

# PT 1,5/ 3-PH-5,0 - PCB connector



1755596

<https://www.phoenixcontact.com/us/products/1755596>

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PCB connector, nominal cross section: 1.5 mm<sup>2</sup>, color: green, nominal current: 10 A, rated voltage (III/2): 400 V, contact surface: Tin, contact connection type: Socket, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: PT 1,5/-PH, pitch: 5 mm, connection method: Screw connection with tension sleeve, screw head form: H1L Slotted Phillips recess, conductor/PCB connection direction: 0 °, plug-in system: COMBICON PST 1,3, locking: without, mounting: without, type of packaging: packed in cardboard

## Your advantages

- Well-known connection principle allows worldwide use
- Low temperature rise, thanks to maximum contact force
- High terminal block capacity thanks to rectangular terminal block space

## Commercial data

Item number	1755596
Packing unit	250 pc
Minimum order quantity	250 pc
Sales key	AA02
Product key	AABAJA
Catalog page	Page 425 (C-1-2013)
GTIN	4046356334136
Weight per piece (including packing)	3.56 g
Weight per piece (excluding packing)	3.56 g
Customs tariff number	85366990
Country of origin	CN

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## Technical data

### Product properties

Type	Plug for pin strip
Product line	COMBICON Connectors S
Product type	PCB connector
Product family	PT 1,5/...-PH
Number of positions	3
Pitch	5 mm
Number of connections	3
Number of rows	1
Mounting flange	without
Number of potentials	3

### Electrical properties

Nominal current $I_N$	10 A
Nominal voltage $U_N$	400 V
Degree of pollution	3
Contact resistance	2.2 mΩ
Rated voltage (III/3)	250 V
Rated surge voltage (III/3)	4 kV
Rated voltage (III/2)	400 V
Rated surge voltage (III/2)	4 kV
Rated voltage (II/2)	630 V
Rated surge voltage (II/2)	4 kV

### Connection data

#### Connection technology

Type	Plug for pin strip
Connector system	COMBICON PST 1,3
Nominal cross section	1.5 mm <sup>2</sup>
Contact connection type	Socket

#### Interlock

Locking type	without
Mounting flange	without

#### Conductor connection

Connection method	Screw connection with tension sleeve
Conductor/PCB connection direction	0 °
Conductor cross section rigid	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section AWG	26 ... 12
Conductor cross section flexible, with ferrule without plastic	0.25 mm <sup>2</sup> ... 1 mm <sup>2</sup>

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sleeve	
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm <sup>2</sup> ... 1 mm <sup>2</sup>
Stripping length	6 mm
Tightening torque	0.35 Nm ... 0.4 Nm

## Material specifications

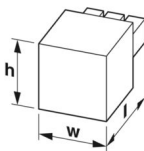
### Material data - contact

Note	WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/JEDEC JESD 201
Contact material	Cu alloy
Surface characteristics	hot-dip tin-plated
Metal surface terminal point (top layer)	Tin (4 - 8 µm Sn)
Metal surface contact area (top layer)	Tin (4 - 8 µm Sn)

### Material data - housing

Color (Housing)	green (6021)
Insulating material	PA
Insulating material group	I
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0
Glow wire flammability index GWFI according to EN 60695-2-12	850
Glow wire ignition temperature GWIT according to EN 60695-2-13	775
Temperature for the ball pressure test according to EN 60695-10-2	125 °C

## Dimensions

Dimensional drawing	
Pitch	5 mm
Width [w]	15 mm
Height [h]	13.15 mm
Length [l]	12.2 mm

## Mounting

Drive form screw head	Slotted Phillips recess (H1L)
Drive form screw head	Slotted Phillips recess (H1L)

## Mechanical tests

### Test for conductor damage and slackening

Specification	IEC 60999-1:1999-11
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Result	Test passed
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## Pull-out test

Specification	IEC 60999-1:1999-11
Conductor cross section/conductor type/tractive force setpoint/actual value	0.2 mm <sup>2</sup> / solid / > 10 N
	0.2 mm <sup>2</sup> / flexible / > 10 N
	2.5 mm <sup>2</sup> / solid / > 50 N
	2.5 mm <sup>2</sup> / flexible / > 50 N

## Insertion and withdrawal forces

Result	Test passed
No. of cycles	10
Insertion strength per pos. approx.	4.5 N
Withdraw strength per pos. approx.	5.5 N

## Torque test

Specification	IEC 60999-1:1999-11
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## Resistance of inscriptions

Specification	IEC 60068-2-70:1995-12
Result	Test passed

## Visual inspection

Specification	IEC 60512-1-1:2002-02
Result	Test passed

## Dimension check

Specification	IEC 60512-1-2:2002-02
Result	Test passed

## Environmental and real-life conditions

### Vibration test

Specification	IEC 60068-2-6:2007-12
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 Hz ... 60.1 Hz)
Sweep speed	5g (60.1 Hz ... 150 Hz)
Test duration per axis	2.5 h

### Durability test

Specification	IEC 60512-5:1992-08
Impulse withstand voltage at sea level	4.8 kV
Contact resistance R <sub>1</sub>	2.2 mΩ
Contact resistance R <sub>2</sub>	2.4 mΩ
Insertion/withdrawal cycles	10

### Climatic test

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Specification	ISO 6988:1985-02
Corrosive stress	0.2 dm <sup>3</sup> SO <sub>2</sub> on 300 dm <sup>3</sup> /40 °C/1 cycle
Thermal stress	100 °C/168 h
Power-frequency withstand voltage	2.21 kV

## Ambient conditions

Ambient temperature (operation)	-40 °C ... 100 °C (dependent on the derating curve)
Ambient temperature (storage/transport)	-40 °C ... 70 °C
Relative humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 100 °C

## Electrical tests

### Thermal test | Test group C

Specification	IEC 60512-5-1:2002-02
Tested number of positions	16

### Insulation resistance

Specification	IEC 60512-3-1:2002-02
Insulation resistance, neighboring positions	1 GΩ

### Air clearances and creepage distances |

Specification	IEC 60664-1:2007-04
Insulating material group	I
Comparative tracking index (IEC 60112)	CTI 600
Rated insulation voltage (III/3)	250 V
Rated surge voltage (III/3)	4 kV
minimum clearance value - non-homogenous field (III/3)	3 mm
minimum creepage distance (III/3)	3.2 mm
Rated insulation voltage (III/2)	400 V
Rated surge voltage (III/2)	4 kV
minimum clearance value - non-homogenous field (III/2)	3 mm
minimum creepage distance (III/2)	3 mm
Rated insulation voltage (II/2)	630 V
Rated surge voltage (II/2)	4 kV
minimum clearance value - non-homogenous field (II/2)	3 mm
minimum creepage distance (II/2)	3.2 mm

## Packaging specifications

Type of packaging	packed in cardboard
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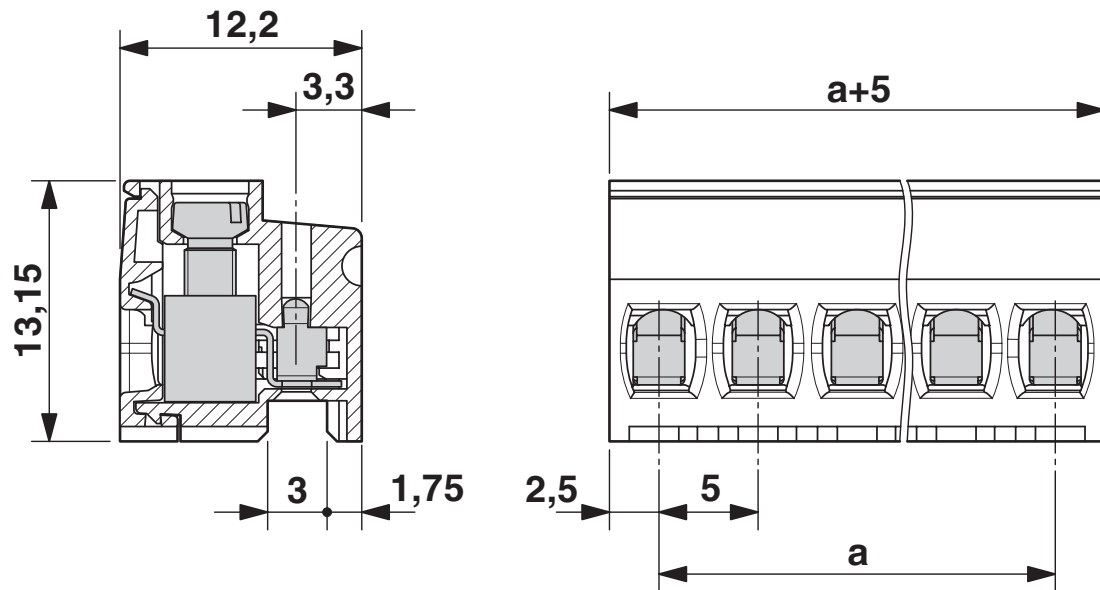
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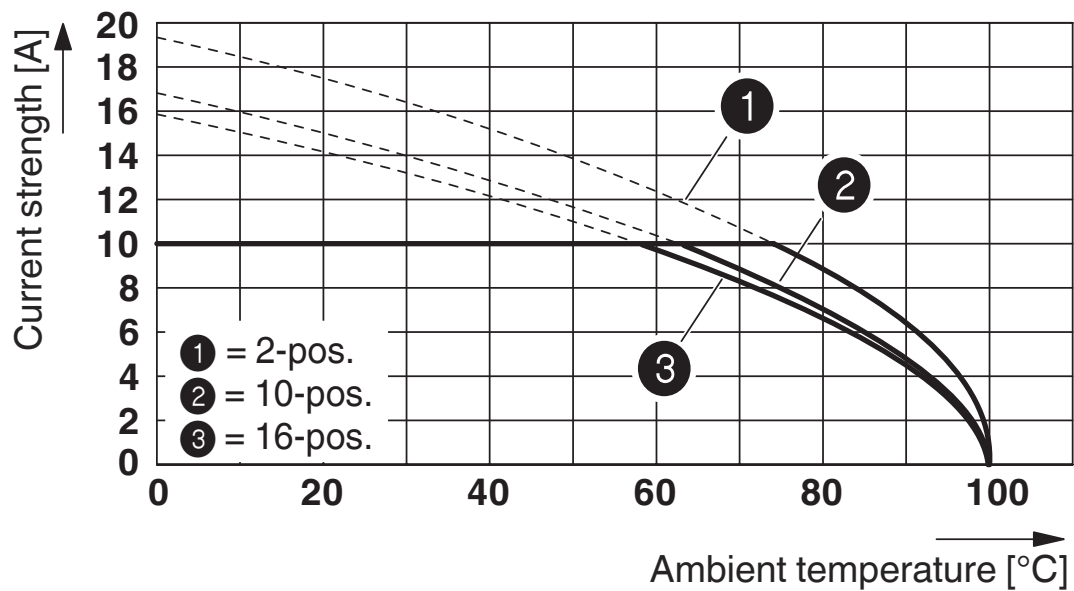
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## Drawings

Dimensional drawing



Diagram



Derating curve for: PT 1,5/...-PH-5,0 with PST 1,3/...5,0

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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1755596>

 <b>cULus Recognized</b> Approval ID: E60425-20030211				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
Use group B				
	300 V	10 A	28 - 14	-
Use group D				
	300 V	10 A	28 - 14	-

 <b>VDE Zeichengenehmigung</b> Approval ID: 40044443				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
	320 V	10 A	-	0.2 - 1.5

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## Classifications

### ECLASS

ECLASS-11.0	27460202
ECLASS-12.0	27460202
ECLASS-13.0	27460202

### ETIM

ETIM 9.0	EC002638
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### UNSPSC

UNSPSC 21.0	39121400
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## Environmental product compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

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