

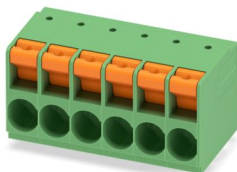
TDPT 16/ 6-SP-10,16-ZB - PCB terminal block



1017535

<https://www.phoenixcontact.com/us/products/1017535>

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Printed circuit board terminal, nominal current: 76 A, rated voltage (III/2): 1000 V, nominal cross section: 16 mm², number of potentials: 6, number of rows: 1, number of positions per row: 6, product range: TDPT 16/..-SP, pitch: 10.16 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]: 3.5 mm, number of solder pins per potential: 2, 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 operation due to color-coded actuating push button

Commercial data

Item number	1017535
Packing unit	50 pc
Minimum order quantity	50 pc
Note	Made to order (non-returnable)
Sales key	AA15
Product key	AAOBEA
GTIN	4055626501673
Weight per piece (including packing)	61.34 g
Weight per piece (excluding packing)	45.21 g
Customs tariff number	85369010
Country of origin	CN

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Technical data

Product properties

Product type	Printed circuit board terminal
Product family	TDPT 16/...-SP
Product line	COMBICON Terminals XL
Number of positions	6
Pitch	10.16 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

Properties

Nominal current I_N	76 A
Nominal voltage U_N	1000 V
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	16 mm ²
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Conductor connection

Connection method	Push-in spring connection
Conductor cross-section rigid	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	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

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Mounting

Mounting type	Wave soldering
Pin layout	Zigzag pinning W

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

Material data – actuating element

Color (Actuating element)	orange (2003)
Insulating material	PA
Insulating material group	I
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0

Dimensions

Dimensional drawing	
Pitch	10.16 mm
Width [w]	58.38 mm
Height [h]	34.7 mm
Length [l]	31.9 mm
Installed height	31.2 mm
Solder pin length [P]	3.5 mm

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Pin dimensions	1.2 x 1 mm
PCB design	
Hole diameter	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	0.75 mm ² / solid / > 30 N
	0.75 mm ² / flexible / > 30 N
	16 mm ² / solid / > 100 N
	16 mm ² / flexible / > 100 N

Electrical tests

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.

Short-time withstand current

Specification	IEC 60947-7-4:2013-08
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Insulation resistance

Specification	IEC 60512-3-1:2002-02
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Air clearances and creepage distances |

Specification	IEC 60947-1:2007-06 + A1:2010-12 + A2:2014-09
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 60068-2-6:2007-12
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 Hz ... 60.1 Hz)
Acceleration	5g (60.1 Hz ... 150 Hz)
Test duration per axis	2.5 h
Test directions	X-, Y- and Z-axis

Glow-wire test

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

Aging

Specification	IEC 60947-7-4:2013-08
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Ambient conditions

Ambient temperature (storage/transport)	-40 °C ... 70 °C
Relative humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 105 °C
Ambient temperature (operation)	-40 °C ... 105 °C (Depending on the current carrying capacity/derating curve)

Packaging specifications

Type of packaging	packed in cardboard
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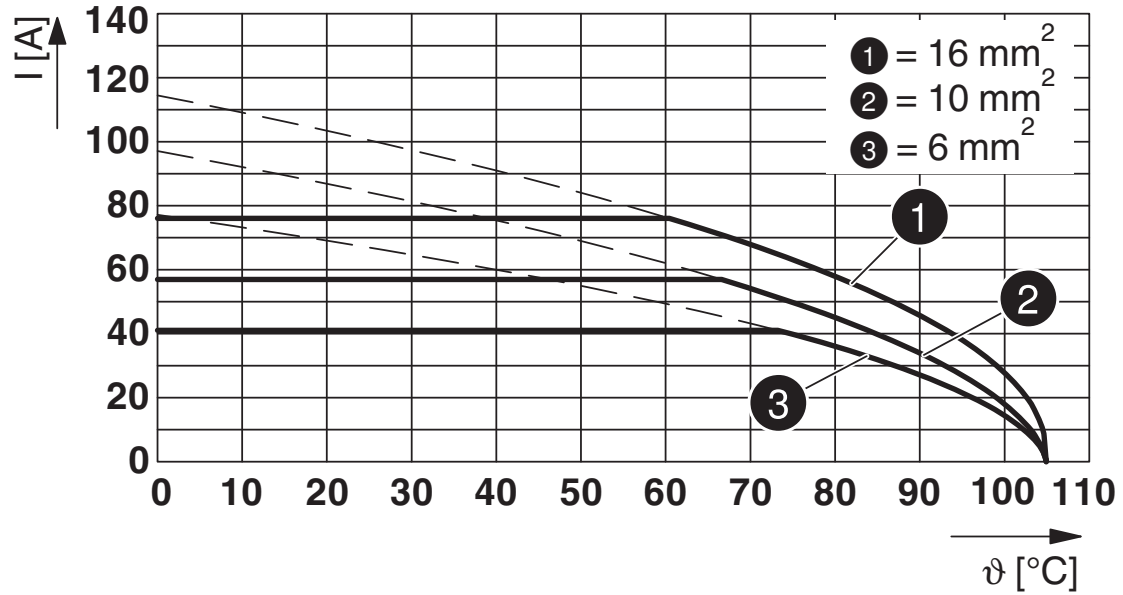


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Drawings

Diagram



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

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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1017535>

 cULus Recognized Approval ID: E60425-20180122				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
B	600 V	58 A	20 - 6	-
C	600 V	58 A	20 - 6	-

 VDE Zeichengenehmigung Approval ID: 40049168				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine	1000 V	76 A	-	0.75 - 16

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Classifications

ECLASS

ECLASS-13.0	27460101
ECLASS-15.0	27460101

ETIM

ETIM 10.0	EC002643
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UNSPSC

UNSPSC 21.0	39121400
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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
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