

PCB terminal block - TDPT 16/ 2-SP-10,16-ZB - 1017531

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PCB terminal block, nominal current: 76 A, rated voltage (III/2): 1000 V, nominal cross section: 16 mm², pitch: 10.16 mm, number of positions: 2, connection method: Push-in spring connection, mounting: Wave soldering, conductor/PCB connection direction: 0 °, color: green, Pin layout: Zigzag pinning W, Solder pin [P]: 3.5 mm


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

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 | 50 pc |
| Minimum order quantity | 50 pc |
| GTIN |  4 055626 501635 |
| GTIN | 4055626501635 |

Technical data

Item properties

| | |
|---------------------------|---------------------------|
| Brief article description | PCB terminal block |
| Range of articles | TDPT 16/...-SP |
| Pitch | 10.16 mm |
| Number of positions | 2 |
| Connection method | Push-in spring connection |
| Mounting type | Wave soldering |
| Pin layout | Zigzag pinning W |
| Number of levels | 1 |
| Number of connections | 2 |
| Number of potentials | 2 |

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Technical data

Electrical parameters

| | |
|-----------------------------|--------|
| Nominal current | 76 A |
| Nom. voltage | 1000 V |
| Rated voltage | 800 V |
| Rated voltage (III/2) | 1000 V |
| Rated voltage (II/2) | 1000 V |
| Rated surge voltage (III/3) | 8 kV |
| Rated surge voltage (III/2) | 8 kV |
| Rated surge voltage (II/2) | 6 kV |

Connection capacity

| | |
|---|---|
| Connection method | Push-in spring connection |
| Conductor cross section solid | 0.75 mm ² ... 16 mm ² (Conductor connection with open terminal point) |
| | 1.5 mm ² ... 16 mm ² (Push-in connection) |
| Single-conductor/terminal point multi-stranded | 0.75 mm ² ... 16 mm ² |
| Conductor cross section flexible | 0.75 mm ² ... 16 mm ² |
| Conductor cross section AWG / kcmil | 20 ... 6 |
| Conductor cross section flexible, with ferrule without plastic sleeve | 0.75 mm ² ... 16 mm ² |
| Conductor cross section, flexible, with ferrule, with plastic sleeve | 0.75 mm ² ... 16 mm ² |
| 2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve | 0.75 mm ² ... 6 mm ² |
| Stripping length | 18 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) |
| 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

| | |
|--------------|----------|
| Length [l] | 31.9 mm |
| Width [w] | 17.74 mm |
| Height [h] | 34.7 mm |

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Dimensions for the product

| | |
|-----------------------------|------------|
| Pitch | 10.16 mm |
| Height (without solder pin) | 31.2 mm |
| Solder pin [P] | 3.5 mm |
| Pin dimensions | 1.2 x 1 mm |

Dimensions for PCB design

| | |
|---------------|------|
| Hole diameter | 2 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

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

Pull-out test

| | |
|--|--|
| Pull-out test | IEC 60999-1:1999-11 |
| | Test passed |
| Conductor cross section / conductor type / tensile force | 0.75 mm ² / solid / > 30 N |
| | 0.75 mm ² / flexible / > 30 N |
| | 16 mm ² / solid / > 100 N |
| | 16 mm ² / flexible / > 100 N |

Mechanical tests according to standard

| | |
|--------------------|---------------|
| Test specification | IEC 60947-7-4 |
|--------------------|---------------|

Electrical tests

| | |
|-----------------------------|--------------------|
| Rated current | 76 A |
| Conductor cross section | 16 mm ² |
| Rated voltage (III/2) | 1000 V |
| Rated surge voltage (III/2) | 8 kV |

Air clearances and creepage distances

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Technical data

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) | 8 mm |
| Minimum clearance - inhomogeneous field (III/2) | 8 mm |
| Minimum clearance - inhomogeneous field (II/2) | 5.5 mm |
| Minimum creepage distance value (III/3) | 10 mm |
| Minimum creepage distance value (III/2) | 8 mm |
| Minimum creepage distance value (II/2) | 5.5 mm |

Temperature-rise test

| | |
|-----------------------------------|--|
| Specification | IEC 60947-7-4:2013-08 |
| Result | Test passed |
| 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 16/...-SP-10,16-ZB |
| Specification | IEC 60947-7-4:2013-08 |
| Number of positions | 4 |
| Reduction factor | 1 |
| Note | Representation based on IEC 60512-5-2:2002-02 |

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 |

Insulation resistance

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

Glow-wire test

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

Alternating climate test

| | |
|---------------|------------------|
| Result | Test passed |
| Specification | ISO 6988:1985-02 |

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Technical data

Alternating climate test

| | |
|------------------|-------------------|
| Corrosive stress | KFW 0.2 S/1 cycle |
|------------------|-------------------|

Standards and Regulations

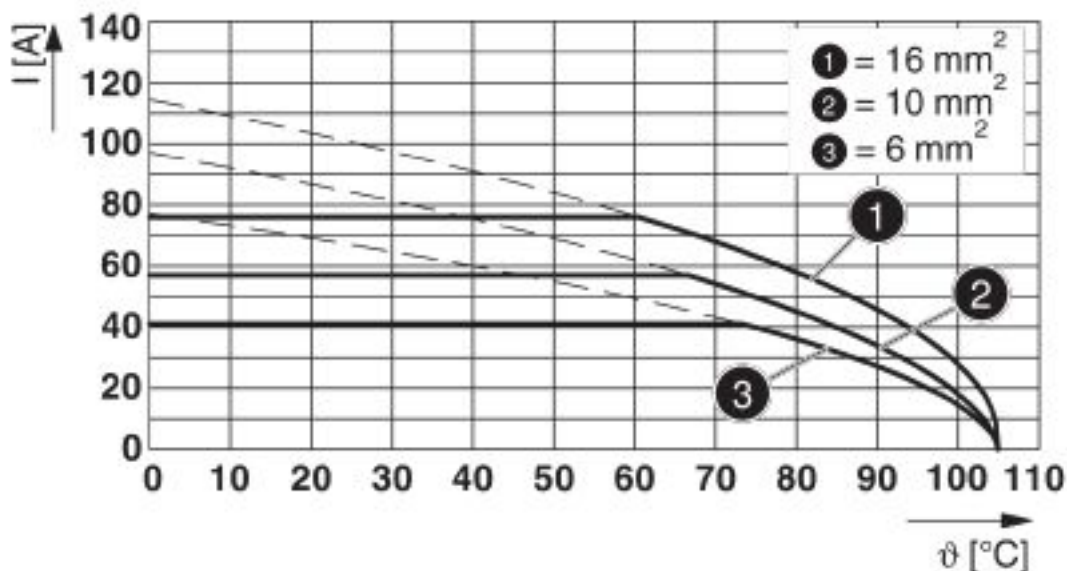
| | |
|--|--------|
| Connection in acc. with standard | EN-VDE |
| Flammability rating according to UL 94 | V0 |

Environmental Product Compliance

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

Drawings

Diagram



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

Classifications

eCl@ss

| | |
|---------------|----------|
| eCl@ss 10.0.1 | 27440401 |
| eCl@ss 5.1 | 27261100 |
| eCl@ss 6.0 | 27261100 |
| eCl@ss 7.0 | 27440401 |
| eCl@ss 8.0 | 27440401 |
| eCl@ss 9.0 | 27440401 |

ETIM

| | |
|----------|----------|
| ETIM 5.0 | EC002643 |
|----------|----------|

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ETIM

| | |
|----------|----------|
| ETIM 6.0 | EC002643 |
| ETIM 7.0 | EC002643 |

Approvals


Approvals


Approvals

cULus Recognized / VDE Zeichengenehmigung / IECCEB Scheme / EAC


Ex Approvals

Approval details

| | | | |
|--|-------|-------|-------|
| cULus Recognized  http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm E60425-20180122 | | | |
| | B | C | D |
| Nominal voltage UN | 600 V | 600 V | 300 V |
| Nominal current IN | 58 A | 58 A | 10 A |
| mm ² /AWG/kcmil | 20-6 | 20-6 | 20-6 |

| | |
|---|---------|
| VDE Zeichengenehmigung  http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx 40049168 | |
| Nominal voltage UN | 1000 V |
| Nominal current IN | 76 A |
| mm ² /AWG/kcmil | 0.75-16 |

| |
|---|
| IECCEB Scheme  http://www.iecee.org/ DE1-61270 |
|---|

| |
|---|
| EAC  B.01687 |
|---|

Accessories

Accessories

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Accessories

Crimping tool

Crimping pliers - CRIMPFOX 6 - 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 mm² ... 6.0 mm², lateral entry, trapezoidal crimp

Crimping pliers - CRIMPFOX 16 S - 1207983



Crimping pliers for ferrules up to 16 mm²

Screwdriver tools

Screwdriver - SZS 1,2X8,0 VDE - 1205082



Screwdriver, slot-headed, VDE insulated, size: 1.2 x 8.0 x 175 mm, 2-component grip, with non-slip grip

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PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstr. 8
32825 Blomberg
Germany
Tel. +49 5235 300
Fax +49 5235 3 41200
<http://www.phoenixcontact.com>

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