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Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

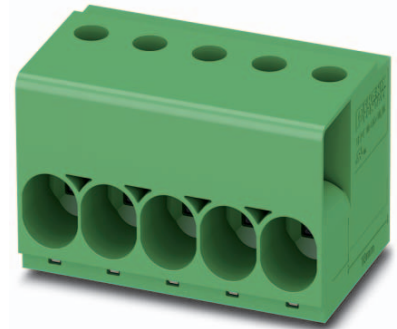


Data sheet

Order No.: 1017528

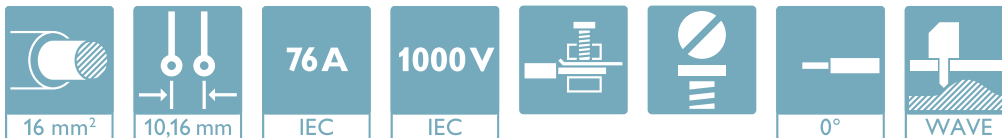
Type: TDPT 16/ 4-SC-10,16-ZB

PCB terminal block, Screw connection with tension sleeve



The figure shows a 5-pos. version of the product

1 Main features



- | | | | |
|---------------------------|--------------------------------------|------------------------|---------------------|
| • No. of pos. | 4 | • Nominal current | 76 A |
| • Conductor cross section | 16 mm ² | • Nominal voltage | 1000 V |
| • Color | green | • Connection direction | 0 ° |
| • Pitch | 10.16 mm | • Type of packaging | packed in cardboard |
| • Connection method | Screw connection with tension sleeve | | |

2 Your advantages

- ✓ Easy to adapt, thanks to their identical size and the same pinning for Push-in spring connections as for screw connections
- ✓ Well-known connection principle allows worldwide use
- ✓ Low temperature rise, thanks to maximum contact force



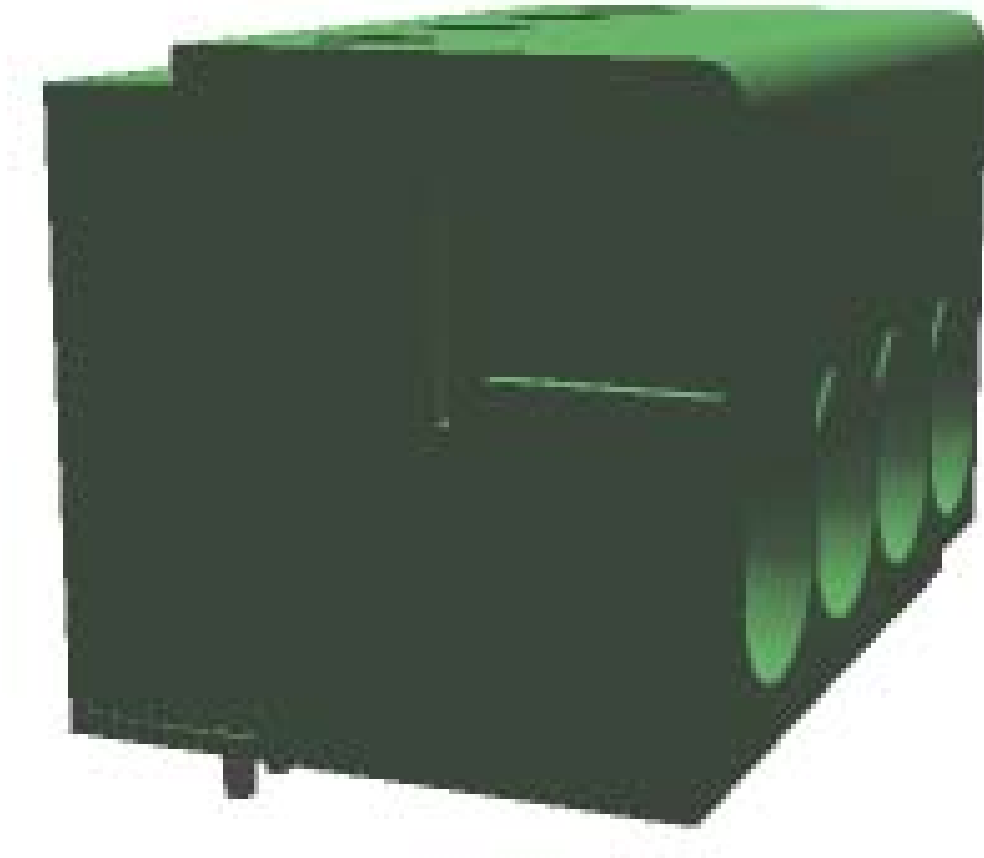
Make sure you always use the latest documentation.
It can be downloaded at: phoenixcontact.net/product/1017528

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4 3D model in PDF can be activated (Acrobat Reader only)



1017528 TDPT 16/ 4-SC-10,16-ZB**5 item properties**

| | |
|-----------------------|--------------------------------------|
| Order No. | 1017528 |
| Type | TDPT 16/ 4-SC-10,16-ZB |
| Range of articles | TDPT 16/...-SC |
| Pitch | 10.16 mm |
| Number of positions | 4 |
| Connection method | Screw connection with tension sleeve |
| Drive form screw head | Slotted (L) |
| Mounting type | Wave soldering |
| Pin layout | Zigzag pinning W |

5.1 Connection capacity

| | |
|---|--|
| Conductor cross section, solid | 0.75 mm ² to 16 mm ² |
| Conductor cross section, flexible | 0.75 mm ² to 16 mm ² |
| Conductor cross section AWG/kcmil | 20 to 6 |
| 2 conductors with same cross section, solid | 0.5 mm ² to 6 mm ² |
| 2 conductors with same cross section, stranded | 0.5 mm ² to 6 mm ² |
| Conductor cross section flexible, with ferrule without plastic sleeve | 0.75 mm ² to 16 mm ² |
| Conductor cross section flexible, with ferrule with plastic sleeve | 0.75 mm ² to 16 mm ² |
| Stripping length | 18 mm |

5.2 Material data

| | | |
|---|---|---------|
| Material of metal parts | | |
| Note | WEEE/RoHS-compliant, whisker-free acc. to IEC 60068-2-82/JEDEC JESD 201 | |
| Contact material | Cu alloy | |
| Surface characteristics | hot-dip tin-plated | |
| Insulating material data | Housing | Housing |
| Insulating material | PA | |
| CTI according to IEC 60112 | 600 | |
| Flammability rating according to UL 94 | V0 | |
| Color | green (6021) | |
| 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 | |

6 Dimensions**6.1 Dimensions for the product**

| | |
|-----------------------------|----------|
| Length | 31.9 mm |
| Width | 41.66 mm |
| Height (without solder pin) | 31.2 mm |
| Total height | 34.7 mm |
| Solder pin [P] | 3.5 mm |
| Dimension a | 30.48 mm |

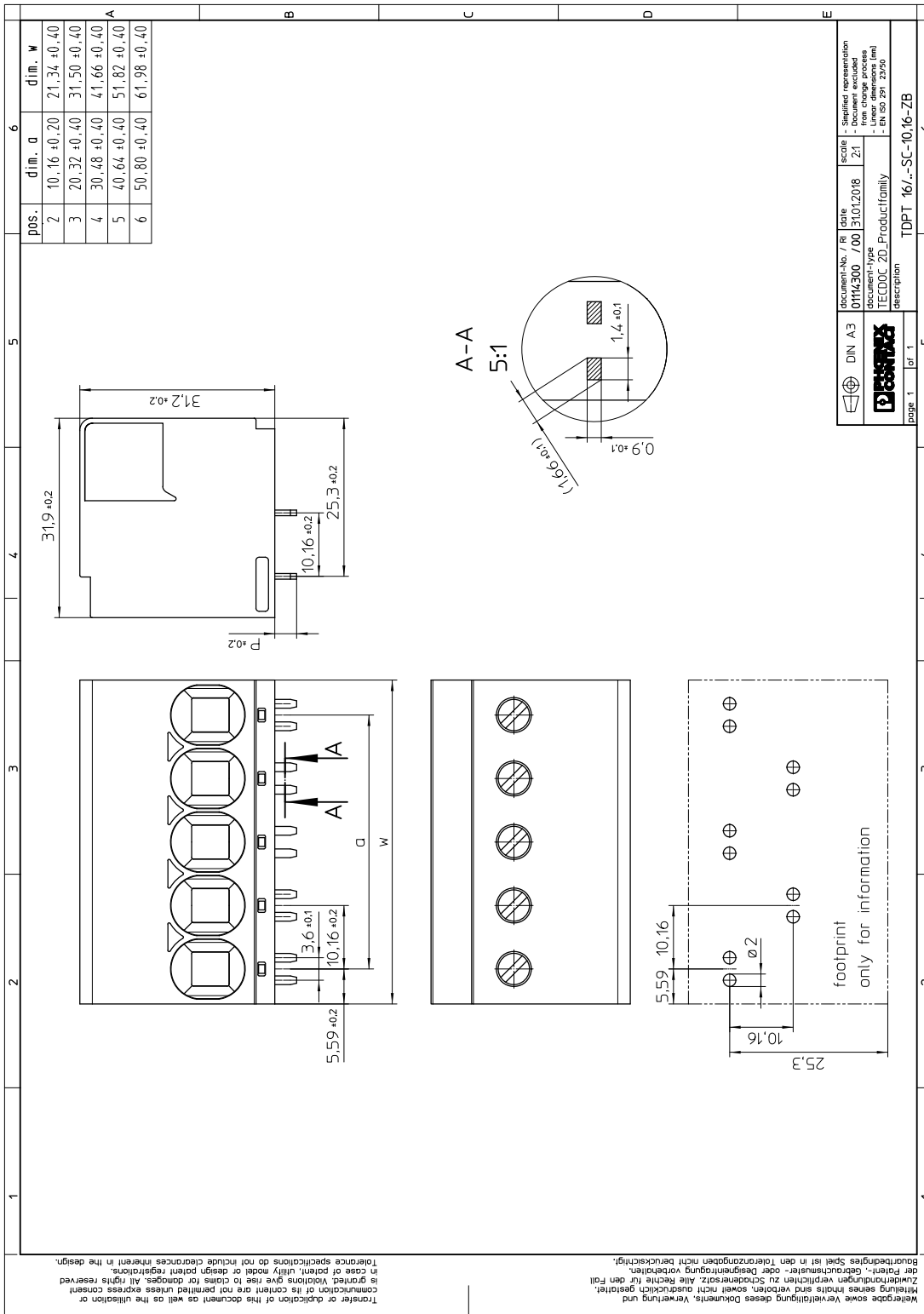
1017528 TDPT 16/ 4-SC-10,16-ZB

6.2 Dimensions for PCB design

| | |
|----------------|--------------|
| Hole diameter | 1.85 mm |
| Pin dimensions | 1,4 x 0,9 mm |

1017528 TDPT 16/ 4-SC-10,16-ZB

7 Series drawing



1017528 TDPT 16/ 4-SC-10,16-ZB**8 Packaging information**

| | |
|--------------------|---------------------|
| Type of packaging | packed in cardboard |
| Pieces per package | 50 |

9 Application**9.1 Temperature limit values**

| | |
|---|--|
| Ambient temperature (storage/transport) | -40 °C ... 70 °C |
| Ambient temperature (assembly) | -5 °C ... 100 °C |
| Ambient temperature (operation) | -40 °C (dependent on the derating curve) |

9.2 Termination and connection method

| | |
|--|---------------------|
| Specification | IEC 60999-1:1999-11 |
| Check for damage to conductor or loosening | Test passed |

9.3 Pull-out test

Termination and connection method: pull-out test

| | |
|--|--|
| Specification | IEC 60999-1:1999-11 |
| Result | Test passed |
| Conductor cross section/conductor type/tractive force actual value | 0.75 mm ² / stranded / > 30 N |
| Conductor cross section/conductor type/tractive force actual value | 0.75 mm ² / solid / > 30 N |
| Conductor cross section/conductor type/tractive force actual value | 16 mm ² / stranded / > 100 N |
| Conductor cross section/conductor type/tractive force actual value | 16 mm ² / solid / > 100 N |

1017528 TDPT 16/ 4-SC-10,16-ZB**10 Electrical tests****10.1 Electrical data**

| | |
|---|---------------------------|
| Rated current / conductor cross section | 76 A / 16 mm ² |
| Rated insulation voltage (III/2) | 1000 V |
| Rated surge voltage (III/2) | 8 kV |
| Contact resistance | 0.18 mΩ |
| Degree of pollution | 2 |

10.2 Short-time withstand current test

| | |
|--|-------------------------------|
| Specification | IEC 60947-7-4:2013-08 |
| Result | Test passed |
| Conductor cross section/short-time current | 16 mm ² / 303 A AC |

10.3 Aging test (climatic impact and corrosion testing)

| | |
|--|------------------------------|
| Specification | IEC 60947-7-4:2013-08 |
| Result | Test passed |
| Contact resistance R ₁ | 0.18 mΩ / 16 mm ² |
| Test sequence 1: low temperature storage | -40 °C / 2 h |
| Test sequence 2: heat storage | 168 h/105 °C |
| Test sequence 3: noxious gas storage (ISO 6988) | KFW 0.2 S/1 cycle |
| Contact resistance R ₂ | 0.18 mΩ / 16 mm ² |
| Rated impulse voltage at sea level Voltage waveform ≥ (1.2/50 μs) | 9.8 kV |
| Power-frequency withstand voltage Voltage waveform ≥ (50/60 Hz) | 4.2 kV |

10.4 Insulation resistance

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

10.5 Mechanical connection test for the PCB terminal block

| | |
|---------------|-----------------------|
| Specification | IEC 60947-7-4:2013-08 |
| Result | Test passed |

10.6 Temperature-rise test

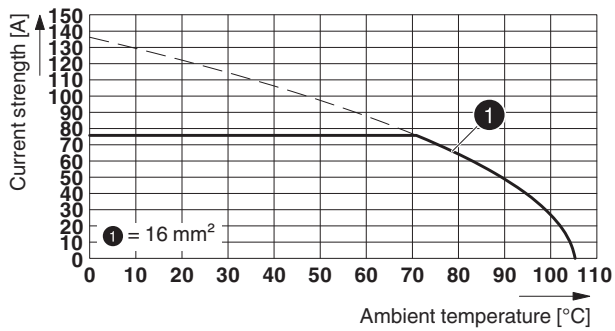
| | |
|---------------|-----------------------|
| Specification | IEC 60947-7-4:2013-08 |
| Result | Test passed |

1017528 TDPT 16/ 4-SC-10,16-ZB

11 Current carrying capacity/derating curves

| | |
|---------------------|-----------------------|
| Specification | IEC 60512-5-2:2002-02 |
| Reduction factor | 1 |
| Number of positions | 4 |

Type: TDPT 16/...-SC-10,16-ZB




1017528 TDPT 16/ 4-SC-10,16-ZB**12 Environmental and durability tests****12.1 Assessment of fire risk (glow wire test)**

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

12.2 Vibration test

| | |
|------------------------|------------------------|
| Specification | IEC 60068-2-6:2007-12 |
| Result | Test passed |
| Frequency | 10 - 150 - 10 Hz |
| Sweep speed | 1 octave/min |
| Amplitude | 0.35 mm (10 - 60.1 Hz) |
| Acceleration | 5 g (60.1 - 150 Hz) |
| Test duration per axis | 2.5 h |
| Test directions | X-, Y- and Z-axis |
| Contact interruption | |

13 Approvals

| | | | |
|--|-------|-------|-------|
| cULus Recognized  | | | |
| Use group | B | C | D |
| mm ² /AWG/kcmil | 20-6 | 20-6 | 20-6 |
| Voltage | 600 V | 600 V | 300 V |
| Current | 58 A | 58 A | 10 A |

1017528 TDPT 16/ 4-SC-10,16-ZB**14 Commercial Data**

| | |
|--------------------|--|
| Order No. | 1017528 |
| Type | TDPT 16/ 4-SC-10,16-ZB |
| Pieces per package | 50 |
| Net weight | 37.62 g |
| GTIN | 4055626501604 |
| | Information that applies locally, see link on page 1 |
| Country of origin | Information that applies locally, see link on page 1 |

15 Accessories

| Description | Order No. | Type |
|---|-----------|---------------|
| 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 | 1204520 | SZF 2-0,8X4,0 |