

# PT 2,5/ 3-7,5-H - PCB terminal block



1988118

<https://www.phoenixcontact.com/us/products/1988118>

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PCB terminal block, nominal current: 32 A, rated voltage (III/2): 800 V, nominal cross section: 2.5 mm<sup>2</sup>, number of potentials: 3, number of rows: 1, number of positions per row: 3, product range: PT 2,5/...-H, pitch: 7.5 mm, connection method: Screw connection with wire protector, mounting: Wave soldering, conductor/PCB connection direction: 0 °, color: green, Pin layout: Linear pinning, Solder pin [P]: 4.1 mm, number of solder pins per potential: 1, type of packaging: packed in cardboard

## Your advantages

- Well-known connection principle allows worldwide use
- Low temperature rise, thanks to maximum contact force
- High terminal block capacity thanks to rectangular terminal block space
- Allows connection of two conductors
- The latching on the side enables various numbers of positions to be combined

## Commercial data

Item number	1988118
Packing unit	250 pc
Minimum order quantity	250 pc
Sales key	AA13
Product key	AAMFNB
Catalog page	Page 429 (C-1-2013)
GTIN	4046356036641
Weight per piece (including packing)	3.97 g
Weight per piece (excluding packing)	3.97 g
Customs tariff number	85369010
Country of origin	BG

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## Technical data

### Product properties

Type	PC termination block
Product line	COMBICON Terminals M
Product type	Printed circuit board terminal
Product family	PT 2,5/...-H
Number of positions	3
Pitch	7.5 mm
Number of connections	3
Number of rows	1
Number of potentials	3
Pin layout	Linear pinning
Solder pins per potential	1

### Electrical properties

Nominal current $I_N$	32 A
Nominal voltage $U_N$	800 V
Degree of pollution	3
Rated voltage (III/3)	500 V
Rated surge voltage (III/3)	6 kV
Rated voltage (III/2)	800 V
Rated surge voltage (III/2)	6 kV
Rated voltage (II/2)	1000 V
Rated surge voltage (II/2)	6 kV

### Connection data

#### Connection technology

Type	PC termination block
Nominal cross section	2.5 mm <sup>2</sup>

#### Conductor connection

Connection method	Screw connection with wire protector
Conductor cross section rigid	0.5 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Conductor cross section flexible	0.5 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Conductor cross section AWG	20 ... 10
Conductor cross section flexible, with ferrule without plastic sleeve	0.5 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.5 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
2 conductors with same cross section, solid	0.5 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
2 conductors with same cross section, flexible	0.5 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.5 mm <sup>2</sup> ... 0.75 mm <sup>2</sup>
2 conductors with the same cross section, flexible, with TWIN	0.5 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>

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ferrule with plastic sleeve	
Stripping length	6.5 mm
Tightening torque	0.45 Nm ... 0.5 Nm

## Mounting

Mounting type	Wave soldering
Pin layout	Linear pinning

## Material specifications

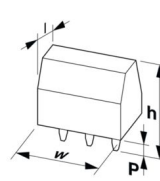
### Material data - contact

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 (3 - 12 $\mu\text{m}$ Sn)
Metal surface terminal point (middle layer)	Nickel (1.5 - 4 $\mu\text{m}$ Ni)
Metal surface soldering area (top layer)	Tin (3 - 12 $\mu\text{m}$ Sn)
Metal surface soldering area (middle layer)	Nickel (1.5 - 4 $\mu\text{m}$ Ni)

### 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	7.5 mm
Width [w]	22.5 mm
Height [h]	17.6 mm
Length [l]	9 mm
Installed height	13.5 mm
Solder pin length [P]	4.1 mm
Pin dimensions	$\varnothing$ 1 mm

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## PCB design

Pin spacing	7.5 mm
Hole diameter	1.3 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	0.5 mm <sup>2</sup> / solid / > 20 N
	0.5 mm <sup>2</sup> / flexible / > 20 N
	4 mm <sup>2</sup> / solid / > 60 N
	4 mm <sup>2</sup> / flexible / > 60 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
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### Insulation resistance

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

### 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)	500 V
Rated surge voltage (III/3)	6 kV
minimum clearance value - non-homogenous field (III/3)	5.5 mm
minimum creepage distance (III/3)	6.3 mm
Note on connection cross section	With connected conductor 4 mm <sup>2</sup> (stranded).
Rated insulation voltage (III/2)	800 V
Rated surge voltage (III/2)	6 kV
minimum clearance value - non-homogenous field (III/2)	5.5 mm
minimum creepage distance (III/2)	5.5 mm
Rated insulation voltage (II/2)	1000 V
Rated surge voltage (II/2)	6 kV

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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)
Sweep speed	5g (60.1 Hz ... 150 Hz)
Test duration per axis	2.5 h

### 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
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### 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
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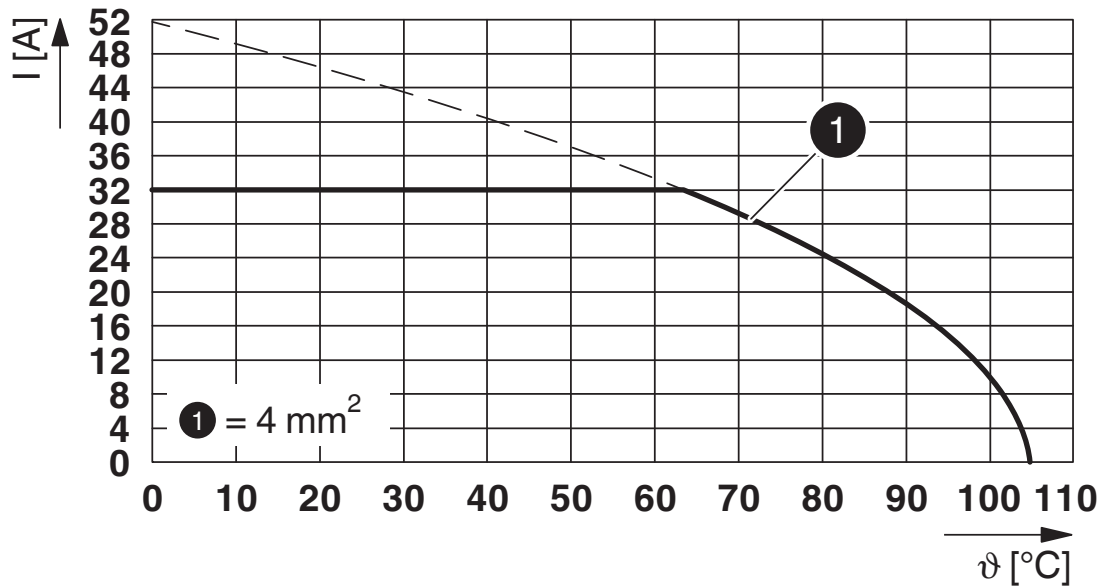
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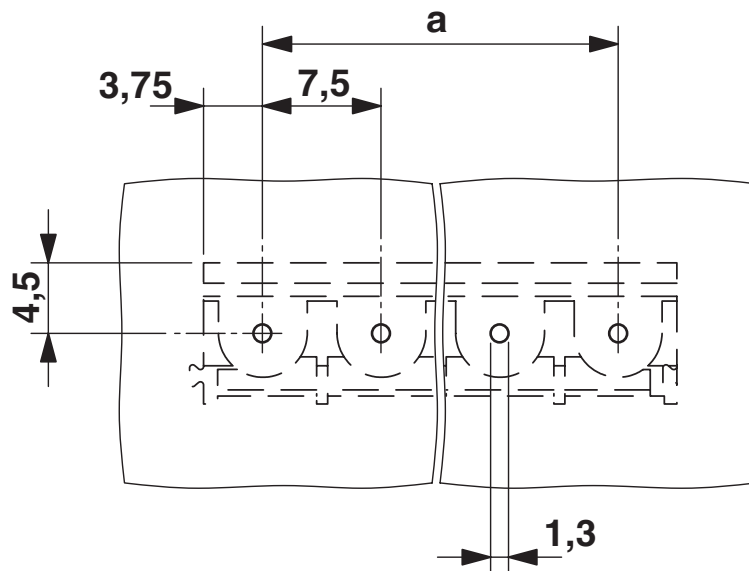
## Drawings

Diagram



Type: PT 2,5/...-7,5-H

Drilling plan/solder pad geometry

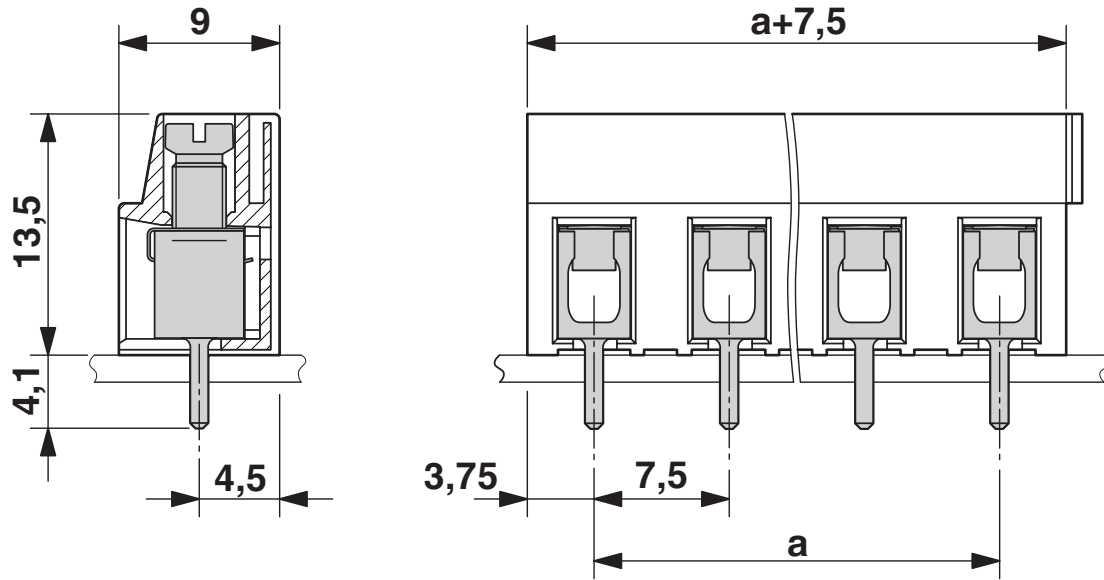


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Dimensional drawing



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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1988118>

 <b>cULus Recognized</b> Approval ID: E60425-20030211				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
Use group B	300 V	20 A	20 - 12	-
Use group C	150 V	20 A	20 - 12	-
Use group D	300 V	10 A	20 - 12	-

 <b>VDE Gutachten mit Fertigungsüberwachung</b> Approval ID: 40029839				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
	750 V	32 A	-	0.5 - 4



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## Classifications

### ECLASS

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

### ETIM

ETIM 9.0	EC002643
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### UNSPSC

UNSPSC 21.0	39121400
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## Environmental product compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

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## Accessories

### SZS 0,6X3,5 - Screwdriver

1205053

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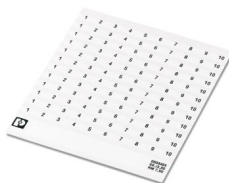


Actuation tool, for ST terminal blocks, insulated, also suitable for use as a bladed screwdriver, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip

### SK 7,5/3,8:FORTL.ZAHLEN - Marker card

0804455

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Marker card, white, labeled, horizontal: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... 100, mounting type: adhesive, for terminal block width: 7.5 mm, lettering field size: 7.5 x 3.8 mm

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