

PTDA 1,5/16-3,5 - PCB terminal block



1725094
<https://www.phoenixcontact.com/us/products/1725094>

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.



PCB terminal block, nominal current: 17.5 A, rated voltage (III/2): 240 V, nominal cross section: 1.5 mm², number of potentials: 16, number of rows: 1, number of positions per row: 16, product range: PTDA 1,5/, pitch: 3.5 mm, connection method: Push-in spring connection, mounting: Wave soldering, conductor/PCB connection direction: 45 °, color: green, Pin layout: Linear pinning, Solder pin [P]: 3.5 mm, number of solder pins per potential: 2, type of packaging: packed in cardboard

Your advantages

- Time saving push-in connection, tools not required
- Defined contact force ensures that contact remains stable over the long term
- Potentials can be easily looped through – ideal for BUS applications
- Quick and convenient testing using integrated test option
- Rounded type for individual device design
- Two solder pins reduce the mechanical strain on the soldering spots

Commercial data

Item number	1725094
Packing unit	50 pc
Minimum order quantity	50 pc
Note	Made to order (non-returnable)
Sales key	AA12
Product key	AALBBA
Catalog page	Page 407 (C-1-2013)
GTIN	4046356129091
Weight per piece (including packing)	17.903 g
Weight per piece (excluding packing)	17.199 g
Customs tariff number	85369010
Country of origin	PL

PTDA 1,5/16-3,5 - PCB terminal block



1725094

<https://www.phoenixcontact.com/us/products/1725094>

Technical data

Product properties

Product type	Printed circuit board terminal
Product family	PTDA 1,5/
Product line	COMBICON Terminals S
Number of positions	16
Pitch	3.5 mm
Number of connections	32
Number of rows	1
Number of potentials	16
Mounting flange	no
Pin layout	Linear pinning
Solder pins per potential	2

Electrical properties

Nominal current I_N	17.5 A
Nominal voltage U_N	240 V
Degree of pollution	3
Rated voltage (III/3)	200 V
Rated surge voltage (III/3)	2.5 kV
Rated voltage (III/2)	240 V
Rated surge voltage (III/2)	2.5 kV
Rated voltage (II/2)	400 V
Rated surge voltage (II/2)	2.5 kV

Connection data

Connection technology

Nominal cross section	1.5 mm ²
-----------------------	---------------------

Conductor connection

Connection method	Push-in spring connection
Conductor cross section rigid	0.2 mm ² ... 1.5 mm ²
Conductor cross section flexible	0.2 mm ² ... 1.5 mm ²
Conductor cross section AWG	24 ... 16
Conductor cross section flexible, with ferrule without plastic sleeve	0.5 mm ² ... 1.5 mm ²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.5 mm ² ... 0.5 mm ²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm ² ... 0.5 mm ²
Stripping length	10 mm

Mounting

Mounting type	Wave soldering
---------------	----------------

PTDA 1,5/16-3,5 - PCB terminal block

1725094

<https://www.phoenixcontact.com/us/products/1725094>



Pin layout	Linear pinning
------------	----------------

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 (4 - 8 µm Sn)
Metal surface soldering area (top layer)	Tin (4 - 8 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

Dimensions

Dimensional drawing	
Pitch	3.5 mm
Width [w]	57.4 mm
Height [h]	19.5 mm
Length [l]	16 mm
Installed height	16 mm
Solder pin length [P]	3.5 mm
Pin dimensions	1 x 0.4 mm
PCB design	
Pin spacing	3.5 mm
Hole diameter	1.3 mm

Mechanical tests

Connection test	
Specification	IEC 60998-2-2:2002-12

PTDA 1,5/16-3,5 - PCB terminal block



1725094

<https://www.phoenixcontact.com/us/products/1725094>

Result	Test passed
--------	-------------

Test for conductor damage and slackening

Specification	IEC 60998-2-2:2002-12
Result	Test passed

Pull-out test

Specification	IEC 60998-2-2:2002-12
Conductor cross section/conductor type/tractive force setpoint/actual value	0.2 mm ² / solid / > 10 N
	0.2 mm ² / flexible / > 10 N
	1.5 mm ² / solid / > 40 N
	1.5 mm ² / flexible / > 40 N

Flexion test

Specification	IEC 60998-2-2:2002-12
Result	Test passed

Insulation holder for crimp connections

Result	Test passed
--------	-------------

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.

Insulation resistance

Specification	IEC 60998-1:2002-12
Insulation resistance, neighboring positions	> 5 MΩ

Air clearances and creepage distances |

Specification	IEC 60664-1:2007-04
Insulating material group	I
Comparative tracking index (IEC 60112)	CTI 600
Rated insulation voltage (III/3)	200 V
Rated surge voltage (III/3)	2.5 kV
minimum clearance value - non-homogenous field (III/3)	1.5 mm
minimum creepage distance (III/3)	2.5 mm
Rated insulation voltage (III/2)	240 V
Rated surge voltage (III/2)	2.5 kV
minimum clearance value - non-homogenous field (III/2)	1.5 mm
minimum creepage distance (III/2)	1.25 mm
Rated insulation voltage (II/2)	400 V
Rated surge voltage (II/2)	2.5 kV
minimum clearance value - non-homogenous field (II/2)	1.5 mm
minimum creepage distance (II/2)	2 mm

PTDA 1,5/16-3,5 - PCB terminal block



1725094

<https://www.phoenixcontact.com/us/products/1725094>

Environmental and real-life conditions

Vibration test

Specification	IEC 60068-2-6:1995-03
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

Glow-wire test

Specification	IEC 60998-1:2002-12
Temperature	850 °C
Time of exposure	5 s

Ambient conditions

Ambient temperature (operation)	-40 °C ... 105 °C (dependent on the 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
-------------------	---------------------

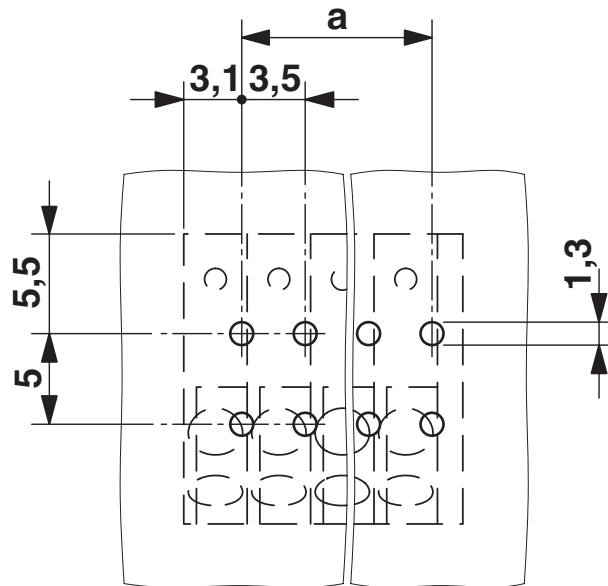
PTDA 1,5/16-3,5 - PCB terminal block

1725094

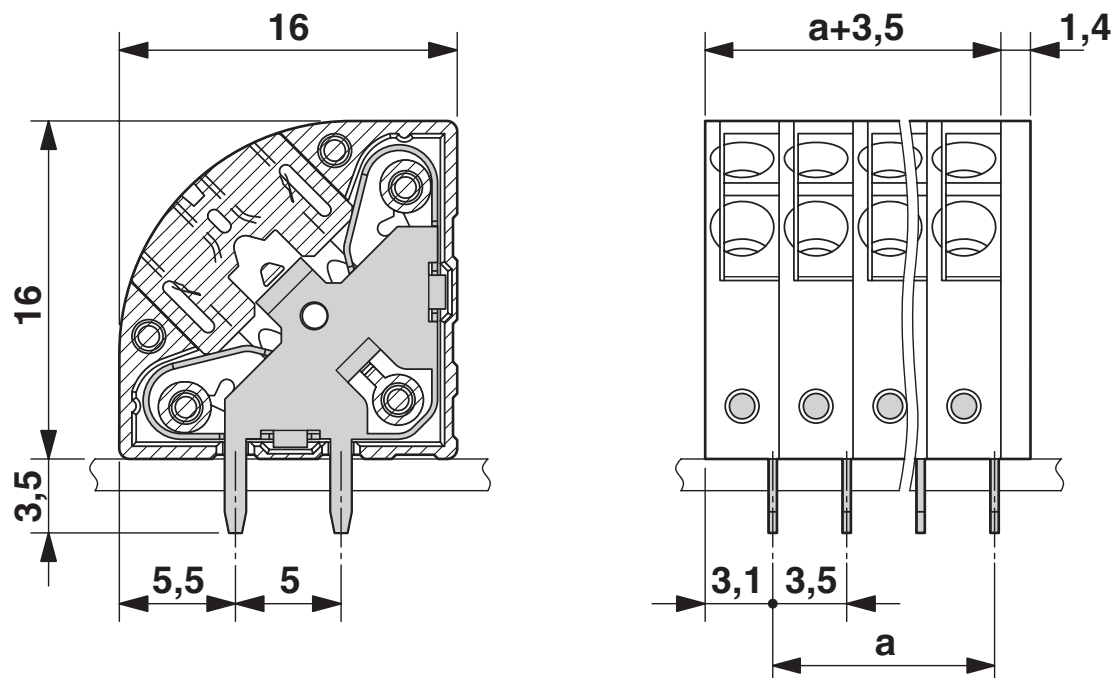
<https://www.phoenixcontact.com/us/products/1725094>

Drawings

Drilling plan/solder pad geometry



Dimensional drawing



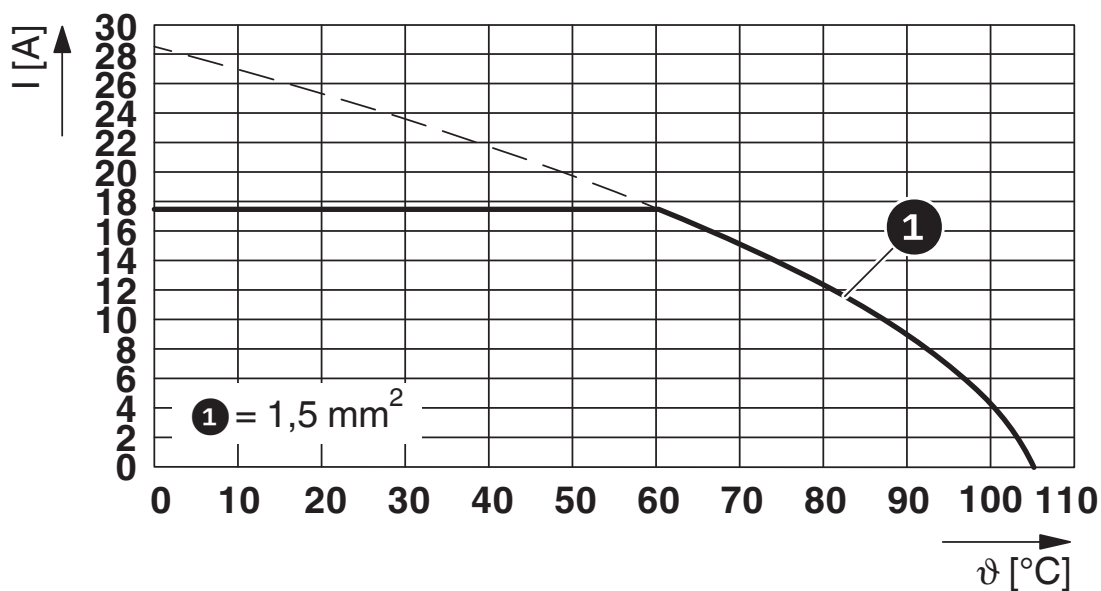
PTDA 1,5/16-3,5 - PCB terminal block



1725094

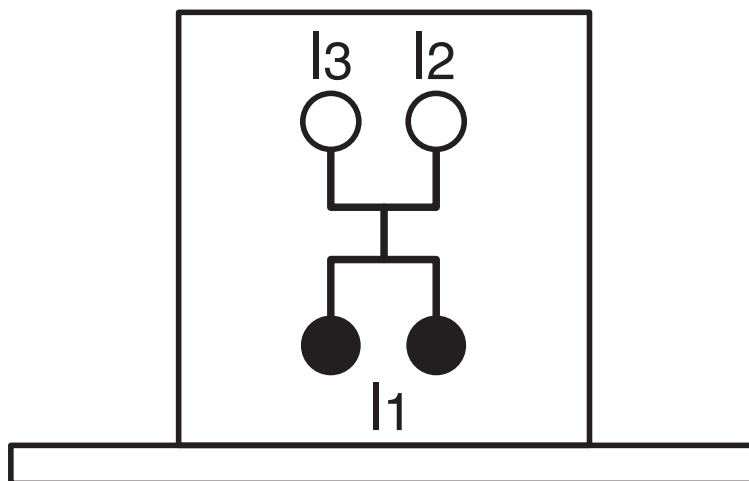
<https://www.phoenixcontact.com/us/products/1725094>

Diagram



Type: PTDA 1,5/...-3,5

Circuit diagram



PTDA 1,5/16-3,5 - PCB terminal block



1725094

<https://www.phoenixcontact.com/us/products/1725094>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1725094>

 cULus Recognized Approval ID: E60425-20030211				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B				
Standard	300 V	12 A	24 - 16	-
Use group C				
with pitch spacer	150 V	12 A	24 - 16	-
Use group D				
Standard	300 V	10 A	24 - 16	-

 VDE Gutachten mit Fertigungsüberwachung Approval ID: 40030462				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	130 V	17.5 A	-	0.2 - 1.5

PTDA 1,5/16-3,5 - PCB terminal block



1725094

<https://www.phoenixcontact.com/us/products/1725094>

Classifications

ECLASS

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

ETIM

ETIM 9.0	EC002643
----------	----------

UNSPSC

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

PTDA 1,5/16-3,5 - PCB terminal block



1725094

<https://www.phoenixcontact.com/us/products/1725094>

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%

PTDA 1,5/16-3,5 - PCB terminal block



1725094

<https://www.phoenixcontact.com/us/products/1725094>

Accessories

SZF 0-0,4X2,5 - Screwdriver

1204504

<https://www.phoenixcontact.com/us/products/1204504>



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.4 x 2.5 x 75 mm, 2-component grip, with non-slip grip

Phoenix Contact 2024 © - 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