

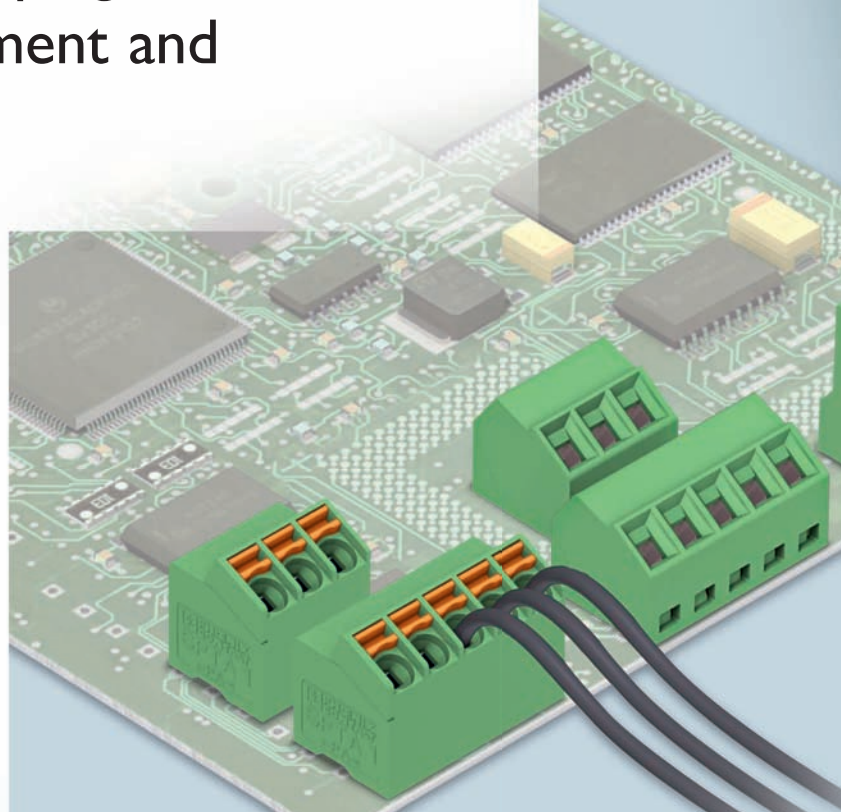
## **COMBICON control**

Connection technology for  
measurement and  
control technology

# PCB terminal blocks and plug-in connectors for measurement and control technology

COMBICON control is Phoenix Contact's range of PCB terminal blocks and plug-in connectors, for measurement and control technology.

The high level of product quality is confirmed by numerous certificates. As such, the products can be used not only in industrial electronics, but also in the Ex area or rail sector.



## COMBICON control PCB terminal blocks

- Currents up to 41 A
- Voltage up to 630 V
- Conductor cross section from 0.08 to 6 mm<sup>2</sup>
- 2.54 to 7.62 mm pitch
- Screw, push-in spring, spring-cage, and displacement connection



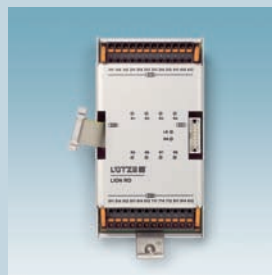
## The right connection technology for every application



Remote I/O module for Ex applications



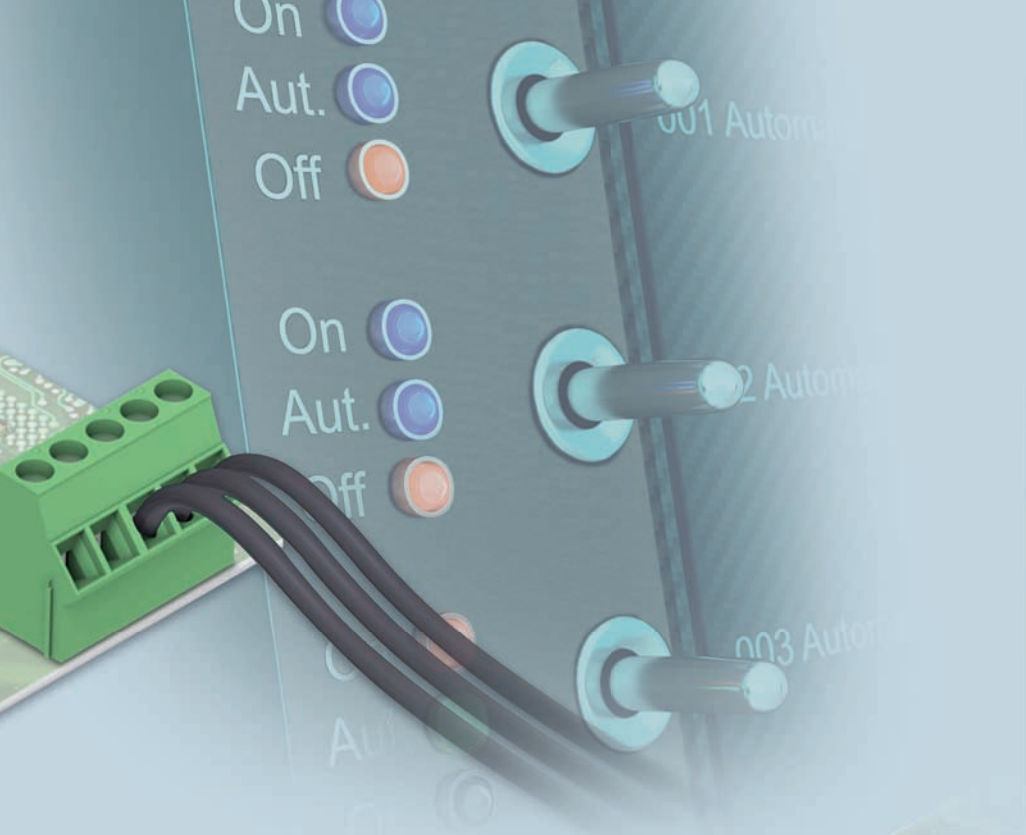
Servo controller



Controller for rail vehicles



Frequency inverter



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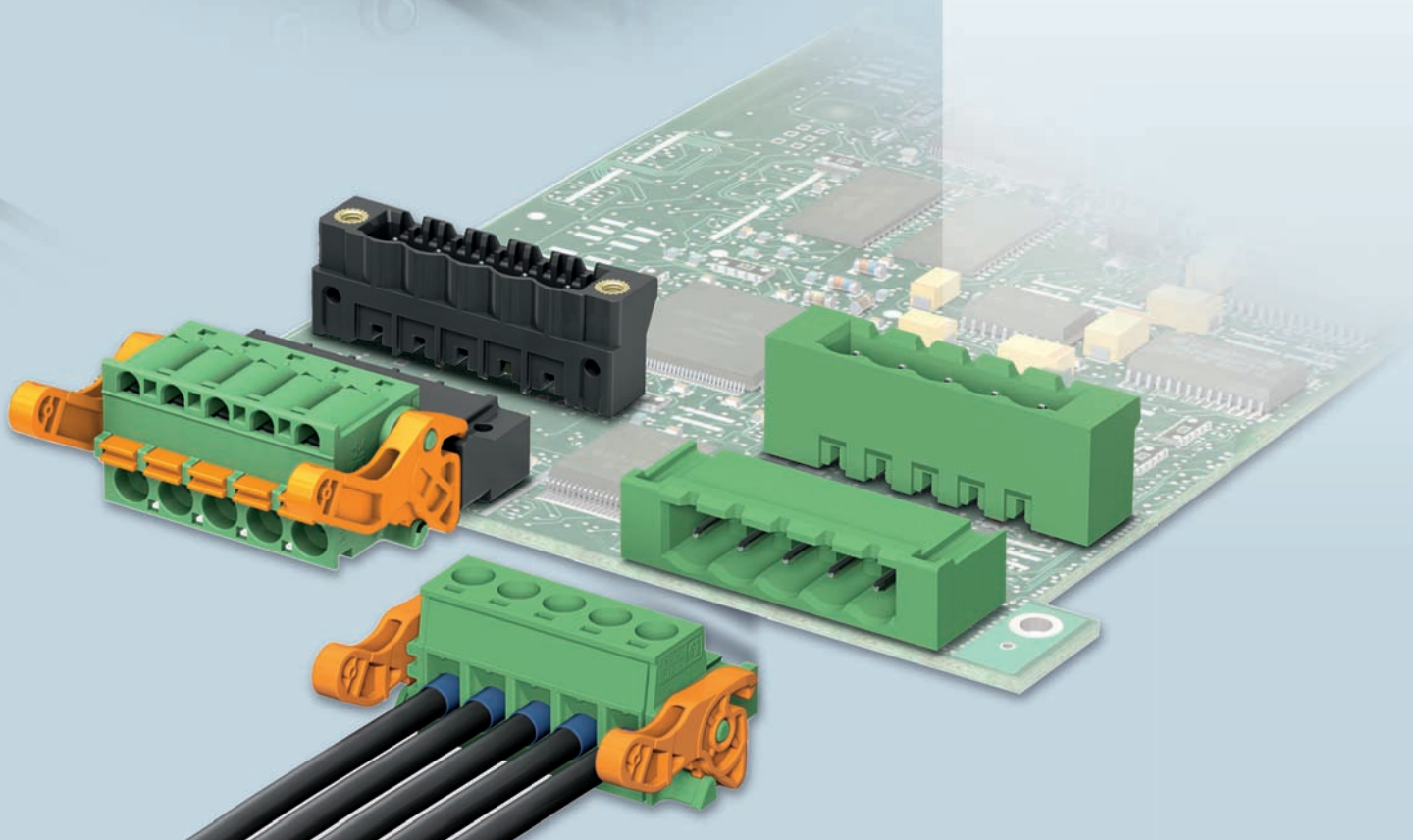
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Plug-in connectors and PCB  
terminal blocks with Ex approval  
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Service  
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### **COMBICON control plug-in connectors**

- Currents up to 12 A
- Voltage up to 630 V
- Conductor cross section from 0.14 to 2.5 mm<sup>2</sup>
- 2.5 to 7.62 mm pitch
- Screw, push-in spring, crimp, and displacement connection

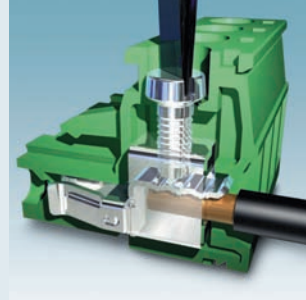
# Plug-in connectors for measurement and control technology

COMBICON control – the worldwide benchmark for industrial PCB connection technology – offers screw, push-in spring, displacement, and crimp connection technology.

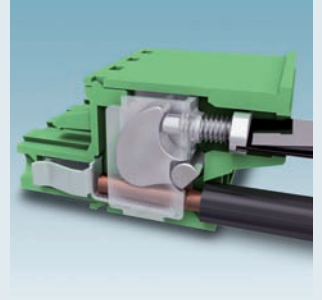
Developed and nurtured over decades with you – our customers – it now represents the most varied product range.

Select the perfect connection for your applications. When we develop our products, we adhere to the most recent standards and relevant regulations. The products are tested in certified laboratories and are checked for process reliability in our own electronics production department.

## Connection technologies for plug-in connectors



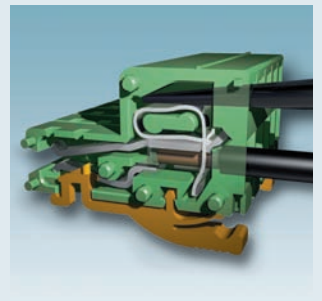
Screw connection



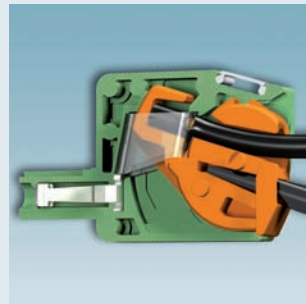
Front screw connection



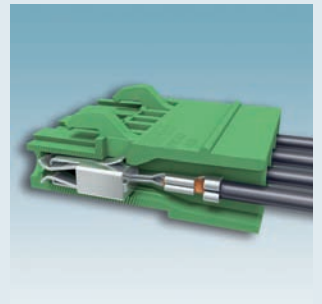
Push-in spring connection



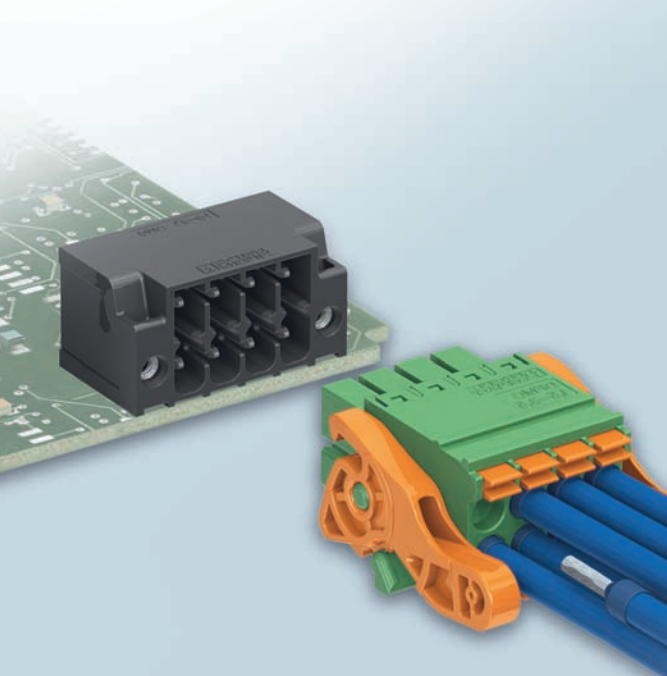
Spring-cage connection



Displacement connection



Crimp connection



### Main features

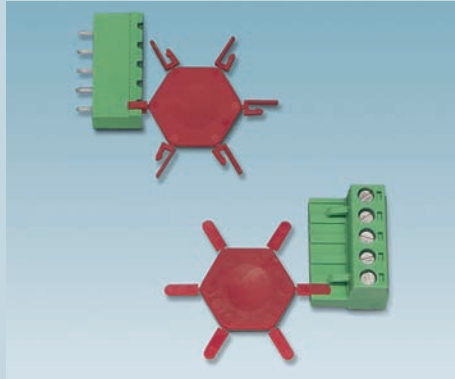
- Fast push-in connection
- Screw connection with tension sleeve
- 2.54 to 7.62 mm pitch
- Flexibility when choosing connection directions; horizontal, vertical, angled
- High variety of mounting types wave soldering, through hole reflow soldering (THR), press-in technology
- Partial assembly optional
- Color coding optional, with colored plugs and pin strips

## Advantages at a glance



### Individual pin strips

- Partially assembled pin strips
- Variable pin lengths
- Electroplating surfaces in tin or gold



### Keying

- Keying with keying sections and keying profiles



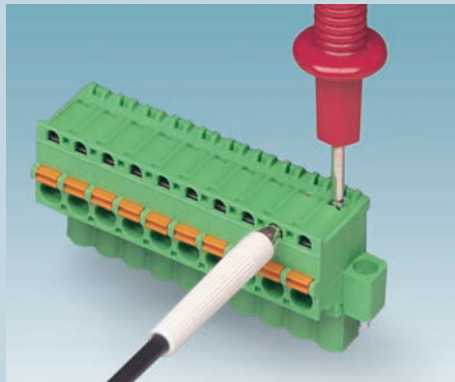
### Identification and marking

- Labeling
- Color options



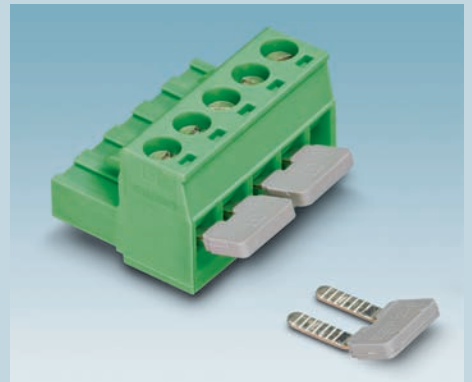
### Flange systems

- Standard
- Lock & Release
- Screw flange
- Self-locking flange



### Integrated test connections

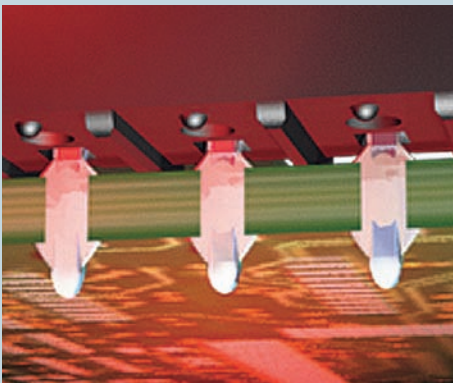
- Touch connection
- Pick-off for test plug



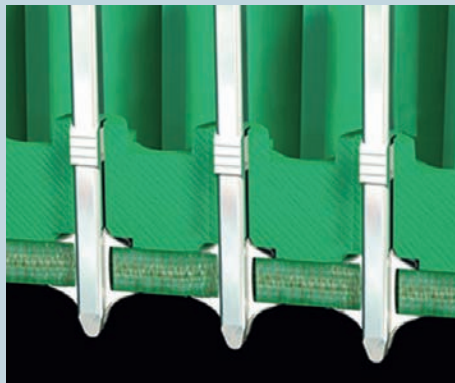
### Bridges

- Easy potential distribution

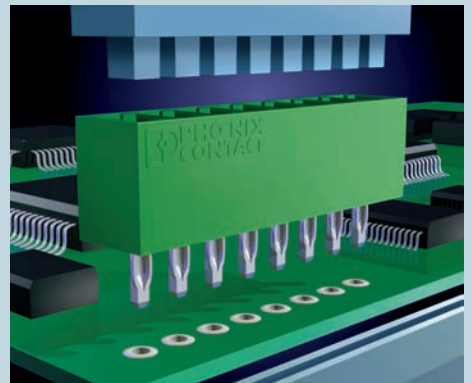
## Variety of assembly options for base strips



Through hole reflow technology



Wave solder technology


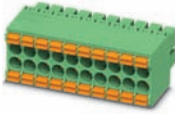
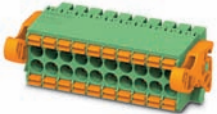

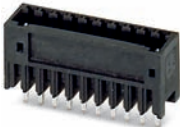





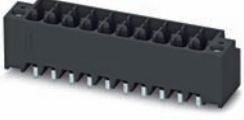
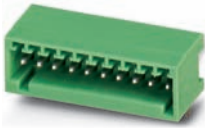



Press-in technology

# Plug-in connectors and headers

Discover the many different combinations offered by the range of plug-in connectors from COMBICON control. Choose the right connection and assembly technology for you from a variety of products.



		2.5 mm pitch		3.5 mm pitch	
Plug-in connectors	Push-in spring connection				
		<b>FK-MC 0,5/...-ST-2,5</b>		<b>DFMC 1,5/...-ST-3,5</b>	<b>DFMC 1,5/...-ST-3,5 LR</b>
		2 to 12-pos. 4 A, 160 V		2 to 20-pos. 8 A, 160 V	2 to 20-pos. 8 A, 160 V
Headers	Through hole reflow technology				
		<b>MC 0,5/...-G-2,5 THT</b>	<b>MCV 0,5/...-G-2,5 THT</b>	<b>DMC 1,5/...-G1-3,5 P20THR</b>	<b>DMC 1,5/...-G1F-3,5-LR P20THR</b>
	2 to 12-pos. 4 A, 160 V	2 to 12-pos. 4 A, 160 V	2 to 20-pos. 8 A, 160 V	2 to 20-pos. 8 A, 160 V	
					
	<b>MC 0,5/...-G-2,5 THT R44</b>	<b>MCV 0,5/...-G-2,5 THT R44</b>	<b>DMCV 1,5/...-G1-3,5 P20THR</b>	<b>DMCV 1,5/2...-G1F-3,5-LR P20THR</b>	
	4 A, 160 V	4 A, 160 V	2 to 20-pos. 8 A, 160 V	2 to 20-pos. 8 A, 160 V	
Wave solder technology					
	<b>MC(V) 0,5/...-G-2,5</b>	<b>MCD(V) 0,5/...-G-2,5</b>			
2 to 12-pos. 4 A, 160 V	2 to 12-pos. 4 A, 160 V				

3.5/3.81 mm pitch

Plug-in connectors

Screw connection					
	<b>MC 1,5/...-ST...</b> 2 to 20-pos. 8 A, 160 V	<b>MCV (W)(R) 1,5/...-ST...</b> 2 to 16-pos. 8 A, 160 V	<b>FRONT-MC 1,5/...-ST...</b> 2 to 20-pos. 8 A, 160 V	<b>IMC 1,5/...-ST-3,81</b> 2 to 16-pos. 8 A, 160 V	
	Push-in spring connection			TWIN	
		<b>FMC 1,5/...-ST...</b> 2 to 20-pos. 8 A, 160 V	<b>FMCD 1,5/...-ST-3,5</b> 3 to 16-pos. 8 A, 160 V	<b>TFMC 1,5/...-ST-3,5</b> 2 to 10-pos. 8 A, 160 V	<b>FK-MCP 1,5/...-ST...</b> 2 to 20-pos. 8 A, 160 V
Displacement connection					
		<b>QC 0,5/...-ST-3,81</b> 2 to 16-pos. 6 A, 320 V			
Crimp connection					
	<b>MCC 1/...-STZ-3,81</b> 2 to 20-pos. 8 A, 160 V				

Headers

Through hole reflow technology					
	<b>MC 1,5/...-G... THR</b> 2 to 12-pos. 8 A, 160 V	<b>MCV 1,5/...-G... THR</b> 2 to 12-pos. 8 A, 160 V	<b>MCDN 1,5/...-G1...THR</b> 2 to 20-pos. 8 A, 160 V	<b>MCDNV 1,5/...-G1...THR</b> 2 to 20-pos. 8 A, 200 V	
	<b>MC 1,5/...-G... THR R...</b> 8 A, 160 V	<b>MCV 1,5/...-G... THR R...</b> 8 A, 160 V	<b>MCDN 1,5/...-G1...THRR...</b> 8 A, 160 V		
	Press-in technology				
		<b>EMC 1,5/...-G...</b> 2 to 16-pos. 8 A, 160 V	<b>EMCV 1,5/...-G...</b> 2 to 16-pos. 8 A, 160 V		
Wave solder technology					
	<b>MC(V) 1,5/...-G...</b> 2 to 20-pos. 8 A, 160 V	<b>MCD(V) 1,5/...-G...</b> 2 to 16-pos. 8 A, 160 V	<b>MCD(V) 1,5/...-G1...</b> 2 to 16-pos. 8 A, 160 V	<b>IMC(V) 2,5/...-G...</b> 2 to 16-pos. 8 A, 160 V	

### 5.0/5.08 mm pitch

## Plug-in connectors

Screw connection



**MSTB (T) 2,5/...-ST...**  
2 to 24-pos.  
12 A, 320 V



**MSTBP 2,5/...-ST...**  
2 to 24-pos.  
12 A, 320 V



**FRONT-MSTB 2,5 /...-ST...**  
2 to 24-pos.  
12 A, 320 V



**SMSTB 2,5/...-ST...**  
2 to 24-pos.  
12 A, 320 V



**MSTBV (W) (R) 2,5/...-ST...**  
2 to 20-pos.  
12 A, 320 V

TWIN



**TMSTBP 2,5/...-ST-5,08**  
2 to 10-pos.  
12 A, 320 V

TWIN

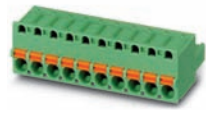


**TVMSTB 2,5/...-ST-5,08**  
2 to 10-pos.  
12 A, 400 V

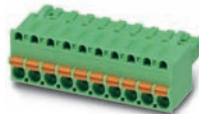


**IC 2,5/...-ST-5,08**  
2 to 24-pos.  
12 A, 320 V

Push-in spring connection



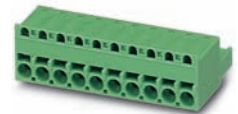
**FKC 2,5/...-ST...**  
2 to 20-pos.  
12 A, 320 V



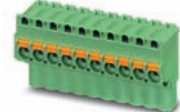
**FKCT 2,5/...-ST...**  
2 to 20-pos.  
12 A, 320 V



**FKCN 2,5/...-ST...**  
2 to 18-pos.  
12 A, 320 V

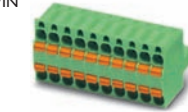


**FKCS 2,5/...-ST...**  
2 to 20-pos.  
12 A, 320 V



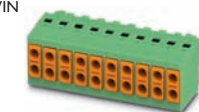
**FKCV (W) (R) 2,5/...-ST...**  
2 to 18-pos.  
12 A, 320 V

TWIN



**TFKC 2,5/...-ST-5,08**  
2 to 10-pos.  
12 A, 320 V

TWIN

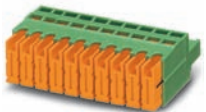


**TVFKC(L) 3,5/...-ST**  
2 to 10-pos.  
12 A, 320 V

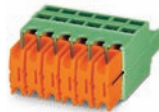


**FKIC(S) 2,5/...-ST...**  
2 to 16-pos.  
12 A, 320 V

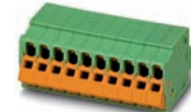
Displacement connection



**QC 1/...-ST-5,08**  
2 to 16-pos.  
10 A, 630 V



**QC 1/...-ST-BUS**  
2 to 6-pos.  
10 A, 630 V

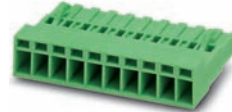


**QC 1,5/...-ST**  
2 to 16-pos.  
12 A, 630 V

Crimp connection



**MSTBC 2,5/...-ST-5,08**  
2 to 24-pos.  
12 A, 320 V



**MSTBC 2,5/...-STZ-5,08**  
2 to 24-pos.  
12 A, 320 V



**MSTBC 2,5/...-STZFD-5,08**  
2 to 24-pos.  
12 A, 320 V



**ICC 2,5/...-STZ-5,08**  
2 to 24-pos.  
12 A, 320 V

### 7.5/7.62 mm pitch

Screw connection



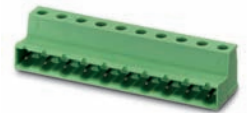
**GMSTB 2,5/...-ST...**  
2 to 12-pos.  
12 A, 630 V



**FRONT-GMSTB 2,5/...-ST...**  
2 to 12-pos.  
12 A, 630 V



**GMVSTB (W) (R) 2,5/...-ST...**  
2 to 12-pos.  
12 A, 630 V

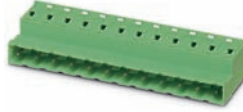


**GIC 2,5/...-ST...7,62**  
2 to 12-pos.  
12 A, 630 V

Push-in spring connection



**GFKC 2,5/...-ST...**  
2 to 12-pos.  
12 A, 630 V



**GFKIC 2,5/...-ST...**  
2 to 12-pos.  
12 A, 630 V



### 5.0/5.08 mm pitch

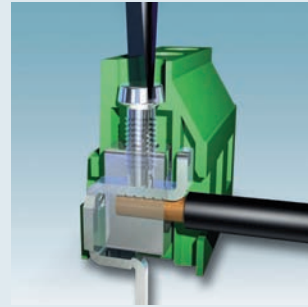
Headers	Through hole reflow technology				
		<b>CCA 2,5/...-G-5,08 P26 THR</b> 2 to 12-pos. 12 A, 320 V	<b>CCVA 2,5/...-G-5,08 P26 THR</b> 2 to 12-pos. 12 A, 320 V	<b>CCDN 2,5/...-G1... P26 THR</b> 2 to 16-pos. 12 A, 400 V	<b>MSTBO 2,5/...G1(L)(R) THR</b> 2 to 4-pos. 16 A, 320 V
		<b>CCA 2,5/...-G-5,08 P26 THRR...</b> 2 to 12-pos. 12 A, 320 V	<b>CCVA 2,5/...-G-5,08 P26 THRR...</b> 2 to 12-pos. 12 A, 320 V		
	Press-in technology				
		<b>EMSTBA 2,5/...-G-...</b> 2 to 24-pos. 12 A, 320 V	<b>EMSTBVA 2,5/...-G-...</b> 2 to 24-pos. 12 A, 320 V		
	Wave solder technology				
		<b>MSTB 2,5/...-G-...</b> 2 to 24-pos. 12 A, 320 V	<b>MSTBA 2,5/...-G-...</b> 2 to 24-pos. 12 A, 320 V	<b>MSTBV 2,5/...-G-...</b> 2 to 24-pos. 12 A, 320 V	<b>MSTBVA 2,5/...-G-...</b> 2 to 24-pos. 12 A, 320 V
		<b>MSTBW 2,5/...-G-...</b> 2 to 24-pos. 12 A, 320 V	<b>MSTBO 2,5/...-G(L)(R)-5,08</b> 2 to 8-pos. 8 A, 320 V	<b>IC 2,5/...-G-5,08</b> 2 to 24-pos. 12 A, 320 V	<b>ICV 2,5/...-G-5,08</b> 2 to 24-pos. 12 A, 320 V
		<b>MDSTB(V) 2,5/...-G-...</b> 2 to 12-pos. 10 A, 320 V	<b>MDSTB(V)A 2,5/...-G-...</b> 2 to 12-pos. 10 A, 320 V	<b>MDSTBA 2,5/...-G1-...</b> 2 to 20-pos. 10 A, 320 V	<b>MDSTBVA 2,5/...-G1-...</b> 2 to 20-pos. 10 A, 320 V
<b>7.5/7.62 mm pitch</b>					
Wave solder technology					
		<b>GMSTBA 2,5/...-G-...</b> 2 to 12-pos. 12 A, 630 V	<b>GMSTBVA 2,5/...-G-...</b> 2 to 12-pos. 12 A, 630 V	<b>GIC 2,5/...-G-7,62</b> 2 to 12-pos. 12 A, 630 V	<b>GICV 2,5/...-G-7,62</b> 2 to 12-pos. 12 A, 630 V

# PCB terminal blocks for measurement and control technology

Thanks to its easy handling, the PCB terminal block range from Phoenix Contact sets the worldwide benchmark for reliable and efficient individual wiring of PCBs.

In addition to the screw connection, the spring connection has also become well established in PCB connection technology. Advantages such as the wide variety of connection technologies always ensure the right solution for your application.

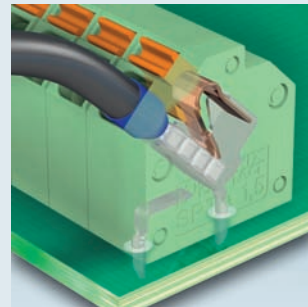
## Connection technologies for PCB terminal blocks



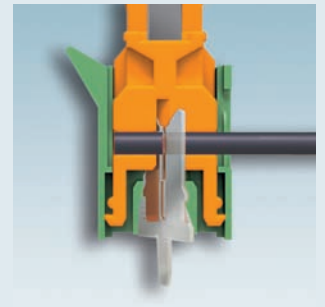
Screw connection



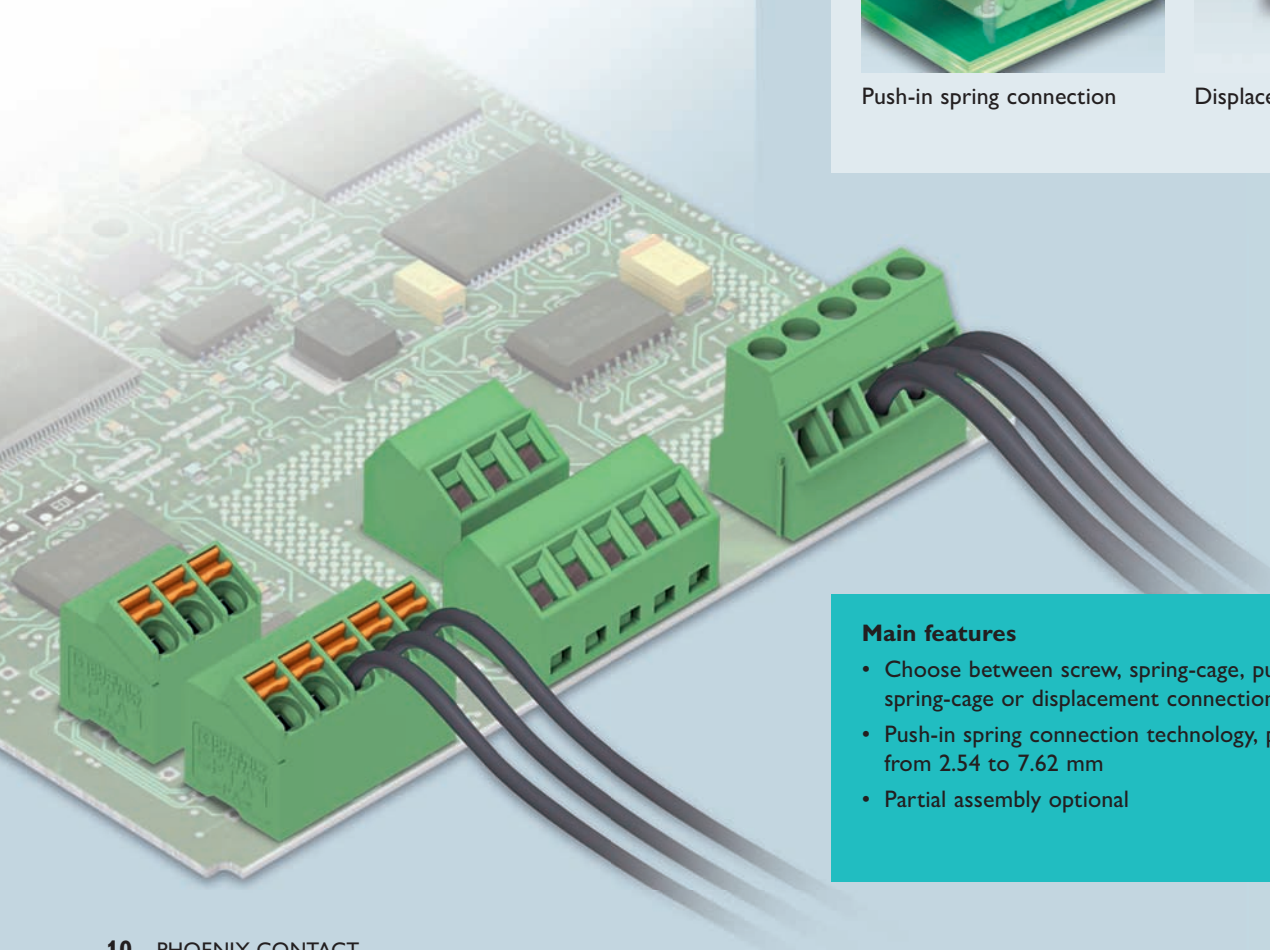
Spring-cage connection



Push-in spring connection



Displacement connection



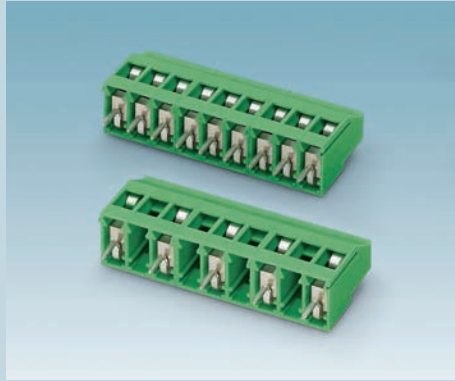
### Main features

- Choose between screw, spring-cage, push-in spring-cage or displacement connection
- Push-in spring connection technology, pitch from 2.54 to 7.62 mm
- Partial assembly optional

## Advantages at a glance



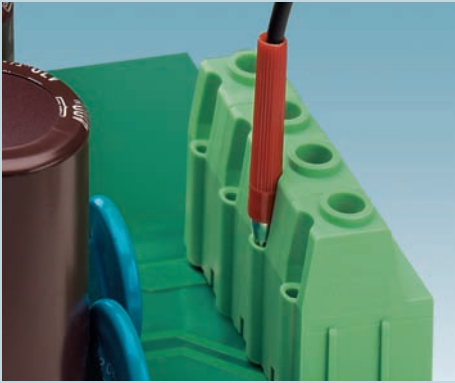
Individual solder pin lengths



Fully or partially assembled versions



Versions with slotted-head and Phillips screws



Integrated test connections

- Touch connection
- Pick-off for test plug



Fixed bridge

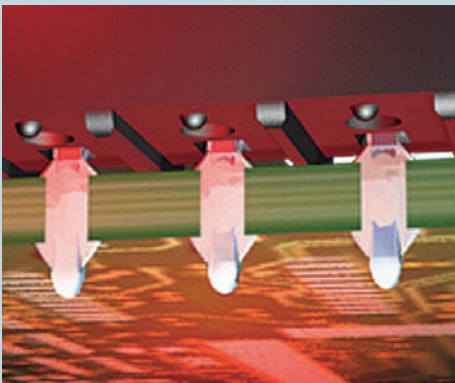
- Easy potential distribution



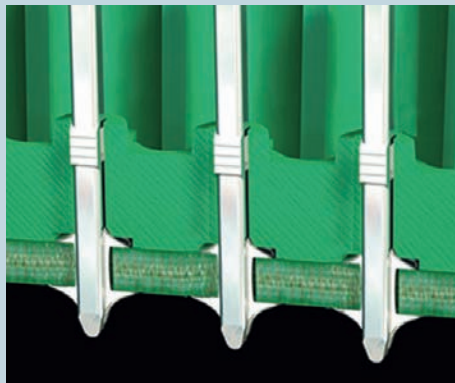
Internal bridges

- To make use of the full clamping space

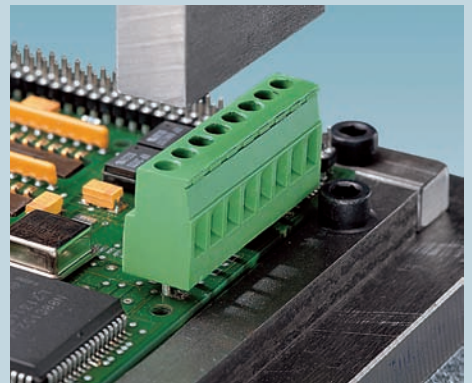
## Variety of assembly options for PCB terminal blocks



Through hole reflow technology



Wave solder technology



Press-in technology

Screw connection

Wave solder technology

3.5/3.81 mm pitch

5.0/5.08 mm pitch

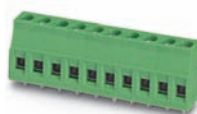
Single-level



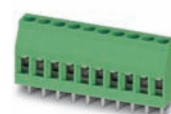
**MKDS 1/...-**  
0.14 – 1.5 mm<sup>2</sup> solid  
0.14 – 1 mm<sup>2</sup> stranded  
AWG 26 – 16  
13.5 A, 200 V



**MKDS(N) 1,5/...-**  
0.14 – 1.5 mm<sup>2</sup> solid  
0.14 – 1.5 mm<sup>2</sup> stranded  
AWG 26 – 16  
13.5 A, 400 V

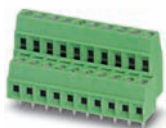


**MKDSN 2,5/...-5,08**  
0.2 – 2.5 mm<sup>2</sup> solid  
0.2 – 2.5 mm<sup>2</sup> stranded  
AWG 24 – 14  
16 A, 400 V

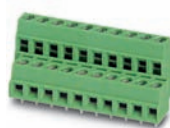


**MKDS 3/...-**  
0.2 – 4 mm<sup>2</sup> solid  
0.2 – 2.5 mm<sup>2</sup> stranded  
AWG 24 – 12  
28 A, 400 V

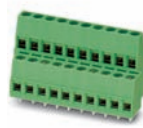
Double-level



**MKKDS 1/...-**  
0.14 – 1.5 mm<sup>2</sup> solid  
0.14 – 1 mm<sup>2</sup> stranded  
AWG 26 – 16  
10 A, 160 V



**MKKDSN 1,5/...-**  
0.14 – 1.5 mm<sup>2</sup> solid  
0.14 – 1.5 mm<sup>2</sup> stranded  
AWG 26 – 16  
13.5 A, 400 V



**MKKDS 1,5/...-**  
0.14 – 2.5 mm<sup>2</sup> solid  
0.14 – 1.5 mm<sup>2</sup> stranded  
AWG 26 – 14  
22 A, 320 V



**MKKDS 3/...-**  
0.2 – 4 mm<sup>2</sup> solid  
0.2 – 2.5 mm<sup>2</sup> stranded  
AWG 24 – 12  
24 A, 400 V

Three/four-level



**MK3DS 1/...-**  
0.14 – 1.5 mm<sup>2</sup> solid  
0.14 – 1 mm<sup>2</sup> stranded  
AWG 26 – 16  
8 A, 160 V



**MK3DSN 1,5/...-**  
0.14 – 1.5 mm<sup>2</sup> solid  
0.14 – 1.5 mm<sup>2</sup> stranded  
AWG 26 – 16  
10 A, 400 V

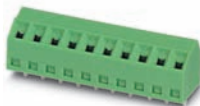


**MK3(4)DS 1,5/...-**  
0.14 – 2.5 mm<sup>2</sup> solid  
0.14 – 1.5 mm<sup>2</sup> stranded  
AWG 26 – 14  
15 A, 400 V



**MK3DS 3/...-**  
0.2 – 4 mm<sup>2</sup> solid  
0.2 – 2.5 mm<sup>2</sup> stranded  
AWG 24 – 12  
24 A, 400 V

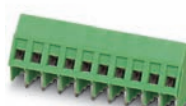
Angled



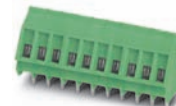
**SMKDS 1/...-**  
0.14 – 1.5 mm<sup>2</sup> solid  
0.14 – 1 mm<sup>2</sup> stranded  
AWG 26 – 16  
12 A, 200 V



**SMKDSN 1,5/...-**  
0.14 – 1.5 mm<sup>2</sup> solid  
0.14 – 1.5 mm<sup>2</sup> stranded  
AWG 26 – 16  
13.5 A, 400 V



**SMKDSP 1,5/...-**  
0.14 – 2.5 mm<sup>2</sup> solid  
0.14 – 1.5 mm<sup>2</sup> stranded  
AWG 26 – 14  
22 A, 400 V

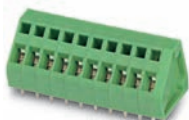


**SMKDS 3/...-**  
0.2 – 4 mm<sup>2</sup> solid  
0.2 – 2.5 mm<sup>2</sup> stranded  
AWG 26 – 12  
28 A, 400 V

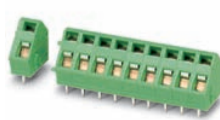
Spring-cage connection

Wave solder technology

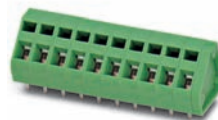
Single-level



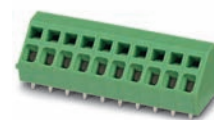
**ZFKDS 1...**  
12 A, 320 V



**ZFKDS 1,5C...**  
16 A, 320 V

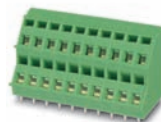


**ZFKDS 1,5...**  
16 A, 400 V

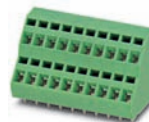


**ZFKDS 2,5...**  
24 A, 400 V

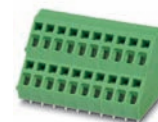
Double-level



**ZFKKDS 1,5C...**  
16 A, 320 V

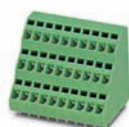


**ZFKKDS 1,5...**  
12 A, 400 V

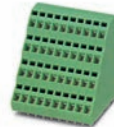


**ZFKKDS 2,5...**  
17.5 A, 400 V





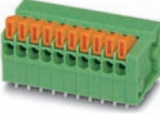
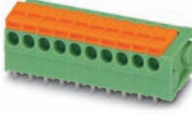
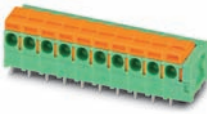
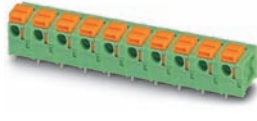

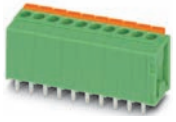
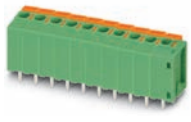




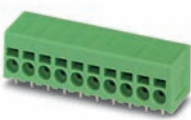

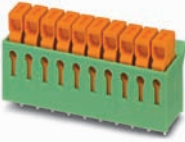

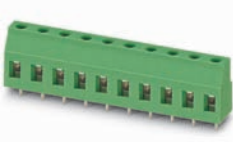
Three/four-level



**ZFK3DS 1,5-5,08**  
12 A, 400 V



**ZFK4DS 1,5-5,08**  
12 A, 400 V

		3.5 mm pitch		5.0/5.08 mm pitch							
		Screw and spring connection		Through hole reflow							
 <p><b>MKDS 1/...-HT BK</b> 0.14 – 1.5 mm<sup>2</sup> solid 0.14 – 1 mm<sup>2</sup> stranded AWG 26 – 16 13.5 A, 200 V</p>				 <p><b>MKDSN 1,50/...-HT BK</b> 13.5 A, 320 V <b>MKDS 1,5/...-HT BK</b> 24 A, 320 V</p>		 <p><b>MKDS 1/...-HT BK</b> 0.2 – 2.5 mm<sup>2</sup> solid 0.2 – 2.5 mm<sup>2</sup> stranded AWG 24 – 14 16 A, 400 V</p>		 <p><b>ZFKDS 2,5-5,08 THT</b> 0.2 – 4 mm<sup>2</sup> solid 0.2 – 2.5 mm<sup>2</sup> stranded AWG 24 – 12 24 A, 320 V</p>			
Push-in spring connection		2.54 mm pitch		3.5/3.81 mm pitch		5.0/5.08 mm pitch		7.62 mm pitch			
		Horizontal		 <p><b>FFKDS/H-2,54</b> 0.14 – 0.5 mm<sup>2</sup> solid 0.14 – 0.5 mm<sup>2</sup> stranded AWG 26 – 20 6 A, 160 V</p>		 <p><b>FFKDS/H-3,81</b> 0.14 – 1 mm<sup>2</sup> solid 0.14 – 1 mm<sup>2</sup> stranded AWG 26 – 18 12 A, 160 V</p>		 <p><b>FFKDS/H1-5,08</b> 0.2 – 1.5 mm<sup>2</sup> solid 0.2 – 1.5 mm<sup>2</sup> stranded AWG 24 – 16 15 A, 400 V</p>		 <p><b>FFKDS/H1-7,62</b> 0.2 – 1.5 mm<sup>2</sup> solid 0.2 – 1.5 mm<sup>2</sup> stranded AWG 24 – 16 17.5 A, 630 V</p>	
		Vertical		 <p><b>FFKDS/V-2,54</b> 0.14 – 0.5 mm<sup>2</sup> solid 0.14 – 0.5 mm<sup>2</sup> stranded AWG 26 – 20 6 A, 160 V</p>		 <p><b>FFKDS/V-3,81</b> 0.14 – 1 mm<sup>2</sup> solid 0.14 – 1 mm<sup>2</sup> stranded AWG 26 – 18 12 A, 160 V</p>		 <p><b>FFKDS/V1-5,08</b> 0.2 – 1.5 mm<sup>2</sup> solid 0.2 – 1.5 mm<sup>2</sup> stranded AWG 24 – 16 15 A, 400 V</p>		 <p><b>FFKDS/V1-7,62</b> 0.2 – 1.5 mm<sup>2</sup> solid 0.2 – 1.5 mm<sup>2</sup> stranded AWG 24 – 16 17.5 A, 630 V</p>	
		Angled		 <p><b>SPTA 1,5/...-3,5</b> 0.2 – 1.5 mm<sup>2</sup> solid 0.2 – 1 mm<sup>2</sup> stranded <b>SPTA 1,5/...-3,81</b> 0.2 – 1.5 mm<sup>2</sup> solid 0.2 – 1.5 mm<sup>2</sup> stranded</p>		 <p><b>SPTA 1,0/...-5,0</b> 0.2 – 1.5 mm<sup>2</sup> solid 0.2 – 1 mm<sup>2</sup> stranded <b>SPTA 1,5/...-5,08</b> 0.2 – 1.5 mm<sup>2</sup> solid 0.2 – 1 mm<sup>2</sup> stranded</p>					
		Horizontal/vertical		 <p><b>SPT 1,5/...-H(V)-3,5</b> 0.2 – 1.5 mm<sup>2</sup> solid 0.2 – 1.5 mm<sup>2</sup> stranded AWG 24 – 16 17.5 A, 200 V</p>		 <p><b>SPT 2,5/...-H(V)-5,0</b> 0.2 – 4 mm<sup>2</sup> solid 0.2 – 2.5 mm<sup>2</sup> stranded AWG 24 – 12 24 A, 400 V</p>					
		Special designs		 <p><b>MPT 0,5 screw connection</b></p>		 <p><b>IDC 0,3 displacement connection</b></p>		 <p><b>GMKDS 1,5 screw connection</b></p>		 <p><b>GMKDS 3 screw connection</b></p>	

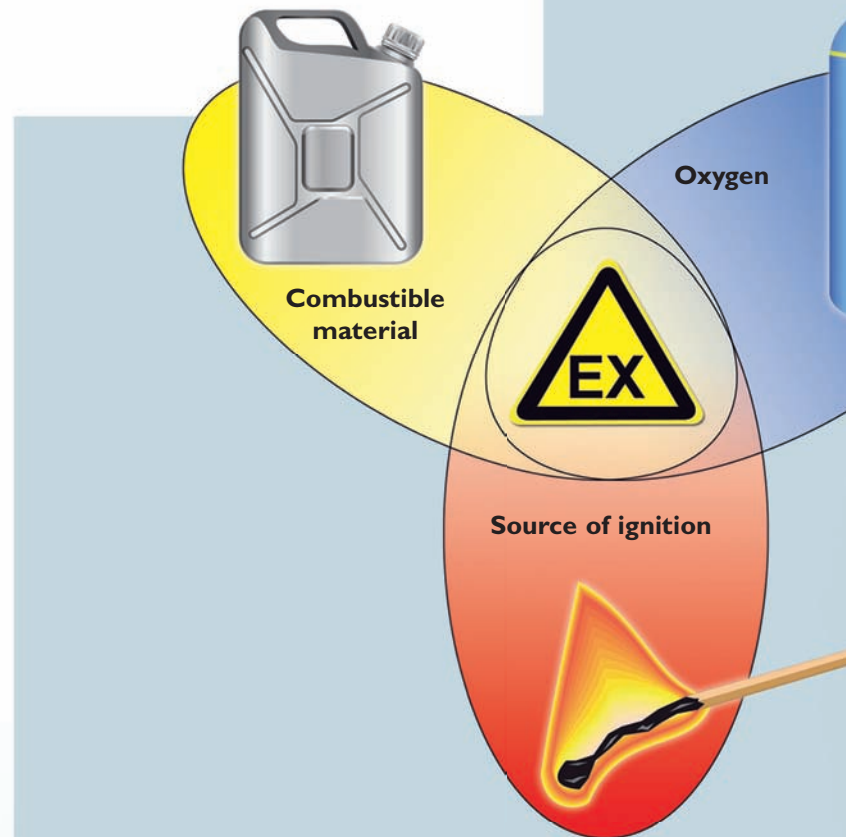
# Plug-in connectors and PCB terminal blocks with Ex approval

The PCB terminal block and plug-in connector range from Phoenix Contact, with Ex approval, is specially designed for use in potentially explosive areas. As such, the range meets the requirements for use in process technology.

The products have component approval according to the IEC/EN 60079-0 and IEC/EN 60079-7 standards, which define the requirements for devices in potentially explosive atmospheres.

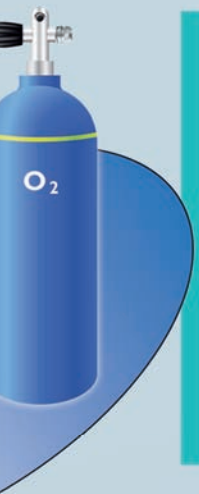
Firstly, you can choose whether your solutions are plug-in or not. Secondly, you have the option of screw connection, push-in spring connection or spring-cage connection, offering you the flexibility you need when it comes to choosing your conductor connection technology.

The plug-in connector PCB terminal blocks and headers are designed for the wave soldering process.



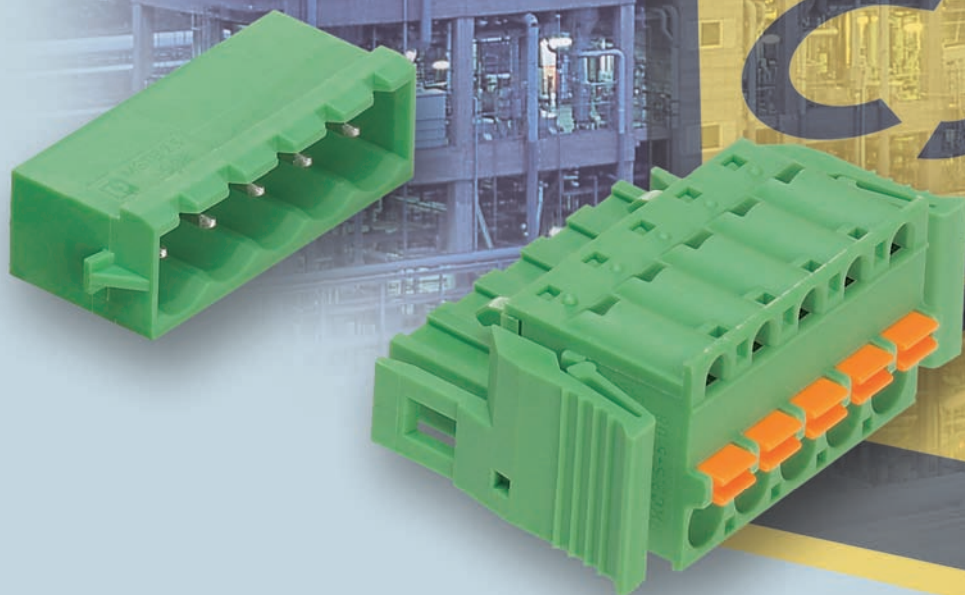
## Plug-in connector main features:

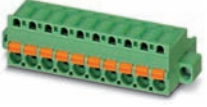
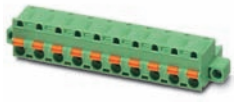

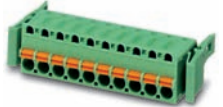















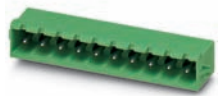
- Ex identification: 0344 Ex II 2 GD Ex e IIC Gb
- Kema 10ATEX0196U examination certificate
- IECEx certificate IECEx KEM 10.0093U
- Screw and push-in spring connection
- Screw or self-locking flange
- 5.08 and 7.62 mm pitch
- Voltage 176 V to 352 V
- Current 12 A
- Conductor cross section: 0.2 to 2.5 mm<sup>2</sup> (solid and stranded conductors)
- Number of positions 2 to 12
- Horizontal or vertical conductor connection in comparison to plug-in direction
- Horizontal and vertical pin strips for wave soldering processes



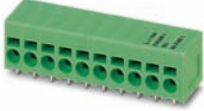


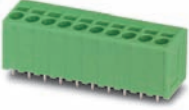


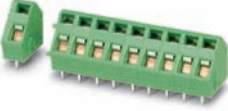
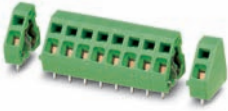












**Approval:**

Combustible material: gas, vapor, liquid, dust  
Protection type: Ex e (increased safety)  
Equipment group: II  
Equipment category: 2 GD  
Equipment protection level: Gb (occasional mixing of combustible materials)  
Gas group: IIC (ignition energy < 60 μJ)  
Additional condition: U (component approval – products cannot be operated alone)



	5.08 mm pitch	7.62 mm pitch	Accessories
Push-in spring connection			
	<b>FKC 2,5/...-STF-5,08 EX</b> 2 to 12-pos. 12 A, 176 V	<b>GFKC 2,5/...-STF-7,62 EX</b> 2 to 12-pos. 12 A, 352 V	<b>STZ...-FKC-5,08</b> Strain relief For FKC 2,5/...-ST(F)-5,08(-RF) EX
			
	<b>FKC 2,5/...-ST-5,08-RF EX</b> 2 to 12-pos. 12 A, 176 V		<b>MPS</b> Test plug For (G)FKC 2,5/...-STF-5,08 EX
			
	<b>MSTB 2,5/...-STF-5,08 EX</b> 2 to 12-pos. 12 A, 176 V	<b>GMSTB 2,5/...-STF-7,62 EX</b> 2 to 12-pos. 12 A, 352 V	<b>SZS 0,6 x 3,5</b> Screwdriver For plugs with screw connection
Screw connection			
	<b>MVSTBR 2,5/...-STF-5,08 EX</b> 2 to 12-pos. 12 A, 176 V	<b>GMVSTBR 2,5/...-STF-7,62 EX</b> 2 to 12-pos. 12 A, 352 V	<b>CP-MSTB</b> Keying profile For all plugs
			
	<b>MVSTBW 2,5/...-STF-5,08 EX</b> 2 to 12-pos. 12 A, 176 V	<b>GMVSTBW 2,5/...-STF-7,62 EX</b> 2 to 12-pos. 12 A, 352 V	<b>SK 5,08/3,8 and SK 7,62/5</b> Self-adhesive marker strips For all plugs/headers
Wave solder technology			
	<b>MSTB 2,5/...-GF-5,08 EX</b> 2 to 12-pos. 12 A, 176 V	<b>GMSTB 2,5/...-GF-7,62 EX</b> 2 to 12-pos. 12 A, 352 V	<b>CR-MSTB</b> Keying section For all headers
			
	<b>MSTBV 2,5/...-GF-5,08 EX</b> 2 to 12-pos. 12 A, 176 V	<b>GMSTBV 2,5/...-GF-7,62 EX</b> 2 to 12-pos. 12 A, 352 V	
			
	<b>MVSTB(V)A 2,5/...-G-5,08-RN EX</b> 2 to 12-pos. 12 A, 176 V		

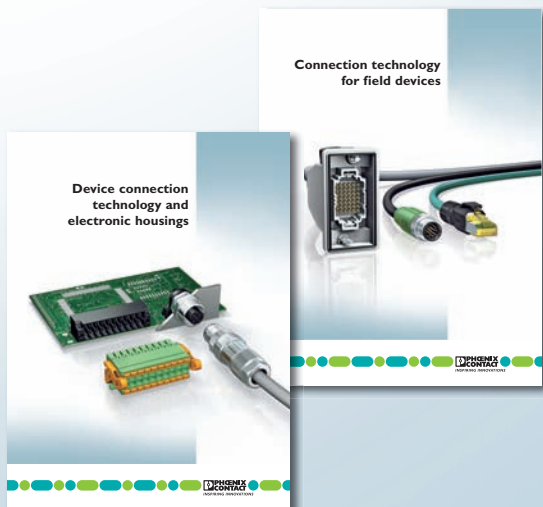


	5.0 mm pitch	5.08 mm pitch	Accessories	
Push-in spring connection				
	<b>SPT 2,5/...-H-5,0-EX</b> 2 to 12-pos. 23 A, 176 V		<b>RZ-SPT 2,5-2,5</b> Pitch spacer For SPT 2,5/...-5,0-EX Width 2.5 mm Voltage increase to 275 V	<b>SZF 1-0,6 x 3,5</b> Screwdriver For SPT 2,5/...-5,0-EX and ZFKDS...-EX
Spring-cage connection				
	<b>SPT 2,5/...-V-5,0-EX</b> 2 to 12-pos. 23 A, 176 V		<b>RZ-SPT 2,5-5,0</b> Pitch spacer For SPT 2,5/...-5,0-EX Width 5.0 mm Voltage increase to 440 V	<b>ZFKDSA 1,5C-6,0-EX</b> End terminal For ZFKDS 1,5C-5,0-EX Width 6.4 mm
Screw connection				
	<b>ZFKDS 1,5C-5,0-EX</b> Modular design 16 A, 176 V	<b>ZFKDS 2,5-5,08-EX</b> Modular design 22 A, 137 V	<b>RZ-ZFKDS 2,5</b> Pitch spacer For ZFKDS 2,5-5,08-EX Width 2.54 mm Voltage increase to 275 V	<b>ZFKDSA 2,5C-6,0-8 R-EX</b> End terminal For ZFKDS 2,5C-5,08-EX Width 6.08 mm
Screw connection				
	<b>FRONT 2,5-H/...-EX</b> Modular design 20 A, 176 V		<b>D-FRONT 2,5...O.Z.</b> Cover For FRONT 2,5-.../...-EX	<b>ZFKDS 2,5-5,08 L-EX</b> Left end terminal For ZFKDS 2,5C-5,08-EX Width 5.08 mm
Screw connection				
	<b>FRONT 2,5-V/...-EX</b> Modular design 20 A, 176 V	<b>MK3DSMH 3/...-EX</b> 2 to 3-pos., can be aligned 19 A, 176 V	<b>RZ 2,5-FRONT 2,5 H-EX</b> Pitch spacer For FRONT 2,5-.../...-EX Width 2.5 mm Voltage increase to 275 V	<b>SZS 0,3 x 3/SZS 0,6 x 3,5</b> Screwdriver For FRONT 2,5-.../...-EX and MK(K)(3)DS(M)H 3...-EX
				
	<b>MKKDSH 3/...-EX</b> 2 and 3-pos., can be aligned 20 A, 176 V	<b>MK3DSMH 3/...-EX</b> 2 to 3-pos., can be aligned 20 A, 176 V		<b>SK 5/3,8/SK 5,08/3,8</b> Self-adhesive marker strips For all PCB terminal blocks

# More than just average

## Our service – Added value for you

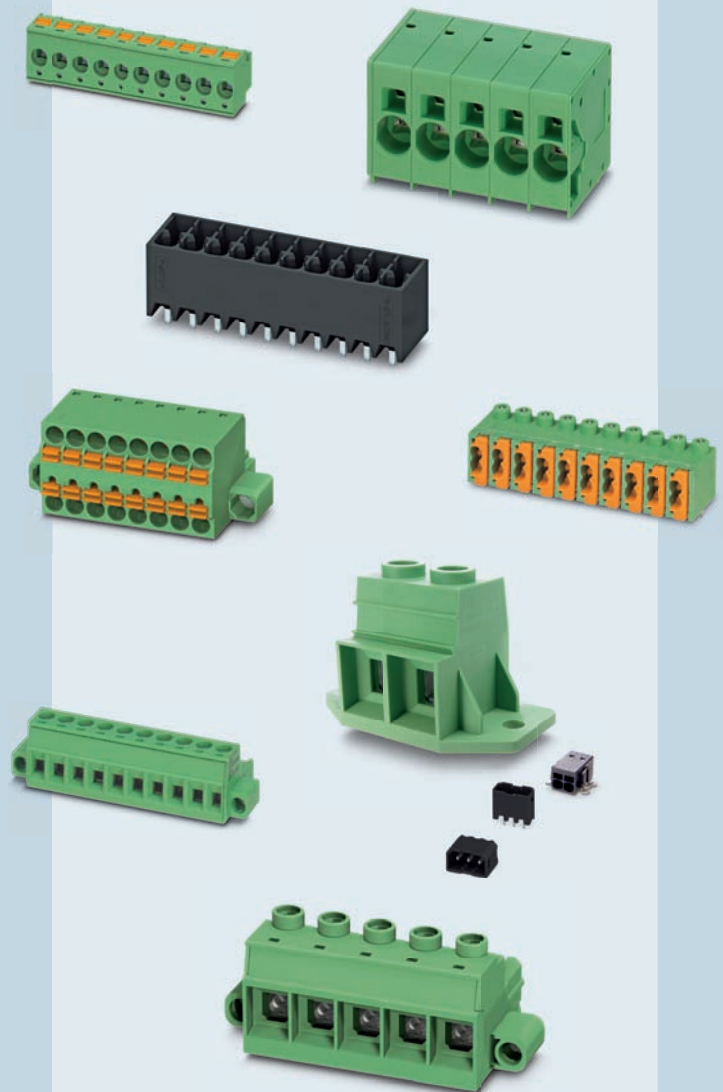
In addition to our versatile standard device connection range, our product portfolio contains a wealth of customer-specific products. From color versions, to special imprinting, right through to special packaging, we can provide you with almost anything – even brand new product developments. Contact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



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or visit our website.

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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.





## Flexibility in different versions

Whether it's individual colors, modern special imprinting, a specific number of contacts or complete cable assembly – our Service Center would be happy to support you in implementing your requirements.



## Expertise in new developments

Benefit from our extensive development and manufacturing expertise for your individual solution – right from the initial idea through to cost-effective series production.



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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**  
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**Device Connection Technology and Electronic Housings**  
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**Power and Signal Quality**  
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**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](http://www.phoenixcontact.com)