LPTA 6/ 6-7,5-ZB - PCB terminal block

1098179

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Printed circuit board terminal, nominal current: 41 A, rated voltage (III/2): 1000 V, nominal cross section: 6 mm^2, number of potentials: 6, number of rows: 1, number of positions per row: 6, product range: LPTA 6/, pitch: 7.5 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	1098179
Packing unit	25 pc
Minimum order quantity	50 pc
Note	Made to order (non-returnable)
Sales key	AA14
Product key	AANTBB
GTIN	4055626941813
Weight per piece (including packing)	31.26 g
Weight per piece (excluding packing)	29.588 g
Customs tariff number	85369010
Country of origin	CN

Technical data

Product properties

Product type	Printed circuit board terminal
Product family	LPTA 6/
Product line	COMBICON Terminals L
Number of positions	6
Pitch	7.5 mm
Number of connections	6
Number of rows	1
Number of potentials	6
Pin layout	Zigzag pinning W

Electrical properties

Properties

Nominal current I_N	41 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	6 mm²

Conductor connection

Connection method	Lever Push-in connection
Conductor cross section rigid	0.2 mm² ... 10 mm² (Conductor connection with open terminal point)
	0.5 mm² ... 10 mm² (Push-in connection)
Conductor cross section flexible	0.34 mm² ... 10 mm²
Conductor cross section AWG	22 ... 8
Conductor cross section flexible, with ferrule without plastic sleeve	0.2 mm² ... 6 mm² (Conductor connection with open terminal point)
	1.5 mm² ... 6 mm² (Push-in connection)
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.2 mm² ... 6 mm² (Conductor connection with open terminal point)
	0.5 mm² ... 6 mm² (Push-in connection)
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm² ... 2.5 mm²
Stripping length	12 mm ... 14 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)

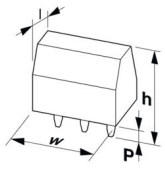
Material data - housing

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	7.5 mm
Width [w]	46 mm
Height [h]	33.76 mm
Length [l]	28 mm
Installed height	30.16 mm
Solder pin length [P]	3.6 mm

Pin dimensions	1.5 x 1.2 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	0.2 mm² / solid / > 10 N
	0.34 mm² / flexible / > 15 N
	10 mm² / solid / > 90 N
	10 mm² / flexible / > 90 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

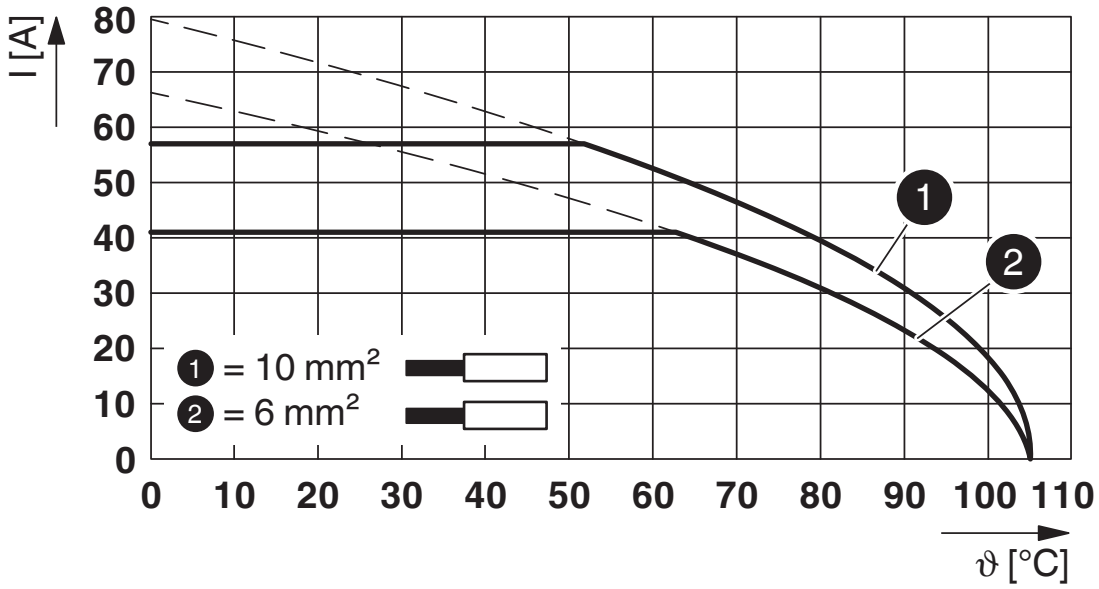
Ambient temperature (operation)	-40 °C ... 105 °C (Depending on the current carrying capacity/derating curve)
Ambient temperature (storage/transport)	-40 °C ... 70 °C
Relative humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 100 °C

Packaging specifications

Type of packaging	packed in cardboard

Drawings

Diagram



Type: LPTA 6/...-7,5-ZB

Classifications

ECLASS

ECLASS-13.0	27460101

ETIM

ETIM 9.0	EC002643

UNSPSC

UNSPSC 21.0	39121400

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions

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%

EF3.0 Climate Change

CO2e kg	0.901 kg CO2e

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