# PCB terminal block - PTSA 1,5/ 3-3,5-Z 2RZ MCBK-RD - 1715883

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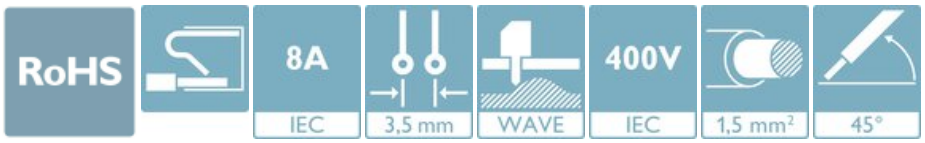


The figure shows a 10-position version of the product

PCB terminal block, nominal current: 8 A, rated voltage (III/2): 400 V, nominal cross section: 1.5 mm², number of potentials: 3, number of rows: 1, number of positions per row: 3, product range: PTSA 1,5, pitch: 3.5 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 45 °, color: multi-color, Pin layout: Zigzag pinning M, Solder pin [P]: 3.6 mm, number of solder pins per potential: 1, 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
- Angled connection enables multi-row arrangement on the PCB




## Key Commercial Data

| | |
|---|---|
| Packing unit | 180 pc |
| Minimum order quantity | 180 pc |
| GTIN | 4 055626 430768 |
| GTIN | 4055626430768 |

## Technical data

### Item properties

| | |
|---|---|
| Brief article description | PCB terminal block |
| Range of articles | PTSA 1,5 |
| Pitch | 3.5 mm |
| Number of positions | 3 |
| Pin layout | Zigzag pinning M |
| Number of rows | 1 |
| Number of connections | 3 |
| Number of potentials | 3 |

### Electrical parameters

| | |
|---|---|
| Nominal current | 8 A |

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## Technical data

### Electrical parameters

| | |
|---|---|
| Nom. voltage | 400 V |
| Contact resistance | Test passed IEC 60512-2-1:2002-02 |
| Rated voltage (III/3) | 250 V |
| Rated voltage (III/2) | 400 V |
| Rated voltage (II/2) | 630 V |
| Rated surge voltage (III/3) | 4 kV |
| Rated surge voltage (III/2) | 4 kV |
| Rated surge voltage (II/2) | 4 kV |

### Connection capacity

| | |
|---|---|
| Connection method | Push-in spring connection |
| pluggable | no |
| Conductor cross section solid | 0.2 mm² ... 1.5 mm² |
| Conductor cross section flexible | 0.2 mm² ... 1.5 mm² |
| Conductor cross section AWG / kcmil | 24 ... 16 |
| Conductor cross section flexible, with ferrule without plastic sleeve | 0.25 mm² ... 1 mm² |
| Conductor cross section, flexible, with ferrule, with plastic sleeve | 0.25 mm² ... 0.5 mm² |
| Stripping length | 9 mm |

### 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 | hot-dip 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

| | |
|---|---|
| Housing color | multi-color |
| 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 for the product

| | |
|---|---|
| Caption | Schematische Abbildung - weitere Details siehe Produktfamilienzeichnung im Download Center |
| Length [ l ] | 12 mm |
| Width [ w ] | 12 mm |
| Height [ h ] | 16.7 mm |
| Pitch | 3.5 mm |

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## Technical data

### Dimensions for the product

| | |
|---|---|
| Height (without solder pin) | 13.1 mm |
| Solder pin [P] | 3.6 mm |
| Pin spacing | 3.5 mm |
| Pin dimensions | 0.4 x 0.75 mm |

### Dimensions for PCB design

| | |
|---|---|
| Hole diameter | 1 mm |
| Pin spacing | 3.5 mm |

### Packaging information

| | |
|---|---|
| Type of packaging | packed in cardboard |
| Pieces per package | 180 |
| Denomination packing units | Pcs. |

### Ambient conditions

| | |
|---|---|
| Ambient temperature (storage/transport) | -40 °C ... 70 °C |
| Relative humidity (storage/transport) | 30 % ... 70 % |
| Ambient temperature (assembly) | -5 °C ... 85 °C |
| Ambient temperature (operation) | -40 °C ... 100 °C (Depending on the current carrying capacity/derating curve) |

### Termination and connection method

| | |
|---|---|
| Test for conductor damage and slackening | IEC 60999-1:1999-11 |
| | Test passed |

### Pull-out test

| | |
|---|---|
| Pull-out test | IEC 60999-1:1999-11 |
| Conductor cross section / conductor type / tensile force | 0.2 mm² / solid / > 10 N |
| | 0.2 mm² / flexible / > 10 N |
| | 1.5 mm² / solid / > 40 N |
| | 1.5 mm² / flexible / > 40 N |

### Mechanical tests according to standard

| | |
|---|---|
| Test specification | IEC 60947-7-4 |

### Electrical tests

| | |
|---|---|
| Rated current | 8 A |
| Conductor cross section | 1.5 mm² |
| Rated voltage (III/2) | 400 V |
| Rated surge voltage (III/2) | 4 kV |

### Air clearances and creepage distances

| | |
|---|---|
| Clearances and creepage distances | IEC 60947-1:2007-06 + A1:2010-12 + A2:2014-09 |
| Specification | IEC 60947-1:2007-06 + A1:2010-12 + A2:2014-09 |
| Minimum clearance - inhomogeneous field (III/3) | 3 mm |
| Minimum clearance - inhomogeneous field (III/2) | 3 mm |

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## Technical data

### Air clearances and creepage distances

| | |
|---|---|
| Minimum clearance - inhomogeneous field (II/2) | 3 mm |
| Minimum creepage distance value (III/3) | 3.2 mm |
| Minimum creepage distance value (III/2) | 3 mm |
| Minimum creepage distance value (II/2) | 3.2 mm |
| Note on connection cross section | With connected conductor 1.5 mm² (solid). |

### Temperature-rise test

| | |
|---|---|
| Specification | IEC 60947-7-4:2013-08 |
| Requirement temperature-rise test | The sum of ambient temperature and temperature rise of the PCB terminal block shall not exceed the upper limiting temperature. |

### Current carrying capacity / derating curves

| | |
|---|---|
| Caption | Type: PTSA 1,5/4-3,5-Z<br>Tested in accordance with DIN EN 60512-5-2:2003-01<br>Reduction factor = 1<br>Number of positions: 4 |

### Vibration test

| | |
|---|---|
| Specification | IEC 60068-2-6:2007-12 |
| Frequency | 10 - 150 - 10 Hz |
| Sweep speed | 1 octave/min |
| Amplitude | 0.35 mm (10 - 60.1 Hz) |
| Acceleration | 5g (60.1 - 150 Hz) |
| Test duration per axis | 2.5 h |

### Insulation resistance

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

### Glow-wire test

| | |
|---|---|
| Specification | IEC 60695-2-10:2000-10 |
| Temperature | 850 °C |
| Time of exposure | 5 s |

### Alternating climate test

| | |
|---|---|
| Result | Test passed |
| Specification | ISO 6988:1985-02 |

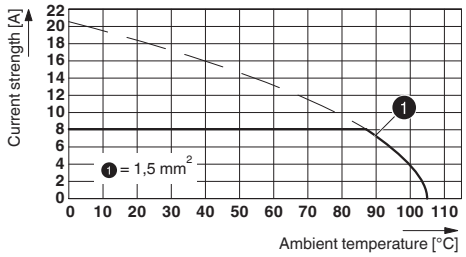
### Environmental Product Compliance

| | |
|---|---|
| China RoHS | Environmentally friendly use period: unlimited = EFUP-e |
| | No hazardous substances above threshold values |

## Drawings

# PCB terminal block - PTSA 1,5/ 3-3,5-Z 2RZ MCBK-RD - 1715883

Diagram




Type: PTSA 1,5/4-3,5-Z
Tested in accordance with DIN EN 60512-5-2:2003-01
Reduction factor = 1
Number of positions: 4

## Classifications

### eCl@ss

| | |
|---|---|
| eCl@ss 5.1 | 27261100 |
| eCl@ss 6.0 | 27261100 |
| eCl@ss 7.0 | 27440401 |
| eCl@ss 9.0 | 27440401 |

### ETIM

| | |
|---|---|
| ETIM 6.0 | EC002643 |
| ETIM 7.0 | EC002643 |

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