

1848590

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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: 8, number of rows: 1, number of positions: 8, number of connections: 8, 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

### Your advantages

- · Time saving push-in connection, tools not required
- Defined contact force ensures that contact remains stable over the long term
- · Intuitive use through colour coded actuation lever
- · Can be snapped into device housing thanks to CLIP geometry
- · Largest possible clamping space in a small component size

### Commercial data

Item number	1848590
Packing unit	1 pc
Minimum order quantity	100 pc
Sales key	AA02
Product key	AABFRB
GTIN	4055626282367
Weight per piece (including packing)	5.51 g
Weight per piece (excluding packing)	5.51 g
Customs tariff number	85366990
Country of origin	BG



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### Technical data

### Product properties

Product line	COMBICON Connectors S
Product type	PCB connector
Product family	PTS 1,5/PH CLIP
Number of positions	8
Pitch	5 mm
Number of connections	8
Number of rows	1
Number of potentials	8

### Electrical properties

Nominal current I <sub>N</sub>	10 A
Nominal voltage U <sub>N</sub>	400 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)	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

Connector system	COMBICON PST 1,3
Nominal cross section	1.5 mm²
Contact connection type	Socket

### Interlock

Locking type	without

#### Conductor connection

Connection method	Push-in spring connection
Conductor/PCB connection direction	0 °
Conductor cross section rigid	0.2 mm² 2.5 mm²
Conductor cross section flexible	0.2 mm² 2.5 mm²
Conductor cross section AWG	26 14
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm <sup>2</sup> 1.5 mm <sup>2</sup>
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm² 1.5 mm²
Stripping length	8 mm



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### 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

### Material data – actuating element

Color (Actuating element)	orange (2003)
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	h
Pitch	5 mm
Width [w]	40 mm
Height [h]	14.25 mm
Length [I]	15.21 mm

### Mounting



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Connection method	Push-in spring connection
echanical tests	
Conductor connection	
Specification	IEC 60999-1:1999-11
Result	Test passed
Fest for conductor damage and slackening	
Specification	IEC 60999-1:1999-11
Result	Test passed
Repeated connection and disconnection	
Specification	IEC 60999-1:1999-11
Result	Test passed
Pull-out test	
Specification	IEC 60999-1:1999-11
Conductor cross section/conductor type/tractive force	0.2 mm² / solid / > 10 N
setpoint/actual value	0.2 mm² / flexible / > 10 N
	2.5 mm² / solid / > 50 N
	2.5 mm² / flexible / > 50 N
nsertion and withdrawal forces	
Result	Test passed
No. of cycles	25
Insertion strength per pos. approx.	5 N
Withdraw strength per pos. approx.	5 N
Resistance of inscriptions	
Specification	IEC 60068-2-70:1995-12
Result	Test passed
/isual inspection	
Specification	IEC 60512-1-1:2002-02
Result	Test passed
Dimension check	IEC 60512-1-2:2002-02
Specification	
Result	Test passed
vironmental and real-life conditions	
/ibration test	
Vibration test Specification	IEC 60068-2-6:2007-12
	IEC 60068-2-6:2007-12 10 - 150 - 10 Hz
Specification	



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Sweep speed	
Test duration per axis	5g (60.1 Hz 150 Hz) 2.5 h
rest duration per axis	2.3 11
urability 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
matic test	
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
mbient 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
etrical tests	
nermal test   Test group C	IEC 60512-5-1:2002-02
ermal test   Test group C Specification	IEC 60512-5-1:2002-02
ermal test   Test group C Specification Tested number of positions	
sermal test   Test group C Specification Tested number of positions sulation resistance	12
sermal test   Test group C Specification Tested number of positions sulation resistance Specification	12 IEC 60512-3-1:2002-02
ermal test   Test group C  Specification  Tested number of positions  ulation resistance  Specification  Insulation resistance, neighboring positions	12
sermal test   Test group C Specification Tested number of positions sulation resistance Specification Insulation resistance, neighboring positions emperature cycles	12 IEC 60512-3-1:2002-02 > 5 MΩ
sermal test   Test group C Specification Tested number of positions sulation resistance Specification Insulation resistance, neighboring positions emperature cycles Specification	12  IEC 60512-3-1:2002-02  > 5 MΩ  IEC 60999-1:1999-11
ermal test   Test group C  Specification  Tested number of positions  sulation resistance  Specification  Insulation resistance, neighboring positions  mperature cycles  Specification	12 IEC 60512-3-1:2002-02 > 5 MΩ
ermal test   Test group C  Specification  Tested number of positions  ulation resistance  Specification  Insulation resistance, neighboring positions  mperature cycles  Specification  Result  clearances and creepage distances	12  IEC 60512-3-1:2002-02  > 5 MΩ  IEC 60999-1:1999-11
ermal test   Test group C  Specification  Tested number of positions  sulation resistance  Specification  Insulation resistance, neighboring positions  mperature cycles  Specification  Result  clearances and creepage distances    Specification	12  IEC 60512-3-1:2002-02  > 5 MΩ  IEC 60999-1:1999-11
ermal test   Test group C  Specification  Tested number of positions  sulation resistance  Specification  Insulation resistance, neighboring positions  emperature cycles  Specification  Result	12  IEC 60512-3-1:2002-02  > 5 MΩ  IEC 60999-1:1999-11  Test passed
ermal test   Test group C  Specification  Tested number of positions  sulation resistance  Specification  Insulation resistance, neighboring positions  mperature cycles  Specification  Result  clearances and creepage distances    Specification  Insulating material group	IEC 60512-3-1:2002-02 > 5 MΩ  IEC 60999-1:1999-11 Test passed  IEC 60664-1:2007-04
specification Tested number of positions  sulation resistance Specification Insulation resistance, neighboring positions  emperature cycles Specification Result r clearances and creepage distances   Specification	IEC 60512-3-1:2002-02 > 5 MΩ  IEC 60999-1:1999-11  Test passed  IEC 60664-1:2007-04 I
nermal test   Test group C  Specification  Tested number of positions  sulation resistance  Specification  Insulation resistance, neighboring positions  emperature cycles  Specification  Result  r clearances and creepage distances    Specification  Insulating material group  Comparative tracking index (IEC 60112)	IEC 60512-3-1:2002-02 > 5 MΩ  IEC 60999-1:1999-11 Test passed  IEC 60664-1:2007-04 I CTI 600
Tested number of positions  sulation resistance  Specification  Insulation resistance, neighboring positions  emperature cycles  Specification  Result  ir clearances and creepage distances    Specification  Insulating material group  Comparative tracking index (IEC 60112)  Rated insulation voltage (III/3)	IEC 60512-3-1:2002-02 > 5 MΩ  IEC 60999-1:1999-11  Test passed  IEC 60664-1:2007-04  I  CTI 600 250 V
nermal test   Test group C  Specification  Tested number of positions  sulation resistance  Specification  Insulation resistance, neighboring positions  emperature cycles  Specification  Result  ir clearances and creepage distances    Specification  Insulating material group  Comparative tracking index (IEC 60112)  Rated insulation voltage (III/3)  Rated surge voltage (III/3)	IEC 60512-3-1:2002-02 > 5 MΩ  IEC 60999-1:1999-11 Test passed  IEC 60664-1:2007-04 I CTI 600 250 V 4 kV
nermal test   Test group C  Specification  Tested number of positions  sulation resistance  Specification  Insulation resistance, neighboring positions  emperature cycles  Specification  Result  r clearances and creepage distances    Specification  Insulating material group  Comparative tracking index (IEC 60112)  Rated insulation voltage (III/3)  Rated surge voltage (III/3)  minimum clearance value - non-homogenous field (III/3)	IEC 60512-3-1:2002-02 > 5 MΩ  IEC 60999-1:1999-11  Test passed  IEC 60664-1:2007-04  I  CTI 600 250 V 4 kV 3 mm



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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

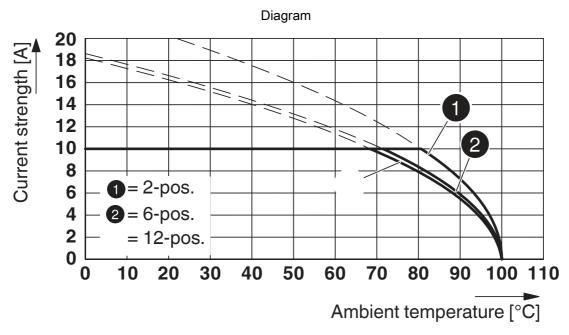
Type of packaging	packed in cardboard



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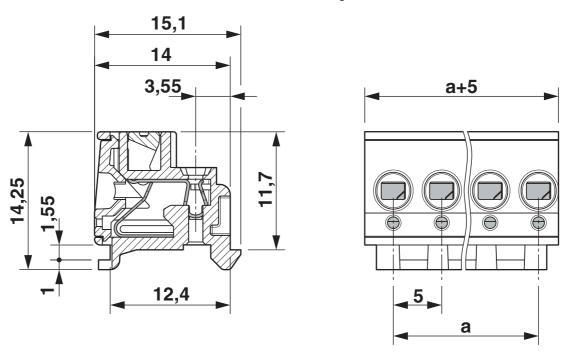
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### **Drawings**



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

### Dimensional drawing





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### **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1848590



CULus Recognized Approval ID: E60425-20030211				
	Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
Use group B				
	300 V	7 A	26 - 14	-
Use group D				
	300 V	7 A	26 - 14	-

<b>₩</b>	VDE Gutachten mit Fertigungsüberwachung Approval ID: 40040542				
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		320 V	10 A	-	0.2 - 2.5



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### Classifications

### **ECLASS**

UNSPSC 21.0

	ECLASS-11.0	27460202
	ECLASS-12.0	27460202
	ECLASS-13.0	27460202
ETIM		
	ETIM 8.0	EC002638
UN	SPSC	

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

SZF 1-0,6X3,5 - Screwdriver

1204517

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Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip

PST 1,3/8-5,0 - Pin strip

1933244

https://www.phoenixcontact.com/us/products/1933244



Pin strip, nominal cross section: 1.5 mm², color: black, 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: 8, number of rows: 1, number of positions: 8, number of connections: 8, 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.

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