

1984963

https://www.phoenixcontact.com/us/products/1984963

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PCB terminal block, nominal current: 8 A, rated voltage (III/2): 250 V, nominal cross section: 1.5 mm², number of potentials: 2, number of rows: 1, number of positions per row: 2, product range: PTSA 1,5, pitch: 3.5 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 45 °, color: green, Pin layout: Linear front pinning, Solder pin [P]: 3.5 mm, number of solder pins per potential: 1, type of packaging: packed in cardboard. Soldering legs in front area, one-rowed

### Your advantages

- · Time saving push-in connection, tools not required
- Defined contact force ensures that contact remains stable over the long term
- · Angled connection enables multi-row arrangement on the PCB



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## **Commercial Data**

Item number	1984963
Packing unit	1 pc
Minimum order quantity	420 pc
Sales Key	A03
Product Key	AALBDA
Catalog Page	Page 413 (C-1-2013)
GTIN	4017918922047
Weight per Piece (including packing)	1.208 g
Weight per Piece (excluding packing)	1.095 g
Customs tariff number	85369010
Country of origin	CN



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### **Technical Data**

### Product properties

Туре	PC termination block
Product line	COMBICON Terminals S
Product type	Printed circuit board terminal
Number of positions	2
Pitch	3.5 mm
Number of connections	2
Number of rows	1
Number of potentials	2
Pin layout	Linear front pinning

### Electrical properties

Nominal current I <sub>N</sub>	8 A
Nominal voltage U <sub>N</sub>	250 V
Pollution degree	3
Rated voltage (III/3)	200 V
Rated surge voltage (III/3)	2.5 kV
Rated voltage (III/2)	250 V
Rated surge voltage (III/2)	2.5 kV

### Connection data

#### Connection technology

Туре	PC termination block
Nominal cross section	1.5 mm²

#### Conductor connection

Connection method	Push-in spring connection
Conductor cross section solid	0.2 mm² 1.5 mm²
Conductor cross section flexible	0.2 mm² 1.5 mm²
Conductor cross section AWG	24 16
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm² 1 mm²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm² 0.5 mm²
Stripping length	9 mm

### Mounting

Mounting type Wave soldering	Wave soldering	
Mounting type	Wave soldering	
Processing notes		
Process	Wave soldering	



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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 soldering area (top layer)	Tin (4 - 8 μm Sn)

#### Material data - housing

Housing color	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 of the actuating lever	green (6021)
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#### **Dimensions**

Dimensional drawing	h h
Pitch	3.5 mm
Width [w]	8.5 mm
Height [h]	16.7 mm
Length [I]	12 mm
Installed height	13.1 mm
Solder pin length [P]	3.5 mm
PCB design	
Pin spacing	3.5 mm

## Mechanical tests

### Test for conductor damage and slackening

3	
Specification	IEC 60999-1:1999-11
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	$0.2 \text{ mm}^2 / \text{ solid } / > 10 \text{ N}$
	$0.2 \text{ mm}^2$ / flexible / > 10 N
	1.5 mm² / solid / > 40 N
	1.5 mm² / flexible / > 40 N

#### Electrical tests

#### Temperature-rise test

Specification	IEC 60947-7-4:2013-08
Requirement temperature-rise test	The sum of ambient temperature and temperature rise of the PCB terminal block shall not exceed the upper limiting temperature.
Short-time withstand current	
Specification	IEC 60947-7-4:2013-08

### Insulation resistance

Specification	IEC 60512-3-1:2002-02
Insulation resistance, neighboring positions	> 5 MΩ

#### Air clearances and creepage distances |

All clearances and creepage distances			
Specification	IEC 60947-1:2007-06 + A1:2010-12 + A2:2014-09		
Insulating material group	I		
Comparative tracking index (IEC 60112)	CTI 600		
Rated insulation voltage (III/3)	200 V		
Rated surge voltage (III/3)	2.5 kV		
minimum clearance value - non-homogenous field (III/3)	1.5 mm		
minimum creepage distance (III/3)	2.5 mm		
Note on connection cross section	With connected conductor 1.5 mm² (solid).		
Rated insulation voltage (III/2)	250 V		
Rated surge voltage (III/2)	2.5 kV		
minimum clearance value - non-homogenous field (III/2)	1.5 mm		
minimum creepage distance (III/2)	1.5 mm		
Rated insulation voltage (II/2)	400 V		
Rated surge voltage (II/2)	2.5 kV		
minimum clearance value - non-homogenous field (II/2)	1.5 mm		
minimum creepage distance (II/2)	2 mm		

#### 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 - 60.1 Hz)



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Sweep speed	5g (60.1 - 150 Hz)
Test duration per axis	2.5 h
low-wire test	
Specification	IEC 60695-2-10:2000-10
Temperature	850 °C
Time of exposure	5 s
ging	
Specification	IEC 60947-7-4:2013-08
nbient conditions Ambient temperature (operation)	-40 °C 100 °C (Depending on the current carrying capacity/derating curve)
Ambient temperature (storage/transport)	-40 °C 70 °C
Relative humidity (storage/transport)	30 % 70 %
Ambient temperature (assembly)	-5 °C 85 °C
kaging specifications	
Type of packaging	packed in cardboard

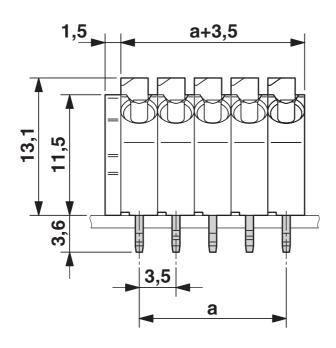


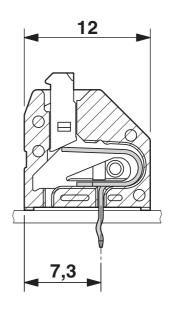
https://www.phoenixcontact.com/us/products/1984963



## Drawings

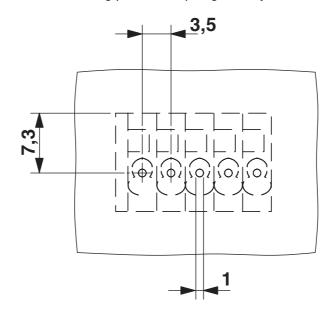
### Dimensional drawing





The figure shows the dimensional drawing of the 5-position product version

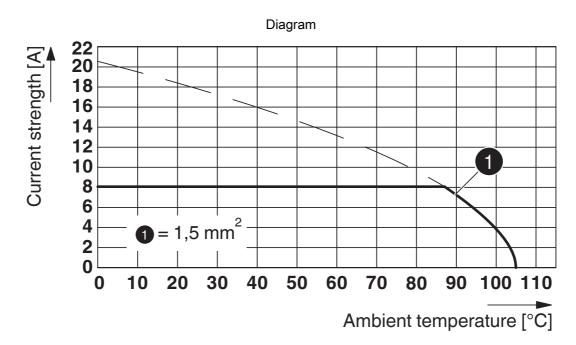
### Drilling plan/solder pad geometry





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Type: PTSA 1,5/...-3,5-F



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## Approvals



EAC

Approval ID: B.01687

cULus Recognized Approval ID: E60425-20030527				
	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	5 A	24 - 16	-
Use group D				
	300 V	5 A	24 - 16	-

CCA Approval ID: CCA/DE1 34182/	/33276			
	Nominal Voltage U <sub>N</sub>	Nominal Current I <sub>N</sub>	Cross Section AWG	Cross Section mm <sup>2</sup>
		2 A	-	- 0.75

<b>₩</b> DE	VDE report with production monitoring Approval ID: 40018594				
		Nominal Voltage U <sub>N</sub>	Nominal Current I <sub>N</sub>	Cross Section AWG	Cross Section mm <sup>2</sup>
		130 V	2 A	-	0.5 - 0.75



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## Classifications

UNSPSC 21.0

### **ECLASS**

	ECLASS-9.0	27440401	
	ECLASS-10.0.1	27440401	
	ECLASS-11.0	27460101	
ET	ETIM		
	ETIM 8.0	EC002643	
UN	SPSC		

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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

#### Screwdriver

Screwdriver - SZF 0-0,4X2,5 - 1204504 https://www.phoenixcontact.com/us/products/1204504



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.4 x 2.5 x 75 mm, 2-component grip, with non-slip grip

### Crimping pliers

Crimping pliers - CRIMPFOX 6 - 1212034 https://www.phoenixcontact.com/us/products/1212034



Crimping pliers, for ferrules without insulating collar according to DIN 46228 Part 1 and ferrules with insulating collar according to DIN 46228 Part 4, 0.25  $\text{mm}^2$  ... 6.0  $\text{mm}^2$ , lateral entry, trapezoidal crimp

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