

# LPT 6/ 6-7,5-ZB - PCB terminal block

1098171

<https://www.phoenixcontact.com/us/products/1098171>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Printed circuit board terminal, nominal current: 41 A, rated voltage (III/2): 1000 V, nominal cross section: 6 mm<sup>2</sup>, number of potentials: 6, number of rows: 1, number of positions per row: 6, product range: LPT 6/, pitch: 7.5 mm, connection method: Lever Push-in connection, mounting: Wave soldering, conductor/PCB connection direction: 0 °, 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	1098171
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	AA14
Product key	AANTBA
GTIN	4055626941738
Weight per piece (including packing)	29.08 g
Weight per piece (excluding packing)	26.437 g
Customs tariff number	85369010
Country of origin	SK

# LPT 6/ 6-7,5-ZB - PCB terminal block



1098171

<https://www.phoenixcontact.com/us/products/1098171>

## Technical data

### Product properties

Product type	Printed circuit board terminal
Product family	LPT 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 mm <sup>2</sup>
-----------------------	-------------------

#### Conductor connection

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

# LPT 6/ 6-7,5-ZB - PCB terminal block

1098171

<https://www.phoenixcontact.com/us/products/1098171>

## 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)

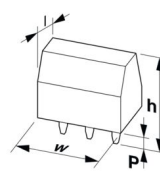
### Material data - housing

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 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]	27.85 mm
Length [l]	24.3 mm
Installed height	24.25 mm
Solder pin length [P]	3.6 mm

# LPT 6/ 6-7,5-ZB - PCB terminal block



1098171

<https://www.phoenixcontact.com/us/products/1098171>

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 mm <sup>2</sup> / solid / > 10 N
	0.34 mm <sup>2</sup> / flexible / > 15 N
	10 mm <sup>2</sup> / solid / > 90 N
	10 mm <sup>2</sup> / 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

# LPT 6/ 6-7,5-ZB - PCB terminal block



1098171

<https://www.phoenixcontact.com/us/products/1098171>

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/s <sup>2</sup> (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

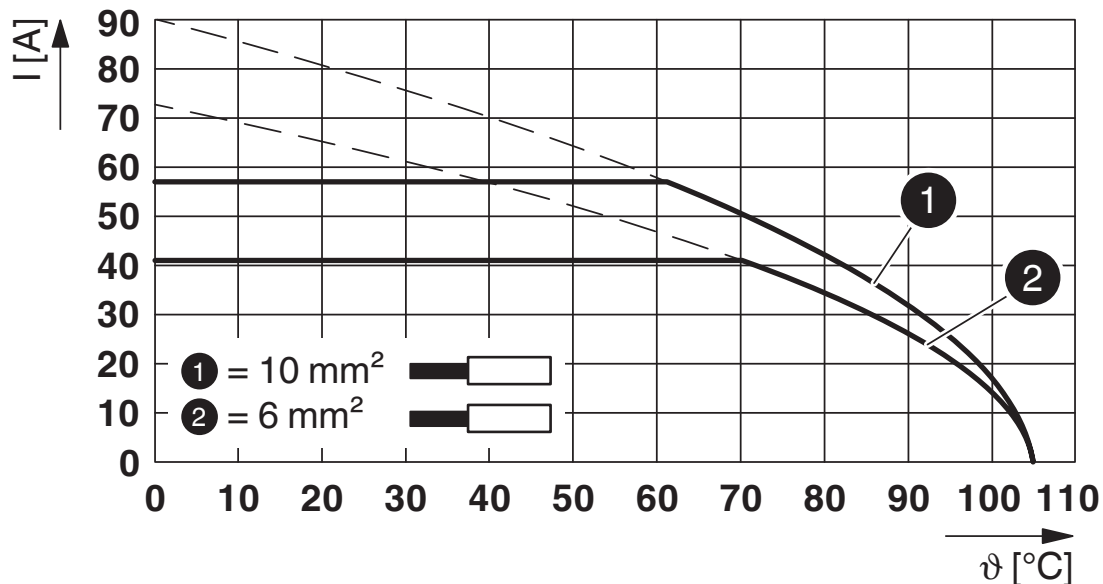
Ambient temperature (storage/transport)	-40 °C ... 70 °C
Relative humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 100 °C
Ambient temperature (operation)	-40 °C ... 105 °C (Depending on the current carrying capacity/derating curve)

## Packaging specifications

Type of packaging	packed in cardboard
-------------------	---------------------

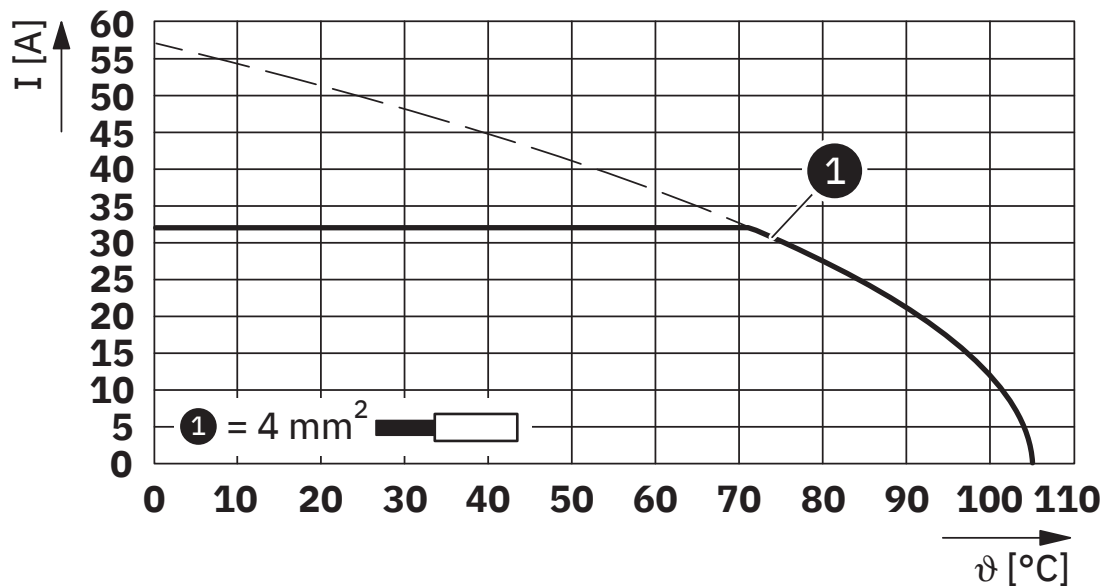
## Drawings

Diagram



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

Diagram



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

# LPT 6/ 6-7,5-ZB - PCB terminal block



1098171

<https://www.phoenixcontact.com/us/products/1098171>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1098171>

 <b>UL Recognized</b> Approval ID: E60425-20210507				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
F	1000 V	40 A	22 - 8	-

 <b>cULus Recognized</b> Approval ID: E60425-20210507				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
B	600 V	40 A	22 - 8	-
C	600 V	40 A	22 - 8	-

 <b>VDE Zeichengenehmigung</b> Approval ID: 40054188				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
keine	1000 V	41 A	-	0.2 - 6

# LPT 6/ 6-7,5-ZB - PCB terminal block



1098171

<https://www.phoenixcontact.com/us/products/1098171>

## Classifications

### ECLASS

ECLASS-13.0	27460101
ECLASS-15.0	27460101

### ETIM

ETIM 10.0	EC002643
-----------	----------

### UNSPSC

UNSPSC 21.0	39121400
-------------	----------

# LPT 6/ 6-7,5-ZB - PCB terminal block



1098171

<https://www.phoenixcontact.com/us/products/1098171>

## 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%
-------------------------------------	----------------------------

### EF3.1 Climate Change

CO2e kg	0.881 kg CO2e
---------	---------------

Phoenix Contact 2026 © - all rights reserved  
<https://www.phoenixcontact.com>

Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)