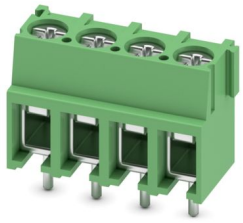
# PT 2,5/ 4-5,0-H - PCB terminal block

1935792

https://www.phoenixcontact.com/us/products/1935792

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PCB terminal block, nominal current: 32 A, rated voltage (III/2): 400 V, nominal cross section: 2.5 $mm^2$, number of potentials: 4, number of rows: 1, number of positions per row: 4, product range: PT 2,5/..-H, pitch: 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. When using ferrules, 250 V are only achieved in combination with overvoltage category/degree of pollution II/2.

## 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 | 1935792 |
| Packing unit | 250 pc |
| Minimum order quantity | 250 pc |
| Sales key | AA13 |
| Product key | AAMFNA |
| Catalog page | Page 427 (C-1-2013) |
| GTIN | 4017918948412 |
| Weight per piece (including packing) | 4.675 g |
| Weight per piece (excluding packing) | 4.59 g |
| Customs tariff number | 85369010 |
| Country of origin | PL |

# Technical data

## Product properties

| | |
|---|---|
| Product type | Printed circuit board terminal |
| Product family | PT 2,5/..-H |
| Product line | COMBICON Terminals M |
| Type | PC termination block |
| Number of positions | 4 |
| Pitch | 5 mm |
| Number of connections | 4 |
| Number of rows | 1 |
| Number of potentials | 4 |
| Pin layout | Linear pinning |
| Solder pins per potential | 1 |

## Electrical properties

| | |
|---|---|
| Nominal current $I_N$ | 32 A |
| Nominal voltage $U_N$ | 400 V |
| Degree of pollution | 3 |
| Rated voltage (III/3) | 250 V |
| Rated surge voltage (III/3) | 4 kV |
| Rated voltage (III/2) | 400 V |
| Rated surge voltage (III/2) | 4 kV |
| Rated voltage (II/2) | 630 V |
| Rated surge voltage (II/2) | 4 kV |

## Connection data

### Connection technology

| | |
|---|---|
| Type | PC termination block |
| Nominal cross section | 2.5 mm² |

### Conductor connection

| | |
|---|---|
| Connection method | Screw connection with wire protector |
| Conductor cross section rigid | 0.5 mm² ... 4 mm² |
| Conductor cross section flexible | 0.5 mm² ... 4 mm² |
| Conductor cross section AWG | 20 ... 10 |
| Conductor cross section flexible, with ferrule without plastic sleeve | 0.5 mm² ... 2.5 mm² |
| Conductor cross section, flexible, with ferrule, with plastic sleeve | 0.5 mm² ... 2.5 mm² |
| 2 conductors with same cross section, solid | 0.5 mm² ... 1.5 mm² |
| 2 conductors with same cross section, flexible | 0.5 mm² ... 1.5 mm² |
| 2 conductors with same cross section, flexible, with ferrule without plastic sleeve | 0.5 mm² ... 0.75 mm² |
| 2 conductors with the same cross section, flexible, with TWIN | 0.5 mm² ... 1.5 mm² |

| | |
|---|---|
| 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 |
| Drive form screw head | Slotted Phillips recess |

## 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 µm Sn) |
| Metal surface terminal point (middle layer) | Nickel (1.5 - 4 µm Ni) |
| Metal surface soldering area (top layer) | Tin (3 - 12 µm Sn) |
| Metal surface soldering area (middle layer) | Nickel (1.5 - 4 µm Ni) |

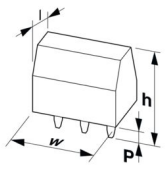
Material data - housing

| | |
|---|---|
| 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 |

## Notes

| | |
|---|---|
| Note on application | For safe conductor connection, always adhere to a defined tightening torque. Particularly in the case of PCB terminal blocks with two or three positions, the individual solder pin for each contact point cannot compensate for this. That is why the terminal blocks must be supported during conductor connection (held with one hand, support on the housing). |

## Dimensions

| | |
|---|---|
| Dimensional drawing |  |

| | |
|---|---|
| Pitch | 5 mm |
| Width [w] | 20 mm |
| Height [h] | 17.6 mm |
| Length [l] | 9 mm |
| Installed height | 13.5 mm |
| Solder pin length [P] | 4.1 mm |
| Pin dimensions | ø 1 mm |

PCB design

| | |
|---|---|
| Pin spacing | 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 mm² / solid / > 20 N |
| | 0.5 mm² / flexible / > 20 N |
| | 4 mm² / solid / > 60 N |
| | 4 mm² / 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 |

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) | 250 V |
| Rated surge voltage (III/3) | 4 kV |
| minimum clearance value - non-homogenous field (III/3) | 3 mm |
| minimum creepage distance (III/3) | 3.2 mm |

| | |
|---|---|
| Rated insulation voltage (III/2) | 400 V |
| Rated surge voltage (III/2) | 4 kV |
| minimum clearance value - non-homogenous field (III/2) | 3 mm |
| minimum creepage distance (III/2) | 3 mm |
| Rated insulation voltage (II/2) | 630 V |
| Rated surge voltage (II/2) | 4 kV |
| minimum clearance value - non-homogenous field (II/2) | 3 mm |
| minimum creepage distance (II/2) | 3.2 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 | 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 |

Ambient conditions

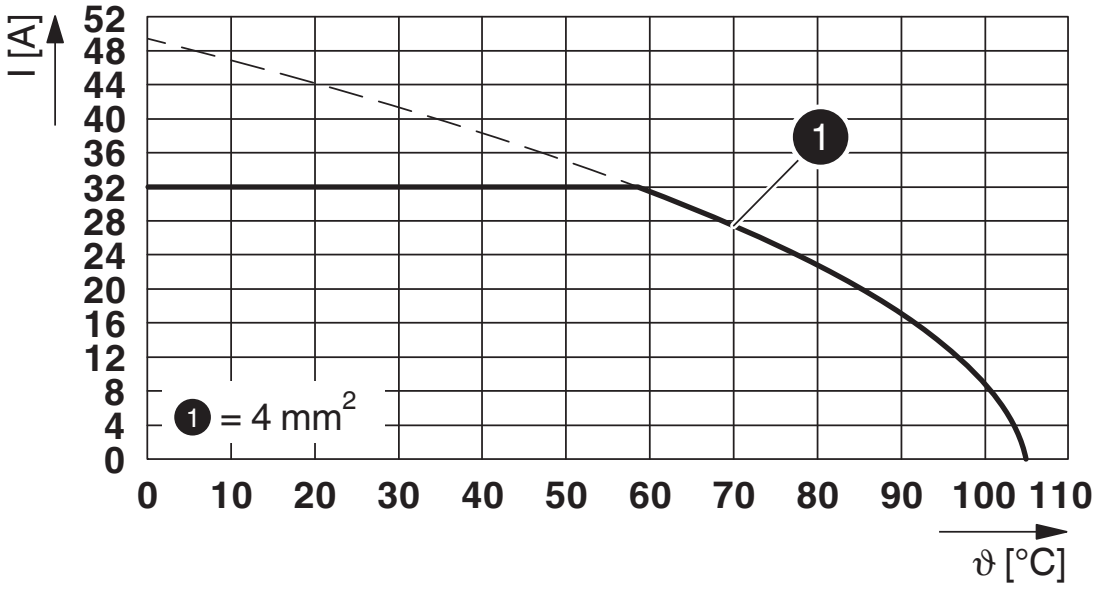
| | |
|---|---|
| Ambient temperature (operation) | -40 °C ... 105 °C (Depending on the current carrying capacity/derating curve) |
| Ambient temperature (storage/transport) | -40 °C ... 70 °C |
| Relative humidity (storage/transport) | 30 % ... 70 % |
| Ambient temperature (assembly) | -5 °C ... 100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

## Packaging specifications

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

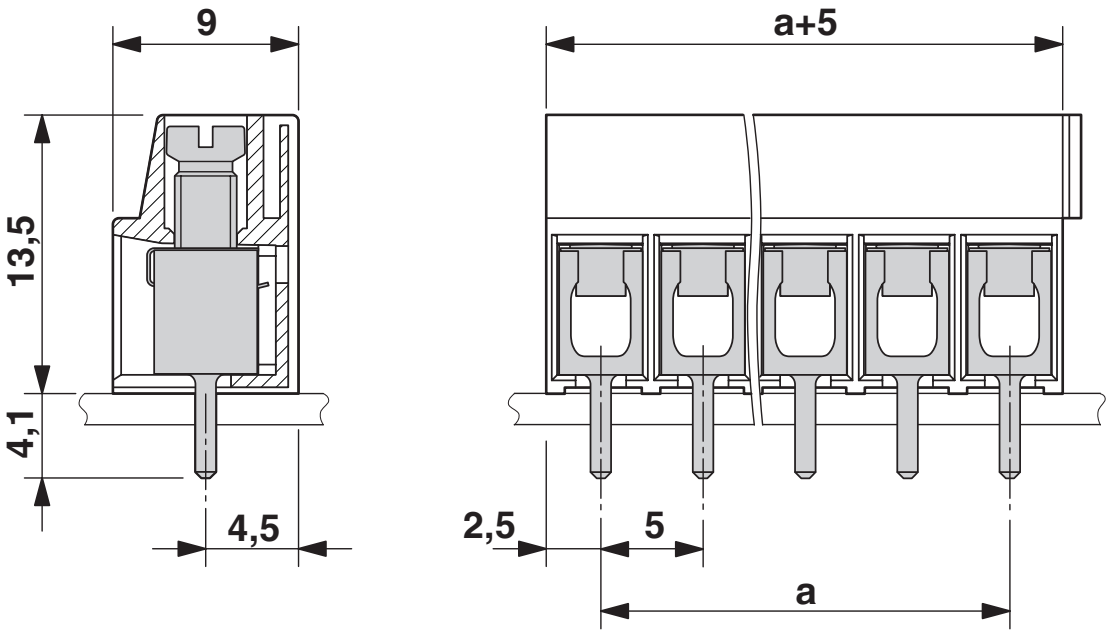
## Drawings

Diagram

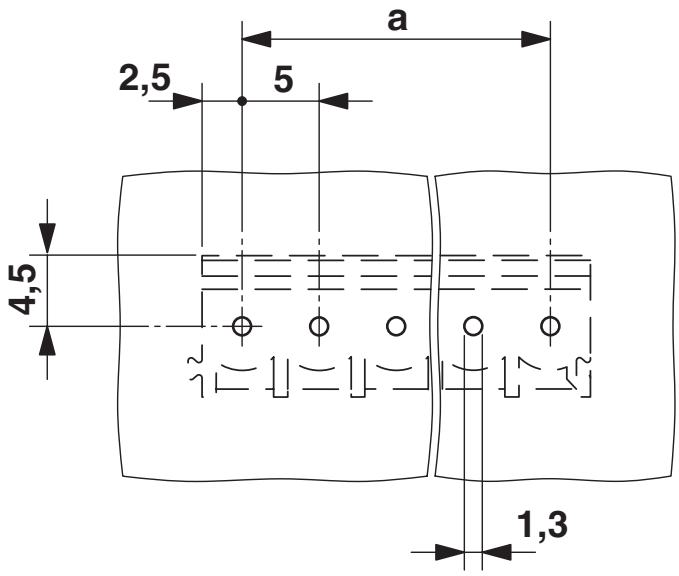



Type: PT 2,5/...-5,0-H

Dimensional drawing



Drilling plan/solder pad geometry



## Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1935792

**cULus Recognized**
Approval ID: E60425-20030211

| | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $mm^2$ |
|---|---|---|---|---|
| Use group B | | | | |
| | 300 V | 20 A | 20 - 12 | - |
| Use group D | | | | |
| | 300 V | 10 A | 20 - 12 | - |

**VDE Gutachten mit Fertigungsüberwachung**
Approval ID: 40029839

| | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $mm^2$ |
|---|---|---|---|---|
| | 250 V | 32 A | - | 0.5 - 4 |

## Classifications

### ECLASS

| | |
|---|---|
| ECLASS-11.0 | 27460101 |
| ECLASS-12.0 | 27460101 |
| 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 |
| Exemption | 6(c) |

China RoHS

| | |
|---|---|
| Environment friendly use period (EFUP) | EFUP-50 |
| | An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required. |

EU REACH SVHC

| | |
|---|---|
| REACH candidate substance (CAS No.) | Lead(CAS: 7439-92-1) |
| SCIP | 4373176e-19cc-4d50-8cb9-4e684fa8dffa |

## Accessories

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

1205053

https://www.phoenixcontact.com/us/products/1205053

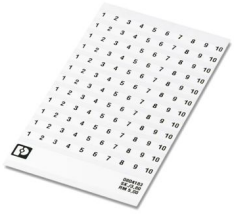


Actuation tool, for ST terminal blocks, insulated, also suitable for use as a bladed screwdriver, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip

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

0804183

https://www.phoenixcontact.com/us/products/0804183



Marker card, white, labeled, horizontal: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... (99)100, mounting type: adhesive, for terminal block width: 5 mm, lettering field size: 5 x 3.8 mm


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