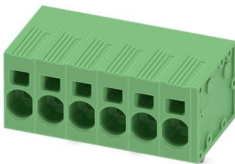


SPT 5/ 6-H-7,5-ZB - PCB terminal block



1719231
<https://www.phoenixcontact.com/pc/products/1719231>

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PCB terminal block, nominal current: 41 A, rated voltage (III/2): 1000 V, nominal cross section: 6 mm², number of potentials: 6, number of rows: 1, number of positions per row: 6, product range: SPT 5/...-H, pitch: 7.5 mm, connection method: Push-in spring connection, mounting: Wave soldering, conductor/PCB connection direction: 0 °, color: green, Pin layout: Zigzag pinning W, Solder pin [P]: 4.6 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
- Clamping space opened by means of fixed screwdriver enables convenient conductor connection
- Unrestricted 600-V-UL approval thanks to compact zig-zag pinning
- Operation and conductor connection from one direction enable integration into front of device

Commercial data

Item number	1719231
Packing unit	50 pc
Minimum order quantity	1 pc
Product key	AANBBA
Catalog page	Page 463 (C-1-2013)
GTIN	4046356141338
Weight per piece (including packing)	23.002 g
Weight per piece (excluding packing)	20.287 g
Customs tariff number	85369010
Country of origin	BG

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Technical data

Product properties

Product line	COMBICON Terminals L
Product type	Printed circuit board terminal
Product family	SPT 5/...-H
Number of positions	6
Pitch	7.5 mm
Number of connections	6
Number of rows	1
Number of potentials	6
Pin layout	Zigzag pinning W
Solder pins per potential	2

Electrical properties

Nominal current I_N	41 A
Nominal voltage U_N	1000 V
Degree of pollution	3
Rated voltage (III/3)	800 V
Rated surge voltage (III/3)	8 kV
Rated voltage (III/2)	1000 V
Rated surge voltage (III/2)	8 kV
Rated voltage (II/2)	1000 V
Rated surge voltage (II/2)	6 kV

Connection data

Connection technology

Nominal cross section	6 mm ²
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Conductor connection

Connection method	Push-in spring connection
Conductor cross section rigid	0.2 mm ² ... 10 mm ²
Conductor cross section flexible	0.2 mm ² ... 6 mm ²
Conductor cross section AWG	24 ... 8
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm ² ... 6 mm ²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm ² ... 6 mm ²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.25 mm ² ... 1.5 mm ²
Stripping length	15 mm

Mounting

Mounting type	Wave soldering
Pin layout	Zigzag pinning W

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Connection method	Push-in spring connection
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Material specifications

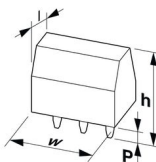
Material data - contact

Note	WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/JEDEC JESD 201
Contact material	Cu alloy
Surface characteristics	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)	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	7.5 mm
Width [w]	46.8 mm
Height [h]	24.2 mm
Length [l]	24.15 mm
Installed height	19.6 mm
Solder pin length [P]	4.6 mm
Pin dimensions	1.7 x 0.8 mm

PCB design

Pin spacing	13.2 mm
Hole diameter	2.1 mm

Mechanical tests

Connection test

Specification	IEC 60998-2-2:2002-12
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Result	Test passed
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Test for conductor damage and slackening

Specification	IEC 60998-2-2:2002-12
Result	Test passed

Pull-out test

Specification	IEC 60998-2-2:2002-12
Conductor cross section/conductor type/tractive force setpoint/actual value	0.2 mm ² / solid / > 10 N
	0.2 mm ² / flexible / > 10 N
	10 mm ² / solid / > 90 N
	6 mm ² / flexible / > 80 N

Flexion test

Specification	IEC 60998-2-2:2002-12
Result	Test passed

Insulation holder for crimp connections

Result	Test passed
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Electrical tests

Temperature-rise test

Specification	IEC 60998-2-1:2002-12
Requirement temperature-rise test	Increase in temperature ≤ 45 K

Insulation resistance

Specification	IEC 60998-1:2002-12
Insulation resistance, neighboring positions	> 5 MΩ

Air clearances and creepage distances |

Specification	IEC 60664-1:1992-10 + A1:2000-02 + A2:2002-05
Insulating material group	I
Comparative tracking index (IEC 60112)	CTI 600
Rated insulation voltage (III/3)	800 V
Rated surge voltage (III/3)	8 kV
minimum clearance value - non-homogenous field (III/3)	8 mm
minimum creepage distance (III/3)	10 mm
Rated insulation voltage (III/2)	1000 V
Rated surge voltage (III/2)	8 kV
minimum clearance value - non-homogenous field (III/2)	8 mm
minimum creepage distance (III/2)	8 mm
Rated insulation voltage (II/2)	1000 V
Rated surge voltage (II/2)	6 kV
minimum clearance value - non-homogenous field (II/2)	5.5 mm
minimum creepage distance (II/2)	5.5 mm

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Environmental and real-life conditions

Vibration test

Specification	IEC 60068-2-6:1995-03
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

Glow-wire test

Specification	IEC 60998-1:2002-12
Temperature	850 °C
Time of exposure	5 s

Ambient conditions

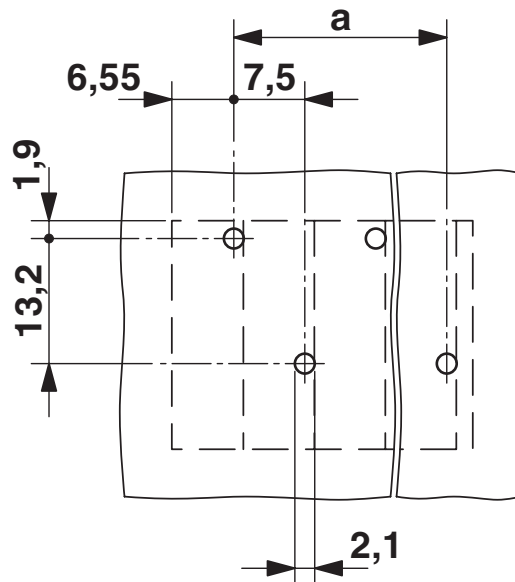
Ambient temperature (operation)	-40 °C ... 100 °C (Depending on the current carrying capacity/derating curve)
Ambient temperature (storage/transport)	-40 °C ... 70 °C
Relative humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 100 °C

Packaging specifications

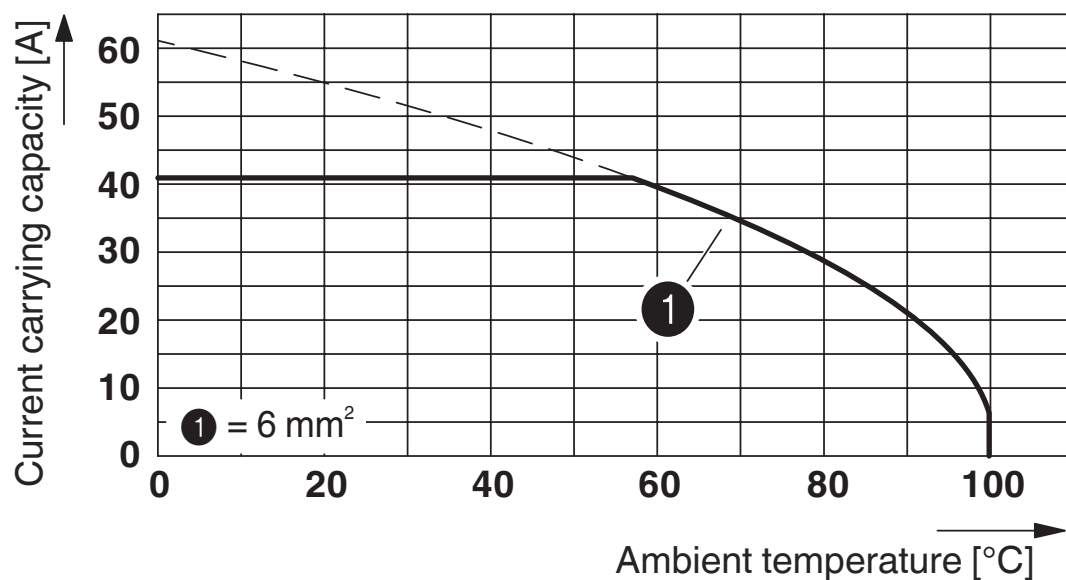
Type of packaging	packed in cardboard
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Drawings

Drilling plan/solder pad geometry



Diagram



Type: SPT 5/...-H-7,5-ZB

Test following DIN EN 60512-5-2:2003-01

Reduction factor = 1

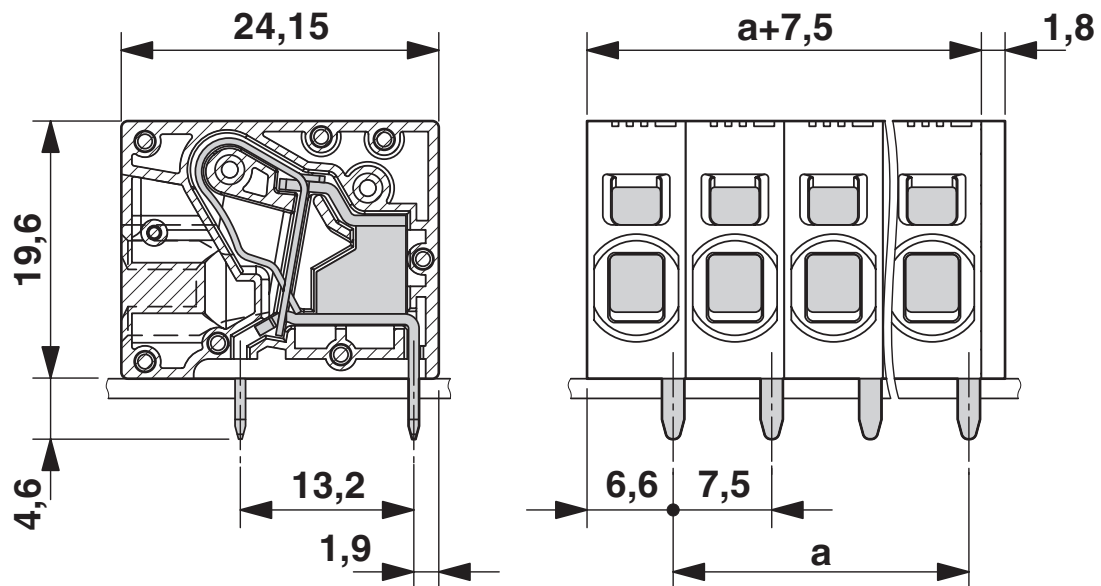
No. of positions: 5

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Dimensional drawing



SPT 5/ 6-H-7,5-ZB - PCB terminal block



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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/pc/products/1719231>

cULus Recognized Approval ID: E60425-20061129				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B	600 V	36 A	24 - 8	-
Use group C	600 V	36 A	24 - 8	-

VDE Zeichengenehmigung Approval ID: 40042909				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	1000 V	41 A	-	0.2 - 10

SPT 5/ 6-H-7,5-ZB - PCB terminal block



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Classifications

ECLASS

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

ETIM

ETIM 9.0	EC002643
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UNSPSC

UNSPSC 21.0	39121400
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SPT 5/ 6-H-7,5-ZB - PCB terminal block



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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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