

https://www.phoenixcontact.com/us/products/1745373



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Pin strip, nominal cross section: 1.5 mm², color: gray, nominal current: 12 A (depends on the plug used), rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Pin, number of potentials: 2, number of rows: 1, number of positions: 2, number of connections: 2, product range: PST 1,3/..-V, pitch: 5 mm, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 3.5 mm, plug-in system: COMBICON PST 1,3, locking: without, mounting: without, type of packaging: packed in cardboard, The maximum current depends on the plug used. The lower of the two current values apply for plug and pin strip. The pin strip is made of highly temperature resistant plastic and is thus suitable for the reflow process.

### Your advantages

- · Suitable for wave and reflow soldering processes
- · Optimum pin geometry for all COMBICON pin strip connectors

#### Commercial data

Item number	1745373
Packing unit	1 pc
Minimum order quantity	50 pc
Note	Made to order (non-returnable)
Sales key	AA03
Product key	AACTFA
GTIN	4046356308519
Weight per piece (including packing)	0.476 g
Weight per piece (excluding packing)	0.345 g
Customs tariff number	85366930
Country of origin	DE



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### Technical data

### Product properties

Product line	COMBICON Connectors M
Product type	Pin strip
Product family	PST 1,3/V
Number of positions	2
Pitch	5 mm
Number of connections	2
Number of rows	1
Mounting flange	without
Number of potentials	2
Pin layout	Linear pinning

### Electrical properties

Nominal current I <sub>N</sub>	12 A (depends on the plug used)
Nominal voltage U <sub>N</sub>	320 V
Degree of pollution	3
Contact resistance	1.6 mΩ
Rated voltage (III/3)	250 V
Rated surge voltage (III/3)	4 kV
Rated voltage (III/2)	320 V
Rated surge voltage (III/2)	4 kV
Rated voltage (II/2)	400 V
Rated surge voltage (II/2)	4 kV

### Mounting

Mounting type	THR soldering
Pin layout	Linear pinning
Processing notes	
Moisture Sensitive Level	MSL 1
Classification temperature T <sub>c</sub>	260 °C
Solder cycles in the reflow	3

### 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	Tin-plated
Metal surface contact area (top layer)	Tin (3 - 5 μm Sn)
Metal surface contact area (middle layer)	Nickel (1 - 3 µm Ni)
Metal surface soldering area (top layer)	Tin (3 - 5 μm Sn)
Metal surface contact area (middle layer)	Nickel (1 - 3 μm Ni)



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Metal surface soldering area (middle layer)	Nickel (1 - 3 μm Ni)
Material data - housing	
Color (Housing)	gray (7042)
Insulating material	PA
Insulating material group	Illa
CTI according to IEC 60112	250
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	ph h
Pitch	5 mm
Width [w]	10 mm
Height [h]	13 mm
Length [I]	2.8 mm
Installed height	9.5 mm
Solder pin length [P]	3.5 mm
Pin dimensions	ø 1.3 mm

### Mechanical tests

## Visual inspection Specification

Result	Test passed
Dimension check	
Specification	IEC 60512-1-2:2002-02
Result	Test passed
Insertion and withdrawal forces	
Dec. II	Test second

IEC 60512-1-1:2002-02

Result	Test passed
No. of cycles	25
Insertion strength per pos. approx.	5 N
Withdraw strength per pos. approx.	5 N

### Contact holder in insert

Specification	IEC 60512-15-1:2008-05



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Contact holder in insert Requirements >20 N	Test passed
Resistance of inscriptions	
Specification	IEC 60068-2-70:1995-12
Result	Test passed
Electrical tests	
Thermal test   Test group C	
Specification	IEC 60512-5-1:2002-02
Tested number of positions	12
Insulation resistance	
Specification	IEC 60512-3-1:2002-02
Insulation resistance, neighboring positions	> 5 MΩ
Temperature cycles	
Specification	IEC 60999-1:1999-11
Result	Test passed
Air clearances and creepage distances	
Specification	IEC 60664-1:2007-04
Insulating material group	Illa
Comparative tracking index (IEC 60112)	CTI 250
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)	4 mm

320 V 4 kV

3 mm

4 kV

3 mm

4 mm

3.2 mm 400 V

### Environmental and real-life conditions

minimum creepage distance (II/2)

Rated insulation voltage (III/2)

minimum creepage distance (III/2)

Rated insulation voltage (II/2) Rated surge voltage (II/2)

minimum clearance value - non-homogenous field (III/2)

minimum clearance value - non-homogenous field (II/2)

Rated surge voltage (III/2)

#### 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



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### **Durability test**

Specification	IEC 60512-9-1:2010-03
Impulse withstand voltage at sea level	4.8 kV
Contact resistance R <sub>1</sub>	1.6 mΩ
Contact resistance R <sub>2</sub>	1.7 mΩ
Insertion/withdrawal cycles	25
Insulation resistance, neighboring positions	> 5 MΩ

#### Climatic test

Specification	ISO 6988:1985-02
Corrosive stress	$0.2~\mathrm{dm}^3~\mathrm{SO}_2$ on 300 $\mathrm{dm}^3/40~\mathrm{^\circ C}/1$ cycle
Thermal stress	100 °C/168 h
Power-frequency withstand voltage	2.21 kV

### Ambient conditions

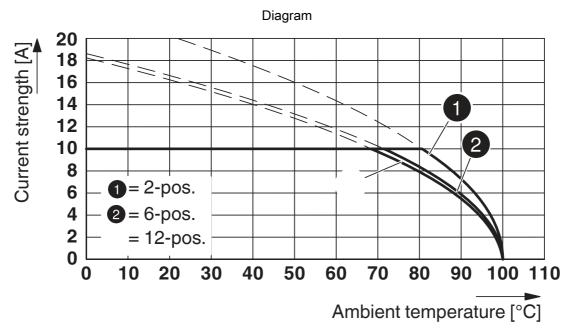
Ambient temperature (operation)	-40 °C 100 °C (dependent on the derating curve)
Ambient temperature (storage/transport)	-40 °C 70 °C
Relative humidity (storage/transport)	30 % 70 %
Ambient temperature (assembly)	-5 °C 100 °C

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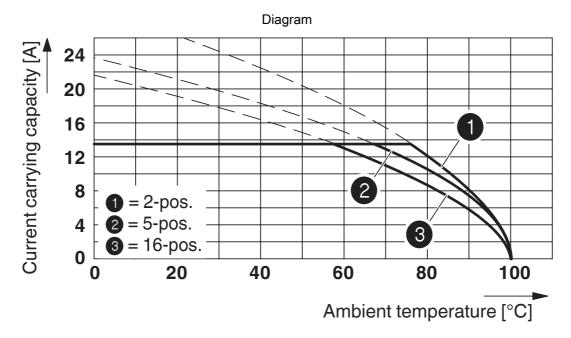
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### **Drawings**



Type: PTS 1,5/...-PH-5,0 CLIP with PST 1,3/...-5,0

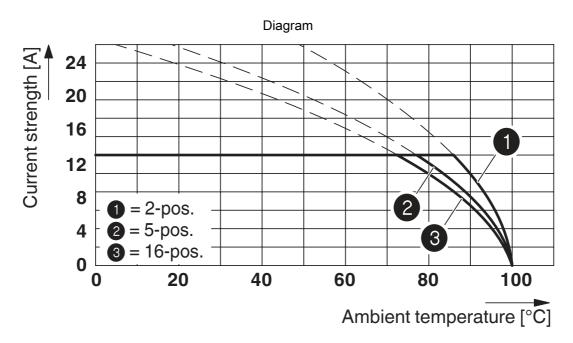


Type: PTDA 2,5/...-PH-5,0 with PST 1,3/...-5,0

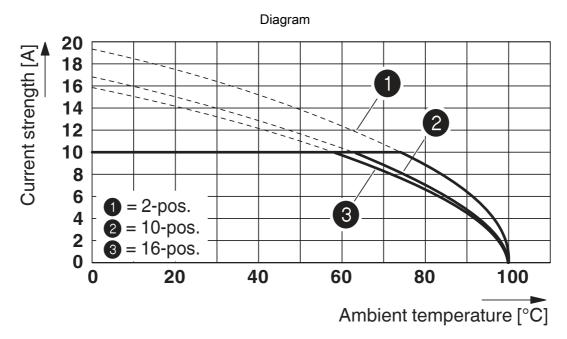


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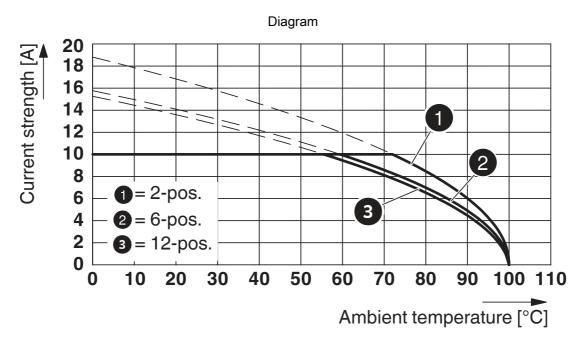
Type: PT 1,5/...-PVH-5,0 with PST 1,3/...-5,0



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

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Type: PTS 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/1745373

CB scheme	IECEE CB Scheme Approval ID: DE1-66607				
		Nominal voltage $U_N$	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		320 V	12 A	-	-

EAC	EAC
LIIL	Approval ID: B.01687

CULus Recognized Approval ID: E60425-20030211				
	Nominal voltage $U_N$	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
Use group B				
	300 V	16 A	-	-
Use group D				
	300 V	10 A	-	-

VDE Zeichengenel Approval ID: 40055514	enehmigung 514				
	Nominal voltage $\mathbf{U}_{\mathbf{N}}$	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>	
	320 V	12 A	-	-	



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## Classifications

UNSPSC 21.0

### **ECLASS**

	ECLASS-11.0	27460201	
	ECLASS-12.0	27460201	
	ECLASS-13.0	27460201	
ET	ETIM		
	ETIM 8.0	EC002637	
UNSPSC			

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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#### Accessories

### PTDA 2,5/2-PH-5,0 - PCB connector

1725497

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PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 14 A, rated voltage (III/2): 400 V, contact surface: Tin, contact connection type: Socket, number of potentials: 2, number of rows: 1, number of positions: 2, number of connections: 4, product range: PTDA 2,5/..-PH, pitch: 5 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 45 °, plug-in system: COMBICON PST 1,3, locking: without, mounting: without, type of packaging: packed in cardboard

### PT 1,5/2-PH-5,0 - PCB connector

1755583

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PCB connector, nominal cross section: 1.5 mm², color: green, nominal current: 10 A, rated voltage (III/2): 400 V, contact surface: Tin, contact connection type: Socket, number of potentials: 2, number of rows: 1, number of positions: 2, number of connections: 2, 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

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#### PT 1,5/2-PH-5,0 CLIP - PCB connector

1755732

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PCB connector, nominal cross section: 1.5 mm², color: green, nominal current: 10 A, rated voltage (III/2): 400 V, contact surface: Tin, contact connection type: Socket, number of potentials: 2, number of rows: 1, number of positions: 2, number of connections: 2, product range: PT 1,5/..-PH CLIP, 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

#### PT 1,5/2-PVH-5,0 - PCB connector

1934861

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PCB connector, nominal cross section: 1.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 400 V, contact surface: Tin, contact connection type: Socket, number of potentials: 2, number of rows: 1, number of positions: 2, number of connections: 2, product range: PT 1,5/..-PVH, pitch: 5 mm, connection method: Screw connection with wire protector, 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



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#### PT 2,5/ 2-PVH-5,0 - Printed-circuit board connector

1704165

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PCB connector, color: green, contact surface: Tin, number of positions: 2, product range: PT 2,5/..-PVH, pitch: 5 mm, type of packaging: packed in cardboard.



#### PTS 1,5/ 2-PH-5,0 - Printed-circuit board connector

1805517

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PCB connector, nominal cross section: 1.5 mm², color: green, nominal current: 10 A, rated voltage (III/2): 400 V, contact surface: Tin, contact connection type: Socket, number of potentials: 2, number of rows: 1, number of positions: 2, number of connections: 2, product range: PTS 1,5/..-PH, pitch: 5 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, plug-in system: COMBICON PST 1,3, locking: without, mounting: without, type of packaging: packed in cardboard

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#### PTS 1,5/ 2-PH-5,0 CLIP - Printed-circuit board connector

1848532

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PCB connector, nominal cross section: 1.5 mm², color: green, nominal current: 10 A, rated voltage (III/2): 400 V, contact surface: Tin, contact connection type: Socket, number of potentials: 2, number of rows: 1, number of positions: 2, number of connections: 2, product range: PTS 1,5/..-PH CLIP, pitch: 5 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, plug-in system: COMBICON PST 1,3, locking: without, type of packaging: packed in cardboard

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