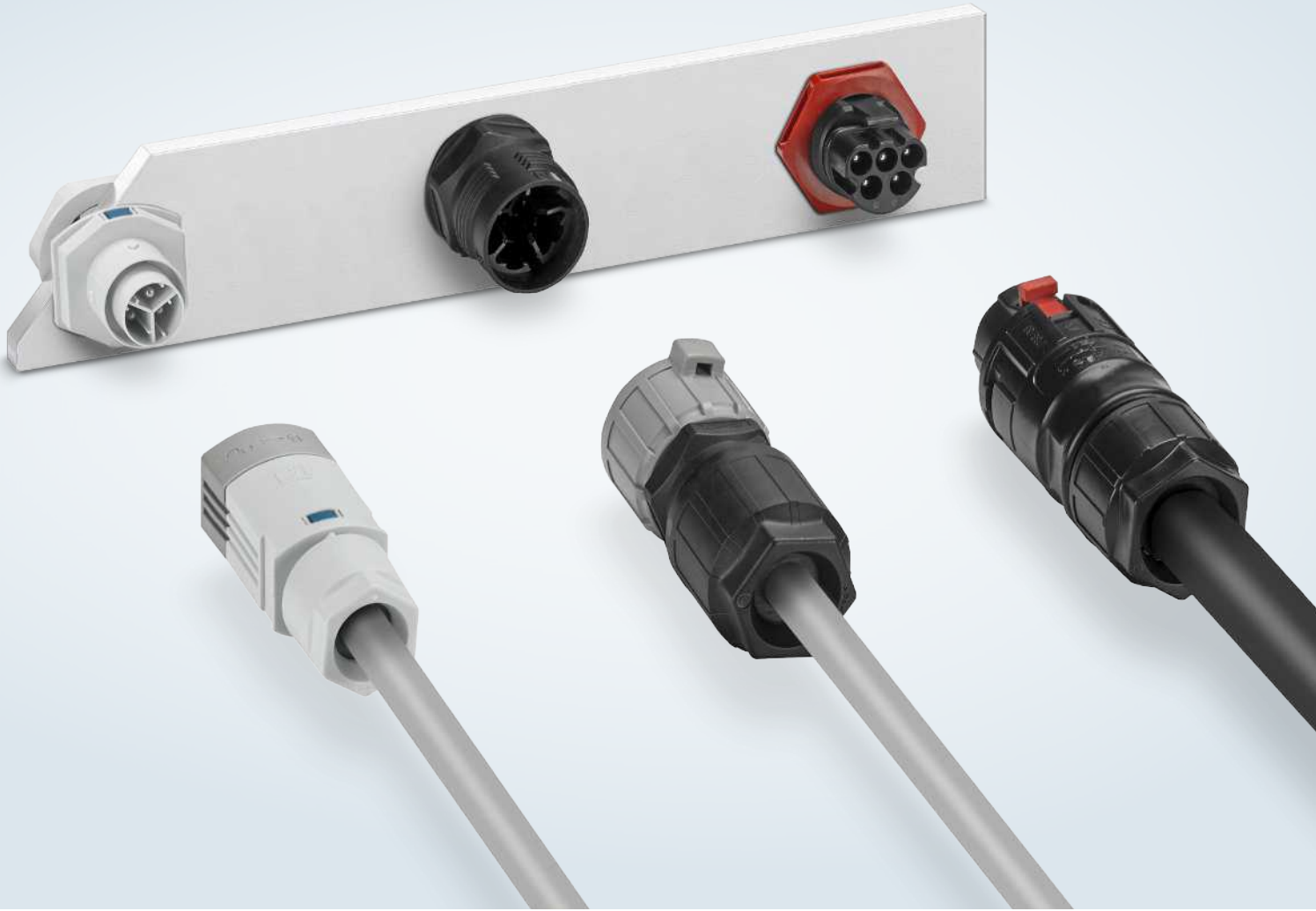


2021



Installation systems

Distribute power quickly and easily

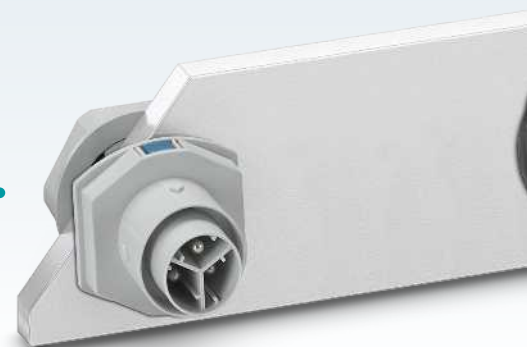
Installation systems for all requirements

Creating flexible power distribution

Connect cables easily and flexibly with our installation systems. Depending on the application, choose between simple cable connections, convenient power distribution, or compact device connections. Robust housings and high degrees of protection enable reliable power transmission outdoors and in wet environments.

IPD

IPD installation connectors and panel feed-throughs with simple Push-in and Push-Lock connection and fast-locking.



Your advantages at a glance

	IPD	QPD	PRC
Connection technology	Push-in/Push-Lock connection	IDC displacement connection	Screw connection
Number of positions	3/5	3/4/5	3/5
Rated voltage	Up to 690 V		
Rated current	Up to 20 A	Up to 40 A	Up to 35 A
Degree of protection	IP66 / IP68 (24h/2m) / IP69K		
Shock resistance	IK07	IK07	IK08 (-25°C)
Ambient temperature (operation)	-40°C ... +100°C	-40°C ... +100°C	-40°C ... +85°C
Type of locking	Fast-locking, can be unlocked manually or with tools	Screw locking mechanism, can be unlocked manually or with tools	Snap-in locking, can be unlocked manually or with tools
Insertion cycles	50	50	Up to 2,000
Conductor cross section (solid and stranded)	0.5 mm² ... 2.5 mm²	0.5 mm² ... 6.0 mm²	1.5 mm² ... 6.0 mm²
External cable diameter	6 mm ... 16 mm	4 mm ... 20 mm	8 mm ... 21 mm
Approvals	IEC, UL, DNV-GL	IEC, UL, DNV-GL	IEC, UL, 2PFG, DNV-GL

QPD

Installation system with fast QUICKON IDC insulation displacement connection. The system consists of conductor and cable connectors, H and T distributors, and panel feed-throughs.



Content

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IPD installation system with Push-in connection	6
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PRC

Installation system with proven screw or crimp connection and snap-in locking. Panel feed-throughs, conductor and cable connectors, assembled cables, and distributors are included in the range.



Installation systems for all applications

Transportation infrastructure

Simple, safe power distribution

Widely branched industrial systems place stringent requirements on the components used. Our installation systems provide flexible and robust solutions for continuous power distribution. Device manufacturers can install the panel feed-throughs directly in the device. This enables fast and secure connection of the supply line in the field.

In tunnels, the lights and emergency control system must operate particularly reliably. The versatile connectors and distributors allow you to distribute power over long distances effortlessly. Installation is also particularly robust thanks to IK08 impact resistance and IP66/IP68/IP69 degree of protection.

Convenient maintenance

Maintenance work must be carried out quickly and easily in infrastructure facilities. The shock and vibration resistance of the connections also eliminate time-consuming service intervals.



Power generation and e-mobility

Reliable grid feed-in

As an operator, you want to feed the power generated safely and reliably into the AC grid – over many years to come. Our installation systems are the robust solution for with and weather to ensure that your system delivers the best possible yields.

A greater overview

Small accumulators are celebrating getting more love. The three-position variants of our installation systems enable a DC transmission and reduce the wiring effort when compared to single wiring.

Smart charging

Many decentral charging stations allow a connection of up to 32 A. This is ideal for our QPD and PRC installation systems, which along with the current carrying capacity also offer advantages thanks to their narrow size.





Telecommunications

Our long-lasting and robust installation systems are designed for operating times of up to 25 years outdoors.



Building infrastructure

The time-saving installation of a pluggable power distribution system allows simple transformation from the office to the laboratory or manufacturing.



Marine and offshore

The salt-water resistance of the installation connectors allow use in all maritime areas.

Intralogistics

With their robust design and high temperature resistance, panel feed-throughs are also suitable for devices in the field of intralogistics. A motor, for example, can be connected conveniently on-site without opening the device. The sensitive electronics remain protected from environmental influences even while they are being connected.



Production

Manufacturing facilities with manual work benches benefit in particular from our installation systems. The pluggable power distribution and pre-assembled cable assemblies allow a quick changeover to changing requirements when changing products. This maintains productivity.



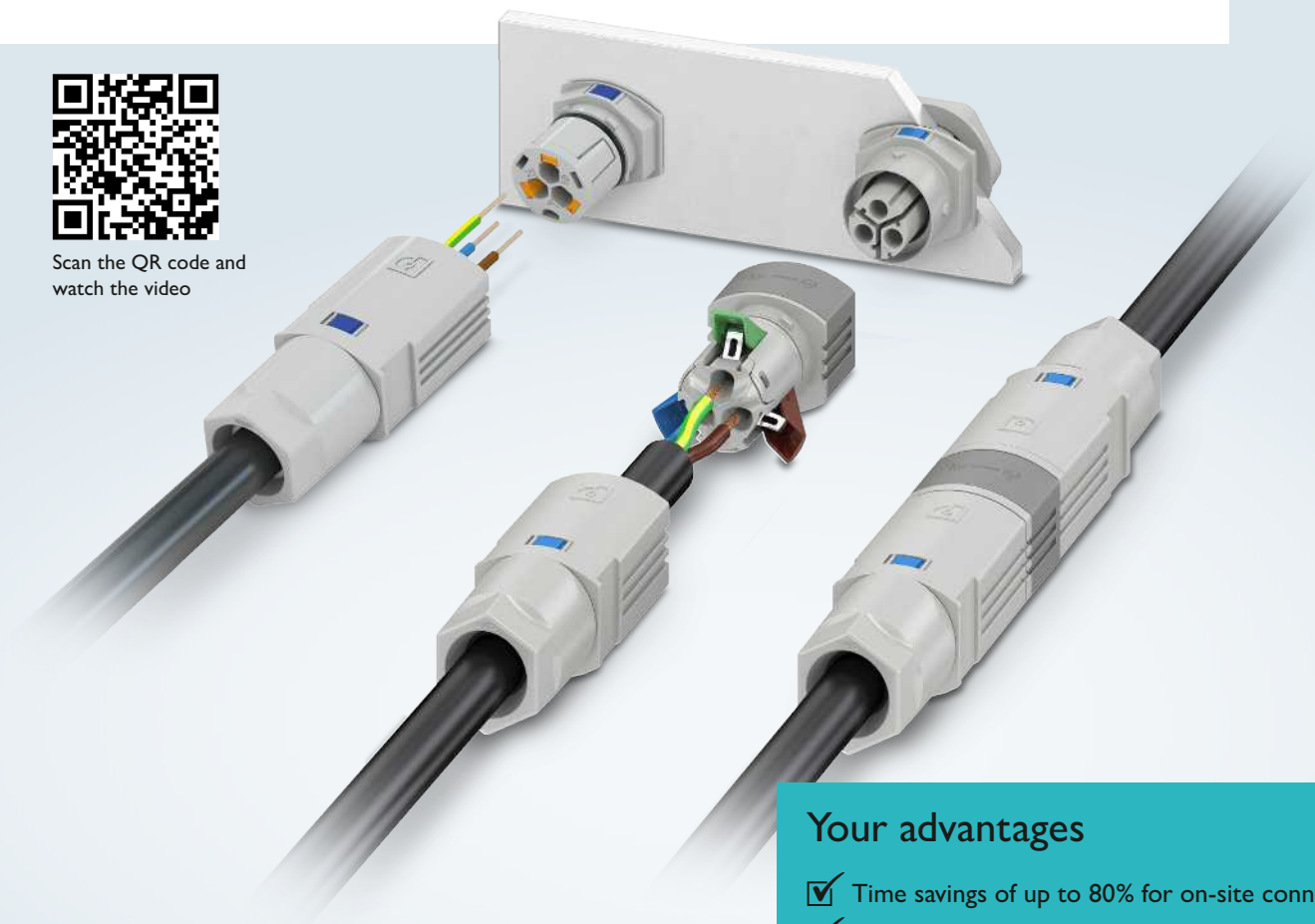
IPD installation system with Push-in connection

Simply plugged in and already securely connected

Experience simple power distribution with the IPD installation system for buildings and infrastructure equipment. IPD (Installation Power Distribution) is fully pluggable and ideally suited for your lighting applications. The Push-in technology allows you to connect 3- and 5-position cables up to 2.5 mm² conveniently and without tools, even in difficult-to-access areas. Thanks to IP67 degree of protection, IPC can also be used safely outdoors and in wet areas.



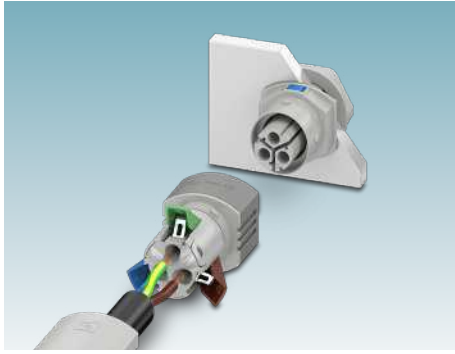
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Your advantages

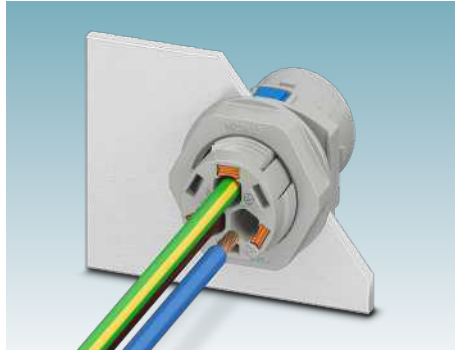
- ✓ Time savings of up to 80% for on-site connection
- ✓ Simple and tool-free assembly
- ✓ High degree of reliability thanks to robust housings up to IP67 degree of protection and IK07 shock resistance
- ✓ Continuously protected electronics, because devices can remain closed during connection work on-site

Your advantages at a glance



Time-saving installation

The Push-Lock connection of the pluggable IPD installation connectors allows the easy, time-saving installation of flexible and rigid conductors. You can open and close the terminal points easily using the lever.



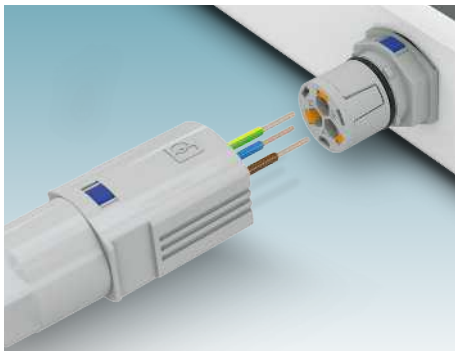
Easy device connection

IPD panel feed-throughs with Push-in connection allow tool-free assembly with the direct connection of pretreated and rigid conductors. The pusher can be used to release already-installed conductors or to connect conductors without ferrules.



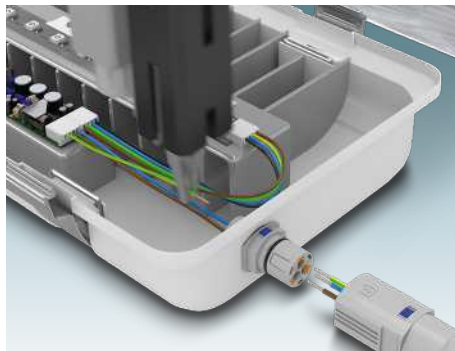
Secure locking

The fast-locking system guarantees easy and reliable mounting, even in particularly difficult installation situations, and the easy replacement of devices in the event of service actions. The plugs latch clearly into place and provide reliable protection against mismatching.



Easy installation without connectors

With the IPD panel feed-throughs, you feed the cable on the field side through the sleeve and connect it directly to the device. Then simply snap the sleeve into place, establish strain relief via the nut, and the cable is connected.



Automated wiring

Thanks to the Push-in connection on the device side, wiring robots can automatically connect the components in the device. The IPD panel feed-throughs are therefore ideal for lighting applications.



Reliable protection

Cabling with long-term stability in outdoor and industrial environments: Thanks to IP67, your installation is protected against splash water and dust, for particularly reliable installations in harsh environments.

IPD product overview

					Pluggable	
						
					M20, device-side Push-in connection	
Connection data	Number of positions	Cable diameter	Connection technology	Color	Male	Female
0.5 mm² ... 1.5 mm² 500 V/20 A	3	6 mm ... 9 mm 8 mm ... 13 mm	Push-Lock	Black	1088679	1088682
				Gray	1088687	1088689

						
					M20	M25
Connection data	Number of positions	Cable diameter	Connection technology	Color	Device-side Push-in connection	
0.5 mm² ... 2.5 mm² 690 V/20 A	3	6 mm ... 9 mm 8 mm ... 13 mm	Push-in	Black	1047321	1047324
				Gray	1047319	1047322
	5	7 mm ... 11 mm 11 mm ... 16 mm	Push-in	Black		1047345
				Gray		1047344

panel feed-throughs		Installation connectors			
					
M25, device-side Push-in connection		With fast-locking		Without fast-locking	
Male	Female	Male	Female	Male	Female
1088681	1088684	1088664	1088666	1088662	1088665
1088688	1088690	1088672	1088674	1088671	1088673

Panel feed-throughs			
			
M20		M25	
0.5 m litz wire	1 m litz wire	0.5 m litz wire	1 m litz wire
1047348	1047353	1047355	1047359
1047347	1047350	1047354	1047356
		1047363	1047372
		1047360	1047364

QPD installation system with IDC connection

Save up to 80% of your wiring time

Industrial power distribution does not have to be time-consuming or complicated. The QPD installation system is proof of this. Thanks to the proven QUICKON IDC displacement connection, cables up to $5 \times 6.0 \text{ mm}^2$ can be connected quickly and easily, without the need for stripping or screwing. You can choose either fixed or pluggable connections to create flexible distribution solutions.



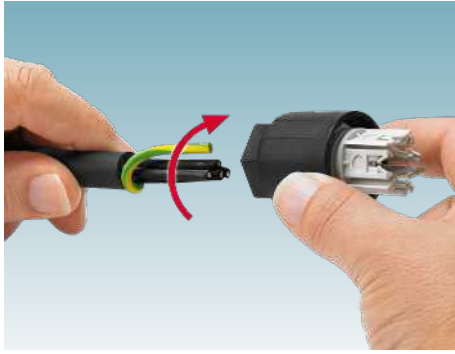
Your advantages

- ✓ Time savings of up to 80% for on-site connection
- ✓ Quick and easy assembly without stripping and screwing
- ✓ Flexible power distribution design with fixed and pluggable versions
- ✓ High degree of reliability with robust housings up to IP68/IP69 degree of protection and IK07 shock resistance
- ✓ Continuously protected electronics, because devices can remain closed during connection work on-site



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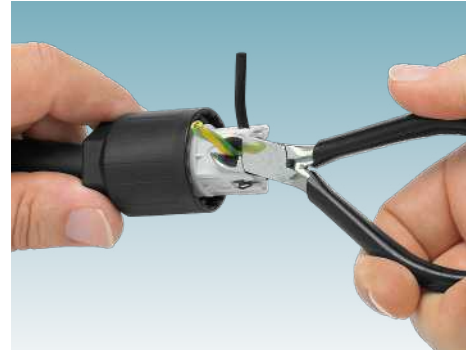
Secure connection in just a few steps



1. Strip the cable and prepare the PE conductor.



2. Insert the wires into the QUICKON nut and snap into the marked wire guides (1, 2, 3. ...).



3. Cut the ends of the litz wires flush.



4. Place the union nut on the contact carrier and tighten it until it stops or use the specified torque for tightening.



5. You will feel the connection snap into place when the optimum tightening point is reached. The QUICKON nut is now screwed on so tight that it cannot be unscrewed again by hand.

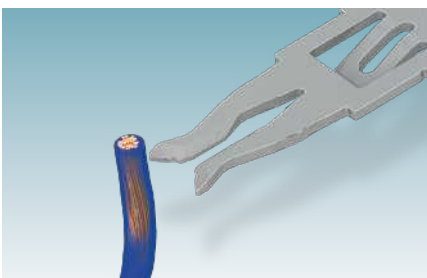


6. The cable can be connected quickly and easily without using any special tools.

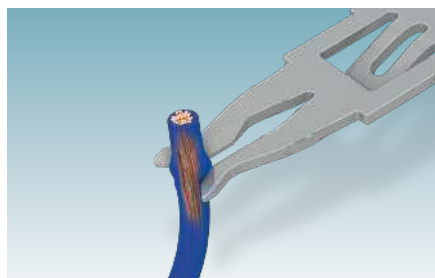
Displacement connection IDC (insulation displacement connection)

For insulation displacement technology, the cable is connected without stripping. The wire guides center the conductors automatically. When the union nut is

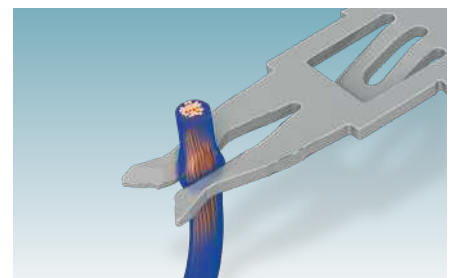
tightened, the insulation displacement termination pierces the cable insulation and establishes a gas-tight electrical contact.



1. Prepare the conductor

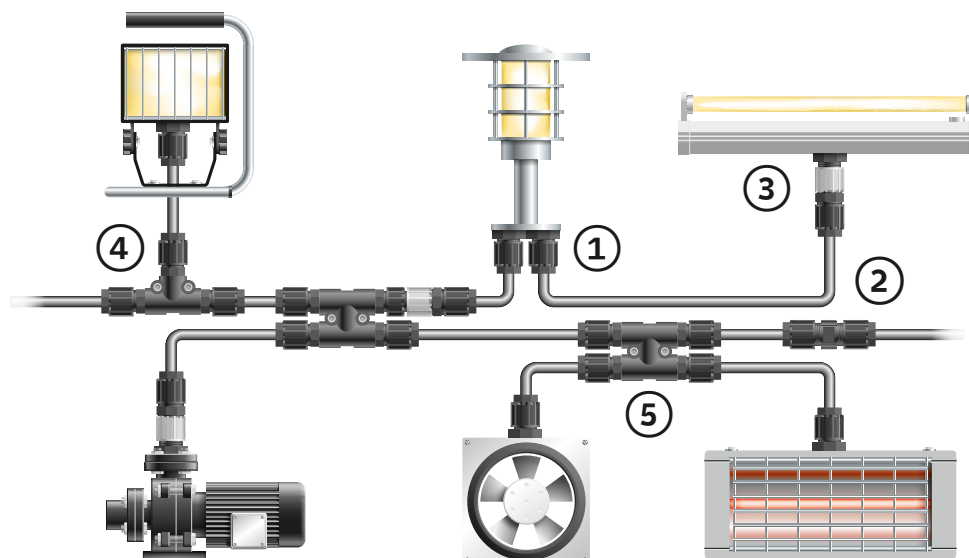


2. The conductor is centered



3. Connection to the conductor is gas-tight

QPD product overview



			Panel feed-throughs						
			① 						
			M20			M25			
Connection data	Number of positions	Cable diameter	0.5 m litz wire	1.0 m litz wire	Spade connection	0.5 m litz wire	1.0 m litz wire	Spade connection	Push-in connection
0.5 mm² ... 1.5 mm² 690 V/17.5 A	3	4 ... 9 mm	1414684	1414685	1414686				
		8 ... 13 mm	1414687	1414688	1414689				
		Without nut	1414690	1414691	1414692				
	4	4 ... 9 mm	1414675	1414676	1414677				
		8 ... 13 mm	1414678	1414679	1414680				
		Without nut	1414681	1414682	1414683				
	5	5 ... 10 mm				1414730	1414731	1414732	
		9 ... 14 mm				1414733	1414734	1414735	
		Without nut				1414736	1414737	1414738	
1.0 mm² ... 2.5 mm² 690 V/20 A	4	6 ... 10 mm				1423975	1423974	1423976	1423977
		9 ... 14 mm				1423980	1423979	1423981	1423982
		Without nut				1423983	1423984	1423986	1423985
	5	6 ... 11 mm	1403725	1403727	1403729	1582557	1582558	1582559	1411432
		9 ... 16 mm	1403731	1403733	1403735	1582561	1582562	1582563	1411433
		Without nut	1403737	1403739	1403741	1582565	1582566	1582567	
2.5 mm² ... 6.0 mm² 690 V/40 A	5	9 ... 14 mm				1410392	1410393		
		12 ... 20 mm				1410394	1410395		
		Without nut				1410396	1410397		

① Panel feed-throughs

The panel feed-throughs are cable glands that can be connected from the outside. It is no longer necessary to open devices to connect a cable. This ensures that the protection class specified by the manufacturer is maintained.

② Cable connectors

The cable connector can be used to lengthen or repair cables. When combined with a connector, it can be used as a flexible coupling connection.

③ Installation connectors

The connector with leading PE contact is ideal for quick device replacement, service situations, and installations with pre-assembled cables. It is coded to prevent incorrect connections.

④ T-distributors

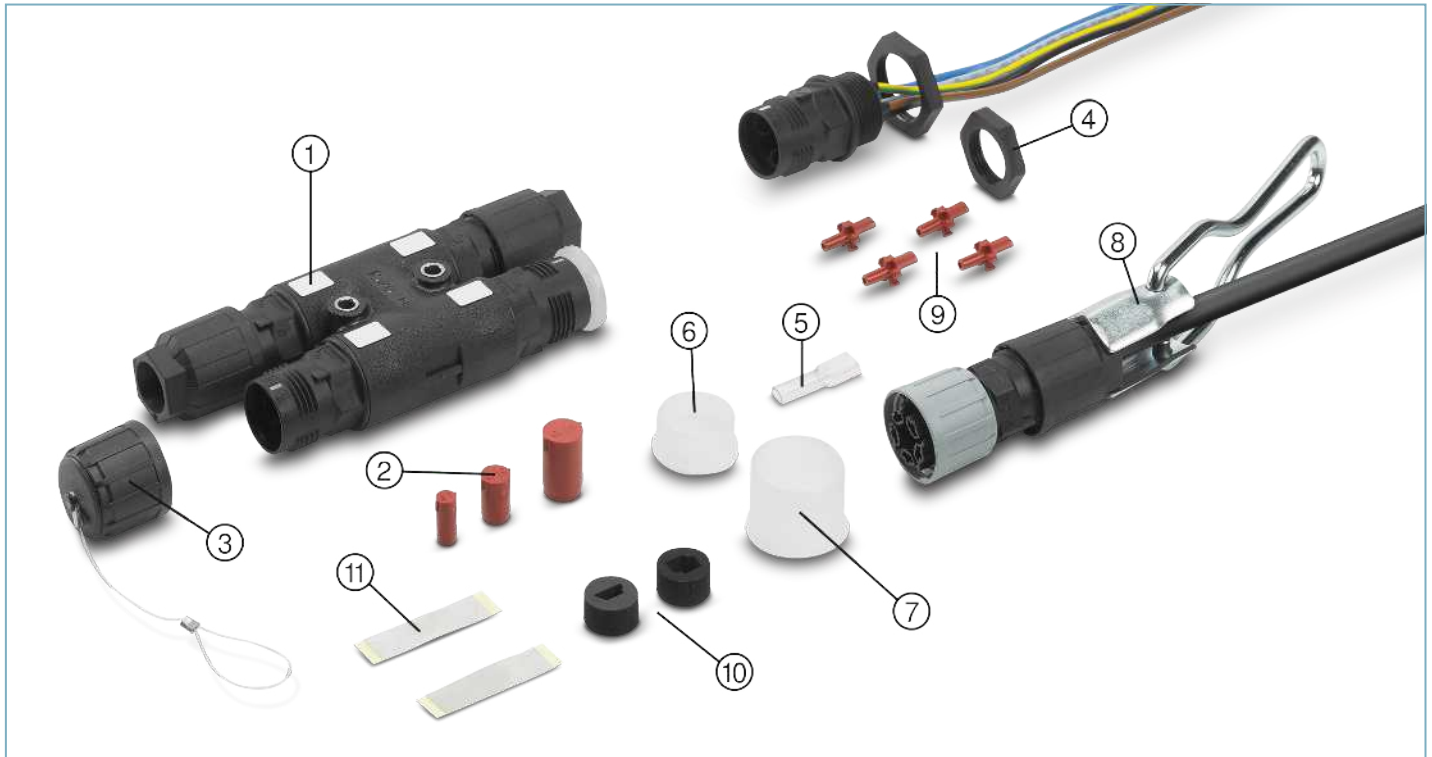
Installation of a branch line for loads is easy with the compact T-distributor. The cable branches off from the continuous trunk line at a right angle.

⑤ H-distributors

The H-distributor is a compact, robust terminal box that can be connected quickly. The four connections are connected parallel to one another, which allows them to be used as a star distributor.

Cable connectors		Installation connectors		T-distributors		H-distributors	Nuts
② 		③ 		④ 		⑤ 	⑥ 
With 1 nut	With 2 nuts	Can be unlocked with tools	Can be unlocked manually	With 2 nuts	With 3 nuts		
1414699	1414700	1414705		1414711	1414712	1414719	1415099
1414701	1414702	1414706		1414713	1414714	1414720	1415100
						1414721	
1414694	1414696	1414703		1414707	1414708	1414715	1415097
1414697	1414698	1414704		1414709	1414710	1414716	1415098
						1414717	
1414739	1414740	1414749		1414751	1414753	1414755	1415101
1414741	1414742	1414750		1414752	1414754	1414756	1415104
						1414757	
1423991	1423989	1423987		1424047	1424045	1423971	1423993
1423992	1423990	1423988		1424048	1424046	1423972	1423994
						1423973	
1403834	1403838	1403784	1039563	1405403	1405401	1406368	1459663
1403831	1403836	1403782	1039561	1405404	1405402	1406369	1459647
						1406370	
1410415	1410410	1410386	1039564	1411416	1411414	1411422	1410409
1410416	1410412	1410387	1039565	1411417	1411415	1411425	1410406
						1411426	

Accessories



	Description	Item number
①	Marker labels for H- and T-distributors	For plotting and engraving
		Printable
②	Sealing plug, IP68	Diameter 7 mm
		Diameter 10 mm
		Diameter 14 mm
③	Protective cap for panel feed-throughs, captive, IP68	For 1.5 mm ² , 3/4-pos. Black
		For 1.5 mm ² , 5-pos. Black
		For 2.5 mm ² , 4-pos. Black
		For 2.5 mm ² , 5-pos. Gray
		For 2.5 mm ² , 5-pos. Black
		For 6 mm ² , 5-pos. Gray
		For 6 mm ² , 5-pos. Black
④	Locking nut	M16, green
		M20, black
		M25, black
		Pg21, black
⑤	Insulating sleeve for spade connector	

	Description	Item number
⑥	Protective cap for QUICKON connection, IP50	For 1.5 mm ² , 3/4-pos.
		For 1.5 mm ² , 5-pos.
		For 2.5 mm ² , 4-pos.
		For 2.5 mm ² , 5-pos.
		For 6 mm ² , 5-pos.
⑦	Protective cap for connectors IP50	For 1.5 mm ² , 3/4-pos.
		For 1.5 mm ² , 5-pos.
		For 2.5 mm ² , 4-pos.
		For 2.5 mm ² , 5-pos.
⑧	Socket wrench for QUICKON nuts	for 1.5 mm ² , 5-pos./2.5 mm ² , 4-pos., wrench size 22
		for 2.5 mm ² , 5-pos., wrench size 27
⑨	Coding profile	For 1.5 mm ² , 3/4-pos.
		For 1.5 mm ² , 5-pos.
		For 2.5 mm ² , 4-pos.
		For 2.5 mm ² , 5-pos.
		For 6 mm ² , 5-pos.
⑩	Seal for AS-Interface cables	for an AS-i cable 2.5 mm ² , 4-pos.
		for two AS-i cables, 2.5 mm ² , 4-pos.
⑪	Shielding foil for fixing the braided shield of shielded cables.	

QPD STAK 3 connectors specifically designed for connecting motors

Tool-free installation

The QPD STAK 3 connector designed for assembly has been designed specifically to connect motors for blinds, shutters, and awnings. With the IDC connection, installation is quick and easy without stripping or screwing. The robust, water spray-resistant housing is perfectly suited for outdoor installation and guarantees a reliable and durable electrical installation.



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Installation connectors



Description	Male
Number of positions	4
Conductor cross-section	0.5 mm² ... 1.5 mm²
Voltage / currents	≤400 V / ≤10 A
Temperature range	-40°C ... +100°C
Degree of protection / shock resistance	IP54 / IK07
Type	QPD STAK 3PE1,5 BK
Item number	1065121

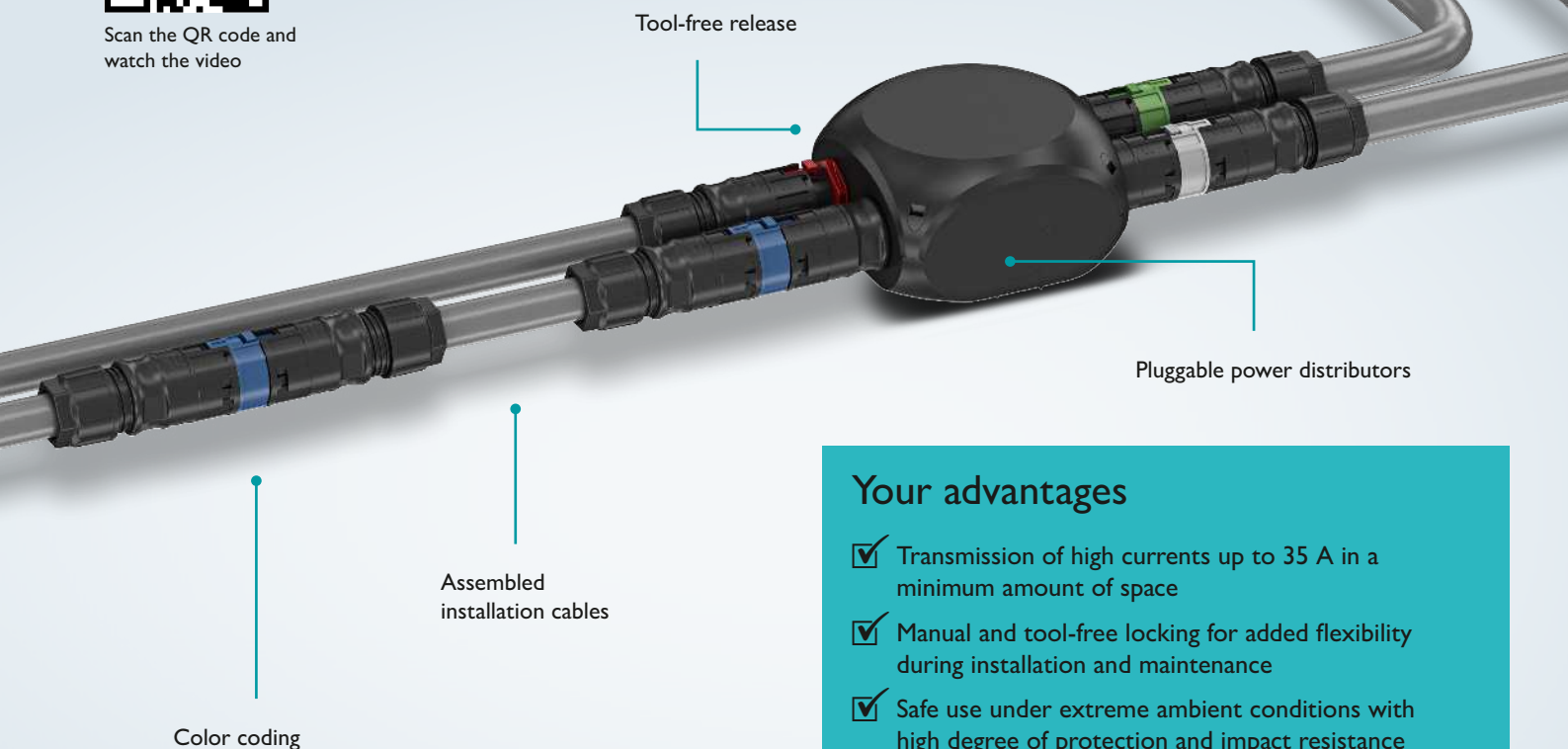
PRC installation system with screw connection

For pluggable power distribution up to 35 A

The PRC series installation is optimally suited for compact and safe power transmission in building, industrial, and outdoor applications. The device and field connectors facilitate a multitude of connection solutions for practically every application. PRC power distribution and installation cables eliminate the need for time-consuming wiring in the field. Connect your devices via Plug and Play and benefit from the high power density of the PRC installation system.



Scan the QR code and watch the video



Your advantages

- ✓ Transmission of high currents up to 35 A in a minimum amount of space
- ✓ Manual and tool-free locking for added flexibility during installation and maintenance
- ✓ Safe use under extreme ambient conditions with high degree of protection and impact resistance
- ✓ Simple handling thanks to proven crimp or screw connection technology
- ✓ Mechanical and color coding for quick and error-free startup

Your advantages at a glance



Reliable installation

High degree of protection and impact resistance provide for reliable connections in building, industrial, and outdoor applications.



Convenient mounting

Whether a screw or a crimp connection, front or rear mounting, angled or straight Plug and Play on the device, they all save time.



Simple power distribution

Pre-assembled power distributors allow easy and time-saving installation with PRC connectors.



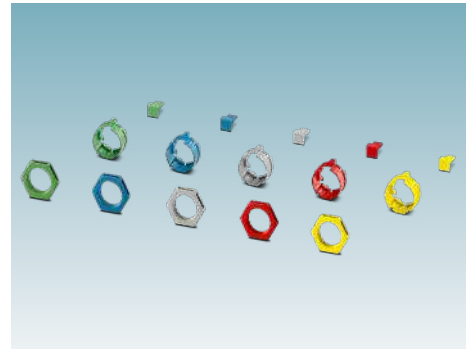
Fast commissioning

Assembled PRC installation cables with high-quality H07RN-F cables support fast commissioning.



Flexible connection

The modular system enables a high number of versions with optimized warehousing.

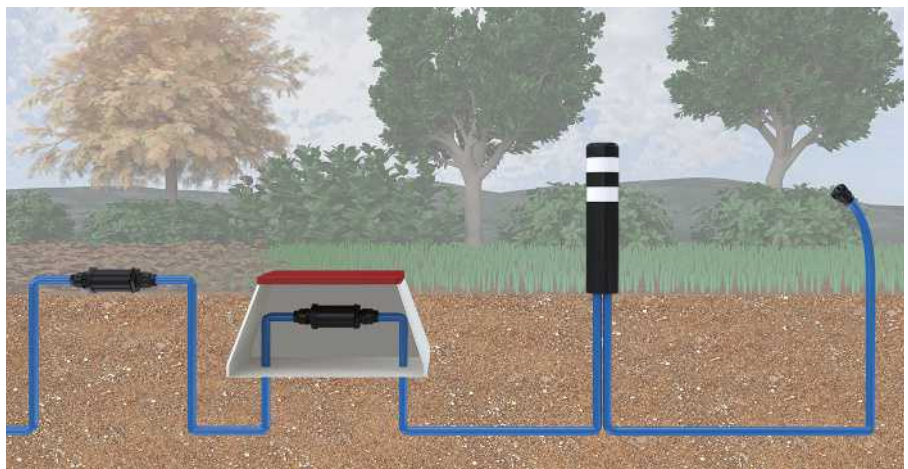


Clear color coding

Marking accessories in various colors helps you to keep a clear overview even in complicated installations.

The best connection

Cable too short, damaged, or cut through? The PRC cable connectors can be used anywhere, even where you would like to implement a secure power connection over the long term. Made of robust plastic, PRC cable connectors are UV and salt water resistant, impact resistant, and waterproof. In addition, the PRC cable end cap offers the possibility of protecting free cable ends against penetrating moisture and subsequent conductor corrosion in the short and long term.



PRC product overview

Panel feed-throughs							
							
			Assembled				
Connection data	Number of positions	Connection technology	2.5 mm² litz wire, 150 mm	4.0 mm² litz wire, 150 mm	6.0 mm² litz wire, 150 mm	With nut	Without nut
1.5 mm² ... 6 mm² 690 V/35 A	3	Screw connection					
	5						
	3	Crimp connection	1409219	1409220	1409221	1409218	1627608
	5		1409211	1409212	1409213	1409206	1627609

Installation connectors								
								
				Designed for assembly			Modular	
Connection data	Number of positions	Cable diameter	Connection technology	Male connector	Coupling	Housing angled	Male connector contact insert	Coupling contact insert
1.5 mm² ... 6 mm² 690 V/35 A	3	8 mm ... 21 mm	Screw connection	1014498	1017635	1065798	1070200	1070198
	5			1014530	1017632		1070199	1070197

Assembled installation cables					
					
Connection data	Number of positions	Cable length	Coupling on the free cable end	Male connector on the free cable end	Male connector on the coupling
2.5 mm² 690 V/24 A	3	5.0 m			1150693
		10.0 m			1150691
		20.0 m			1150691
4 mm² 690 V/35 A	5	1.0 m	1150676	1150679	
		2.5 m	1150675	1150678	
		5.0 m	1150674	1150677	1150682
		10.0 m			1150681
		20.0 m			1150880

						
Designed for assembly			Modular			
Crimp contact 2.5 mm² male	Crimp contact 4.0 mm² male	Crimp contact 6.0 mm² male	Housing angled	Housing straight	Male connector contact insert	Coupling contact insert
			1065796	1065795	1070200	1070198
					1070199	1070197
1409207	1409208	1409209				

Distributors					
					
		T-distributors		H-distributors	
Connection data	Number of positions	1 input / 2 outputs	Empty enclosures	1 input / 3 outputs	Empty enclosures
4 mm² 400 V/32 A	3	1079650	1021212	1079651	1079658
	5	1079659		1079660	
	3 / 5			1079661	

Special versions					
					
Connection data	Num- ber of posi- tions	Cable diameter	Connection technology	Cable connectors	Cable protective cap
1.5 mm²... 4 mm²; 500 V/25 A	5	9.5 mm... 12.5 mm	Screw connection	1274812	1274810

Color markings			
			
Color	Nut for panel feed-throughs	Manual release latch for couplings	Coding for male connector
Blue	1049831	1002293	1014455
Red	1125067	1125075	1125097
Yellow	1125062	1125073	1125058
Green	1049830	1002290	1014456
Gray	1049832	1002292	1014457
Black	1457937		1014496



Open communication with customers and partners worldwide

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

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

You can find your local partner at
phoenixcontact.com