LPTA 16/ 2-10,0-ZB - PCB terminal block

1333817

https://www.phoenixcontact.com/pc/products/1333817

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PCB terminal block, nominal current: 76 A, rated voltage (III/2): 1000 V, nominal cross section: 16 mm^2, number of potentials: 2, number of rows: 1, number of positions per row: 2, product range: LPTA 16/, pitch: 10 mm, connection method: Lever Push-in connection, mounting: Wave soldering, conductor/PCB connection direction: 30 °, color: green, Pin layout: Zigzag pinning W, Solder pin [P]: 3.6 mm, type of packaging: packed in cardboard

Your advantages

- Tool-free lever principle enables time-saving connection and release of conductors with/without ferrules
- Clear lever positions provide reliable feedback on opened or closed clamping spaces
- Defined contact force ensures that contact remains stable over the long term
- Time-saving push-in connection when lever is closed
- Intuitive operation, thanks to a color-coded actuation lever

Commercial data

Item number	1333817
Packing unit	25 pc
Minimum order quantity	25 pc
Product key	AAOTAC
GTIN	4063151631765
Weight per piece (including packing)	27.256 g
Weight per piece (excluding packing)	25.38 g
Customs tariff number	85369010
Country of origin	PL

Technical data

Product properties

Product type	Printed circuit board terminal
Product family	LPTA 16/
Product line	COMBICON Terminals XL
Number of positions	2
Pitch	10 mm
Number of connections	2
Number of rows	1
Number of potentials	2
Pin layout	Zigzag pinning W

Data management status

Article revision	02

Electrical properties

Nominal current I_N	76 A
Nominal voltage U_N	1000 V
Rated voltage (III/3)	1000 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 mm²

Conductor connection

Connection method	Lever Push-in connection
Conductor cross section rigid	0.75 mm² ... 16 mm² (Conductor connection with open terminal point)
	1.5 mm² ... 16 mm² (Push-in connection)
Single-conductor/terminal point multi-stranded	0.75 mm² ... 16 mm²
Conductor cross section flexible	0.75 mm² ... 25 mm²
Conductor cross section AWG	18 ... 4
Conductor cross section flexible, with ferrule without plastic sleeve	0.75 mm² ... 16 mm²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.75 mm² ... 10 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	4 mm² ... 6 mm²
Stripping length	18 mm ... 20 mm

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

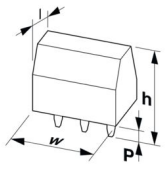
Material data - housing

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 GF
Insulating material group	I
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0

Dimensions

Dimensional drawing	
Pitch	10 mm
Width [w]	21.9 mm
Height [h]	45.8 mm
Length [l]	37.4 mm
Installed height	42 mm
Solder pin length [P]	3.6 mm

Pin dimensions	1 x 1 mm

PCB design

Hole diameter	1.7 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 mm² / solid / > 30 N
	0.75 mm² / flexible / > 30 N
	16 mm² / solid / > 100 N
	25 mm² / flexible / > 135 N

Electrical tests

Temperature-rise test

Specification	IEC 60947-7-4:2019-01
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 60947-7-4:2019-01

Insulation resistance

Specification	IEC 60512-3-1:2002-02
Insulation resistance, neighboring positions	> 5 MΩ

Air clearances and creepage distances |

Specification	IEC 60947-7-4:2019-01
Insulating material group	I
Comparative tracking index (IEC 60112)	CTI 600
Rated insulation voltage (III/3)	1000 V
Rated surge voltage (III/3)	8 kV
minimum clearance value - non-homogenous field (III/3)	8 mm
minimum creepage distance (III/3)	12.5 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

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	50 m/s² (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 60947-7-4:2019-01

Ambient conditions

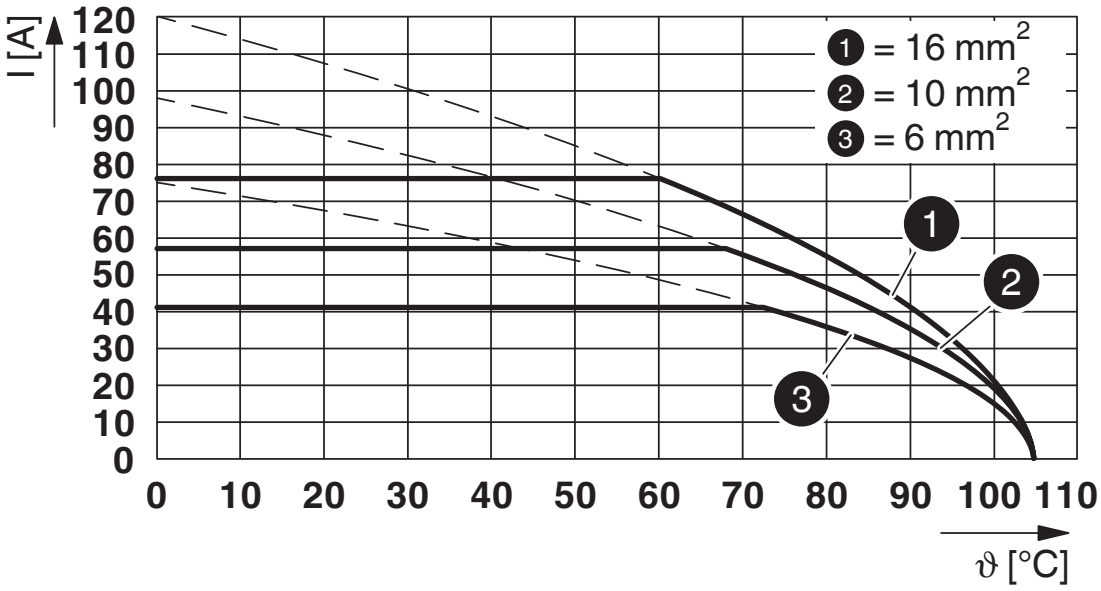
Ambient temperature (operation)	-40 °C ... 105 °C (Depending on the current carrying capacity/derating curve)
Ambient temperature (storage/transport)	-40 °C ... 70 °C
Relative humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 100 °C

Packaging specifications

Type of packaging	packed in cardboard

Drawings

Diagram



Type: LPTA 16/...-10,0-ZB

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/pc/products/1333817

cUL Recognized
Approval ID: E60425-20210507

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group C				
	1000 V	66 A	18 - 4	-

UL Recognized
Approval ID: E60425-20210507

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group C				
	600 V	66 A	18 - 4	-
Use group F				
	1000 V	66 A	18 - 4	-

cULus Recognized
Approval ID: E60425-20210507

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B				
	600 V	66 A	18 - 4	-

VDE Zeichengenehmigung
Approval ID: 40054188

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	1000 V	76 A	-	0.75 - 25

cULus Recognized

Classifications

ECLASS

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

ETIM

ETIM 9.0	EC002643

Accessories

CRIMPFOX 6 - Crimping pliers

1212034

https://www.phoenixcontact.com/pc/products/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 mm^2 ... 6.0 mm^2, lateral entry, trapezoidal crimp

MPS-MT - Test plug

0201744

https://www.phoenixcontact.com/pc/products/0201744

Test plug, with solder connection up to 1 mm^2 conductor cross section, number of positions: 1, color: gray

CRIMPFOX DUO 16S - Crimping pliers

1202877

https://www.phoenixcontact.com/pc/products/1202877

Crimping pliers, contact type: insulated and uninsulated ferrules, standards/regulations: DIN 46228-1, DIN 46228-4, UL 486F, Form A, E, F, cross-section, minimum: 0.14 mm^2, cross-section, maximum: 16 mm^2, for TWIN ferrules up to 2 mm^2 x 6 mm^2, automatic cross-section adjustment, rotating dies, lateral and front entry, crimping: square

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