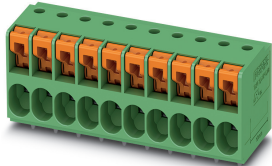


## PCB terminal block - TDPT 2,5/ 4-SP-5,08 - 1017505

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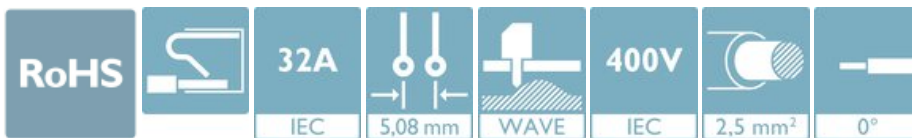


The figure shows a 10-position version of the product


PCB terminal block, nominal current: 32 A, rated voltage (III/2): 400 V, nominal cross section: 2.5 mm<sup>2</sup>, number of potentials: 4, Number of rows: 1, Number of positions per row: 4, product range: TDPT 2,5/..-SP, pitch: 5.08 mm, connection method: Push-in spring connection, mounting: Wave soldering, conductor/PCB connection direction: 0 °, color: green, Pin layout: Linear double pinning, Solder pin [P]: 3.5 mm, type of packaging: packed in cardboard

### Your advantages

- ✓ Easy to adapt, thanks to their identical size and the same pinning for Push-in spring connections as for screw connections
- ✓ 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



### Key Commercial Data

Packing unit	1 pc
Minimum order quantity	50 pc
GTIN	 4 055626 501390
GTIN	4055626501390
Weight per Piece (excluding packing)	8.400 g
Custom tariff number	85369010
Country of origin	China

### Technical data

#### Item properties

Brief article description	PCB terminal block
Range of articles	TDPT 2,5/..-SP
Pitch	5.08 mm

## PCB terminal block - TDPT 2,5/ 4-SP-5,08 - 1017505

### Technical data

#### Item properties

Number of positions	4
Mounting type	Wave soldering
Pin layout	Linear double pinning
Number of levels	1
Number of connections	4
Number of potentials	4

#### Electrical parameters

Nominal current	32 A
Nom. voltage	400 V
Contact resistance	Test passed IEC 60512-2-1:2002-02
Rated voltage (III/3)	320 V
Rated voltage (III/2)	400 V
Rated voltage (II/2)	630 V
Rated surge voltage (III/3)	4 kV
Rated surge voltage (III/2)	4 kV
Rated surge voltage (II/2)	4 kV

#### Connection capacity

Connection method	Push-in spring connection
Conductor cross section solid	0.2 mm <sup>2</sup> ... 4 mm <sup>2</sup> (Conductor connection with open terminal point) 0.75 mm <sup>2</sup> ... 4 mm <sup>2</sup> (Push-in connection)
Conductor cross section flexible	0.2 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Conductor cross section AWG / kcmil	24 ... 12
Conductor cross section flexible, with ferrule without plastic sleeve	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm <sup>2</sup> ... 0.75 mm <sup>2</sup>
Stripping length	10 mm

#### 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 (10 - 16 µm Sn)
Metal surface soldering area (top layer)	Tin (10 - 16 µm Sn)

#### Material data - housing

Housing color	green (6021)
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## PCB terminal block - TDPT 2,5/ 4-SP-5,08 - 1017505

### Technical data

#### Material data - housing

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 for the product

Caption	Schematische Abbildung - weitere Details siehe Produktfamilienzeichnung im Download Center
Length [ l ]	18 mm
Width [ w ]	21.12 mm
Height [ h ]	22.5 mm
Pitch	5.08 mm
Height (without solder pin)	19 mm
Solder pin [P]	3.5 mm
Pin spacing	8.7 mm
Pin dimensions	0.8 x 0.8 mm

#### Dimensions for PCB design

Hole diameter	1.4 mm
Pin spacing	8.7 mm

#### Packaging information

Type of packaging	packed in cardboard
Pieces per package	50
Denomination packing units	Pcs.

#### Processing notes

Process	Wave soldering
Specification	Following IEC 61760-1:2006-04
	Following IEC 60068-2-54:2006-04

#### Ambient conditions

Ambient temperature (storage/transport)	-40 °C ... 70 °C
Ambient temperature (assembly)	-5 °C ... 105 °C
Ambient temperature (operation)	-40 °C ... 105 °C (Depending on the current carrying capacity/derating curve)

#### Termination and connection method

## PCB terminal block - TDPT 2,5/ 4-SP-5,08 - 1017505

### Technical data

#### Termination and connection method

Test for conductor damage and slackening	IEC 60999-1:1999-11
	Test passed

#### Pull-out test

Pull-out test	IEC 60999-1:1999-11
Conductor cross section / conductor type / tensile force	0.2 mm <sup>2</sup> / solid / > 10 N
	0.2 mm <sup>2</sup> / flexible / > 10 N
	4 mm <sup>2</sup> / solid / > 60 N
	4 mm <sup>2</sup> / flexible / > 60 N

#### Mechanical tests according to standard

Test specification	IEC 60947-7-4
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#### Electrical tests

Rated current	32 A
Conductor cross section	4 mm <sup>2</sup>
Rated voltage (III/2)	400 V
Rated surge voltage (III/2)	4 kV

#### Air clearances and creepage distances

Clearances and creepage distances	IEC 60947-1:2007-06 + A1:2010-12 + A2:2014-09
Specification	IEC 60947-1:2007-06 + A1:2010-12 + A2:2014-09
Minimum clearance - inhomogeneous field (III/3)	3 mm
Minimum clearance - inhomogeneous field (III/2)	3 mm
Minimum clearance - inhomogeneous field (II/2)	3 mm
Minimum creepage distance value (III/3)	4 mm
Minimum creepage distance value (III/2)	3 mm
Minimum creepage distance value (II/2)	3.2 mm

#### 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.

#### Current carrying capacity / derating curves

Caption	Type: TDPT 2,5/...-SP-5,08
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#### 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)

# PCB terminal block - TDPT 2,5/ 4-SP-5,08 - 1017505

## Technical data

### Vibration test

Acceleration	5 g (60.1 - 150 Hz)
Test duration per axis	2.5 h

### Insulation resistance

Specification	IEC 60512-3-1:2002-02
Result	Test passed

### Glow-wire test

Specification	IEC 60695-2-10:2013-04
Temperature	850 °C
Time of exposure	5 s

### Alternating climate test

Result	Test passed
Specification	ISO 6988:1985-02

### Standards and Regulations

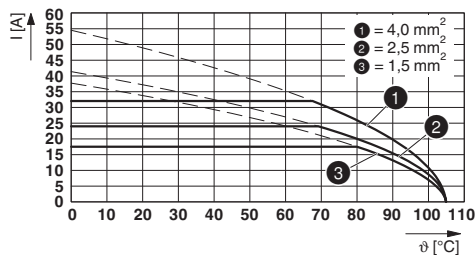
Connection in acc. with standard	EN-VDE
Flammability rating according to UL 94	V0

### Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

## Drawings

Diagram



Type: TDPT 2,5/...-SP-5,08

## Classifications

eCl@ss

eCl@ss 10.0.1	27440401
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# PCB terminal block - TDPT 2,5/ 4-SP-5,08 - 1017505

## Classifications

### eCl@ss

eCl@ss 11.0	27460101
eCl@ss 5.1	27261100
eCl@ss 6.0	27261100
eCl@ss 7.0	27440401
eCl@ss 9.0	27440401

### ETIM

ETIM 6.0	EC002643
ETIM 7.0	EC002643

## Approvals


### Approvals


#### Approvals


VDE Zeichengenehmigung / IECCE CB Scheme / EAC / cULus Recognized

#### Ex Approvals

## Approval details

VDE Zeichengenehmigung		<a href="http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx">http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx</a>	40049168
Nominal voltage UN	400 V		
Nominal current IN	32 A		
mm <sup>2</sup> /AWG/kcmil	0.2-4		

IECEE CB Scheme		<a href="http://www.iecee.org/">http://www.iecee.org/</a>	DE1-61270
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EAC		B.01687
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## PCB terminal block - TDPT 2,5/ 4-SP-5,08 - 1017505

### Approvals

cULus Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	E60425-20180122
	B	C	D
Nominal voltage UN	300 V	150 V	300 V
Nominal current IN	20 A	20 A	10 A
mm <sup>2</sup> /AWG/kcmil	24-12	24-12	24-12

### Accessories

#### Accessories

#### Screwdriver tools

Screwdriver - SZF 2-0,8X4,0 - 1204520



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.8 x 4.0 x 100 mm, 2-component grip, with non-slip grip