

1135293

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PCB terminal block, nominal current: 32 A, rated voltage (III/2): 400 V, nominal cross section: 4 mm<sup>2</sup>, number of potentials: 2, number of rows: 1, number of positions per row: 2, product range: SPT 2,5/..-H-THR, pitch: 5 mm, connection method: Push-in spring connection, mounting: THR soldering, conductor/PCB connection direction: 0 °, color: black, Pin layout: Linear pinning, Solder pin [P]: 2.6 mm, number of solder pins per potential: 2, 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 operation due to color-coded actuating push button
- · Operation and conductor connection from one direction enable integration into front of device
- · Designed for integration into the SMT soldering process

## Commercial data

Item number	1135293
Packing unit	220 pc
Minimum order quantity	220 pc
Note	Made to order (non-returnable)
Sales key	AA13
Product key	AAMCAA
GTIN	4063151068813
Weight per piece (including packing)	3.47 g
Weight per piece (excluding packing)	3 g
Customs tariff number	85369010
Country of origin	PL

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# Technical data

### **Product properties**

Product line	COMBICON Terminals M
Product type	Printed circuit board terminal
Product family	SPT 2,5/H-THR
Number of positions	2
Pitch	5 mm
Number of connections	2
Number of rows	1
Number of potentials	2
Pin layout	Linear pinning
Solder pins per potential	2

### **Electrical properties**

Nominal current I <sub>N</sub>	32 A
Nominal voltage U <sub>N</sub>	400 V
Degree of pollution	3
Rated voltage (III/3)	320 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)	500 V
Rated surge voltage (II/2)	4 kV

## Connection data

lominal cross section	4 mm <sup>2</sup>
nductor connection	
Connection method	Push-in spring connection
Conductor cross section rigid	0.2 mm <sup>2</sup> 4 mm <sup>2</sup> (Conductor connection with open terminal point)
	0.5 mm <sup>2</sup> 4 mm <sup>2</sup> (Push-in connection)
Conductor cross section flexible	0.2 mm² 4 mm²
Conductor cross section AWG	24 12
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm² 2.5 mm²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm² 2.5 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm² 0.5 mm²
Stripping length	10 mm

Mounting





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Mounting type	THR soldering
Pin layout	Linear pinning
Processing notes	
Process	Reflow/wave soldering
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	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

Color (Housing)	black (9005)
Insulating material	LCP
Insulating material group	Illa
CTI according to IEC 60112	175
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	200 °C

#### Material data - actuating element

Color (Actuating element)	white (9010)
Insulating material	PA GF
Insulating material group	1
CTI according to IEC 60112	600
Flammability rating according to UL 94	VO

#### Notes

Assembly instruction:

This item is not suitable for PCB cleaning with liquids.

#### Dimensions



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Dimensional drawing	h h P
Pitch	5 mm
Width [w]	10.8 mm
Height [h]	15.4 mm
Length [I]	19.15 mm
Installed height	12.8 mm
Solder pin length [P]	2.6 mm
PCB design	
Hole diameter	1.2 mm

### Mechanical tests

Test for conductor damage and slackening

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 setpoint/actual value	0.2 mm² / solid / > 10 N
	0.2 mm² / flexible / > 10 N
	4 mm² / solid / > 60 N
	4 mm² / flexible / > 60 N
	0.5 mm² / solid / > 20 N

### Electrical tests

#### Temperature-rise test

Specification	IEC 60947-7-4:2019-01
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 60947-7-4:2019-01
Insulation resistance	
Specification	IEC 60512-3-1:2002-02
Insulation resistance, neighboring positions	> 5 MΩ
Air clearances and creepage distances	
Specification	IEC 60947-7-4:2019-01
Insulating material group	Illa



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Comparative tracking index (IEC 60112)	CTI 175
Rated insulation voltage (III/3)	320 V
Rated surge voltage (III/3)	4 kV
minimum clearance value - non-homogenous field (III/3)	3 mm
minimum creepage distance (III/3)	5 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)	4 mm
Rated insulation voltage (II/2)	500 V
Rated surge voltage (II/2)	4 kV
minimum clearance value - non-homogenous field (II/2)	3 mm
minimum creepage distance (II/2)	5 mm

## Environmental and real-life conditions

pecification	IEC 60068-2-6:2007-12
requency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 Hz 60.1 Hz)
Sweep speed	50 m/s² (60.1 Hz 150 Hz)
Test duration per axis	2.5 h
ow-wire test	
Specification	IEC 60695-2-10:2013-04
Temperature	850 °C
Time of exposure	5 s
ing	
Specification	IEC 60947-7-4:2019-01
nbient conditions	
Ambient temperature (operation)	-40 °C 105 °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 100 °C
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kaging specifications	
ckaging specifications Type of packaging	packed in cardboard

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# Classifications

### ECLASS

ECLASS-12.0 27460101   ECLASS-13.0 27460101	ECLASS-11.0	27460101
ECLASS-13.0 27460101	ECLASS-12.0	27460101
	ECLASS-13.0	27460101

## ETIM

	ETIM 9.0	EC002643			
UN	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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Phoenix Contact USA 586 Fulling Mill Road Middletown, PA 17057, United States (+717) 944-1300 info@phoenixcon.com