors of output devices. These scalable solutions provide the right safety function for all types of systems, from a single e-stop safety relay to a fully integrated safety solution monitoring a factory automation process.



Outputs

Outputs are responsible for energizing and de-energizing equipment safely and reliably. Hybrid motor starters with integrated safety functionality up to SIL 3/PLe allow streamlined integration of emergency stop circuitry for three-phase motors up to 5HP. Eliminating the need for a redundant contactor and all of the associated interlocking wiring can save 75% on space and wiring time. Additional functionality, such as overload protection or reversing contactors, can all be achieved in a slim, 22.5 mm housing. Outputs are available as stand-alone devices, as part of a modular motor starter system, or as a networkable motor starter.

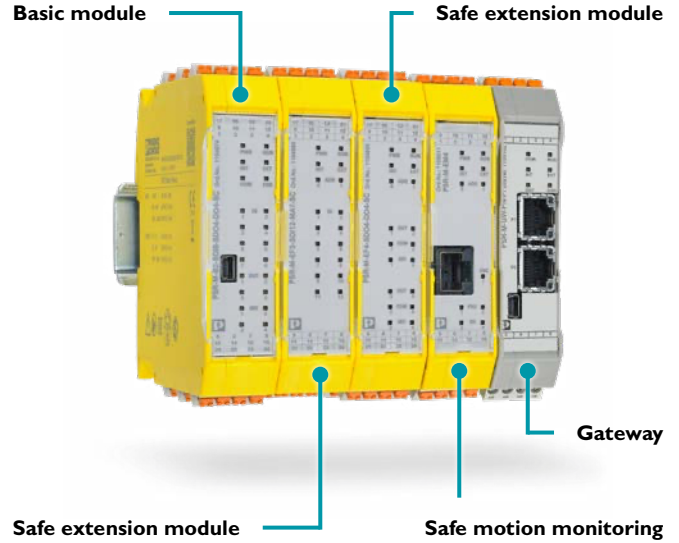


PSRmodular Safety System


PSRmodular is a flexible safety solution for monitoring your machine or system. In addition to monitoring classic safety functions such as emergency stop signals, safety door interlocks, light grids, and safety mats, you can also realize safety functions such as speed, zero-speed, direction of rotation, and safe analog value monitoring.

Main features

- Modular extension possible up to 160 I/Os
- Applications up to PL e or SIL 3
- TÜV certified
- Overall width of 22.5 mm
- COMPLETE line standard
- A wide range of extension modules
- XC product versions for use under extreme conditions
- Push-in Technology
- TBUS DIN rail bus connectors




















PSRmodular: Configurable safety system

Description	Details	Inputs/outputs				Safety approvals		Connection technology
		Inputs/ EDM reset inputs	Outputs	Clock outputs	Signal outputs	PL in accordance with EN ISO 13849	SIL in accordance with EN IEC 62061/IEC 61508	
Basic modules								
	Basic module	8/2	2 (pairs)	4	2	e	3	1104972
PSR-M-B2	Basic module (with large program memory)	8/4 ¹⁾	2 (pair) or 4 (single)	4	4 ¹⁾	e	3	1104975
PSR-M-B3	Basic module (B2) with integrated gateway or (single) function (PROFINET, Ether-Net/IP, Modbus/TCP, EtherCAT)	8/4 ¹⁾	2 (pairs)	4	4 ¹⁾	e	3	1300897
PSR-M-B4	Basic module (not extendable)	16/4	4 (pairs)	4	4	e	3	1738572
Safe extension modules								
PSR-M-EF1	Failsafe extension module	8/4 ¹⁾	2 (pair) or 4 (single)	4	4 ¹⁾	e	3	1104889
PSR-M-EF2	Failsafe extension module	16	—	4	—	e	3	1104887
PSR-M-EF3	Failsafe extension module for safety shut-off mats	12	—	8	—	e	3	1104884
PSR-M-EF4	Failsafe extension module	-/4	4 pairs	—	4	e	3	1104868
PSR-M-EF5	Failsafe extension module	-/4	2 (pair) or 4 (single), each 2 A	—	8	e	3	1104977
PSR-M-EF6	Failsafe extension module	-/4	4 relays	—	—	e	3	1104983
PSR-M-EF7	Failsafe extension module	4 analog	—	—	—	e	3	1104986
PSR-M-EF8	Failsafe extension module	8/2	2 (pairs)	4	2	e	3	1105523
PSR-M-E1	Non-safe extension module	—	—	—	8	—	—	1105133
PSR-M-E2	Non-safe extension module	—	—	—	16	—	—	1105136
PSR-M-TBUS1	TBUS extension module	1 connection channel for local bus extension (up to 50 m per segment)				e	3	1105096
PSR-M-TBUS2	TBUS extension module	2 connection channels for local bus extension (up to 50 m per segment)				e	3	1105098

¹⁾Configurable



Safety Relays

PSRclassic: Conventional safety relays for machine building																
Description	Applications							Output contacts				Safety approvals		Connection technology		
																
PSR-ESA2-B 24 V AC/DC	●	●	—	—	—	—	A	4	—	1	—	c ²⁾	1 ²⁾	2963802	2963954	
PSR-ESAM2/3X1-B 230 V AC/DC	●	●	—	—	—	—	A/M	3	—	1	—	c ²⁾	1 ²⁾	2901430	2901431	
PSR-ESAM4/2X1 24 V AC/DC	●	●	—	—	—	—	A/M	2	—	1	—	e	3	2900525	2900526	
PSR-ESAM4/8X1 24 V AC/DC	●	●	—	—	—	—	A/M	8	—	1	—	e	3	2963912	2963996	
PSR-ESD-30 24 V DC	●	●	●	●	—	●	A/M	2	2	—	—	e	3	2981800	2981813	
PSR-ESD-300 24 V DC	●	●	●	—	—	●	A/M	3	2	1	—	e ⁴⁾	3 ⁴⁾	2981428	2981431	
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-URML4 ¹⁾ 24 V DC	Contact extension for OSSD signals							3	—	1	—	e	3	2903583	2903584	
PSR-URM4 42 ... 230 V AC/DC	Contact extension							4	—	2	—	e ³⁾	3 ³⁾	2702924	2702925	
PSR-URM4 24 V AC/DC	Contact extension							5	—	2	—	e ³⁾	3 ³⁾	2963734	2964005	
PSR-URM4-B 24 V AC/DC	Contact extension							5	—	2	—	e ³⁾	3 ³⁾	2981033	2981046	

¹⁾ Without cross-circuit detection ²⁾ Up to PL e / SILCL 3 possible depending on the application ³⁾ In conjunction with suitable evaluating device
⁴⁾ Non-delayed contacts: Cat. 4 / PL e, SILCL 3, contacts with dropout delay: Cat. 3 / PL d, SILCL 2 ⁵⁾ Type IIIC in accordance with EN 574
 A = autostart, M = manual, monitored start



Safety Relays

PSRclassic: Conventional safe coupling relays for the process industry

Desc.	Applications	Output contacts			Diagnostics/proof test				Safety approvals				→ ←	Connection technology		
					Visual via LED	Active error feedback via A1 ²⁾	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	Width in mm	Screw connection
	Classic, safe coupling relays for fail-safe controllers:				Visual via LED	Active error feedback via A1 ²⁾	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	Width in mm	Screw connection	Push-in connection
PSR-FSP 24 V DC	For safety-related shutdown (ESD)	1	1	—	—	—	●	—	3	3	—	—	●	17.5	2981978	2981981
PSR-FSP/2x1 24 V DC		2	1	—	—	—	●	—	3	3	—	—	●	17.5	2986960	2986957
PSR-FSP2/2x1 24 V DC		2	1	—	—	—	●	—	2	2	—	—	●	17.5	2986575	2986588
PSR-ESP4 24 V DC		2	1	—	—	—	—	●	1 ¹⁾	—	—	—	●	22.5	2981020	2981017

¹⁾ Up to PL e/SIL 3 possible depending on the application

PSRmotion: Zero-speed and over-speed safety relays

Description	Applications						Output contacts		Safety approvals			Connection technology	
				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-MM25 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	

Legend for applications, outputs, and safety approvals

Emergency stop	Safety door switch, mechanical	Light grid	Solenoid switch	Two-hand function	Transponder switch	Safety shut-off mats	Start/restart	Enabling current path /N/O contact	Off-delayed contact	N/C contact	Sensor-free motor monitoring	Encoder	Initiators



Multifunctional Safety Relays

With the PSRuni multifunctional safety relay, up to two safety functions can be monitored with just one device. The comprehensive coverage of common safety functions enables flexible configuration and adaptation to individual requirements.




Your advantages

- ✔ Universal use by covering all common safety functions
- ✔ Flexible adaptation to individual requirements
- ✔ Space-saving and efficient monitoring of up to two safety functions in a single device
- ✔ Fast startup with easy configuration directly on the device

Main features

- Configuration directly on the device via rotary coding switches
- Coverage of common safety functions, such as emergency stop, light grid
- Monitoring of two independent circuits
- Overall width: 22.5 mm
- Push-in connection technology

Multifunctional safety relays

	Details	Connection	Description	Order no.
	PL e · 1 safety sensor circuit 1×4 enabling current paths	Screw	PSR-UNI-L-1X4NO-1DO-24DC-SC	1487649
		Push-in	PSR-UNI-L-1X4NO-1DO-24DC-PI	1487648
	PL e · 2 safety sensor circuits 2×2 enabling current paths	Screw	PSR-UNI-L-2X2NO-2DO-24DC-SC	1487647
Push-in		PSR-UNI-L-2X2NO-2DO-24DC-PI	1487644	



Networking

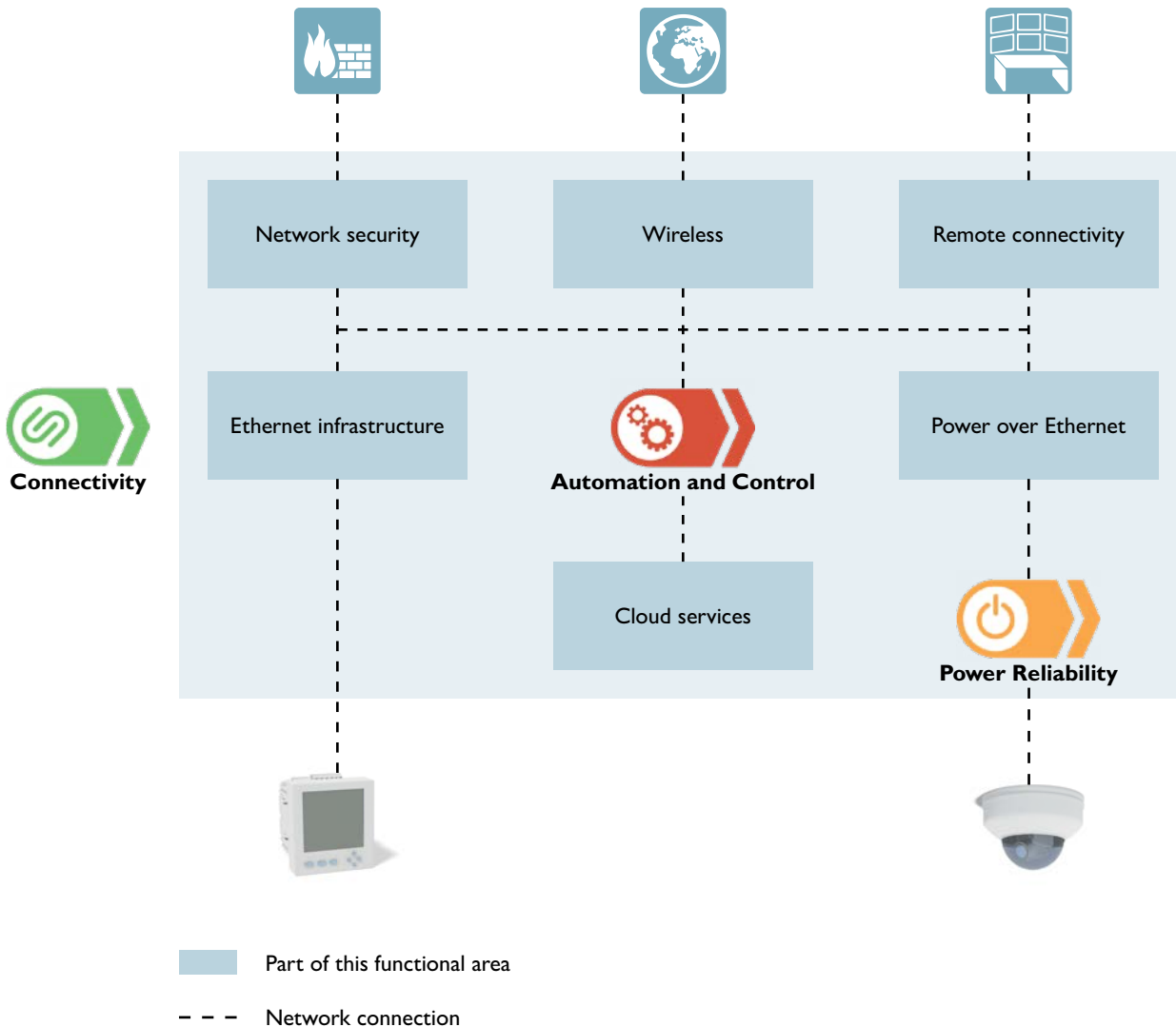
With the broad range of technologies supported by Phoenix Contact networking and security products, you can design and implement scalable, reliable, and high-functioning systems.

Cellular remote connectivity powers communication with devices around the globe, while the increasing capabilities of cloud services provide the support and data management that is behind IIoT.

Ethernet infrastructure devices provide everything from basic connectivity to advanced managed switches, with options that include powering end devices, field-wiring connectivity, and converting between physical media.

Wireless technology enables convenient, reliable, and cost effective communication whether on the factory floor or to remote sites miles away.

With network security, proper separation of IT and OT networks can be achieved along with providing defense-in-depth to ensure critical assets are protected by state-of-the-art technology .





Unmanaged Ethernet Switches

FL SWITCH 1000N unmanaged switches


Scan the QR code to learn more online



Your advantages


- ✓ Cost-effective
- ✓ Simple
- ✓ Gigabit/Fast ethernet speed
- ✓ Multiple fiber options

FL SWITCH 1000N



Plastic construction
-10°C – +60°C

FL SWITCH 1000NT





Metal construction*
-40°C – +75°C
Conformal coat variants
hazardous approvals
maritime approvals

*Base and DIN-latch

Switch 1000N					
Copper ports	Specialty ports	Total ports	Speed	Description	Order no.
5	—	5	10/100 Mbps	FL SWITCH 1005N	1085039
5	2 SFP	7	10/100 Mbps	FL SWITCH 1005N-2SFX	1085176
4	1 Fiber SC-D	5	10/100 Mbps	FL SWITCH 1004N-FX	1084159
4	1 Fiber ST	5	10/100 Mbps	FL SWITCH 1004N-FX ST	1085179
4	1 Single mode fiber SC	5	10/100 Mbps	FL SWITCH 1004N-FX SM	1085214
4	1 SFP	5	10/100 Mbps	FL SWITCH 1004N-SFX	1085177
8	—	8	10/100 Mbps	FL SWITCH 1008N	1085256
16	—	16	10/100 Mbps	FL SWITCH 1016N	1085255
Switch 1100N					
4	1 SFP	5	10/100/1000 Mbps	FL SWITCH 1104N-SFP	1085173
5	—	5	10/100/1000 Mbps	FL SWITCH 1105N	1085254
5	2 SFP	7	10/100/1000 Mbps	FL SWITCH 1105N-2SFP	1085171
8	—	8	10/100/1000 Mbps	FL SWITCH 1108N	1085243
16	—	16	10/100/1000 Mbps	FL SWITCH 1116N	1085219
Switch 1000NT					
5	—	5	10/100 Mbps	FL SWITCH 1005NT	1085170
8	—	8	10/100 Mbps	FL SWITCH 1008NT	1085165
4	1 Fiber SFP	5	10/100 Mbps	FL SWITCH 1004NT-SFX	1085169
5	2 Fiber SFP	7	10/100 Mbps	FL SWITCH 1005NT-2SFX	1085164
12	2 Fiber SFP	14	10/100 Mbps	FL SWITCH 1012NT-2SFP	1249598
24	—	24	10/100 Mbps	FL SWITCH 1024T	1343027
Switch 1100NT					
5	—	5	10/100/1000 Mbps	FL SWITCH 1105NT	1085163
8	—	8	10/100/1000 Mbps	FL SWITCH 1108NT	1085162
16	—	16	10/100/1000 Mbps	FL SWITCH 1116T	1085115

IP67 Machine mounted switches

IP67

Unmanaged machine mounted IP67 switch							
	Class I Div 2	Copper ports	Specialty ports	Total ports	Speed	Description	Order no.
	✓	8	—	8	10/100 Mbps	FL SWITCH 1608	1196227
					10/100/1000 Mbps	FL SWITCH 1708	1196228
Managed machine mounted IP67 switch							
	Class I Div 2	Copper ports	Specialty ports	Total ports	Speed	Description	Order no.
	✓	8	—	8	10/100 Mbps	FL SWITCH 2608	1106500
					10/100/1000 Mbps	FL SWITCH 2708	1106615



PoE and Ethernet Installation Technology


Power over Ethernet

Security cameras, wireless access points, VoIP telephones, and even sensors are some of the many devices that employ the convenience and cost savings of PoE technology.




Scan the QR code to learn more online

PoE


	Copper ports	Specialty ports	Total ports	Speed	Description	Order no.
	8	8 PoE af/at	8	10/100/1000 Mbps	FL SWITCH 1000-8POE-GT	1102079
	5	4 PoE af/at	5	10/100/1000 Mbps	FL SWITCH 1001-4POE-GT	1102077
	5	4 PoE af/at	5	10/100 Mbps	FL SWITCH 1001T-4POE	2891064
	5	4 PoE af/at	5	10/100/1000 Mbps	FL SWITCH 1001T-4POE-GT	1026937
	8	8 PoE af/at	8	10/100 Mbps	FL SWITCH 1000N-8POE	1343031
	8	8 PoE af/at	10	10/100/1000 Mbps	FL SWITCH 1100T-8POE-2SFP	1467018
	8	8 PoE af/at/bt	8	10/100 Mbps	FL SWITCH 1000-8POE	1342622
	8	8 PoE af/at/bt	8	10/100/1000 Mbps	FL SWITCH 1100T-8POE	1343034
	5	8 PoE af/at/bt	7	10/100/1000 Mbps	FL SWITCH 1100-5POE-2SFP	1342621

PoE injectors

PoE injector

	Connection method	Temperature range	Power budget	Special features	PoE standard	Description	Order no.
RJ45/RJ45		0 °C ... +55 °C	2 x 15 W	Electrical isolation in the power supply unit	IEEE 802.3 af	FL PSE 2TX	2891013
			15/30 W	—	IEEE 802.3 af/at (PoE+)	INJ 1000	2703005
		-40 °C ... +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	


Patch panels

	Connection method	Type	Shielding	Cable shield connection	Description	Order no.
	RJ45/RJ45	Standard ethernet patch panel, 8-pos., 10/100/1000 Mbps	Right on the DIN rail	Using an RJ45 socket	PP-RJ-RJ	2703015
	RJ45/SC			Toolless using shield contact spring	PP-RJ-SC	2703016
	RJ45/IDC				PP-RJ-IDC	2703019




Ethernet Media Converters

MC 1000 — media converters for applications with basic requirements

	FO connection	Range	Data rate	Special features	Description	Order no.
	MM SC	Up to 10 km	10/100 Mbps	<ul style="list-style-type: none"> Automatic switching between store-and-forward and cut-through mode Short latency times for real-time protocols Link Fault Pass Through (LFPT) – activated via DIP switch 	MC 1000-MM SC	1329817
	MM ST				MC 1000-MM ST	1329818
	MM LC				MC 1000-MM LC	1329819
	SM SC	Up to 20 km			MC 1000-SM20 SC	1329820
	SM ST				MC 1000-SM20 ST	1329821
	MM WDM A				Up to 10 km	MC 1000-MM WDM A
	MM WDM B	MC 1000-MM WDM B	1329823			
	MM SC	MC 1100-MM SC	1330888			
	SFP	Depending on module	10/100/1000 Mbps		MC 1100-SFP	1330903


Temperature range: -10°C ... +60°C, for an easy introduction to FO technology

MC 1000T – media converters for applications in demanding industrial environments

	FO connection	Range	Data rate	Special features	Description	Order no.	
	MM SC	Up to 10 km	10/100 Mbps	<ul style="list-style-type: none"> Automatic switching between store-and-forward and cut-through mode Short latency times for real-time protocols Link Fault Pass Through (LFPT) – activated via DIP switch Redundant power supply Digital output for reading out alarm messages DNV-GL approval 	MC 1000T-MM SC	1329827	
	MM ST				MC 1000T-MM ST	1330244	
	MM LC				MC 1000T-MM LC	1330259	
	SM SC	Up to 20 km			MC 1000T-SM20 SC	1330262	
	SM SC	Up to 40 km			MC 1000T-SM40 SC	1330276	
	SM ST	Up to 20 km			MC 1000T-SM20 ST	1330282	
	SM WDM A	Up to 40 km			MC 1000T-SM40 WDM A	1330293	
	SM WDM B				MC 1000T-SM40 WDM B	1330296	
	MM WDM A	Up to 10 km			MC 1000T-MM WDM A	1330494	
	MM WDM B				MC 1000T-MM WDM B	1330509	
	SFP	Depending on module			10/100/1000 Mbps	MC 1100T-SFP	1330902
	MM SC	Up to 10 km			MC 1100T-MM SC	1330900	
	SM SC	Up to 20 km			MC 1100T-SM20 SC	1330898	

Temperature range: -40°C ... +75°C, robust metal housing, shipbuilding approval, redundant power supply

MC 1000E – media converters for applications with requirements on special approvals

	FO connection	Range	Data rate	Special features	Description	Order no.	
	MM SC	Up to 10 km	10/100 Mbps	<ul style="list-style-type: none"> Automatic switching between store-and-forward and cut-through mode Short latency times for real-time protocols Link Fault Pass Through (LFPT) – activated via DIP switch Redundant power supply Digital output for reading out alarm messages Increased resistance to EMI DNV-GL, ATEX, IECEx, and UL HazLoc approval IEC 61850 and IEEE 1613 for applications in the energy sector 	MC 1000E-MM SC	1330507	
	MM ST				MC 1000E-MM ST	1330504	
	MM LC				MC 1000E-MM LC	1330611	
	SM SC	Up to 20 km			MC 1000E-SM20 SC	1330728	
	SM SC	Up to 40 km			MC 1000E-SM40 SC	1330725	
	SM ST	Up to 20 km			MC 1000E-SM20 ST	1330723	
	SM LC	Up to 40 km			MC 1000E-SM40 LC	1330722	
	SM WDM A				MC 1000E-SM40 WDM A	1330885	
	SM WDM B	MC 1000E-SM40 WDM B			1330892		
	MM WDM A	Up to 10 km			MC 1000E-MM WDM A	1330588	
	MM WDM B				MC 1000E-MM WDM B	1330890	
	SFP	Depending on module			10/100/1000 Mbps	MC 1100E-SFP	1331375
	MM SC	Up to 10 km			MC 1100E-MM SC	1330896	
SM SC	Up to 20 km	MC 1100E-SM20 SC			1331377		

Temperature range: -40°C ... +75°C, robust metal housing, extended approval package, redundant power supply



Industrial Wireless

Industrial wireless systems enable flexible automation. With wireless LAN or Bluetooth, you can avoid cable runs and integrate mobile devices into the network. The wireless Ethernet systems from Phoenix Contact ensure reliable communication under harsh conditions and are optimized for fast PROFINET and EtherNet/IP™ transmission. We also support you in designing your custom wireless network.



Ethernet port adapter

	Characteristics	Function	Frequency band	Data rate	Special features	Description	Order no.
	Supply voltage: 9 V DC... 30 V DC, extended temperature range: - 40°C... +65°C, IP65	Combined WLAN and Bluetooth wireless module	2.4 GHz and 5 GHz	Up to 65 Mbps	Internal antenna	FL EPA 2	1005955
					External antenna	FL EPA 2 RSMA	1005957
		Bluetooth wireless module	—	Up to 3 Mbps	Internal antenna	FL BT EPA 2	1005869

Compact wireless module IEEE 802.11ax / Wi-Fi 6/6E

	Characteristics	Function	Frequency band	Data rate	Special features	Description	Order no.
		WLAN client and soft access point with IP54	2.4 / 5 GHz		External antennas	FL WLAN 1120	1386091
			2.4 / 5 / 6 GHz		External antennas, USA and Canada only	FL WLAN 1121	1386092
	Supply voltage: 9 V DC... 32 V DC, WLAN client, soft access point, and WLAN access point	WLAN client and soft access point with IP20	2.4 / 5 GHz	WLAN up to 2400 Mbps	External antennas	FL WLAN 1122	1752496
			2.4 / 5 / 6 GHz		Internal antennas	FL WLAN 1020	2702992
		WLAN access point with IP65	2.4 / 5 GHz	Ethernet connection 10/100/1000 Mbps	Internal antennas, USA and Canada only	FL WLAN 1021	2702993
					Internal antennas	FL WLAN 1022	1752493
					External antennas	FL WLAN 2330	1360275
					External antennas, USA and Canada only	FL WLAN 2331	1360276
					Internal antennas	FL WLAN 2340	1510147
					Internal antennas, USA and Canada only	FL WLAN 2341	1510249
		WLAN access point with IP20	6 GHz		Internal antennas	FL WLAN 2350	1513603
					Internal antennas, USA and Canada only	FL WLAN 2351	1513600

Trusted Wireless

Phoenix Contact specifically developed the proprietary Trusted Wireless technology for industrial use. It is particularly suitable for forwarding sensor and actuator information wirelessly as well as transmitting low to medium volumes of data in large systems. With a clear line of sight, distances ranging from several hundred meters up to several kilometers can be covered between two wireless devices. The technology is used in the Radioline industrial wireless system from Phoenix Contact.

Your advantages

- ✓ Easy startup without programming
- ✓ Integrated RS-232 and RS-435 interface
- ✓ Trusted Wireless 2.0 technology
- ✓ Adjustable data rates for the wireless interface
- ✓ 128-bit data encryption (AES)

Scan the QR code to learn more online





Managed Switches

Managed Switches 2000 and 2100

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Simple unmanaged switch or powerful managed switch? The intelligent 2000 switches (Fast ethernet switch) and 2100 switches (Gigabit switch) combine the best of both worlds. They are as easy to use as an unmanaged switch yet provide the features of a managed switch. This improves the stability and robustness of your machine network.

Intelligent switches for the machine — Switch 2000 and 2100

	Copper ports	Fiber optic ports	Combo ports	Port speed	Special features	Description	Order no.
	5 x RJ45	—	—	10/100 Mbps	RSTP, EtherNet/IP™, extended multicast filtering and PROFINET class A	FL SWITCH 2005	2702323
	8 x RJ45	—	—			FL SWITCH 2008	2702324
	16 x RJ45	—	—			FL SWITCH 2016	2702903
	5 x RJ45	—	—	10/100/1000 Mbps		FL SWITCH 2105	2702665
	8 x RJ45	—	—			FL SWITCH 2108	2702666
	16 x RJ45	—	—			FL SWITCH 2116	2702908

Supply voltage: 18...32 V DC, temperature range: 0°C ... +60°C, IP20, front port outlet direction

Managed Switches 2200 and 2300

With easy startup and a variety of versions with functions graded according to the application, the 2200 and 2300 managed switches

enable cost-effective management of your ethernet network. In addition to the extended scope of functions, the switches offer communication via fiberglass, as well as approvals for the maritime sector and the process industry.

Switch 2200 and 2300 intelligent switches for universal use — Class I, Div 2

	Copper ports	Fiber optic ports	Combo ports	Port speed	Special features	Description	Order no.
	5 x RJ45	—	—	10/100 Mbps	RSTP, EtherNet/IP™, extended multicast filtering and PROFINET class B	FL SWITCH 2205	2702326
	8 x RJ45	—	—			FL SWITCH 2208	2702327
	7 x RJ45	1 x MM SC	—			FL SWITCH 2207-FX	2702328
	7 x RJ45	1 x SM SC	—			FL SWITCH 2207-FX SM	2702329
	6 x RJ45	2 x MM SC	—			FL SWITCH 2206-2FX	2702330
	6 x RJ45	2 x SM SC	—			FL SWITCH 2206-2FX SM	2702331
	6 x RJ45	2 x MM ST	—			FL SWITCH 2206-2FX ST	2702332
	6 x RJ45	2 x SM ST	—			FL SWITCH 2206-2FX SM ST	2702333
	6 x RJ45	2 x SFX	—			FL SWITCH 2206-2SFX	2702969
	4 x RJ45	2 x SFX	2 x SFX/RJ45			FL SWITCH 2204-2TC-2SFX	2702334
	16 x RJ45	—	—			FL SWITCH 2216	2702904
	14 x RJ45	2 x MM SC	—			FL SWITCH 2214-2FX	2702905
	14 x RJ45	2 x SM SC	—	FL SWITCH 2214-2FX SM	2702906		
	14 x RJ45	2 x SFX	—	FL SWITCH 2214-2SFX	1006188		
	12 x RJ45	2 x SFX	2 x SFX/RJ45	FL SWITCH 2212-2TC-2SFX	2702907		
	8 x RJ45	—	—	FL SWITCH 2308	2702652		
	6 x RJ45	2 x SFP	—	FL SWITCH 2306-2SFP	2702970		
	4 x RJ45	2 x SFP	2 x SFP/RJ45	FL SWITCH 2304-2GC-2SFP	2702653		
	16 x RJ45	—	—	FL SWITCH 2316	2702909		
	14 x RJ45	2 x SFP	—	FL SWITCH 2314-2SFP	1006191		
12 x RJ45	2 x SFP	2 x SFP/RJ45	FL SWITCH 2312-2GC-2SFP	2702910			
	8 x RJ45	—	—	10/100 Mbps	PROFINET (preset), PROFINET status LEDs	FL SWITCH 2208 PN	1044024
	6 x RJ45	2 x SFX	—			FL SWITCH 2206-2SFX-PN	1044028
	16 x RJ45	—	—			FL SWITCH 2216 PN	1044029
	14 x RJ45	2 x SFX	—			FL SWITCH 2214-2SFX PN	1044030
	8 x RJ45	—	—	10/100/1000 Mbps		FL SWITCH 2308 PN	1009220
	6 x RJ45	2 x SFP	—			FL SWITCH 2306-2SFP PN	1009222
	16 x RJ45	—	—			FL SWITCH 2316 PN	1031673
	14 x RJ45	2 x SFP	—			FL SWITCH 2314-2SFP PN	1031683

Supply voltage: 12... 57 V DC (redundant), temperature range: - 40°C ... +70°C, IP20, front port outlet direction, PROFINET Class B. Approvals: DNV/GL, BV, ABS, LR, RINA, IECEx, ATEX Zone 2



Secure Connectivity

Industrial routers for remote maintenance and cybersecurity



Scan the QR code to learn more online



Our robust industrial routers connect various networks via cable (LAN router and NAT router) or mobile network (3G/UMTS/4G/LTE router) for the remote maintenance and protection of your local network. A large number of products feature integrated VPN and firewall functions. For the highest level of security, the mGuard routers protect against cyber attacks and malware.

mGuard					
Notes	mGuard Secure Cloud	Routing/NAT	Configurable firewall	Description	Order no.
Simple cellular router supporting access to 4G networks. Panel mount version	✗	✓	✗	CELLULINK 4401-4G GL M40	1637627
Simple cellular router supporting access to 4G networks. Pole mount version	✗	✓	✗	CELLULINK 4401-4G GL M25	1637527
Remote access gateway with 1 LAN and 1 WAN port	✓	✗	✗	CLOUD CLIENT 1001T-TX/TX	1221706
Gigabit router with 1 LAN, 1 WAN port supporting VPN/Remote access (2 tunnels), Routing/NAT and a firewall	✓	✓	✓	FL MGUARD 2102	1357828
Gigabit router with 4 LAN, 1 WAN port supporting VPN/Remote access (2 tunnels), Routing/NAT and a firewall	✓	✓	✓	FL MGUARD 2105	1357850
Gigabit router WITH 1 LAN, 1 WAN port supporting VPN/Remote access (250 tunnels), Routing/NAT and a fully featured stateful firewall.	✓	✓	✓	FL MGUARD 4302	1357840
Gigabit router WITH 4 LAN, 1 WAN port supporting VPN/Remote access (250 tunnels), Routing/NAT and a fully featured stateful firewall. Configurable DMZ port also available	✓	✓	✓	FL MGUARD 4305	1357875
Cellular radio for 4G (CAT 4), worldwide use	✓	✓	✓	TC ROUTER 3002T-4G GL	1632697



Connectivity

Whether in a control cabinet or in the field – the energy industry places a large number of demands on connection technology. It must be as safe and secure as it is durable, and it must also be easy to operate. Connection technologies from Phoenix Contact meet these demands.



CONNECTIVITY

- Heavy-duty Connectors
- Distributor Boxes
- Connectors and Cordsets

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more online





Connectivity

Connections in the cabinet, through the cabinet, and in the field are the bridge between the field-based sensors and logic controlling a system.

The automation and control level reads inputs and drives outputs. These devices must be connected by secure discrete wiring or through networks.

These same devices must be reliably powered, which requires efficient distribution and marshalling to energize and balance loads. Loads can range from small milliamp signals to high horsepower motor connections, depending on the end application.

Analog signals often require special functionality at the connection point, such as testing, measurement, or fusing. Specialty terminal blocks support these functions.

When system complexity and I/Os increase, networking field signals outside the enclosure is often a more efficient way to integrate larger systems than point-to-point wiring.

Passive distributor boxes for every application

In decentralized connection technology, passive distributor systems connect the I/O devices to the PLC. Phoenix Contact provides a series of sensor/actuator boxes that are specially tailored for every demand. Examples include different thread sizes, various connection technologies for the master cable, and products where the specifications go beyond the scope typically found in industrial environments.



Through

Products on DIN rail inside an enclosure need to either collect data from, communicate with, or control devices outside of the cabinet. While there are wireless solutions available for some of these transmissions, it's generally not practical or possible to make all connections wireless.

When it comes to making wired connections for power, signal, or data transmissions, there are a seemingly infinite number of solutions available. Fortunately, you can count on Phoenix Contact to provide recommendations on secure, water-tight, and vibration-proof methods to bring cabling from the field into the cabinet.



Field

Every end device needs to be powered, as well as communicate its intended information. Device power can be either AC or DC and range from a few milliamps to hundreds of amps. Sensor connectivity collects field-level digital analog signals and brings them back to the control level. Networks or industrial protocols are used to communicate with devices using the same language.





RJ45 STANDARD Industrial Ethernet Patch Cables

With the cable sheath in the **Low Smoke Zero Halogen (LSZH)** material class, the shielded patch cables are ideally suited for future-proof cabling solutions in building automation.

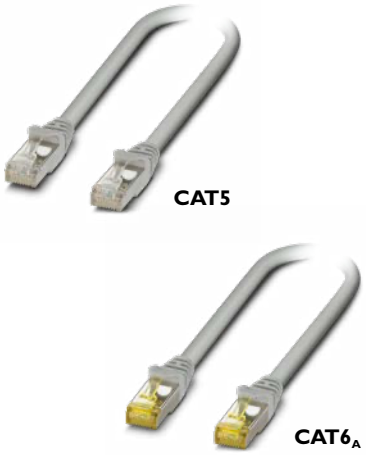
Data transmission speeds of up to 10 Gbps in accordance with CAT5 and CAT6_A allow demanding ethernet applications to be implemented. The protected locking clip ensures a robust design and increased vibration resistance. Comprehensive approvals for the global market and cable lengths from 0.3 m to 20 m allow versatile applications.



Your advantages

- ✓ Ideal for demanding ethernet applications with up to 10 Gbps data transmission in accordance with CAT6_A
- ✓ Ideal for building automation and control cabinet applications due to the use of cable sheath with LSZH material class
- ✓ Reliable due to the protected locking clip
- ✓ Standard lengths (0.3 m to 20 m)

RJ45 standard shielded patch cables

	Length	Order no.	Order no.
		CAT5 (up to 1 Gbps)	CAT6 _A (up to 10 Gbps)
	0.3 m	1227558	1227572
	0.5 m	1227559	1227573
	1 m	1227560	1227575
	1.5 m	1227561	1227578
	2 m	1227562	1227580
	3 m	1227563	1227581
	5 m	1227564	1227583
	7.5 m	1227565	1227585
	10 m	1227566	1227588
	12.5 m	1227567	1227590
	15 m	1227570	1227591
	20 m	1227571	1227593

Colour RJ45 patch cables

Phoenix Contact is extending its range with colour patch cables for the RJ45 BUILDING series. The new cables available in eight colours – white, orange, yellow, red, violet, green, blue, and black.

Your advantages

- ✓ Perfect for office, building, and protected industrial applications, e.g., in control cabinets
- ✓ Worldwide approval with CE, UL, WEEE, and EAC
- ✓ Secure connection and disconnection with reliable locking clip protection
- ✓ Future-proof high-speed data transmission with up to 10 Gbps (CAT6_A)
- ✓ Ideal EMC properties due to 360° shielding



Main features

- Colours: white, orange, yellow, red, violet, green, blue, and black
- Data transmission up to 10 Gbps (CAT6_A)
- Lengths from 0.3 to 50 m
- Integrated locking clip protection

Scan the QR code to learn more online





High-flex Ethernet Cordsets

Your advantages

- ✓ Category 5, up to 1 Gbps
- ✓ -40°C ... +80°C
- ✓ UV-Resistant CMX outdoor jacket, 600 V rating
- ✓ Up to 20 million lateral flex bend cycles
- ✓ Up to 4.8 million torsional flex cycles
- ✓ Tray-rated for co-location with power cables

Applications

- Robotics and factory automation
- Integrators/cabinet builders/panel shops
- Machine builders
- Surveillance (IP Cameras)
- Vision systems
- Network infrastructure

RJ45 high-flex ethernet patch cables — Teal TPE 600 V cable jacket



Length	Order no.	Order no.
	4-wire (2-pair) Straight / Straight	8-wire (4-pair) Straight / Straight
0.3 m	1199417	1199422
0.5 m	1199415	1199427
1 m	1199413	1199426
2 m	1199412	1199425
3 m	1199411	1199424
5 m	1199410	1199423
10 m	1199408	1199421
15 m	1199405	1199420
20 m	1199404	1199418

M12 high-flex ethernet cordsets — Teal TPE 600 V cable jacket

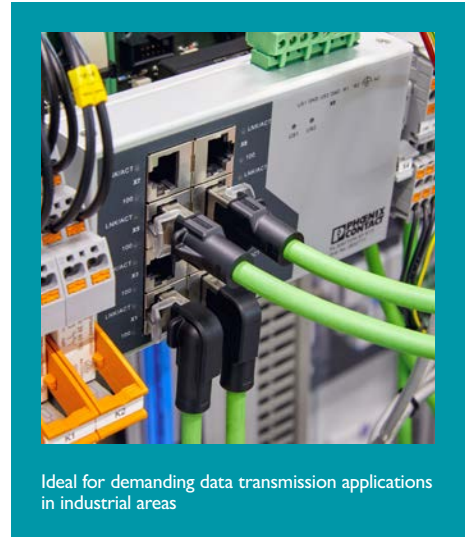
Design	Configuration	0.5 m	1 m	2 m	5 m	10 m	15 m	20 m	30 m	40 m	CMAT
4-pos. D-code 	Male straight / Open end	—	—	1406131	1408727	1408728	1418065	1418066	1418067	1418068	1405876/.../...
	Male 90° / Open end	—	—	1406126	1408734	1408735	—	—	—	—	1405871/.../...
	Female straight / Open end	—	—	1406130	1408729	1408730	—	—	—	—	1405875/.../...
	Female 90° / Open end	—	—	1406125	1408736	1408738	—	—	—	—	1405870/.../...
	Male straight / Male straight	1408732	—	1406128	1418076	1418077	1418078	1418079	—	—	1405873/.../...
	Male straight / Female straight	1408731	—	1406129	—	—	—	—	—	—	1405874/.../...
	Male 90° / Male 90°	1408741	—	1406123	—	—	—	—	—	—	1405868/.../...
	Male 90° / Female 90°	1408739	—	1406124	—	—	—	—	—	—	1405869/.../...
	Male straight / RJ45 straight	1408733	—	1406127	1409860	1409861	1409862	1418087	—	—	1405872/.../...
Male 90° / RJ45 straight	1408742	—	1406122	—	—	—	—	—	—	1405867/.../...	
8-pos. A-code 	Male straight / Open end	—	—	1406121	1408743	1408744	1418069	1418071	1418072	1418075	1405865/.../...
	Male 90° / Open end	—	—	1406116	1408751	1408752	—	—	—	—	1405860/.../...
	Female straight / Open end	—	—	1406120	1408745	1408746	—	—	—	—	1405864/.../...
	Female 90° / Open end	—	—	1406115	1408754	1408755	—	—	—	—	1405859/.../...
	Male straight / Male straight	1408748	—	1406118	1418080	1418081	1418082	1418083	—	—	1405862/.../...
	Male straight / Female straight	1408747	—	1406119	—	—	—	—	—	—	1405863/.../...
	Male 90° / Male 90°	1408757	—	1406113	—	—	—	—	—	—	1405857/.../...
	Male 90° / Female 90°	1408756	—	1406114	—	—	—	—	—	—	1405858/.../...
	Male straight / RJ45 straight	1408749	—	1406117	1409863	1409864	1409865	1417873	—	—	1405861/.../...
Male 90° / RJ45 straight	1408758	—	1406112	—	—	—	—	—	—	1405856/.../...	
8-pos. X-code 	Male straight / Open end	—	1407467	1407468	1407469	1407470	1440575	1440588	—	—	1408648/.../...
	Male straight / Male straight	1440465	1407483	1407484	1407485	1407486	1440517	1440520	—	—	1408644/.../...
	Male straight / RJ45 straight	1440591	1407471	1407472	1407473	1407474	1440643	1440656	—	—	1408647/.../...



RJ45 Patch Cables for Industrial Applications

Individual cabling solutions in industrial applications

The RJ45 patch cables in the INDUSTRIAL series were specifically developed for industrial applications. The shielding concept, vibration resistance, and robust molding ensure reliable data transmission in industrial areas. With the different outlet directions and the wide variety of cables offered by Phoenix Contact, you will find the right cable for flexible installation, drag chains, and robots.



Technical data

- Robust molded connector
- 360° shroud
- Five cable outlet directions
- CAT5 (4-pos. up to 100 Mbps, 8-pos. up to 1 Gbps)
- CAT6_A (up to 10 Gbps)
- One-design connector
- Maximized insertion depth
- All cables are part of the RJ45 INDUSTRIAL connector system
- Approvals: CE, RoHS, REACH, WEEE, EAC, UL

Cable overview: RJ45 INDUSTRIAL

Cable	93B	93C	93M	93K	93R	94B	94C	94F
Schema								
Sheath	PVC	PUR	PUR	PVC	PUR	PUR	PUR	PUR
Design	AWG 22/7	AWG 22/19	AWG 22/7	AWG 22/7	AWG 22/19	AWG 26/7	AWG 26/19	AWG 26/7
Shielding	SFTQ	SFTQ	SFTQ	SFTQ	SFTQ	SF/UTP	SF/UTP	S/FTP
Transmission category	CAT5 (100 Mbps)	CAT5 (100 Mbps)	CAT5 (100 Mbps)	CAT5 (100 Mbps)	CAT5 (100 Mbps)	CAT5 (1 Gbps)	CAT5 (1 Gbps)	CAT6 _A (10 Gbps)
Application	Type B Flexible	Type C Drag chain	Type B Flexible	Type B Flexible	Type R Robot	Type B Flexible	Type C Drag chain	Type B Flexible

i Detailed information on our cables can be found in the technical data for the item on our web shop

INDUSTRIAL patch cables

Configurable item*	1247656		1247661		1247639		1247647		1387606		1387607					
Cable	93B, 93C, 93K, 93M, 93R								94B, 94C, 94D				94F			
Protocol	PROFINET / EtherCAT® / Sercos								Ethernet							
Transmission speed	CAT5 (up to 100 Mbps)								CAT5 (up to 1 Gbps)				CAT6 _A (up to 10 Gbps)			
Cable	93B	93C	93M	93K	93B	93C	93M	93K	94B	94C	94B	94C	94F	94F		
0.5 m	1112785	1112939	1112925	1112931	1112877	1112871	1113336	—	1441453	1112918	1441195	1113331	1113823	1113204		
1.0 m	1112817	1112937	1112924	1112930	1112876	1112857	1113335	—	1441456	1112916	1441200	1113212	1112909	1113202		
2.0 m	1112820	1112936	1112923	1112929	1112875	1112870	1113334	—	1441463	1112914	1441443	1113211	1112908	1113198		
3.0 m	1112823	1112935	1112921	1112928	1112874	1112869	1113333	1112858	1441464	1112913	1441444	1113210	1112907	1113197		
5.0 m	1112856	1112933	1112920	1112927	1112873	1112868	1113332	1113178	1441466	1112912	1441659	1113209	1112906	1113196		

Standard item in fixed length (other lengths available under web code #2675)

*Configurable cable and length between 0.5 m and 90.0 m



RJ45 Patch Cables for Industrial Applications

INDUSTRIAL patch cables, angled

Configurable item*	1247660	1247629	1247652	1247633	1247662	1247628	1247646	1247653	1387614	1387609	1387619	1387620
Cable	93B 93C 93K 93M 93R				94B 94C 94D			94F				
Protocol	PROFINET / EtherCAT / SERCOS				Ethernet							
Transmission speed	CAT5 (up to 100 Mbps)				CAT5 (up to 1 Gbps)			CAT6 _A (up to 10 Gbps)				
Cable	93B				—			94F				
0.3 m	1113311	1113322	1113292	1113297	—			1113237	1113249	1113221	1113225	
0.5 m	1113304	1113321	1113291	1113295	—			1113236	1113248	1113220	1113224	
1.0 m	1113310	1113320	1113290	1113294	—			1113235	1113247	1113219	1113223	
2.0 m	1113309	1113319	1113289	1113293	—			1113234	1113246	1113218	1113222	

Standard item in fixed length (other lengths available under web code #2675)

*Configurable cable and length between 0.5 m and 90.0 m

Configurator for cables and lines

Our configurator directs you to the appropriate RJ45 patch cable for your application – whether for industrial or building applications.



USB patch cables

USB version	USB 2.0	USB 3.2 Gen. 1		USB 3.2 Gen. 2
Head 1 USB type	USB type A			USB type C
Head 2 USB type	USB type A		USB type C	
Sheath material	PVC			
1.0 m	1333136	1333151	1333165	1333197
2.0 m	1333139	1333156	1333187	1333213*
3.0 m	1333140	1333157	1333190	1333214*

Other lengths available: 0.3, 0.5, 1.5, 1.8, and 5.0 m

*USB 3.2 Gen. 1

HDMI patch cables

HDMI version	HDMI high speed with ethernet channel
Head 1 HDMI type	HDMI type A
Head 2 HDMI type	HDMI type A
2.0 m	1332082
3.0 m	1332083
5.0 m	1332084

Other lengths available: 0.3, 0.5, 1.0, 1.5, and 7.5 m



Cabling Solutions

The ideal RJ45 connectors for PROFINET cabling up to 1 Gbps or Ethernet cabling up to 10 Gbps. QUICKON fast connection technology for assembling without the need for special tools guarantees quick and easy installation in the field. Together with the RJ45 connectors with crimp connection technology, Phoenix Contact provides the ideal solution for every application from CAT5 to CAT6_A.

RJ45 connectors

Protocol	Ethernet			PROFINET	Ethernet
Connection technology	IDC insulation displacement connectors				Crimp*
Connection range	AWG 26 ... AWG 24	AWG 26 ... AWG 23		AWG 22	AWG 27 ... AWG 24
CAT5	—	1656725	1658008	1658435	1414382
CAT6_A	1419001	—	—	—	1414395

*Requires crimping tool VS-CT-RJ45-H, 1653265

The RJ45 INDUSTRIAL connectors for data transmission speeds up to 10 Gbps are a future-oriented solution for your interface. The one-piece design and assembly without the need for special tools facilitate easy handling.

RJ45 INDUSTRIAL connectors

Protocol	PROFINET				Ethernet			
Connection technology	IDC insulation displacement connectors							
Connection range	AWG 23 ... AWG 22				AWG 26 ... AWG 24			
Category	CAT5		CAT6 _A		CAT5		CAT6 _A	
Cable outlet	Straight	Upward	Downward	Straight	Straight	Upward	Downward	Straight
Order no.	1421126	1421127	1421128	1149847	1421607	1421876	1421877	1149846

The universal DIN rail adapters offer a high degree of flexibility in a small space. The one-piece housing snaps quickly and easily onto the DIN rail. Accepts RJ45 IDC modules and couplers.

DIN rail adapters

Type	DIN rail adapter
Gray, kit*	1100077
Gray, kit**	1769127
Gray, unassembled	1041740

*includes 1x 1041740 and 1x 1417274

**includes 1x 1041740 and 1x 1041760

RJ45 modules for the DIN rail adapter

Inserts	RJ45 coupling module	RJ45 cable connection with IDC connection
CAT6_A	1041760	1417274



RJ45 Version 6 for IP67 / Outdoor Applications

Version 6 RJ45 connectors					
<p>The version 6 data connectors from Phoenix Contact are a cost-effective option for IP-protected connectors. The portfolio of packaged RJ45 connectors includes versions with IDC and crimp connection for CAT5 and CAT6_A applications, as well as preassembled patch cables.</p>					
	Connection technology	IDC	Crimp	IDC	Crimp
	External cable diameter	5 mm ... 8.5 mm			
	Connection range	AWG 26 ... AWG 23	AWG 27 ... AWG 24	AWG 26 ... AWG 23	AWG 27 ... AWG 24
	Colour	Gray		Black	
	CAT5	1656990	1414383*	1658493	1414408*
	CAT6_A	—	1414406*	—	1414410*
*Tool 1653265 required					

Version 6 panel-mount frames					
<p>The version 6 panel-mount frames and further version 6 accessories are a convenient and simple option for creating a reliable IP-protected connection between version 6 data connectors and devices.</p>					
	Panel cutout	Circular		Square	
	Colour	Gray	Black	Gray	Black
	For keystone modules	1689844	1658053	1689080	1658642
	For freenet modules	1653744	1658668	—	—
	For PCB modules	—	—	1689446	1658655

Version 6 accessories		
Description	Protective cover, for covering the contact insert in the panel-mount frame	
Colour	Gray	Black
Order no.	1652606	1658066

RJ45 jack insert					
<p>The version 6 panel-mount frames can be extended to create the matching insert for your mating connector by adding the appropriate coupling modules for RJ45 and FO connections as well as the cable connection modules for copper connections.</p>					
	Description	Cable module	Coupler		PCB module
	Connection system	Freenet	Keystone	Freenet	—
	CAT5	1652936	1689064	—	1653087
	CAT6_A	1418984	1086108	1086111	—



FDX 20 Fusion Splice Boxes

FDX 20 splice boxes are the perfect solution for the integration and protection of fiber optics in the industrial environment. Pre-installed pigtailed are included in these boxes for quick and easy termination of fiber cable runs using the fusion splicing method. Fusion splicing utilizes an electric arc to fuse two optical fibers together, resulting in a splice that is not only stronger than mechanical splices, but also offers much lower loss and reflectance.

The FDX 20 series also features a steel housing, a patented 3-stage strain relief system, a splice tray, top and bottom entry cable glands, and a splice comb for the protection of fiber cables and splices.



Scan the QR code to learn more online



FDX 20 series for DIN rail mounting High-speed, future-proof data transmission

The new splice boxes from Phoenix Contact ensure continuously reliable data transmission in real time. With their compact and uniform design, the splice boxes provide plenty of interior space for the secure connection of fiber optics.

FDX 20 series for 19" rack mounting For all common FO interfaces

The 19-inch splice boxes of the FDX 20 series from Phoenix Contact provide ample interior space for the convenient and secure connection of fiber optics. The IP20 boxes can be extended and their depth can be adjusted. They are particularly suitable for real-time data transmission in industrial applications and data centers.

Fiber optic splice boxes, FDX 20 series, IP20, with pre-terminated pigtailed

Fiber type	DIN rail mounting			19-inch rack mounting		
	6x LC duplex	12x LC duplex	6x SC duplex	12x LC duplex	24x LC duplex	12x SC duplex
OM1 (G62.5/125 μm)	1343377	—	1343380	—	—	—
OM2 (G50/125 μm)	1019713	1019709	1019700	1145416	1145375	1145408
OM3 (G50/125 μm)	1343378	—	1343381	—	—	—
OM4 (G50/125 μm)	1019712	1019708	1019698	1145415	1145413	1145406
OS2 PC (E9/125 μm)	1019711	1019707	1019692	1145411	1145409	1143631



FO Singlemode/Multimode Patch Cables

With exceptional quality, the FO patch cables from Phoenix Contact provide the ideal conditions for reliable data transmission with data rates of up to 40 Gbps. The huge variety of connector types and cable lengths enables an individual solution to be created for every application.



Fiber-optic cables						
	Zip cord fiber classes	Sheath colour	Fiber category	Ethernet protocol / typical range	Typical wavelength	Fiber structure
Multimode		Orange	OM1	1000Base-SX: min. 350 m 1000Base-LX: min. 550 m	850 nm 1300 nm	
		Orange	OM2	1000Base-SX: min. 525 m 1000Base-LX: min. 1000 m	850 nm 1300 nm	
		Aqua	OM3	1000Base-SX: min. 1000 m 1000Base-LX: min. 550 m 10GBase-SX: min. 300 m	850 nm	
		Heather violet	OM4	1000Base-SX: min. 1040 m 1000Base-LX: min. 600 m 10GBase-SX: min. 550 m	850 nm	
Singlemode		Yellow	OS2	10GBase-LR: min. 10 km 10GBase-ER: min. 40 km	1310 nm 1550 nm	

FO patch cables (length: 1.0 m*)								
Description	OM1			OM2			OM3	
Type	LC	SC	ST	LC	SC	ST	LC	SC
LC	1146497	1146498	1146499	1115633	1115607	1115588	1185473	1185480
SC	1146498	1146504	—	1115607	1115536	1115574	1185480	1185485
ST	1146499	—	1146501	1115588	1115574	1115560	—	—
Description	OM4		OS2 UPC			OS2 APC		
Type	LC	SC	LC	SC	ST	LC	SC	
LC	1115625	1115601	1115636	1115618	1115596	1115630	1115613	
SC	1115601	1115424	1115618	1115550	1115582	1115613	1115544	
ST	—	—	1115596	1115582	1115565	—	—	

*Further available length versions: 0.5 m, 1 m, 2 m, 3 m, 5 m, 10 m configurable



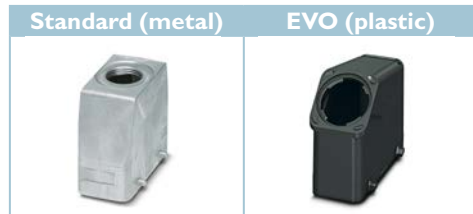
Heavy-duty Connectors

Industrial connectors from the HEAVYCON complete series protect your interfaces and ensure the reliable transmission of power, data, and signals even under the harshest conditions. The industrial connectors are resistant to dirt, water, vibrations, and high levels of mechanical strain. The heavy-duty connectors have a seal rating of up to IP69K.



Rock-solid performance, ready when you are.

Scan the QR code to learn more online



Selector guide — Pick 4 parts

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

HEAVYCON STANDARD

Poles	Tech.	Socket (F)		Plug (M)		Panel mounting base		Hood - Top entry		Hood - Lateral entry	
		Order no.	Description	Order no.	Description	With cover	w/o cover	Low profile	High profile	Low profile	High profile
6	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						
	Crimp	1648160	HC-B 6-I-CT-F	1648157	HC-B 6-I-CT-M						
10	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						
	Crimp	1605569	HC-B 10-I-CT-F	1605624	HC-B 10-I-CT-M						
16	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						
	Crimp	1648283	HC-B 16-I-CT-F	1648270	HC-B 16-I-CT-M						
24	Screw	1648306	HC-B 24-I-UT-F	1648296	HC-B 24-I-UT-M	1411331 + 1346546	—	1412779 (M32)	1412754 (M32)	1412774 (M32)	1412750 (M32)
	Push-in	1407735	HC-B 24-I-PT-F	1407736	HC-B 24-I-PT-M						
	Crimp	1648348	HC-B 24-I-CT-F	1648335	HC-B 24-I-CT-M						

HEAVYCON EVO

Poles	Tech.	Socket (F)		Plug (M)		Panel mounting base		Hood - Top and lateral entry	
		Order no.	Description	Order no.	Description	With cover	w/o cover	Low profile	High profile
6	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				
	Crimp	1648160	HC-B 6-I-CT-F	1648157	HC-B 6-I-CT-M				
10	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				
	Crimp	1605569	HC-B 10-I-CT-F	1605624	HC-B 10-I-CT-M				
16	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				
	Crimp	1648283	HC-B 16-I-CT-F	1648270	HC-B 16-I-CT-M				
24	Screw	1648306	HC-B 24-I-UT-F	1648296	HC-B 24-I-UT-M	1407661 + 1346546	—	1420935	1407657
	Push-in	1407735	HC-B 24-I-PT-F	1407736	HC-B 24-I-PT-M				
	Crimp	1648348	HC-B 24-I-CT-F	1648335	HC-B 24-I-CT-M				




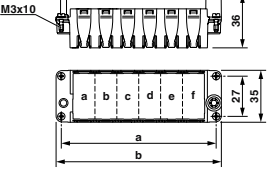
Accessories — Cable gland

HEAVYCON STANDARD		HEAVYCON EVO	
M20	1411163	7-13 mm	1407669 (M20 equivalent)
M25	1411165	9-17 mm	1407670 (M25 equivalent)
M32	1411166	11-21 mm	1407671 (M32 equivalent)
M40	1411167	19-28 mm	1407672 (M40 equivalent)







































Snap-in Frames for Modular Contact Inserts

Module carrier frames with side latch springs

		Module slots	Housing size	Dimensions		Type	Order no.	
				a (mm)	b (mm)			
	For sleeve housings (A, B, C, etc.)							
		2	B06	44.0	51.0	HC-M-B06-MFH-H	1182087	
		3	B10	57.0	64.0	HC-M-B10-MFH-H	1182089	
		4	B16	77.5	84.5	HC-M-B16-MFH-H	1182093	
		6	B24	104.0	111.0	HC-M-B24-MFH-H	1182095	
		For panel mounting bases, surface mounting housings, and coupling housings (a, b, c, etc.)						
			2	B06	44.0	51.0	HC-M-B06-MFH-B	1182085
			3	B10	57.0	64.0	HC-M-B10-MFH-B	1182088
4			B16	77.5	84.5	HC-M-B16-MFH-B	1182090	
6	B24		104.0	111.0	HC-M-B24-MFH-B	1182094		

Modular Contact Inserts for B Housings and EVO M1

Power		Number of positions													
		1	2	2	2	2	2	2	2	2	5				
															
Connection		Axial screw		Axial screw		Axial screw		Axial screw		Push-in		Crimp CK 4.0			
IEC rated data		200 A, 1,000 V, 70 mm ²		100 A, 1,000 V, 35 mm ²		70 A, 1,000 V, 25 mm ²		40 A, 1,000 V, 10 mm ²		40 A, 830 V, 6 mm ²		40 A, 1,000 V, 10 mm ²			
UL rated data		146 A, 600 V, AWG 00		127 A, 600 V, AWG 2		69 A, 600 V, AWG 6		55 A, 600 V, AWG 8		600 V, AWG 8		42 A, 600 V, AWG 10			
Module slots		2		2		1		1		1		1			
Female	Male	1417379	1417381	1417390	1417392	1417296	1417297	1417387	1417389	1424222	1424223	1414361	1414360		
		3	3	3/4	4	4	4	4	4	2	2	5			
															
Connection		Push-in		Crimp CK 4,0		Crimp CK 4,0		Push-in		Crimp CK 4,0		Crimp CK 2,5		Push-in	
IEC rated data		40 A, 500 V, 6 mm ²		40 A, 500 V, 10 mm ²		40/10 A, 830 V, 6/2.5 mm ²		35 A, 690 V, 6 mm ²		40 A, 690 V, 6 mm ²		16 A, 2900 V, 4 mm ²		16 A, 400 V, 2.5 mm ²	
UL rated data		600 V, AWG 8		42 A, 600 V, AWG 10		40 A, 600 V, AWG 10		600 V, AWG 8		37 A, 600 V, AWG 10		28 A, 600 V, AWG 12		19 A, 600 V, AWG 14	
Module slots		1		1		1		1		1		2		1	
Female	Male	1424218	1424219	1414359	1414358	1414365	1414364	1424220	1424221	1414362	1414363	1417407	1417408	1417373	1417372
		5x2	6	6	6	6	6	8	8	20	20	20	20	20	20
															
Connection		Push-in TWIN		Push-in		Crimp CK 2,5		Crimp CK 2,5		Crimp CK 2,5		Crimp CK 2,5		Crimp CK 2,5	
IEC rated data		16 A, 400 V, 1.5 mm ²		16 A, 500 V, 2.5 mm ²		16 A, 830 V, 4 mm ²		16 A, 500 V, 4 mm ²		16 A, 500 V, 4 mm ²		16 A, 500 V, 4 mm ²		16 A, 500 V, 4 mm ²	
UL rated data		16 A, 600 V, AWG 16		19 A, 600 V, AWG 14		24 A, 600 V, AWG 12		24 A, 600 V, AWG 12		20 A, 600 V, AWG 12		17.5 A, 600 V, AWG 12		17.5 A, 600 V, AWG 12	
Module slots		1		1		1		1		1		2		2	
Female	Male	1423962	1423961	1424224	1424225	1414369	1414368	1414367	1414366	1414371	1414370	1414373	1414372	1414373	1414372
Signal		Number of positions													
		12	12	17	25	25	25	25	6	6	6				
															
Connection		Push-in		Crimp CK 1,6		Crimp CK 1,6		Crimp D-SUB		Push-in		Push-in		Push-in	
IEC rated data		10 A, 250 V, 1.5 mm ²		10 A, 250 V, 2.5 mm ²		10 A, 160 V, 2.5 mm ²		4 A, 50 V, 0.5 mm ²		20 A, 100 V, 4 mm ²		20 A, 100 V, 4 mm ²		20 A, 100 V, 4 mm ²	
UL rated data		10 A, 250 V, AWG 16		16 A, 600 V, AWG 14		14 A, 600 V, AWG 14		5 A, 30 V, AWG 20		20 A, 600 V, AWG 12		20 A, 600 V, AWG 12		20 A, 600 V, AWG 12	
Module slots		1		1		1		1		2		2		2	
Female	Male	1424228	1424246	1414355	1414354	1414357	1414356	1414375	1414374	1079590	1079591	1079590	1079591	1079590	1079591



Modular Contact Inserts for B Housings and EVO M1

Data	Number of positions											
	8											
Connection	Crimp D-SUB		RJ45 gender changer	RJ Industrial, IDC			RJ45 patch cable					
Data transmission rate	CAT6 _A , 10 Gbps		10 Gbps, 500 MHz	—			1 Gbps, 100 MHz		—			
Description	—		CAT6 _A	For RJ Industrial, IDC			CAT5(e)		For RJ45 patch cables			
Module slots	1		1	1			AWG 26-24/23-22		1			
Female	Male	1417303	1417302	1419886	—	1419888	—	1421608/1421129	1419885*	—	1435214*	—

*Suitable patch cables can be found in the "Accessories" section of our e-shop

Pneumatics	Number of positions						Dummy module
	2	—	3	—			
Hose inner Ø	6 mm	6 mm	1.6 mm	1.6 mm	3 mm	4 mm	Order no.
Module slots	1		1				
Male		1676750		1663488	1663491	1663501	1414353
Socket without valve	1417434	1676763	1417433	1663514	1663527	1663530	
Socket with valve		1676776		1663543	1663556	1663569	

IPD Installation System With Push-in Connection

Simply plugged in and already securely connected



Your advantages

- ✓ Simple, time-saving wiring in the field with Push-Lock connection
- ✓ Secure, tool-free locking even in particularly difficult installation situations
- ✓ Reliable installation in harsh environments with IP66, IP68, and IP69K throughout the entire system
- ✓ Fast commissioning with preassembled cable assemblies
- ✓ 3/5 Poles, Up to 20 A/600 V, IP69K, toolless!

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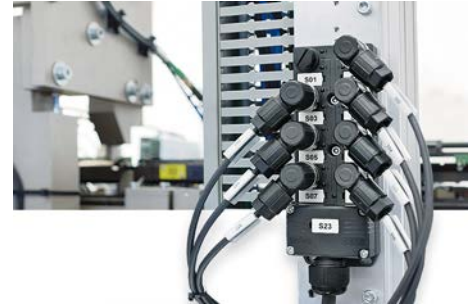
Installation connectors and panel feed-throughs								
Current / voltage	Number of pos.	Connection cross-section	External cable diameter	Connection technology	With snap-in locking		Without snap-in locking	
					Gray		Gray	
					Male	Female	Male	Female
500 V / 20 A	3	0.5 mm ² ...	6 mm ... 9 mm	Push-Lock	1088672	1088674	1088671	1088673
600 V / 17.5 A	5	2.5 mm ²	8 mm ... 13 mm 7 mm ... 11 mm 6 mm ... 16 mm	Push-Lock	1088676	1088678	1088675	1088677
Current / voltage	Number of pos.	Connection cross-section	Mounting type	With Push-in connection		With 0.5 m cable		
				Gray		Gray		
				Male	Female	Male	Female	
500 V / 20 A	3	0.5 mm ² ... 2.5 mm ²	M20	1088687	1088689	1088700	1088702	
600 V / 17.5 A	5		M25	1088691	1088692	1088704	1088705	



M8/M12 Distributor Boxes

Distributor boxes for signal and power applications

Scan the QR code to learn more online



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.



M8 — Metal thread

Pos.	LED	Single or double occupancy	Cable glands	Connector: Requires master cable*	Length	Description	Order no.
8	✓	Single	—	—	5 m	SACB- 8/3-L- 5,0PUR-M8 HD	1197232
					10 m	SACB- 8/3-L-10,0PUR-M8 HD	1197236
		Double	—	1166980 (M16)	5 m	SACB- 8/4-L- 5,0PUR-M8 HD	1197314



M12 — Metal thread

8	✗	Single	1516881	—	5 m	SACB-8/ 8- 5,0PUR SCO	1517042
					10 m	SACB-8/ 8-10,0PUR SCO	1517055
		Double	1516894	—	5 m	SACB-8/16- 5,0PUR SCO	1517068
					10 m	SACB-8/16-10,0PUR SCO	1517071
	✓	Single	1516823	—	5 m	SACB-8/ 8-L- 5,0PUR SCO	1517165
					10 m	SACB-8/ 8-L-10,0PUR SCO	1517178
	Double	1516836	—	5 m	SACB-8/16-L- 5,0PUR SCO	1517181	
				10 m	SACB-8/16-L-10,0PUR SCO	1517194	

M12 — Plastic thread

8	✗	Single	1452783	—	5 m	SACB-8/ 8- 5,0PUR SCO P	1452518
					10 m	SACB-8/ 8-10,0PUR SCO P	1452521
		Double	1452796	1692844 (M23)	5 m	SACB-8/16- 5,0PUR SCO P	1452547
					10 m	SACB-8/16-10,0PUR SCO P	1452550
	✓	Single	1452848	—	5 m	SACB-8/ 8-L- 5,0PUR SCO P	1452699
					10 m	SACB-8/ 8-L-10,0PUR SCO P	1452709
	Double	1452851	1692459 (M23)	5 m	SACB-8/16-L- 5,0PUR SCO P	1452725	
				10 m	SACB-8/16-L-10,0PUR SCO P	1452738	

*Master cables

Type	Number of positions	Cable material	Cable length	Description	Order no.
 Master cable with M23 plug, angled	19	PUR/PVC black	5 m	RCK-TWUM/BL16+3/ 5,0PUR-U	1684072
			10 m	RCK-TWUM/BL16+3/10,0PUR-U	1684085
 Master cable with M16 plug, angled	12		5 m	SAC-12P- 5,0-PUR/M16FR	1693720
			10 m	SAC-12P-10,0-PUR/M16FR	1693733

*Alternative products in accordance with RoHS II without exemption are also available

Accessories

	M8 Screw plug 	M12 Screw plug 	M12 Plug (Fast locking) 
Description	PROT-M8	PROT-MS SCO	PROT-M12
Order no.	1682540	1553129	1680539



Connectors

Phoenix Contact offers metric circular connectors for industrial automation in a variety of designs: from small to large, straight or angled, molded or for assembly in the field. The wide-ranging portfolio offers versatile solutions for transmitting signals, data, and power.

A comprehensive range of M8 and M12 flush-type connectors and panel feed-through have 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.



Configurator for cables

Configure your cable connection for signal, data, and power transmission in IP6x environments or for control cabinet applications. Freely selectable cable lengths and cable ends allow customized cable assemblies.

Your advantages

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



Scan the QR code to access our online cable configurator

M8									
	Positions	Connection	Gender	Diameter	Description	Order no.			
	3-pos.	Screw	Male straight	3.5...5 mm	SACC-M 8MS-3CON-M-SW	1501252			
			Female straight		SACC-M 8FS-3CON-M-SW	1506888			
		Insulation displacement	Male straight	2.5...5 mm	SACC-M 8MS-3QO-0,25-M	1441008			
			Female straight		SACC-M 8FS-3QO-0,5-M	1441066			
	4-pos.	Screw	Male straight	3.5...5 mm	SACC-M 8MS-4CON-M	1681169			
			Female straight		SACC-M 8FS-4CON-M-SW	1506891			
		Insulation displacement	Male straight	2.5...5 mm	SACC-M 8MS-4QO-0,5-M	1441037			
			Female straight		SACC-M 8FS-4QO-0,5-M	1441079			
M12									
	4-pos.	Screw	Male straight	4...6 mm	SACC-M12MS-4CON-PG 7-M	1662528			
			Male angled		SACC-M12MR-4CON-PG7-M	1681101			
			Female straight		SACC-M12FS-4CON-PG7-M	1681127			
			Female angled		SACC-M12FR-4CON-PG7-M	1681143			
		Insulation displacement	Male straight	4...8 mm	SACC-M12MS-4QO-0,75-M	1641785			
			Female straight		SACC-M12FS-4QO-0,75-M	1641772			
			Male straight		SACC-M12MS-4PL M	1424657			
			Male angled		SACC-M12MR-4PL M	1424654			
		Push-lock	Female straight	SACC-M12FS-4PL M	1424655				
			Female angled	SACC-M12FR-4PL M	1424656				
				5-pos.	Screw	Male straight	4...6 mm	SACC-M12MS-5CON-PG 7-M	1663116
						Male straight	6...8 mm	SACC-M12MS-5CON-PG 9-M	1681460
Male angled	4...6 mm	SACC-M12MR-5CON-PG 7-M				1663129			
Female straight		SACC-M12FS-5CON-PG 7-M				1662968			
Female angled		SACC-M12FR-5CON-PG 7-M				1662984			
Push-lock	Male straight	4...8 mm			SACC-M12MS-5PL M	1424649			
	Male angled				SACC-M12MR-5PL M	1424651			
	Female straight				SACC-M12FS-5PL M	1424652			
	Female angled				SACC-M12FR-5PL M	1424653			
					8-pos.	Screw	Female straight	6...8 mm	SACC-M12FS-8CON-PG9-M
Male straight		SACC-M12MS-8CON-PG9-M	1513334						
Insulation displacement		Male straight	5...9.7 mm	SACC-M12MS-8QO-0,5 SH		1414610			
		Female straight		SACC-M12FS-8QO-0,5 SH		1414611			



Cordsets

Quick and reliable connection, even in confined spaces

Connect sensors and actuators quickly and easily in the field using assembled cables for signal and power transmission. Choose from a range of versions and cable qualities. For requirements that go beyond the classic specifications for industrial environments, we offer a range of specially tailored products. We will also be happy to implement individual solutions on request.



Scan the QR code to learn more online



M8								
	Pos.	Gender / Head	Length	Non-shielded PUR jacket order no.	Non-shielded CMAT order no.	Shielded PUR jacket order no.	Shielded CMAT order no.	
	3-pos.	Male / Female / Straight	1.5 m	1681923	1405935	1455285	1405828	
		Female / Straight	5 m	1669628	1405956	1521737	1405834	
		Female / Right angle		1669631	1405957	1521782	1405835	
		Male / Straight		1681680	1405939	1521630	1405830	
		Male / Right angle		1681716	1405944	1521685	1405833	
		Female / Straight		10 m	1694101	1405956	1521740	1405834
	Female / Right angle	1694169			1405957	1521795	1405835	
	Male / Straight	1693584	1405939		1521643	1405830		
	Male / Right angle	1694114	1405944		1521698	1405833		
	4-pos.	Male / Female / Straight	1.5 m		1682168	1405902	1455735	1405810
		Female / Straight	5 m		1681868	1405923	1521931	1405822
		Female / Right angle		1681897	1405924	1521986	1405823	
Male / Straight		1681800		1405906	1521834	1405818		
Male / Right angle		1681839		1405911	1521889	1405821		
Female / Straight		10 m		1683484	1405923	1521944	1405822	
Female / Right angle	1694172			1405924	1521999	1405823		
Male / Straight	1694143		1405906	1521847	1405818			
Male / Right angle	1694156		1405911	1521892	1405821			
M12								
	3-pos.		Male / Female / Straight	1.5 m	1681525	—	1500826	—
		Female / Straight	5 m	1683510	1405947	1682809	1405927	
		Female / Right angle		1694525	1405959	1682838	1405934	
		Male / Straight		1668030	1405949	1682676	1405929	
		Male / Right angle		1668153	1405955	1682702	1405932	
		Female / Straight		10 m	1693034	1405958	1500680	1405933
	Female / Right angle	1694538			1405959	1500693	1405934	
	Male / Straight	1682566	1405949		1500664	1405929		
	Male / Right angle	1694444	1405955		1500677	1405932		
	4-pos.	Male / Female / Straight	1.5 m		1668373	—	1500868	—
		Female / Straight	5 m		1668124	1405925	1682867	1405900
		Female / Right angle		1668247	1405926	1682922	1405901	
Male / Straight		1668069		1405916	1682647	1405896		
Male / Right angle		1668182		1405922	1682896	1405899		
Female / Straight		10 m		1683002	1405925	1500716	1405900	
Female / Right angle	1681389			1405926	1500729	1405901		
Male / Straight	1682993		1405916	1694389	1405896			
Male / Right angle	1694457		1405922	1500703	1405899			
	5-pos.		Male / Female / Straight	1.5 m	1681606	1405886	1500907	1405877
			Female / Straight	5 m	1669848	1405892	1682951	1405884
		Female / Right angle	1669877		1405893	1682980	1405885	
		Male / Straight	1669783		1405888	1682731	1405879	
		Male / Right angle	1669819		1405891	1682773	1405883	
		Female / Straight	10 m		1683374	1405886	1500758	1405877
	Female / Right angle	1694541			1405892	1500761	1405884	
	Male / Straight	1683361		1405893	1500732	1405885		
	Male / Right angle	1694460		1405888	1500745	1405879		
	8-pos.	Male / Female / Straight		1.5 m	1522697	1405891	1522985	1405883
		Female / Straight		5 m	1520369	1405851	1522888	1405843
		Female / Right angle	1522642		1405852	1522930	1405844	
Male / Straight		1522516	1405847		1526981	1405839		
Male / Right angle		1522561	1405850		1522833	1405842		
Female / Straight		10 m	1520372		1405851	1522891	1405843	
Female / Right angle	1522655		1405852		1522943	1405844		
Male / Straight	1522529		1405847	1522794	1405839			
Male / Right angle	1522574		1405850	1522846	1405842			



M12 Power

Phoenix Contact offers M12 Power connections for AC and DC power in a variety of designs: from straight or angled, molded or for assembly in the field. The wide-ranging portfolio offers versatile solutions field devices from Phoenix Contact.

Power up to 16 A/690 V

- Connection cross-sections up to 2.5 mm²
- For 1-phase and 3-phase mains voltage applications
- Protected against mismatching for AC and DC applications

M12 Power						
	Power connectors	Gender / Head	Length	Cable material / Connector	Description	Order no.
	M12 L-coded	Female / Straight	5 m	Black PUR	SAC-4P- 5,0-PUR/M12FSL	1425075
		Female / Straight	10 m		SAC-4P-10,0-PUR/M12FSL	1425076
		Male connector	—	Push-Lock	SACC-M12MSL-4FEPL-CL	1151368
		Female connector	—		SACC-M12FSL-4FEPL-CL	1080233
	M12 T-coded	Female / Straight	5 m	Black PUR	SAC-4P- 5,0-PUR/M12FST	1408825
		Female / Straight	10 m		SAC-4P- 10,0-PUR/M12FST	1408826
		Male connector	—	Push-Lock	SACC-M12MST-4CT-CM SH	1151362
		Female connector	—		SACC-M12FST-4CT-CM SH	1151366

Feed-Throughs

Panel-mount sensor receptacles with leads

Panel-mount receptacles allow for a waterproof quick-disconnect into a cabinet or device. There are various options for mounting direction, panel cutout size, lead length, or number of positions.



Front mount

The receptacle threads or pushes through into the enclosure from the front, and is secured with a locknut in the rear (inside) of the enclosure. This provides the most security against tampering, but does not allow pre-wiring of leads until after the product is mounted. Since the enclosure could be either tapped and threaded or punched, the locknut is ordered separately.





Rear mount


The receptacle pushes through the enclosure from the rear and is secured with a locknut on the front (outside) of the enclosure. This allows leads to be pre-terminated to terminals, then pushed into the cutout during final installation. A locknut is included since the enclosure is never threaded for a rear-mount receptacle. A full range for direct PCB mount is also available, see the website for details.









M8 Panel-mount Receptacles With 0.5 m Pre-terminated Leads

M8 — 3 and 4-pos. sensor receptacles with pre-terminated leads						
Style	Configuration	Panel mount thread	AWG	M8 3-pos. A-code 	M8 4-pos. A-code 	Locknut
Front mount	Female	8 mm	24 AWG	1500350	1500363	1504071
	Male	8 mm	24 AWG	1500334	1500347	1504071
Rear mount	Female	10 mm	24 AWG	1456080	1456093	Included
	Female	12 mm	24 AWG	1453449	1453452	Included
	Male	8 mm	24 AWG	1453478	1453481	Included

 Additional lengths can be requested

M12 Panel-mount Receptacles With 0.5 m Pre-terminated Leads

M12 — 4, 5, and 8-pos. sensor receptacles with pre-terminated leads							
Style	Configuration	Panel mount thread	AWG	M12 4-pos. A-code 	M12 5-pos. A-code 	M12 8-pos. A-code 	Locknut
Front mount	Female	PG9	22 AWG	1693788	1671098	—	1504084
	Female	16 mm	22 AWG	1523434	1520039	—	1504097
	Male	PG9	22 AWG	1693762	1671111	—	1504084
	Male	16 mm	22 AWG	1523450	1520055	—	1504097
Rear mount	Female	PG9	22 AWG	1556621	1542729	—	Included
	Female	16 mm	22 AWG	1419632	1419658	—	Included
	Male	PG9	22 AWG	1556618	1542703	—	Included
	Male	16 mm	22 AWG	1419629	1419645	—	Included
Front mount	Female	PG9	24 AWG	—	—	1513758	1504084
	Female	16 mm	24 AWG	—	—	1523476	1504097
	Male	PG9	24 AWG	—	—	1513774	1504084
	Male	16 mm	24 AWG	—	—	1523492	1504097
Rear mount	Female	PG9	24 AWG	—	—	1542732	Included
	Female	16 mm	24 AWG	—	—	1419690	Included
	Male	PG9	24 AWG	—	—	1542716	Included
	Male	16 mm	24 AWG	—	—	1419687	Included

 Additional lengths can be requested



Ethernet Panel Feed-through Solutions

	M12 to RJ45		M12 to M12			M12 with shielded cable		Cable gland
	Straight	Angled	Female to female	Male to female	Length	Front mount	Rear mount	Plastic
4-pos. D-Code 	1414398	1414397	1424326	—	2 m	1405837	1405866	1076600
8-pos. A-Code 	1414396	1414393	—	1551697	2 m	—	1412820	
					5 m	—	1407877	
8-pos. X-Code 	1404549	1404548	1822399	—	0.5 m	—	1424135	
					1 m	—	1424148	
					2 m	—	1424151	
					5 m	—	1424164	

	RJ45 CAT6A (Socket/Socket)	USB A 3.0 (Socket/Socket)
Details	With cover	With cover
Description	CUC-SI-CM/RJ45-C6A	CUC-SI-CM/USBA3.0
Order no.	1484212	1484218

Panel feed-throughs (Locknut included)		
	M12 Pin	M12 Socket
Push-lock 		
4-pos. A-code 	SACC-E-M12MS-4PL-M20 1139802	SACC-E-M12FS-4PL-M20 1139803
5-pos. A-code 	SACC-E-M12MS-5PL-M20 1139804	SACC-E-M12FS-5PL-M20 1139805



MINI 7/8" — 16UNF Cordsets and Connectors



Our industry-compatible MINI 7/8" 16UNF screw threaded connectors and cordset product range allows you to quickly connect sensors and switches and other devices in the field.



MINI 7/8"-16UNF cordsets

Cable jacket: Yellow PVC
Wire gauge: 18 AWG and 16 AWG
Properties: IP68, UL listed under E221474 per UL2238



# Wires	Configuration	18 AWG, [547] PVC				16 AWG, [U20] PVC			
		1 m	2 m	5 m	10 m	1 m	2 m	5 m	10 m
4-pos.	Female Straight / Open End	1416472	1416601	1416603	1416604	1416530	1416798	1416799	1416800
	Female 90° / Open End	1416471	1416589	1416590	1416600	1416527	1416795	1416796	1416797
	Male Straight / Open End	1416477	1416618	1416621	1416623	1416551	1416810	1416811	1416812
	Male 90° / Open End	1416476	1416614	1416616	1416617	1416543	1416809	1416807	1416808
	Male Straight / Female Straight	1416478	1416625	1416626	1416627	1416553	1416814	1416815	1416816
	Male 90° / Female Straight	1416475	1416610	1416612	1416613	1416540	1416804	1416805	1416806
5-pos.	Male 90° / Female 90°	1416474	1416605	1416608	1416609	1416534	1416801	1416802	1416803
	Female Straight / Open End	1416480	1416631	1416632	1416633	1416559	1416820	1416821	1416822
	Female 90° / Open End	1416479	1416628	1416629	1416630	1416556	1416817	1416818	1416819
	Male Straight / Open End	1416484	1416644	1416645	1416646	1416580	1416833	1416834	1416835
	Male 90° / Open End	1416483	1416641	1416642	1416643	1416569	1416830	1416831	1416832
	Male Straight / Female Straight	1416485	1416647	1416649	1416650	1416586	1416836	1416837	1416838
	Male 90° / Female Straight	1416482	1416638	1416639	1416640	1416565	1416827	1416828	1416829
Male 90° / Female 90°	1416481	1416634	1416636	1416637	1416562	1416823	1416824	1416825	

1/2" NPT MINI 7/8" receptacles

Cable: PVC Litz Wires, 1 meter
Wire Gauge: 18 AWG and 16 AWG
Properties: IP68, UL Listed under E221474 per UL2238



# Wires	Image	Configuration	18 AWG [547]	16 AWG [U20]
3-pos.		Male	1417764	1417769
		Female	1420948	1420953
4-pos.		Male	1417765	1417770
		Female	1420949	1420954
5-pos.		Male	1417766	1417771
		Female	1420950	1420955

7/8" T-Distributors

	Positions	Description	Order no.
	3	SAC-3P-MINT/2XMIN VP US	1351104
	4	SAC-4P-MINT/2XMIN VP US	1351105
	5	SAC-5P-MINT/2XMIN VP US	1351106



M12 push-pull

The new standard in automation technology

Easy connection, fast-locking: M12 connectors with push-pull fast-locking system guarantee secure, tool-free plugging, even in confined spaces and with a high cabling density. Versions with internal locking also enable compact housing designs.



Scan the QR code to learn more online



IEC61076-2-010

Highly future-proof

The consistently standardized push-pull product range guarantees worldwide availability.



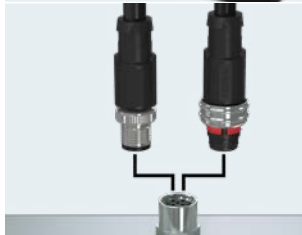
Flying leads

Establish flying leads with connectors in male and female versions.



More compact designs

The new M12 push-pull concept with countersunk M12 ports allows flush integration into the housing. This allows you to achieve more compact device designs.



Greater flexibility

The M12 duo contour allows for a flexible field wiring with proven M12 screw connectors or the new push-pull fast-locking system.



Plug and Produce

With the cross-manufacturer locking system, you can save up to 80% of installation time, compared to screw connection.



Assembled cables with M12 push-pull connectors (PUR), unshielded

RoHS		
	Lead-free alternative items available	
Number of positions	4	5
Coding	A	
Straight male, free cable end		
5 m	1392709	1395709
10 m	1392713	1395710
Straight female, free cable end		
5 m	1393026	1395822
10 m	1393032	1395827
Straight male, straight female		
1.5 m	1224019	1224208
3 m	1393228	1396099

Assembled network cables with M12 connectors (PUR)

RoHS		
	Lead-free alternative items available	
Number of positions	4	8
Coding	D	X
Straight male, straight male		
2 m	1476054	1584439
5 m	1476051	1584437
10 m	1476048	1584432
Straight male, RJ45		
2 m	1476024	1584453
5 m	1476025	1584452
10 m	1476027	1584451

Push-Lock connection, conductor cross-section: 0.14 mm² ... 0.75 mm², with push-pull internal locking — Coding: A

	Straight	1438146	1438151	1438156	1438159
	Angled	1438148	1438155	1438158	1438162

Push-Lock connection, conductor cross-section: 0.14 mm² ... 0.75 mm², shielded, with push-pull internal locking — Coding: A

	Straight	1438165	1438169	1438175	1438180
	Angled	1438168	1438172	1438179	1438181

Push-pull Sensor Actuator Boxes

SACB-8/16-PTP P12	SACB-8/16-M23 P12
1491631	1491749

M12 device connectors, with litz wires, front mounting

RoHS	Number of positions	4		5		8			
	Coding	A		D		A			
Lead-free alternative items available	Rated voltage	250 V				60 V			
	Rated current	4 A							
	Conductor cross-section	0.34 mm ²							
	Assembly	Preassembled with 0.5 m long litz wires							
	Pin assignment	Male	Female	Male	Female	Male	Female		
	Versions with zinc die-cast housing, for screw fastening								
	Push-pull, M16 x 1.5	1108117	—	1027688	1027686	1027694	1027683	1687981	1432249
	Flat nut M16 x 1.5	1504097							



Cabinet Efficiency

Efficiently building a quality control cabinet starts with what you use to build it. Quick, flexible marking systems, automated tools and hand tools, cable/wire management, and cabinet accessories are often overlooked methods of reducing errors and cutting commissioning time. Thoughtful selection of these “secret weapons” translates directly to the bottom-line profitability of any shop floor.



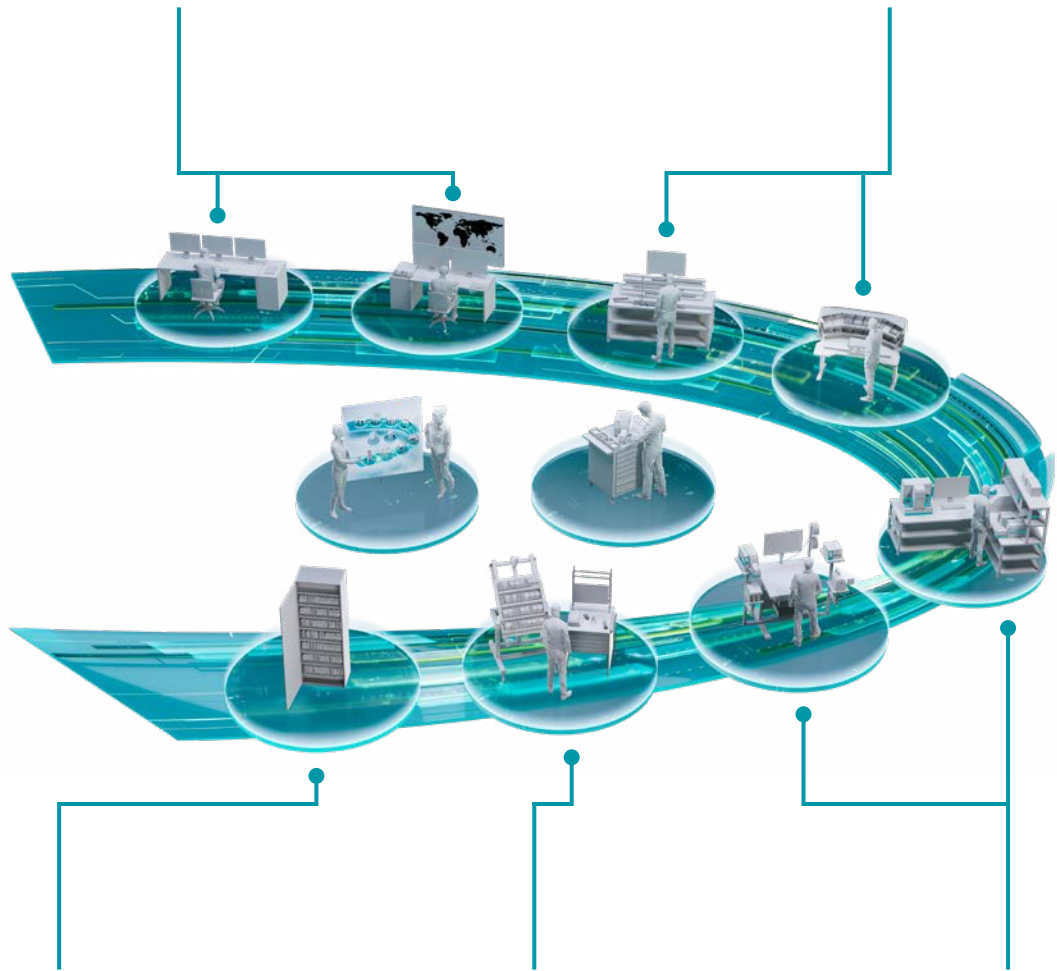
CABINET EFFICIENCY

- Terminal Blocks
- Printers and Marking Materials
- Installation
- Cable Management
- Accessories

Scan the QR code to learn more online



Efficiency in Cabinet Building

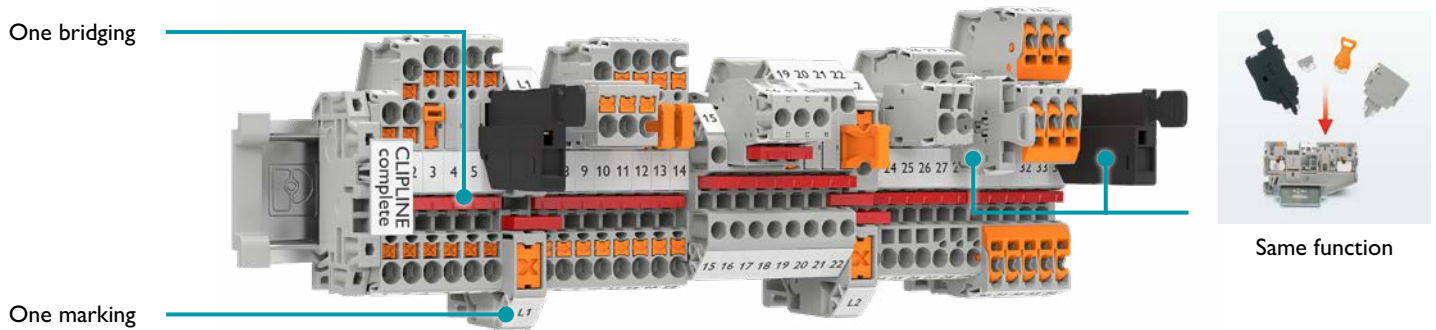




Modular Terminal Blocks

All connection technologies – one system

The CLIPLINE complete system enables a high degree of flexibility in terminal strip design. Choose between various connection technologies and combine the terminal blocks by installing bridges in the double function shaft. The terminal block system features standardized bridging, marking, and test accessories.

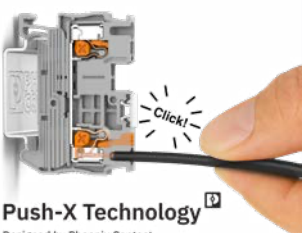


Push-X (XT)

Push-X Technology
Designed by Phoenix Contact

- Quick and easy wiring due to the pre-loaded spring concept
- Wiring of all conductor types (rigid or flexible, with or without ferrules)
- Clear identification of the conductor connection: Visual / Sound confirmation

AWG	Current	Voltage	Type	Levels	Order no.	Description	Cover	Marking		Bridge (2 pos.)
								Side	Top	
22-14	15 A	300 V	Feed-Through	Single	1641108	XT 1,5	1343141	0828742	0828732	3030116
	—	—	Ground	Single	1641115	XT 1,5-PE	1343141			
	15 A	300 V	Feed-Through	Single-TWIN	1641116	XT 1,5-TWIN	1641135			
20-12	15 A	300 V	Feed-Through	Single-QUATTRO	1641123	XT 1,5-QUATTRO	1641136	0828744	0828734	3030161
	20 A	600 V	Feed-Through	Single	1343106	XT 2,5	1343141			
	—	—	Ground	Single	1343116	XT 2,5-PE	1343141			
	20 A	300 V	Knife-Disconnect	Single	1462716	XT 2,5-MT	3211003			
	20 A	300 V	Component	Single	1462719	XT 2,5-TG	3211003			
	20 A	600 V	Feed-Through	Single-TWIN	1343117	XT 2,5-TWIN	1343146			
	20 A	600 V	Feed-Through	Single-QUATTRO	1343129	XT 2,5-QUATTRO	3030514			
	20 A	300 V	Double-Level	Double	1453789	XTTB 2,5	1453880			
	—	—	Ground	Double	1453897	XTTB 2,5-PE	1453880			
	20 A	300 V	Feed-Through	3	1641352	XT 2,5-3L	3211647			
18-10	30 A	600 V	Feed-Through	Single	1343174	XT 4	1343224	0828746	0828736	3030336
	—	—	Ground	Single	1343195	XT 4-PE	1343224			
	30 A	600 V	Feed-Through	Single-TWIN	1343199	XT 4 TWIN	1343226			
	30 A	600 V	Feed-Through	Single-QUATTRO	1343211	XT 4 QUATTRO	1343228			




1 Simply insert the wire until it reaches the locking mechanism at the end of the contact chamber

2 Clamp the conductor effortlessly by lightly tapping the locking mechanism surface

3 An audible click reassures a secure connection, which is also visually verified by the position of the pusher

Scan the QR code to learn more online



Push-X Vertical (XTV)



- Vertical installation for large wire gages, avoiding tight bending radius
- Quick and easy wiring due to the pre-loaded spring concept
- Wiring of all conductor types (rigid or flexible, with or without ferrules)
- Clear identification of the conductor connection: Visual / Sound confirmation

Push-X Technology
Designed by Phoenix Contact

AWG	Current	Voltage	Type	Levels	Order no.	Description	Cover	Marking		Bridge (2 pos.)
								Side	Top	
14-8	40 A	600 V	Feed-Through	Single	1329493	XTV 6	1329515	—	0828740	3030284
	—	—	Ground	Single	1329495	XTV 6-PE	1329515			
	40 A	600 V	Feed-Through	Single-TWIN	1329499	XTV 6-TWIN	1329516			
	40 A	600 V	Feed-Through	Single-QUATTRO	1329511	XTV 6-QUATTRO	1329517			
12-6	55 A	600 V	Feed-Through	Single	1329547	XTV 10	1329608	—	0829142	3005947
	—	—	Ground	Single	1329550	XTV 10-PE	1329608			
	55 A	600 V	Feed-Through	Single-TWIN	1329603	XTV 10-TWIN	1329609			
10-4	75 A	600 V	Feed-Through	Single	1329672	XTV 16	1329675	—	0829144	3005950
	—	—	Ground	Single	1329674	XTV 16-PE	1329675			

Push-in (PT)



- Tool-free installation of solid wires and stranded wires with ferrules
- Orange pushbutton permits easy conductor release
- Uniformed Push-in Technology available on thousands of Phoenix Contact parts

Das Original
Push-in Technology
Designed by PHOENIX CONTACT

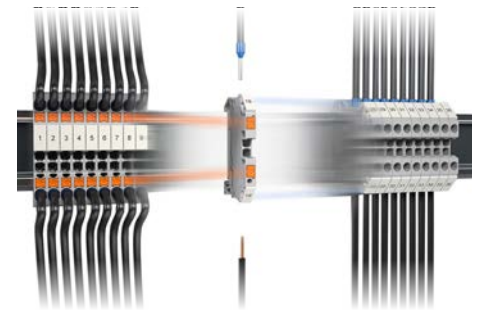
AWG	Current	Voltage	Type	Levels	Order no.	Description	Cover	Marking		Bridge (2 pos.)
								Side	Top	
26-14	15 A	300 V	Feed-Through	Single	3208100	PT 1,5/S	3208142	0829486	0829484	3213014
	—	—	Ground	Single	3208139	PT 1,5/S-PE	3208142			
	15 A	300 V	Feed-Through	Single-TWIN	3208155	PT 1,5/S -TWIN	3208184			
	15 A	300 V	Feed-Through	Single-QUATTRO	3208197	PT 1,5/S -QUATTRO	3108375			
26-12	20 A	600 V	Feed-Through	Single	3209510	PT 2,5	3030417	0828744	0828734	3030161
	—	—	Ground	Single	3209536	PT 2,5-PE	3030417			
	20 A	300 V	Knife-Disconnect	Single	3210156	PT 2,5-MT	3211003			
	20 A	300 V	Component	Single	3210185	PT 2,5-TG	3211003			
	20 A	300 V	Feed-Through	Single-TWIN	3209549	PT 2,5-TWIN	3030488			
	20 A	600 V	Feed-Through	Single-QUATTRO	3209578	PT 2,5-QUATTRO	3030514			
	20 A	300 V	Double-Level	Double	3210567	PTTB 2,5	3211634			
	—	—	Ground	Double	3210596	PTTB 2,5 PE	3211634			
	20 A	300 V	Feed-Through	3	3210499	PT 2,5-3L	3211647			
	18 A	300 V	Feed-Through	4	1334599	PT 2,5-4L	1336340			
24-10	30 A	600 V	Feed-Through	Single	3211757	PT 4	3030420	0828746	0828736	3030336
	—	—	Ground	Single	3211766	PT4-PE	3030420			
	20 A	300 V	Knife-Disconnect	Single	3211933	PT 4-MT	3030420			
	20 A	300 V	Component	Single	3211922	PT 4-TG	3030420			
	30 A	600 V	Feed-Through	Single-TWIN	3211771	PT 4-TWIN	3208977			
	30 A	600 V	Feed-Through	Single-QUATTRO	3211797	PT 4-QUATTRO	3208979			
	30 A	300 V	Feed-Through	Double	3211786	PTTB 4	3030462			
	—	—	Ground	Double	3211854	PTTB 4-PE	3030462			
	6.3 A	300 V	Fuse	Single	3211861	PT 4-HESI (5X20)	3030420			
	6.3 A	24V/LED	Fuse	Single	3211903	PT 4-HESILED 24 (5X20)	3030420			
20-8	40 A	600 V	Feed-Through	Single	3211813	PT 6	3212044	0828748	0828740	3030284
	—	—	Ground	Single	3211822	PT 6-PE	3212044			
	20 A	300 V	Knife-Disconnect	Single	3212160	PT 6-MT	—			
	20 A	300 V	Component	Single	3212163	PT 6-TG	—			
	40 A	600 V	Feed-Through	Single-TWIN	3211929	PT 6-TWIN	3211508			
	40 A	600 V	Feed-Through	Single-QUATTRO	3212934	PT 6-QUATTRO	3212963			
	10 A	300 V	Fuse	Single	3211870	PT 6-HESI (6,3X32)	—			
	10 A	24V/LED	Fuse	Single	3211874	PT 6-HESILED 24 (6,3X32)	—			
20-6	55 A	600 V	Feed-Through	Single	3212120	PT 10	3212057	0829204	0829142	3005947
	—	—	Ground	Single	3212131	PT 10-PE	3212057			
	55 A	600 V	Feed-Through	Single-TWIN	3208746	PT 10-TWIN	3208748			
20-4	70 A	600 V	Feed-Through	Single	3212138	PT 16 N	3212060	0829214	0829144	3005950
	—	—	Ground	Single	3212147	PT 16 N-PE	3212060			
	70 A	600 V	Feed-Through	Single-TWIN	3208760	PT 16-TWIN N	3208799			

PTV Terminal Blocks

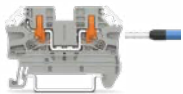
The PTV terminal block family combines the advantages of tool-free Push-in connection with the lateral conductor routing of a screw terminal block. The PTV terminal blocks thus offer direct, fast connection technology and clearly arranged wiring without bending radii in a single terminal block.



Scan the QR code to watch the video



Push-in Vertical (PTV)



The PTV terminal block family combines the advantages of tool-free Push-in connection with the lateral conductor routing of a screw terminal block.

Das Original
Push-in Technology[®]
Designed by PHOENIX CONTACT

AWG	Current	Voltage	Type	Levels	Order no.	Description	Cover	Marking		Bridge (2 pos.)
								Side	Top	
26-12	20 A	600 V	Feed-Through	Single	1078960	PTV 2,5	1088746	—	0828734	3030161
	—	—	Ground	Single	1078963	PTV 2,5-PE	1088746			
	20 A	300 V	Knife-Disconnect	Single	1079063	PTV 2,5-MT	1079918			
	20 A	300 V	Component	Single	1079065	PTV 2,5-TG	1079918			
	20 A	600 V	Feed-Through	Single-TWIN	1078966	PTV 2,5-TWIN	1088747			
	20 A	600 V	Feed-Through	Single-QUATTRO	1078999	PTV 2,5-QUATTRO	1088748			
26-10	20 A	300 V	Double-Level	Double	1079073	PTTBV 2,5	1083611	—	0828736	3030336
	30 A	600 V	Feed-Through	Single	1088728	PTV 4	1088746			
	—	—	Ground	Single	1088730	PTV 4-PE	1088746			
	16 A	300 V	Knife-Disconnect	Single	1088739	PTV 4-MT	1079918			
	16 A	300 V	Component	Single	1088741	PTV 4-TG	1079918			
	30 A	600 V	Feed-Through	Single-TWIN	1088731	PTV 4-TWIN	1088747			
	30 A	600 V	Feed-Through	Single-QUATTRO	1088734	PTV 4-QUATTRO	1088748			
	28 A	600 V	Feed-Through	Double	1088737	PTTBV 4	1083611			
	16 A	300 V	Fuse	Single	1088742	PTV 4-HESI (5X20)	1079918			
	16 A	24V/LED	Fuse	Single	1088743	PTV 4-HESILED 24 (5X20)	1079918			
	20-8	40 A	600 V	Feed-Through	Single	1116734	PTV 6			
—		—	Ground	Single	1116736	PTV 6-PE	1180894			
40 A		600 V	Feed-Through	Single-TWIN	1116737	PTV 6-TWIN	1180923			
40 A		600 V	Feed-Through	Single-QUATTRO	1116871	PTV 6-QUATTRO	1180930			

Push-in Angled (PTS)

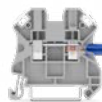


The PTS terminal block family combines the advantages of tool-free Push-in connection with a angled wire connection.

Das Original
Push-in Technology[®]
Designed by PHOENIX CONTACT

AWG	Current	Voltage	Type	Levels	Order no.	Description	Cover	Marking		Bridge (2 pos.)
								Side	Top	
26-12	20 A	600 V	Feed-Through	Single	3211799	PTS 2,5	3031762	—	0828734	3030161
	—	—	Ground	Single	3211867	PTS 2,5-PE	3031762			
	20 A	600 V	Feed-Through	Single-TWIN	3211896	PTS 2,5-TWIN	3031762			
	20 A	600 V	Feed-Through	Single-QUATTRO	3211993	PTS 2,5-QUATTRO	3031762			
	20 A	300 V	Double-Level	Double	3209604	PTTBS 2,5	3038503			
26-10	30 A	600 V	Feed-Through	Single	3213601	PTS 4	3213600	—	0828736	3030336
	—	—	Ground	Single	3213603	PTS 4-PE	3213600			
	30 A	600 V	Feed-Through	Single-TWIN	3213604	PTS 4-TWIN	3213600			
	30 A	600 V	Feed-Through	Single-QUATTRO	3213607	PTS 4-QUATTRO	3213600			
	24 A	600 V	Feed-Through	Double	3211832	PTTBS 4	3211849			

Screw Clamp (UT)



- Universal multi-wire connection with highest pullout force
- Maintenance-free conductor connection with the Reakdyn® principle

AWG	Current	Voltage	Type	Levels	Order no.	Description	Cover	Screw Torque	Marking Top	Bridge (2 pos.)																																																																																																																																																																																																																														
30-14	15 A	600 V	Feed-Through	Single	1452265	UT 1,5	3047028	0.22-0.25 Nm	0828732	3030116																																																																																																																																																																																																																														
	—	—	Ground	Single	1452318	UT 1,5-PE	3047028				26-12	20 A	600 V	Feed-Through	Single	3044076	UT 2,5	3047028	0.4-0.6 Nm	0828734	3030161	—	—	Ground	Single	3044092	UT 2,5-PE	3047028	16 A	300 V	Knife-Disconnect	Single	3046362	UT 2,5-MT	3047141	16 A	300 V	Component	Single	3046388	UT 2,5-TG	3047141	20 A	150 V	Feed-Through	Single-TWIN	3044513	UT 2,5-TWIN	3047141	0.5-0.6 Nm	20 A	150 V	Feed-Through	Single-QUATTRO	3044542	UT 2,5-QUATTRO	3047170	20 A	300 V	Double-Level	Double	3044636	UTT 2,5	3047293	0.4-0.6 Nm	—	—	Ground	Double	3044665	UTT 2,5-PE	3047293	20 A	300 V	Feed-Through	3	3214259	UT 2,5-3L	3214314		26-10	30 A	600 V	Feed-Through	Single	3044102	UT 4	3047028	0.6-0.8 Nm	0828736	3030336	—	—	Ground	Single	3044128	UT 4-PE	3047028	16 A	600 V	Knife-Disconnect	Single	3046139	UT 4-MT	—	16 A	600 V	Component	Single	3046142	UT 4-TG	—	30 A	150 V	Feed-Through	Single-TWIN	3044364	UT 4-TWIN	3047141	30 A	150 V	Feed-Through	Single-QUATTRO	3044571	UT 4-QUATTRO	3047170	30 A	300 V	Feed-Through	Double	3044814	UTT 4	3047293	—	—	Ground	Double	3044759	UTT 4-PE	3047293	6.3 A	600 V	Fuse	Single	3046032	UT 4-HESI (5X20)	—	6.3 A	24V/LED	Fuse	Single	3046090	UT 4-HESILED 24 (5X20)	—	24-8	50 A	600 V	Feed-Through	Single	3044131	UT 6	3047028	1.5-1.7 Nm	0828740	3030284	—	—	Ground	Single	3044157	UT 6-PE	3047028	16 A	600 V	Knife-Disconnect	Single	3064069	UT 6-MT	—	16 A	600 V	Component	Single	3046485	UT 6-TG	—	10 A	600 V	Fuse	Single	3046401	UT 6-HESI (6,3X32)	—	10 A	24V/LED	Fuse	Single	3046414	UT 6-HESILED 24 (6,3X32)	—	20-6	65 A	600 V	Feed-Through	Single	3044160	UT 10	3047028	1.5-1.7 Nm	0829142	3005947	—	—	Ground	Single	3044173	UT 10-PE	3047028	16-4	85 A	600 V	Feed-Through	Single	3044199	UT 16	3047206	2.3-3.0 Nm	0829144	3005950	—	—	Ground
26-12	20 A	600 V	Feed-Through	Single	3044076	UT 2,5	3047028	0.4-0.6 Nm	0828734	3030161																																																																																																																																																																																																																														
	—	—	Ground	Single	3044092	UT 2,5-PE	3047028																																																																																																																																																																																																																																	
	16 A	300 V	Knife-Disconnect	Single	3046362	UT 2,5-MT	3047141																																																																																																																																																																																																																																	
	16 A	300 V	Component	Single	3046388	UT 2,5-TG	3047141																																																																																																																																																																																																																																	
	20 A	150 V	Feed-Through	Single-TWIN	3044513	UT 2,5-TWIN	3047141	0.5-0.6 Nm																																																																																																																																																																																																																																
	20 A	150 V	Feed-Through	Single-QUATTRO	3044542	UT 2,5-QUATTRO	3047170																																																																																																																																																																																																																																	
	20 A	300 V	Double-Level	Double	3044636	UTT 2,5	3047293	0.4-0.6 Nm																																																																																																																																																																																																																																
	—	—	Ground	Double	3044665	UTT 2,5-PE	3047293																																																																																																																																																																																																																																	
20 A	300 V	Feed-Through	3	3214259	UT 2,5-3L	3214314																																																																																																																																																																																																																																		
26-10	30 A	600 V	Feed-Through	Single	3044102	UT 4	3047028	0.6-0.8 Nm	0828736	3030336																																																																																																																																																																																																																														
	—	—	Ground	Single	3044128	UT 4-PE	3047028																																																																																																																																																																																																																																	
	16 A	600 V	Knife-Disconnect	Single	3046139	UT 4-MT	—																																																																																																																																																																																																																																	
	16 A	600 V	Component	Single	3046142	UT 4-TG	—																																																																																																																																																																																																																																	
	30 A	150 V	Feed-Through	Single-TWIN	3044364	UT 4-TWIN	3047141																																																																																																																																																																																																																																	
	30 A	150 V	Feed-Through	Single-QUATTRO	3044571	UT 4-QUATTRO	3047170																																																																																																																																																																																																																																	
	30 A	300 V	Feed-Through	Double	3044814	UTT 4	3047293																																																																																																																																																																																																																																	
	—	—	Ground	Double	3044759	UTT 4-PE	3047293																																																																																																																																																																																																																																	
	6.3 A	600 V	Fuse	Single	3046032	UT 4-HESI (5X20)	—																																																																																																																																																																																																																																	
	6.3 A	24V/LED	Fuse	Single	3046090	UT 4-HESILED 24 (5X20)	—																																																																																																																																																																																																																																	
24-8	50 A	600 V	Feed-Through	Single	3044131	UT 6	3047028	1.5-1.7 Nm	0828740	3030284																																																																																																																																																																																																																														
	—	—	Ground	Single	3044157	UT 6-PE	3047028																																																																																																																																																																																																																																	
	16 A	600 V	Knife-Disconnect	Single	3064069	UT 6-MT	—																																																																																																																																																																																																																																	
	16 A	600 V	Component	Single	3046485	UT 6-TG	—																																																																																																																																																																																																																																	
	10 A	600 V	Fuse	Single	3046401	UT 6-HESI (6,3X32)	—																																																																																																																																																																																																																																	
	10 A	24V/LED	Fuse	Single	3046414	UT 6-HESILED 24 (6,3X32)	—																																																																																																																																																																																																																																	
20-6	65 A	600 V	Feed-Through	Single	3044160	UT 10	3047028	1.5-1.7 Nm	0829142	3005947																																																																																																																																																																																																																														
	—	—	Ground	Single	3044173	UT 10-PE	3047028																																																																																																																																																																																																																																	
16-4	85 A	600 V	Feed-Through	Single	3044199	UT 16	3047206	2.3-3.0 Nm	0829144	3005950																																																																																																																																																																																																																														
	—	—	Ground	Single	3044212	UT 16-PE	3047206																																																																																																																																																																																																																																	

Fuse terminal blocks (UK HESI)



- For 10 x 38 CC fuse-links in accordance with UL 4248-4, up to 600 V
- For 10 x 38 fuse-links in accordance with IEC 60269-2, up to 690 V AC

AWG	I _{max}	Fuse type	Poles	LED indication	Description	Order no.	Bridge (2-pos.)	Screwdriver	Marking
18-4	30 A	Class CC	1	✗	UK 10,3-CC HESI N	3048580	3009300	1212587	0829204
			2	✗	UK 10,3-CC HESI N 2POL	3048593	3009300	1212587	0829204
			3	✗	UK 10,3-CC HESI N 3POL	3048603	3009300	1212587	0829204
			1	✓	UK 10,3-CC HESILED N 600	3048616	3009300	1212587	0829204
			2	✓	UK 10,3-CC HESILED N 600 2POL	3048629	3009300	1212587	0829204
			3	✓	UK 10,3-CC HESILED N 600 3POL	3048632	3009300	1212587	0829204
18-3		Ceramic: 10.3 x 38 mm	1	✗	UK 10,3-HESI N	3048386	3009300	1212587	0829204
			1	✓	UK 10,3-HESILED N 690	3048399	3009300	1212587	0829204



Power Distribution



Simplify the panel design with one supplier for all terminal blocks.

Order no.	Description		Input AWG	Current		Output AWG
1725165	TB-EE-DB 80/3+4	3x	14-4	80 A	4x	14-0
1725167	TB-EE-DB 125/2+6	1x	8-2	115 A	1x	14-6
		1x	10-6		6x	14-6
1725166	TB-EE-DB 160/2+6	1x	6-2/0	160 A	6x	14-6
		1x	10-6			
1725168	TB-EE-DB 175/2+10	2x	6-2/0	175 A	10x	14-6
1725169	TB-EE-DB 250/1+11	1x	2AWG-250kcmil	255 A	2x	14-2
					5x	14-6
					4x	14-8
1798055	TB-EE-DB 400/1+11	1x	3/0AWG-400kcmil	335 A	2x	14-2
					5x	14-6
					4x	14-8

PowerTurn (PTPOWER)

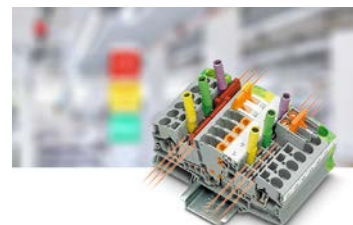


The PTPOWER high-current terminal blocks provide you with the fastest and most user-friendly connection option currently available for wiring large conductors. The patented PowerTurn spring connection uses up to three high-quality steel pressure springs work in combination with the prismatic terminal body base to create a vibration-resistant connection.

AWG	Current	Voltage	Type	Levels	Order no.	Description	Mounting	Marking		Bridge (2 pos.)
								Side	Top	
14-2	115 A	600 V/1000 V	Feed-Through	Single	3212064	PTPOWER 35	NS 35/15	—	0829142	3005963
			Ground	Single	3212066	PTPOWER 35-PE	NS 35/15			
8-1	140 A	600 V/1000 V	Feed-Through	Single	3260050	PTPOWER 50	NS 35/15	—	0829142	3260067
			Ground	Single	3260052	PTPOWER 50-PE	NS 35/15			
4	230 A	600 V/1000 V	Feed-Through	Single	3260100	PTPOWER 95	NS 35/15	—	0829142	3260157
			Ground	Single	3260106	PTPOWER 95-PE	NS 35/15			
2-300kcmil	270 A	1000 V	Feed-Through	Single	1054722	PTPOWER 185	NS 35/15	—	0829142	3215057

Test-disconnect Terminal Blocks

The test-disconnect and current transformer terminal blocks allow you to freely select the connection technology. The modular design and online configurator assist you in selecting suitable terminal blocks and accessories for testing and short-circuiting current transformers according to your application.



Test-disconnect and current transformer terminal blocks (ME/MEA)



AWG	I _{max}	Connection technology	Function shafts	Current transformer terminal block	Test disconnect terminal block	Description	Order no.	Cover	Marking
20-8	30 A	Push-X	6	✓		XTVMEA 6	1446173	1447809	0828740
26-10	30 A	Push-in	4		✓	PTVME 6/S-P	1166809	1164789	0828740
20-8	30 A	Push-in	6		✓	PTME 6	3212170	3034426	0828740
24-10	26 A	Push-in	2		✓	PTME 4	3212139	3212167	0828736
24-8	30 A	Screw	6		✓	UTME 6	3047400	3047426	0828740
26-10	25 A	Screw	2		✓	UTME 4	3047452	3047491	0828736
24-10	30 A	Screw	2		✓	USST 6-T	3070312	3070367	0828740
26-6	55 A	Screw	2		✓	URTK/S-BEN 10	0309109	0308029	0828740

End brackets



Mounting	Width (mm)	Description	Order no.
Screw	9.5	E/NS 35 N	0800886
Snap on	5.15	CLIPFIX 35-5	3022276
Snap on	9.5	CLIPFIX 35	3022218



Printers

The advantages of our industrial printers

Scan the QR code to learn more online



With our industrial printers, you can create markings more easily than ever before: whether using laser, UV LED, or thermal transfer technology. The wide range of printing and marking systems that we offer is guaranteed to provide you with the right solution for marking terminal blocks, conductors and cables, devices, and systems. All printers are particularly easy to use.



- ✓ THERMOMARK CARD 2.0: Maintenance-free operation with proven thermal transfer printer technology
- ✓ BLUEMARK E.CARD: Fast, high quality printing and low maintenance UV inkjet printer for high volume
- ✓ THERMOMARK ROLL 2.0: Fast, high-quality, and durable printing
- ✓ THERMOMARK E.300: Suitable for all roll materials in the MARKING system product portfolio
- ✓ THERMOMARK GO.K: Mobile thermal transfer printer for marking materials in cartridge format
- ✓ THERMOMARK GO: Operated entirely via digital devices using MARKING system app

Industrial marking for every application

The right industrial printer is available for all of your marking requirements.




With the various marking technologies, you can create markings that are ideally suited for your application.

Printers

	Material	Volume	Size	Description	Order no.
	Card and sheet	Manual feed	Desktop	THERMOMARK CARD 2.0	1085267
	Card and sheet	Automated feed	Desktop	BLUEMARK E.CARD US	1506740
	Roll	< 50,000 labels/yr.	Desktop	THERMOMARK ROLL 2.0	1085260
	Roll	> 50,000 labels/yr.	Large/desktop	THERMOMARK E.300 D US	1287033
	Cartridge	Low	Hand-held	THERMOMARK GO.K	1184146
	Cartridge	Low	Hand-held (Starter Kit)	THERMOMARK GO.K SET	1184148
	Cartridge	Low	Hand-held with die cut option labels	THERMOMARK GO	1090747
	Cartridge	Low	Hand-held with die cut option labels (starter kit)	THERMOMARK GO SET	1221548



Conductor/Cable Marking

Shrink sleeves					
	Conductor size	Lettering field size [mm / in]	Markers per roll	Description	Order no.
	1 - 3.3 mm or 22-18 AWG	15 x 5 / 0.59 x 0.20	1000	WMS 3,2 (15X5)R	0800380
			4000	WMS 3,2 (15X5)RL	0800390
		30 x 5 / 1.18 x 0.20	500	WMS 3,2 (30X5)R	0800374
			2000	WMS 3,2 (30X5)RL	0800387
			5000	WMS 3,2 (30X5)RXL	0804268
			250	WMS 3,2 (60X5)R	0800364
	60 x 5 / 2.36 x 0.20	1000	WMS 3,2 (60X5)RL	0800384	
		1000	WMS 4,8 (15X9)R	0800382	
	1.6 - 4.8 mm or 18-14 AWG	15 x 9 / 0.59 x 0.35	4000	WMS 4,8 (15X9)RL	0800391
			10000	WMS 4,8 (15X9)RXL	0800397
			500	WMS 4,8 (30X9)R	0800375
		30 x 9 / 1.18 x 0.35	2000	WMS 4,8 (30X9)RL	0800388
			5000	WMS 4,8 (30X9)RXL	0800395
			250	WMS 4,8 (60X9)R	0800366
			1000	WMS 4,8 (60X9)RL	0800385
60 x 9 / 2.36 x 0.35		2500	WMS 4,8 (60X9)RXL	0800393	
		1000	WMS 6,4 (15X10)R	0801593	
2.4 - 6.4 mm or 16-10 AWG	15 x 10 / 0.59 x 0.39	4000	WMS 6,4 (15X10)RL	0801594	
		10000	WMS 6,4 (15X10)RXL	0801595	
		500	WMS 6,4 (30X10)R	0800376	
30 x 10 / 1.18 x 0.39	250	WMS 6,4 (60X10)R	0800367		
	60 x 10 / 2.36 x 0.39	500	WMS 9,5 (30X16)R	0800377	
3.5 - 9.5 mm or 12-8 AWG - 2/0	30 x 16 / 1.18 x 0.63	2000	WMS 9,5 (30X16)RL	0804267	
		250	WMS 9,5 (60X16)R	0800368	
	60 x 16 / 2.36 x 0.63	1000	WMS 9,5 (60X16)RL	0803105	
Wrap around labels					
	< 3 mm or < 10 AWG	13 x 10 / 0.51 x 0.39	5000	WML 3 (13X10)R	0800073
	< 5 mm or < 6 AWG	25 x 10 / 0.98 x 0.39	3000	WML 5 (25X10)R	0817523
	< 6 mm or < 4 AWG	13 x 13 / 0.51 x 0.51	7000	WML 6 (13X13)R	0816252
	< 7.5 mm or < 2 AWG	13 x 13 / 0.51 x 0.51	4000	WML 7,5 (13X13)R	0800074
		17 x 9 / 0.67 x 0.35	1500	WML 7,5 (17X9)R	0828444
		25 x 13 / 0.98 x 0.51	2100	WML 7,5 (25X13)R	0800075
	< 12 mm or < 4/0	25 x 19 / 0.98 x 0.75	1000	WML 12 (25X19)R	0800076
	< 14 mm or < 0.55 in Ø	25 x 19 / 0.98 x 0.75	1500	WML 14 (25X19)R	0817536
		38 x 19 / 1.5 x 0.75	1000	WML 14 (38X19)R	0817552
	< 18 mm or < 0.75 in Ø	12 x 12 / 0.47 x 0.47	2500	WML 18 (12X12)R	0817507
	< 20 mm or < 0.79 in Ø	31 x 25 / 1.22 x 0.98	500	WML 20 (31X25)R	0828457
	< 22 mm or < 0.875 in Ø	25 x 25 / 0.98 x 0.98	900	WML 22 (25X25)R	0800078
	< 36 mm or < 1.45 in Ø	25 x 38 / 0.98 x 1.5	500	WML 36 (25X38)R	0817510
	< 46 mm or < 1.825 in Ø	25 x 38 / 0.98 x 1.5	250	WML 46 (25X38)R	0800067
Available in other sizes, quantities, and colours					
Ribbon					
	Conductor size			Description	Order no.
		Standard ink ribbon for all thermal marking - CARD PRINTER length 300 m		THERMOMARK-RIBBON 110-TC	0801371
		Standard ink ribbon heat shrink materials - ROLL PRINTER length 300 m		THERMOMARK-RIBBON 110-WMSU	0801358
		Standard ink ribbon for all thermal marking (not heat shrink) ROLL PRINTER length 300 m		THERMOMARK-RIBBON 110	5145384
	Standard ink ribbon for all thermal marking - PRIME PRINTER length 70 m		TMP-RIBBON 110 BK 100	0803374	

Continuous Format Cartridges

Heat shrink labels					
Application	Compatibility	Length	Colour	Description	Order no.
	THERMOMARK GO.K and THERMOMARK GO	1.8 m / 5.9 ft	Black on white	MM-WMS 3,2 (EX5)R C1 WH/BK	0803923
		1.8 m / 5.9 ft	Black on white	MM-WMS 4,8 (EX9)R C1 WH/BK	0803924
		1.8 m / 5.9 ft	Black on white	MM-WMS 6,4 (EX10)R C1 WH/BK	0803925
		1.8 m / 5.9 ft	Black on white	MM-WMS 9,5 (EX16)R C1 WH/BK	0803926
		1.8 m / 5.9 ft	Black on yellow	MM-WMS 3,2 (EX5)R C1 YE/BK	1116139
		1.8 m / 5.9 ft	Black on yellow	MM-WMS 4,8 (EX9)R C1 YE/BK	1116140
		1.8 m / 5.9 ft	Black on yellow	MM-WMS 6,4 (EX10)R C1 YE/BK	1116141
		1.8 m / 5.9 ft	Black on yellow	MM-WMS 9,5 (EX16)R C1 YE/BK	1116142
Wrap around labels					
	THERMOMARK GO.K and THERMOMARK GO	6.5 m / 21.3 ft	Black on white	MM-WML 3 (EX10)R C1 WH/BK	0803931
		6.5 m / 21.3 ft	Black on white	MM-WML 5 (EX10)R C1 WH/BK	0803932
Nylon cloth labels					
	THERMOMARK GO.K and THERMOMARK GO	6 m / 19.7 ft	Black on white	MM-EMLC (EX12)R C1 WH/BK	0803934
		6 m / 19.7 ft	Black on white	MM-EMLC (EX18)R C1 WH/BK	0803936
Flexible vinyl labels					
	THERMOMARK GO.K and THERMOMARK GO	8 m / 26.2 ft	Black on white	MM-EMLF (EX10)R C1 WH/BK	0803937
		8 m / 26.2 ft	Black on white	MM-EMLF (EX12)R C1 WH/BK	0803938
		8 m / 26.2 ft	Black on white	MM-EMLF (EX18)R C1 WH/BK	0803939
		8 m / 26.2 ft	Black on white	MM-EMLF (EX24)R C1 WH/BK	0803940
Polyester device labels					
	THERMOMARK GO.K and THERMOMARK GO	8 m / 26.2 ft	Black on white	MM-EML (EX10)R C1 WH/BK	0803970
		8 m / 26.2 ft	Black on white	MM-EML (EX12)R C1 WH/BK	0803971
		8 m / 26.2 ft	Black on white	MM-EML (EX18)R C1 WH/BK	0803972
		8 m / 26.2 ft	Black on white	MM-EML (EX24)R C1 WH/BK	0803973


Die-cut Format Cartridges

Heat shrink labels					
Application	Compatibility	No. of labels	Colour	Description	Order no.
	THERMOMARK GO	235	Black on white	MM-WML 5 (24X10)R C1 WH/BK	1116196
		190	Black on white	MM-WML 6 (13X13)R C1 WH/BK	1116197
		165	Black on white	MM-WML 7,5 (24X13)R C1 WH/BK	1116198
Wrap around labels					
	THERMOMARK GO	50	Black on white	MM-WMTB HF (40X12)R C1 WH/BK	1116166
		20	Black on white	MM-WMTB HF (55X15)R C1 WH/BK	1116207
		20	Black on white	MM-WMTB HF (55X25)R C1 WH/BK	1116209
Nylon cloth labels					
	THERMOMARK GO	297	Black on white	MM-EML (20X8)R C1 WH/BK	1116204
		297	Black on yellow	MM-EML (20X8)R C1 YE/BK	1116205


Additional sizes and colours are available

Installation Equipment and Tools


Cutting tools

	Function	Conductor size	Description	Order no.
	Cable-cutting tool	Up to 35 mm ²	CUTFOX 12	1212128
	Cable-cutting tool	Up to 50 mm ² or 1/0	CUTFOX 18	1212129
	Diagonal cutter	VDE insulated	CUTFOX S VDE	1212207
	Cable-binder cutter	For plastic cable binders up to 4.8 mm or 0.187 inches wide	UNIFOX-CT 4,8P	1212609


Stripping tools

	Function	Conductor size	Installation type	Description	Order no.
	Self-adjusting stripping tool	0.08-2.5 mm ² or 28-14AWG	Standard	WIREFOX 2.5	1212368
	Self-adjusting stripping tool	0.1 - 4 mm ² or 28 - 12 AWG	Special insulation, e.g. PTFE	WIREFOX 4	1212156
	Self-adjusting stripping tool	0.02 - 10 mm ² or 34 - 8 AWG	Standard	WIREFOX 10	1212150
	Strips sensor/actuator cables	4.4 - 7 mm ² or 12 - 8 AWG	SAC cables	WIREFOX SAC	1212623
	Strips multi-conductor cables	max insulation 1 mm 2.5-11 mm or 10-3/0 AWG	Any	WIREFOX-D 11	1212160
	Strips large, multi-conductor cables	4.5 - 40 mm Ø or 0.17 - 1.5 in Ø	Any	WIREFOX-D 40	1212161
	Replacement blade available				


Crimping tools

	Conductor size	Crimp shape	Description	Order no.
	0.14 - 6 mm ² or 24 - 10 AWG	Square	CRIMPFOX CENTRUS 6S	1213144
		Hex	CRIMPFOX CENTRUS 6H	1213146
	0.14 - 10 mm ² or 24 - 8 AWG	Square	CRIMPFOX CENTRUS 10S	1213154
		Hex	CRIMPFOX CENTRUS 10H	1213156
	0.25 - 6 mm ² or 22 - 10 AWG	Trapezoid	CRIMPFOX 6	1212034
	10 - 25 mm ² or 6 - 4 AWG	Trapezoid	CRIMPFOX 25R	1212039
0.14-10 mm ² or 26-8 AWG	Trapezoid	CRIMPFOX DUO 10	1031721	


Ferrules

	AWG	Colour	Standard pack	Description	Order no.
	22	Turquoise	100	AI 0,34-8 TQ	3203066
	20	White	100	AI 0,5-8 WH	3200014
	18	Grey	100	AI 0,75-8 GY (0,75 cross section)	3200519
	18	Red	100	AI 1-8 RD (1 cross section)	3200030
	16	Black	100	AI 1,5-8 BK	3200043
	14	Blue	100	AI 2,5-8 BU	3200522
	12	Grey	100	AI 4-10 GY	3200535
	10	Yellow	100	AI 6-12 YE	3200548
	8	Red	100	AI 10-12 RD	3200551

Screwdrivers

	Tool	Description	Order no.
	Torque screwdriver: 0.3 - 1.2 Nm / 2.6 in. lb - 10.6 in. lb	TSD-M 1,2NM	1212224
	Torque screwdriver: 1.2 - 3.0 Nm / 10.6 in. lb - 26.5 in. lb	TSD-M 3NM	1212225
	Torque screwdriver: 3.0 - 6.0 Nm / 26.5 in. lb - 53 in. lb	TSD-M 6NM	1212226
	Micro screwdriver - Flat head - 0.4 mm blade	SZS 0,4X2,0	1205202
	Standard screwdriver - Flat head - 0.6 mm blade	SZF 1-0,6X3,5	1204517
	Tool set - 17-part kit	SF-M SET 2	1212756
	16 Speed cordless screwdriver set	SF-ASD 16 SET	1200295
	#2 Roberston screwdriver, 8" long	SF-SQ 2-200	1072455

Multifunction tools and ferrules

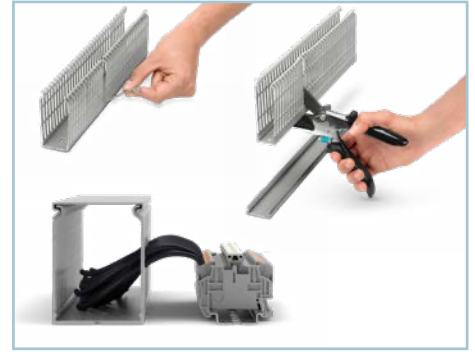
	Function	Conductor size	Description	Order no.
	Complete kit	0.5 - 2.5 mm ² or 20 - 14 AWG	CRIMPFOX 4 IN 1 SET	1200102
	Cut, strip, and crimp	0.5 - 2.5 mm ² or 20 - 14 AWG	CRIMPFOX 4 IN 1	1200101
	Ferrule carrier	0.5 - 2.5 mm ² or 20 - 14 AWG	CRIMPFOX 4 IN 1/MAG	1200103
	50-ferrule strip - white	0.5 mm ² or 20 AWG	AI 0,5-8 WH S1	1200104
	50-ferrule strip - gray	0.75 mm ² or 18 AWG	AI 0,75-8 GY S1	1200105
	50-ferrule strip - red	1.0 mm ² or 18 AWG	AI 1,0-8 RD S1	1200106
	50-ferrule strip - black	1.5 mm ² or 16 AWG	AI 1,5-8 BK S1	1200107
	50-ferrule strip - blue	2.5 mm ² or 14 AWG	AI 2,5-8 BU S1	1200108

Cable Ducts for Clear Cable Routing

Your advantages

- ✓ Cover snaps on easily
- ✓ Single part number for cable duct and cover
- ✓ 2 m length, matches Phoenix Contact 2 m DIN rail product
- ✓ Two score lines for easy removal of fingers and wall, no sharp edges

Scan the QR code to learn more online







Cable ducts

DIMENSIONS (W x H) L=2m		Description	Gray Order no.	Blue Order no.	White Order no.	Halogen free gray Order no.	Halogen free blue Order no.
Nominal size (inches)	Millimetres						
1 x 1	25 x 25	CD 25X25	3240187	—	—	3240340	—
1 x 1 ½	25 x 40	CD 25X40	3240188	—	—	3240341	—
1 x 2	25 x 60	CD 25X60	3240191	3240303	3240618	3240342	3240584
1 x 3	25 x 80	CD 25X80	3240197	3240304	3240619	3240343	3240585
1 x 1 ½	30 x 40	CD 30X40	3240278	—	—	3240344	—
1 x 2	30 x 60	CD 30X60	3240280	—	—	3240345	—
1 x 3	30 x 80	CD 30X80	3240282	—	—	3240346	—
1 x 4	30 x 100	CD 30X100	3240283	—	3240623	3240347	—
1 ½ x 1 ½	40 x 40	CD 40X40	3240189	—	—	3240348	—
1 ½ x 2	40 x 60	CD 40X60	3240192	3240310	3240625	3240349	—
1 ½ x 3	40 x 80	CD 40X80	3240198	3240311	3240626	3240350	3240592
1 ½ x 4	40 x 100	CD 40X100	3240294	3240312	3240627	3240351	3240593
2 x 1 ½	60 x 40	CD 60X40	3240190	—	—	3240352	—
2 x 2	60 x 60	CD 60X60	3240193	3240314	3240629	3240353	3240595
2 x 3	60 x 80	CD 60X80	3240199	3240315	3240630	3240354	3240596
2 x 4	60 x 100	CD 60X100	3240263	3240316	3240631	3240355	3240597
3 x 2	80 x 60	CD 80X60	3240194	—	—	3240358	—
3 x 3	80 x 80	CD 80X80	3240200	3240320	3240635	3240359	3240601
3 x 4	80 x 100	CD 80X100	3240264	3240321	3240636	3240360	3240602
4 x 3	100 x 80	CD 100X80	3240201	3240324	3240639	3240363	3240605
4 x 4	100 x 100	CD 100X100	3240205	3240325	3240640	3240364	3240606
5 x 3	120 x 80	CD 120X80	3240202	3240327	3240642	3240366	3240608

DIN Rails

DIN rails



	Material	Perforated	Length (M)	Size W/H (mm)	Description	Order no.
		✗	2	NS 35/ 7,5	 NS 35/ 7,5 UNPERF 2000MM	0801681
		✓	2	NS 35/15	 NS 35/15 PERF 2000MM	1201730
		✗	2	NS 35/15	 NS 35/15 UNPERF 2000MM	1201714



Accessories


Control Cabinet 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.

300 series enclosure lights					
	Product information		Motion sensor	Description	Order no.
	Colour temp. 5000 K, length 350 mm, Housing: Polycarbonate, pivoting, can be switched in series, including mounting accessories		✗	PLD E 409 W 350	1319569
			✓	PLD E 409 W 350 MS	1319573
Accessories					
	Optional door switch			PLD E 400-DS-3,0/0,6	1318672

Electrical Outlets

You can choose to wire the electrical outlets with Push-in or screw connection technology. The procedure for mounting the sockets is also extremely flexible. Either latch them onto the DIN rail or mount them directly using screw or adhesive mounting.

Single socket						
	Connection	Nominal current	Function	Mounting	Description	Order no.
	Push-in	15 A	—	DIN rail or direct mounting	EO-AB/PT/15	0804165
			LED		EO-AB/PT/LED/15	0804168
			Switch		EO-AB/PT/S/15	0804173
			LED / switch		EO-AB/PT/LED/S/15	0804174
	Screw	15 A	—	EO-AB/UT/15	0804152	
			LED	EO-AB/UT/LED/15	0804155	
		20 A	LED	EO-AB/UT/LED/20	0804509	
			Switch	EO-AB/UT/S/15	0804159	
		15 A	LED / switch	EO-AB/UT/LED/S/15	0804160	

Double socket						
	Connection	Nominal current	Function	Mounting	Description	Order no.
	Push-in	15 A	LED	DIN rail or direct mounting	EO-AB/PT/LED/DUO/15	0804177
	Screw		LED		EO-AB/UT/LED/DUO/15	0804163
	Push-in	15 A	GFCI class A	DIN rail or direct mounting	EO-AB/PT/LED/DUO/V/GFI/15	1263626
Screw	EO-AB/UT/LED/DUO/V/GFI/15				1263628	



Open communication with customers and partners worldwide

Phoenix Contact is a global market leader based in Germany. We are known for producing future-oriented products and solutions for the electrification, networking, and automation of all sectors of the economy and infrastructure. With a global network reaching across more than 100 countries with over 20,000 employees, we maintain close relationships with our customers, something we believe is essential for our common success.

Our wide range of innovative products makes it easy for our customers to implement the latest technology in a variety of applications and industries. This especially applies to the target markets of energy, infrastructure, industry, and mobility.

You will find our complete product range at:
phoenixcontact.ca

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