

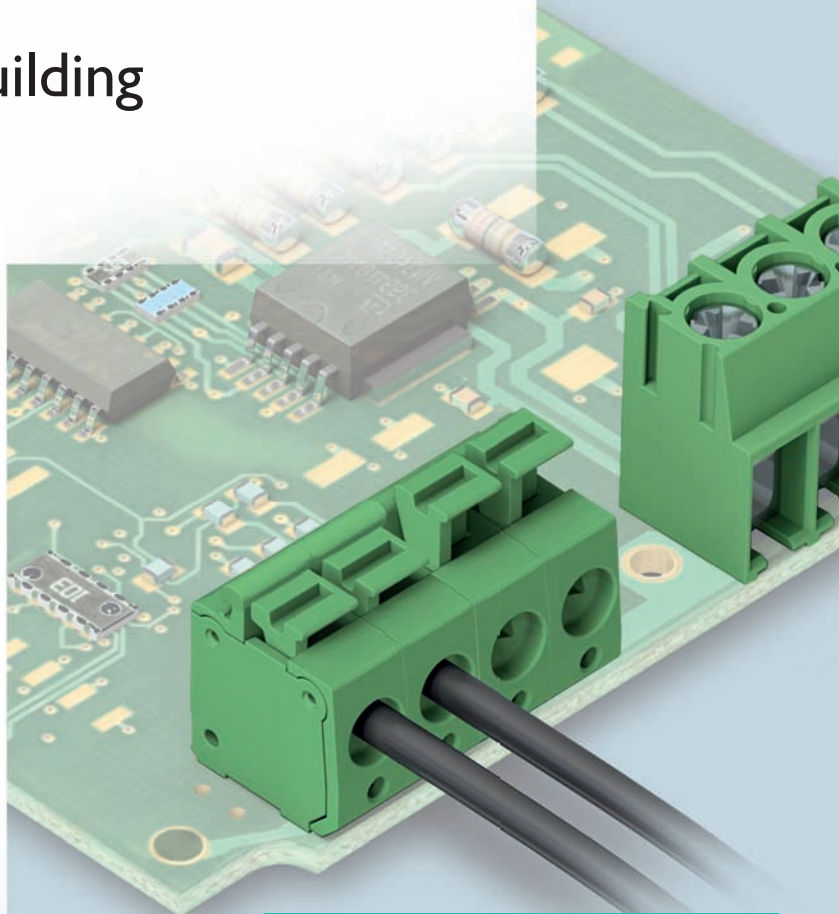
COMBICON compact

Connection technology
for building and
LED applications

PCB terminal blocks and plug-in connectors for building and LED applications

COMBICON compact is the PCB terminal block and plug-in connector range from Phoenix Contact, for connections up to 32 A. Electronic modules in building automation and the lighting industry are increasingly compact, and more and more components and functions are centered in the PCB.

For these areas of application, Phoenix Contact offers you the ideal conductor connection.



COMBICON PCB terminal blocks

- Currents up to 32 A
- Voltage up to 800 V
- Conductor cross section up to 4 mm²
- Pitch from 2.5 to 7.5 mm
- Screw, spring cage, and displacement connection

The right connection technology for every application



Lighting



Safety technology



Communication



Alarm technology



Air conditioning control system

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COMBICON plug-in connectors

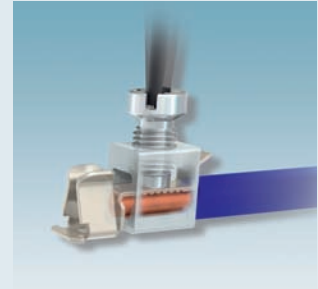
- Currents up to 13.5 A
- Voltage up to 400 V
- Conductor cross section up to 4 mm²
- Pitch from 2.5 to 5 mm
- Screw and spring connection
- Can be plugged onto pin strips

Plug-in connectors for building automation

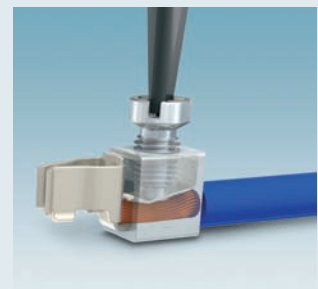
COMBICON compact plug-in connectors are the professional solution for user-friendly PCB connections. Along with the proven screw connection with wire protector, the new push-in spring technology offers fast and tool-free conductor connection. Establishing connection is now therefore consistently plug-in capable and easy to maintain.

Discover the many different combinations offered by the range of plug-in connectors from COMBICON compact.

Connection technologies for plug-in connectors



Screw connection
with tension sleeve



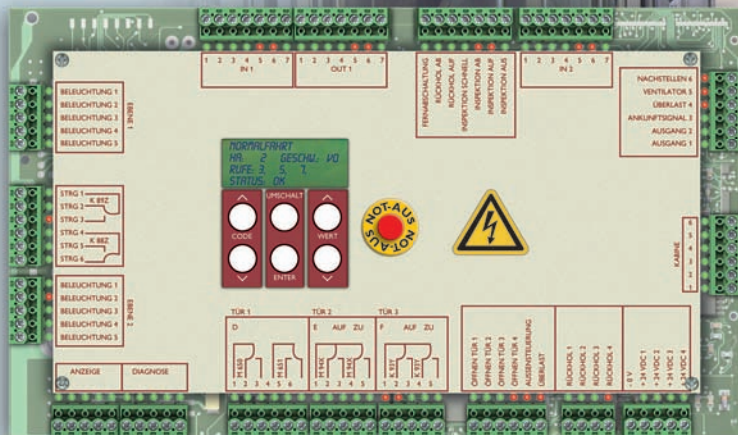
Screw connection
with wire protector



Push-in spring connection

Main features

- Screw connection with tension sleeve or wire protector
- Fast push-in connection
- Large clamping space
- Highly flexible conductor protection latch for screw terminal blocks
- Tension sleeve principle in the PT 1,5 PH series
- Pitch 2.5 to 5.0 mm
- Partial assembly optional
- Color coding optional, with colored plugs and pin strips



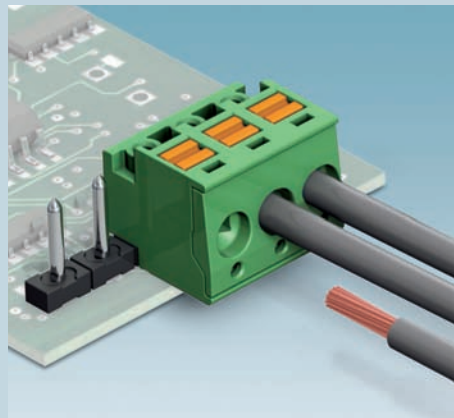
Elevator controller with PT 1,5/...-PH-5,0 and PST 1,3/...-5,0 pin strip

Advantages at a glance



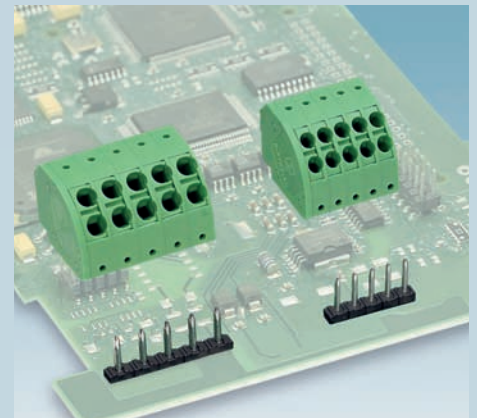
PT 1,5 plug-in connector

- Screw connection with tension sleeve
- For latching in device housing
- Snap-on feet for reliable stop
- Ideal for clam-shell electronics housing



PTS plug-in connector

- Push-in spring connection
- Safe latching when connecting the new pin strip or base strip
- Test connection
- Integrated release button prevents inadvertent release
- Optional keying
- Designs comparable to screw solution



PTDA plug-in connector

- Spring-cage double connection
- Direct plug-in technology
- Compact dimensions
- Test connection
- Attractive design

PCB terminal blocks for building automation

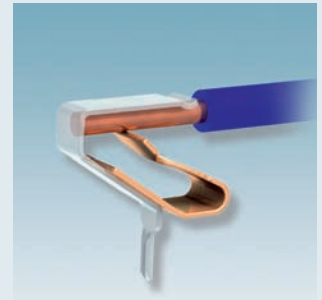
COMBICON compact features a wide range of PCB terminal blocks with various connection technologies.

PCB terminal blocks offer connection options for conductors with cross sections of up to 4 mm². Conductors are easily connected thanks to the fast spring connection or the proven screw connection.

Connection technologies for PCB terminal blocks



Screw connection with
wire protector



Push-in spring connection

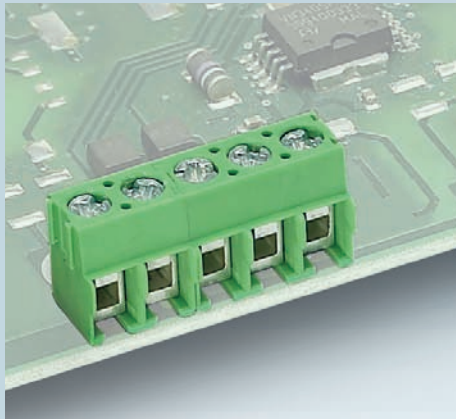
Main features

- Choice between screw and spring connection
- Large clamping space
- Highly flexible conductor protection latch for screw terminal blocks
- Push-in spring connection technology, pitch from 2.5 to 7.5 mm
- Pitch spacers available for the PTSA and PTDA series
- Partial assembly optional



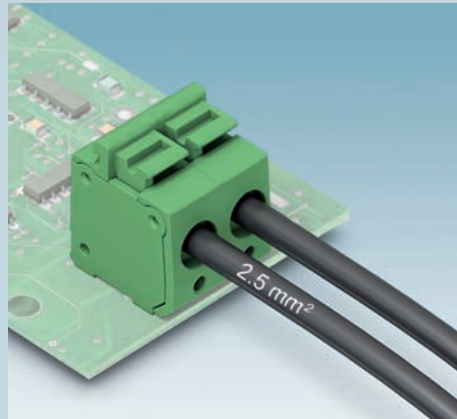
*Building automation
with PTDA PCB terminal blocks
and BC housing*

Advantages at a glance



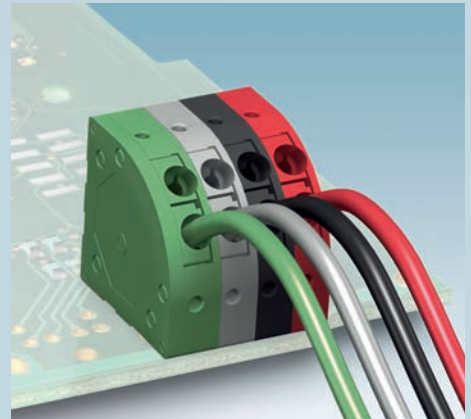
PT 1,5 PCB terminal blocks

- Screw connection
- High terminal capacity
- High current carrying capacity
- Plus/minus screw as standard



PTS 1,5 PCB terminal blocks

- Push-in spring connection
- Finger-operated release button
- Compact design
- Test connection



PTDA PCB terminal blocks

- Spring-cage double connection
- Direct plug-in technology
- Compact dimensions
- Test connection










The right connection solution for every application

Spring connection		Screw connection			
Plug-in connector	Individual connection	Double connection			
					
		FK-MPT 0,5/...ST-3,5 4 A, 250 V (VDE) 4 A, 300 V (UL/CUL) Up to 0.5 mm ² , AWG 26 – 20 Number of positions 2 – 16	PTDA 1,5/...PH-3,5 8 A, 240 V (VDE) 10 A, 150 V (UL/CUL) Up to 1.5 mm ² , AWG 24 – 16 Number of positions 2 – 16	PT 1,5/...PVH-3,5 8 A, 200 V (VDE) 10 A, 300 V (UL/CUL) Up to 1.5 mm ² , AWG 26 – 16 Number of positions 2 – 16	PT 1,5/...PH-3,5 8 A, 200 V (VDE) 10 A, 300 V (UL/CUL) Up to 1.5 mm ² , AWG 26 – 16 Number of positions 2 – 16
					
5.0 mm pitch	PTS 1,5/...-PH-5,0 10 A, 400 V (VDE) UL approval applied for Up to 2.5 mm ² , AWG 14 – 26 Number of positions 2 – 12	PTDA 2,5/...-PH-5,0 13.5 A, 400 V (VDE) 13.5 A, 300 V (UL/CUL) Up to 2.5 mm ² , AWG 24 – 12 Number of positions 2 – 16		PT 1,5/...PVH-5,0 12 A, 320 V (VDE) 15 A, 300 V (UL/CUL) Up to 2.5 mm ² , AWG 26 – 14 Number of positions 2 – 16	PT 1,5/...PH-5,0 10 A, 400 V (VDE) 5 A, 300 V (UL/CUL) Up to 2.5 mm ² , AWG 26 – 12 Number of positions 2 – 16
					PT 1,5/...-PH-5,0 CLIP 10 A, 400 V (VDE) 5 A, 300 V (UL/CUL) Up to 1.5 mm ² , AWG 26 – 14 Number of positions 2 – 16
					
	PTSA 0,5/...-2,5-Z(F) 2 A, up to 250 V (VDE) 2 A, 300 V (UL/CUL) Up to 0.5 mm ² , AWG 24 – 20 Number of positions 2 – 16				
PCB terminal blocks					
		 Horizontal		 Horizontal	
	PTSA 1,5/...-3,5-Z(F) 2 A, up to 400 V (VDE) 2 A, 300 V (UL/CUL) Up to 1.5 mm ² , AWG 24 – 16 Number of positions 2 – 16	FK-MPT 0,5/...-3,5 4 A, 250 V (VDE) 4 A, 300 V (UL/CUL) Up to 0.5 mm ² , AWG 26 – 20 Number of positions 2 – 16	PTDA 1,5/...-3,5 13.5 A, 240 V (VDE) 12 A, 300 V (UL/CUL) Up to 1.5 mm ² , AWG 24 – 16 Number of positions 2 – 16	PT 1,5/...-3,5 17.5 A, 200 V (VDE) 10 A, 300 V (UL/CUL) Up to 1.5 mm ² , AWG 26 – 16 Number of positions 2 – 16	PTA 1,5/...-3,5 17.5 A, 200 V (VDE) 10 A, 300 V (UL/CUL) Up to 1.5 mm ² , AWG 26 – 16 Number of positions 2 – 16
				 Horizontal	 Horizontal
	PTS 1,5/...-5,0-H 12 A, 400 V (VDE) 10 A, 300 V (UL/CUL) Up to 1.5 mm ² , AWG 24 – 16 Number of positions 2 – 16	PTDA 2,5/...-5,0 24 A, 400 V (VDE) 15 A, 300 V (UL/CUL) Up to 2.5 mm ² , AWG 24 – 12 Number of positions 2 – 16		PT 1,5/...-5,0 17.5 A, 400 V (VDE) 18 A, 300 V (UL/CUL) Up to 2.5 mm ² , AWG 26 – 14 Number of positions 2 – 16	PTA 1,5/...-5,0 17.5 A, 400 V (VDE) 15 A, 300 V (UL/CUL) Up to 2.5 mm ² , AWG 26 – 14 Number of positions 2 – 16
7.5 mm pitch				 Horizontal	 Horizontal
	PTS 1,5/...-7,5-H 12 A, 630 V (VDE) 10 A, 300 V (UL/CUL) Up to 2.5 mm ² , AWG 26 – 14 Number of positions 2 – 12			PT 2,5/...-7,5 32 A, 800 V (VDE) 20 A, 300 V (UL/CUL) Up to 4.0 mm ² , AWG 20 – 10 Number of positions 2 – 12	

In addition to the products in the catalog, our product range includes numerous customer-specific products. By this, we don't just mean different versions, but also special developments designed to meet your requirements.

Are you looking for a tailor-made connection solution?
If so, please do not hesitate to contact us.

Base and pin strips

				
	PST 1,0/...-3,5	PST 1,0/...-3,5 RS6	FK-MPT 0,5/...-ICA-3,5	
	8 A, 250 V (VDE)	8 A, 250 V (VDE)	Shock-proof base strip	
	10 A, 300 V (UL/CUL)	10 A, 300 V (UL/CUL)	For FK-MPT 0,5/...-3,5	
				
	PT 2,5/...-PVH-5,0	PST 1,3/...-5,0	PST 1,3/...-L...-5,0	PST 1,3/...-5,0-SF
	13.5 A, 320 V (VDE)	12 A, 320 V (VDE)	Pin strip that can be encoded	Snap-on pin strip
	10 A, 300 V (UL/CUL)	16 A, 300 V (UL/CUL)	For PT 2,5/...-PVH-5,0	For PTS 1,5/...-PH-5,0
Up to 4.0 mm², AWG 20 – 12	Number of positions 2 – 16	Number of positions 2 – 8	13.5 A, 400 V (VDE)	12 A, 320 V
Number of positions 2 – 8			10 A, 300 V (UL/CUL)	UL/CUL approval applied for

Customer-specific versions

Designation	Labeling	Color		Partial assembly	Mechanical coding	Color coding	Tape-on-reel packing	Other
		Default	Optional					
PTSM...	● ⁵⁾	■	□	●	○	○	●	
PTSM... plug-in	● ⁵⁾	■	□	●	○	○	●	
PTQ	●	■	□ ²⁾	○ ²⁾	○	○	●	
PTS	●	■	■	○ ²⁾	○	●	○ ²⁾	
PTS...PH	●	■	■	○ ²⁾	●	○	○	
FK-MPT	● ⁴⁾	■	■	●	○	○	●	
PTSA...	●	■	■	● ¹⁾	○	●	●	Blocks available with different pitches
PTDA...	● ⁴⁾	■	■	○ ^{1) 2)}	●	●	○ ²⁾	Blocks available with different pitches
PTA 1,5	●	■	■	●	●	○	○ ²⁾	A-version can be aligned in the pitch (plug)
PT 1,5...	●	■	■	●	●	○	○ ²⁾	
PT 2,5...	●	■	■	●	●	○	○ ²⁾	
PST...	○	■	■	●	○	○	●	Various pin lengths/geometries available on request
PST...-L...	○	■	○	●	●	○	○ ²⁾	
PST...-SF	○	■	○	●	●	○	○ ²⁾	

● = Available

○ = Not available

1) With pitch spacer

2) Available on request

3) E.g., to double the pitch

4) Two labeling areas available

5) Color marking

FOPT PCB terminal block product versions



- Integrated transmit and receive diode
- Fast push-in connection without fiber pretreatment
- Fast release thanks to the integrated release button
- High stability thanks to additional strain relief
- Bend protection sleeve supplied as standard
- Detailed wiring plan (see COMBICON catalog)

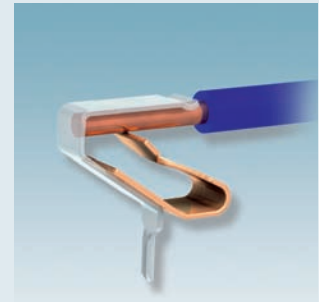
Miniature plug-in connectors for LED applications

The COMBICON high density product range excels thanks to its very small dimensions. Spring and displacement connection technologies (IDC) help you to connect conductors quickly and easily. What's more, the products have a current carrying capacity of up to 6 A.

The PCB terminal blocks and base strips are specially designed for THR soldering and automatic assembly.



Connection technologies for PCB terminal blocks

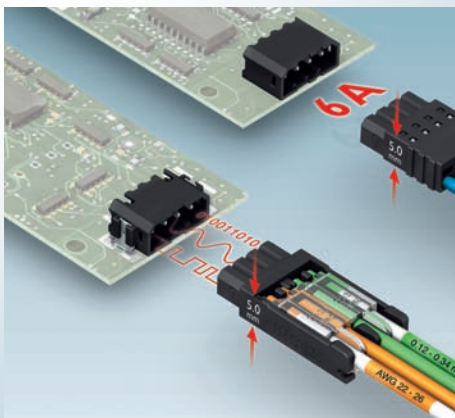


Push-in spring connection



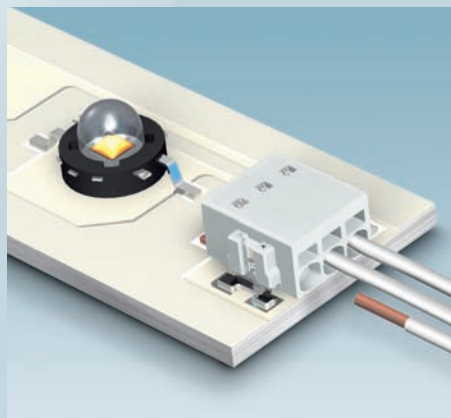
Displacement connection (IDC)

The right connection technology for every application



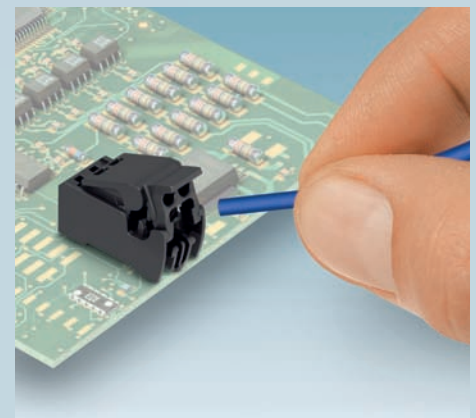
PTSM/PTPM miniature plug-in connectors

- Push-in spring connection or pierce connection
- SMD and THR solderable base strips
- 2.5 mm pitch
- Design height 5.0 mm
- High current carrying capacity of up to 6 A



Miniature PTSM PCB terminal blocks

- Push-in spring connection
- SMD and THR solderable
- 2.5 mm pitch
- Design height 5.0 mm
- High current carrying capacity of up to 6 A
- Available in white and black



Miniature PTQ PCB terminal block

- Displacement connection (IDC)
- THR solderable
- 2.5 mm pitch
- Design height 8.0 mm

Plug-in connector	Spring connection		Pierce connection			
						
	PTSM 0,5/...-P-2,5		PTPM 0,2/(0,4)....-P			
	Plug component		Plug			
	6 A, 160 V (VDE)		2 A, (4 A) up to 160 V (VDE)			
	5 A, 150 V (UL/CUL)		2 A (3 A), 50 V (UL/CUL)			
Base strips						
	PTSM 0,5/...HH-2,5 THR R...		PTSM 0,5/...HV-2,5 THR R...		PTSM 0,5/...HH-2,5 SMD R...	PTSM 0,5/...IH-2,5 SMD R...
	Horizontal base strip		Vertical base strip		Horizontal base strip	Inverted, horizontal base strip
	6 A, 160 V		6 A, 160 V		6 A, 160 V	6 A, 160 V
	6 A, 150 V (UL/CUL)		6 A, 150 V (UL/CUL)		6 A, 150 V (UL/CUL)	UL/CUL approval applied for
PCB terminal blocks					 <p>Tape-on-reel packing as standard</p> <p>The PCB terminal blocks and base strips are suitable for automatic processing and are taped as standard.</p>	
	PTSM 0,5/...-2,5-H THR R...		PTSM 0,5/...-2,5-V THR R...			
	Horizontal PCB terminal block		Vertical PCB terminal block			
	THR solderable		THR solderable			
	6 A, up to 200 V (VDE)		6 A, up to 200 V (VDE)			
	5 A, 150 V (UL/CUL) ¹⁾		5 A, 150 V (UL/CUL) ¹⁾			
	0.14/0.2 – 0.5 mm ² solid/stranded ²⁾		0.14/0.2 – 0.5 mm ² solid/stranded ²⁾			
	AWG 26 – 20		AWG 26 – 20			
						
	PTSM 0,5/...-2,5-H SMD R...		PTSM 0,5/...-2,5-V SMD R...			
	Horizontal PCB terminal block		Vertical PCB terminal block			
	SMD solderable		SMD solderable			
	6 A, up to 160 V (VDE)		6 A, up to 160 V (VDE)			
	5 A, 150 V (UL/CUL) ¹⁾		5 A, 150 V (UL/CUL) ¹⁾			
	0.14/0.2 – 0.5 mm ² solid/stranded ²⁾		0.14/0.2 – 0.5 mm ² solid/stranded ²⁾			
	AWG 26 – 20		AWG 26 – 20			
	1) 6 A factory wiring					
	2) For 0.75 mm ² up to 40 A					
	3) Applies only to stranded conductors (solid conductors on request)					
			PTQ 0,3/2-2,5 THR R32			
			PCB terminal block			
			THR solderable			
			4 A, 160 V (VDE)			
			2 A, 150 V (UL/CUL) ³⁾			
			0.14 – 0.34 mm ²			
			AWG 26 – 22			

Tape-on-reel packing as standard

The PCB terminal blocks and base strips are suitable for automatic processing and are taped as standard.

Your electronics in a clever package

In the building automation sector, Phoenix Contact offers a consistent solution concept for building electronics, including the electronic housings BC housing, which can be used flexibly. Electronic modules establish connections using COMBICON compact versatile PCB connection technology or RJ45 plug-in connectors. The consistently tailored components ensure smooth interaction and cost-effective installation.

RJ45 plug-in connector

RJ45 plugs and sockets are suitable for use in devices, infrastructure components, and control cabinets.

Main features:

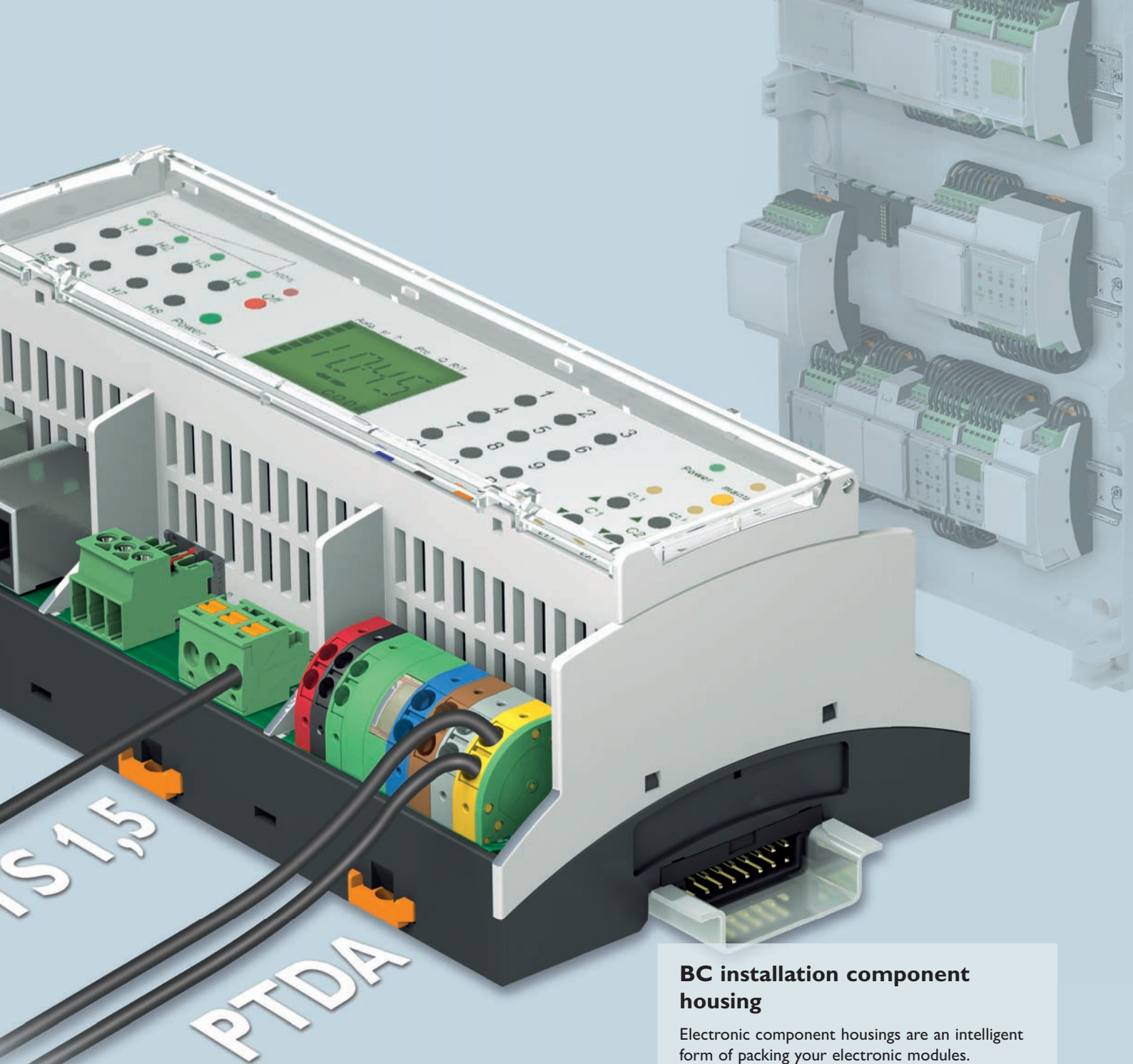
- Available in IP20 and IP67 versions
- Robust locking principle for safe connection
- All components in line with CAT5e requirements
- CAT6_A components available for transmission speeds up to 10 Gbps

PTS 1,5 plug-in connector

The PTS plug-in connector enables quick and easy wiring of solid and stranded conductors.

Main features:

- Push-in spring connection
- Compatible with standard pin strips
- Can be snapped on to PST 1,3 ... -SF pin strips
- Test connection and keying option
- Conductor cross sections up to 2.5 mm²
- Can be aligned in pitch
- Monoblock design



PTDA PCB terminal blocks

PTDA PCB terminal blocks are the perfect solution when a double connection is needed.

Main features:

- Push-in spring connection
- Pitches 3.5 mm and 5.0 mm
- Compact design
- Semicircle design
- Additional plugs available for pin strips

BC installation component housing

Electronic component housings are an intelligent form of packing your electronic modules.

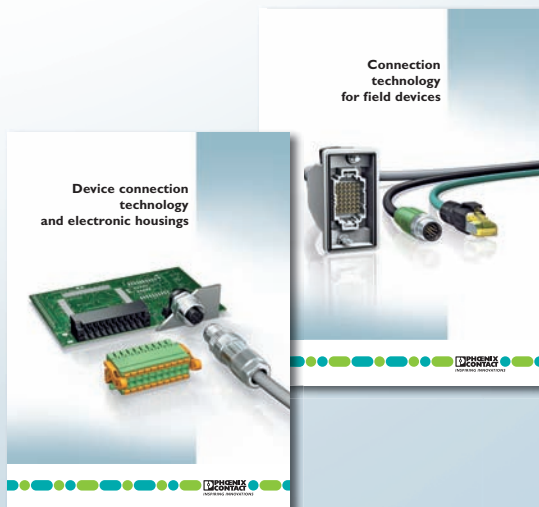
Main features:

- Modular structure
- DIN rail bus connectors
- Complies with DIN 43880 for use in distribution boards

More than just average

Our service – Added value for you

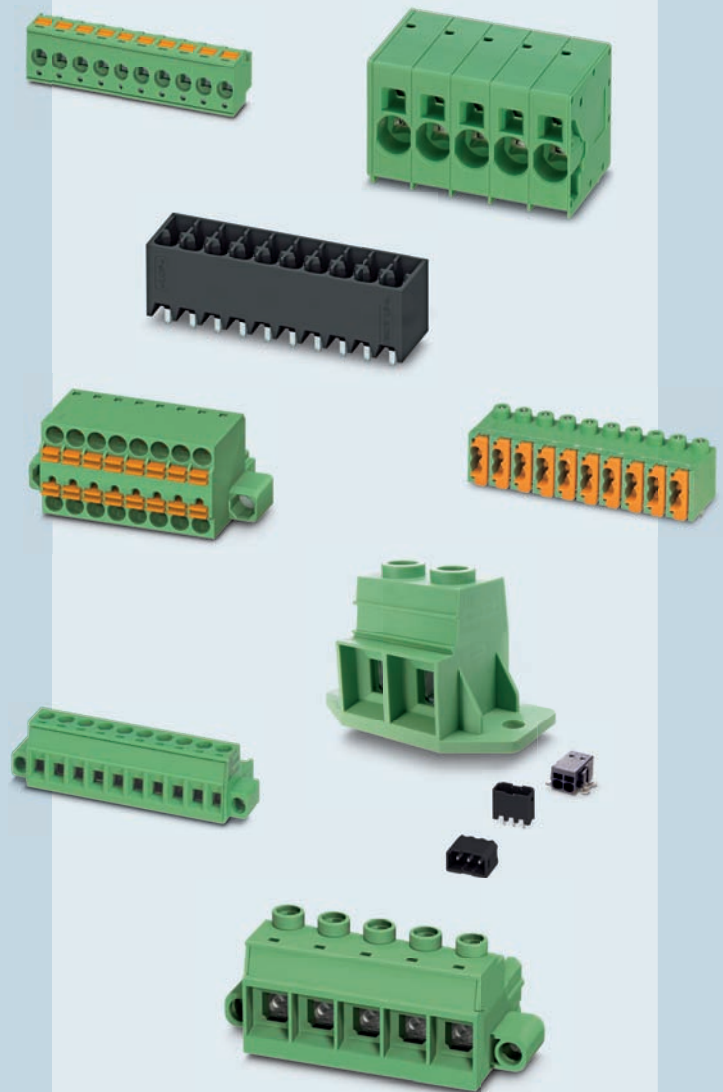
In addition to our versatile standard device connection range, our product portfolio contains a wealth of customer-specific products. From color versions, to special imprinting, right through to special packaging, we can provide you with almost anything – even brand new product developments. Contact us for more information.



Order your own copy of our catalog or visit our website.

Unique variety as standard

With more than 50,000 products, we offer you a full range of device connection technology for signals, data, and power – from miniature plug-in connectors right through to high-current feed-through terminal blocks.



Further information on the products
presented here and on the world of solutions
from Phoenix Contact can be found at
www.phoenixcontact.net/catalog



Or contact us directly.



Modular Terminal Blocks
CLIPLINE 1



**Marking Systems, Tools, and
Mounting Material**
CLIPLINE 2



**Connection Technology for
Field Devices and Field Cabling**
PLUSCON



**Device Connection Technology
and Electronic Housings**
COMBICON



Power and Signal Quality
TRABTECH



**Signal Converters, Switching Devices,
Power Supply Units**
INTERFACE



**Automation Components
and Systems**
AUTOMATION

PHOENIX CONTACT GmbH & Co. KG
32823 Blomberg, Germany
Phone: +49 (0) 52 35 3-00
Fax: +49 (0) 52 35 3-4 12 00
www.phoenixcontact.com