

## PCB terminal block - PTSA 0,5/ 8-2,5-Z - 1990067

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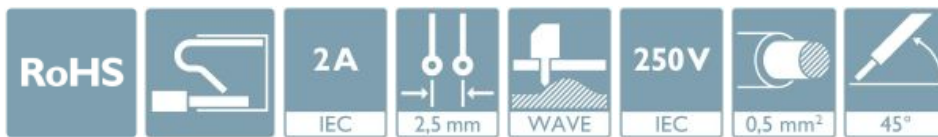


PCB terminal block, nominal current: 2 A, rated voltage (III/2): 250 V, nominal cross section: 0.5 mm<sup>2</sup>, Number of potentials: 8, Number of rows: 1, Number of positions per row: 8, product range: PTSA 0,5, pitch: 2.5 mm, connection method: Push-in spring connection, mounting: Wave soldering, conductor/PCB connection direction: 45 °, color: green, Pin layout: Zigzag pinning W, Solder pin [P]: 3.6 mm, type of packaging: packed in cardboard. Offset soldering legs, two-rowed

The figure shows a 10-position version of the product

### 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 | 100 pc        |
| GTIN         |               |
| GTIN         | 4017918973636 |

### Technical data

#### Item properties

|                           |                    |
|---------------------------|--------------------|
| Brief article description | PCB terminal block |
| Range of articles         | PTSA 0,5           |
| Pitch                     | 2.5 mm             |
| Number of positions       | 8                  |
| Mounting type             | Wave soldering     |
| Pin layout                | Zigzag pinning W   |
| Number of levels          | 1                  |
| Number of connections     | 8                  |
| Number of potentials      | 8                  |

#### Electrical parameters

|                 |     |
|-----------------|-----|
| Nominal current | 2 A |
|-----------------|-----|

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## Technical data

### Electrical parameters

|                             |       |
|-----------------------------|-------|
| Nom. voltage                | 250 V |
| Rated voltage               | 160 V |
| Rated voltage (III/2)       | 250 V |
| Rated voltage (II/2)        | 400 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       | 0.14 mm² ... 0.5 mm²      |
| Conductor cross section flexible    | 0.2 mm² ... 0.5 mm²       |
| Conductor cross section AWG / kcmil | 24 ... 20                 |
| 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                                                     | 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 for the product

|                             |                                                                                            |
|-----------------------------|--------------------------------------------------------------------------------------------|
| Caption                     | Schematische Abbildung - weitere Details siehe Produktfamilienzeichnung im Download Center |
| Length [ l ]                | 12 mm                                                                                      |
| Width [ w ]                 | 21.5 mm                                                                                    |
| Height [ h ]                | 16.7 mm                                                                                    |
| Pitch                       | 2.5 mm                                                                                     |
| Height (without solder pin) | 13.1 mm                                                                                    |
| Solder pin [P]              | 3.6 mm                                                                                     |
| Pin spacing                 | 2.5 mm                                                                                     |

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### Technical data

#### Dimensions for the product

|                |               |
|----------------|---------------|
| Pin dimensions | 0.4 x 0.75 mm |
|----------------|---------------|

#### Dimensions for PCB design

|               |        |
|---------------|--------|
| Hole diameter | 1 mm   |
| Pin spacing   | 2.5 mm |

#### Packaging information

|                            |                     |
|----------------------------|---------------------|
| Type of packaging          | packed in cardboard |
| Pieces per package         | 100                 |
| Denomination packing units | Pcs.                |

#### Ambient conditions

|                                         |                  |
|-----------------------------------------|------------------|
| Ambient temperature (storage/transport) | -40 °C ... 70 °C |
| Ambient temperature (assembly)          | -5 °C ... 55 °C  |
| Ambient temperature (operation)         | -40 °C ... 85 °C |

#### Electrical tests

|                             |                     |
|-----------------------------|---------------------|
| Rated current               | 2 A                 |
| Conductor cross section     | 0.5 mm <sup>2</sup> |
| Rated voltage (III/2)       | 250 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                                          |
| Minimum clearance - inhomogeneous field (II/2)  | 3 mm                                          |
| Minimum creepage distance value (III/3)         | 3 mm                                          |
| Minimum creepage distance value (III/2)         | 3 mm                                          |
| Minimum creepage distance value (II/2)          | 3 mm                                          |

#### Standards and Regulations

|                                        |        |
|----------------------------------------|--------|
| Connection in acc. with standard       | EN-VDE |
|                                        | CUL    |
| Flammability rating according to UL 94 | V0     |

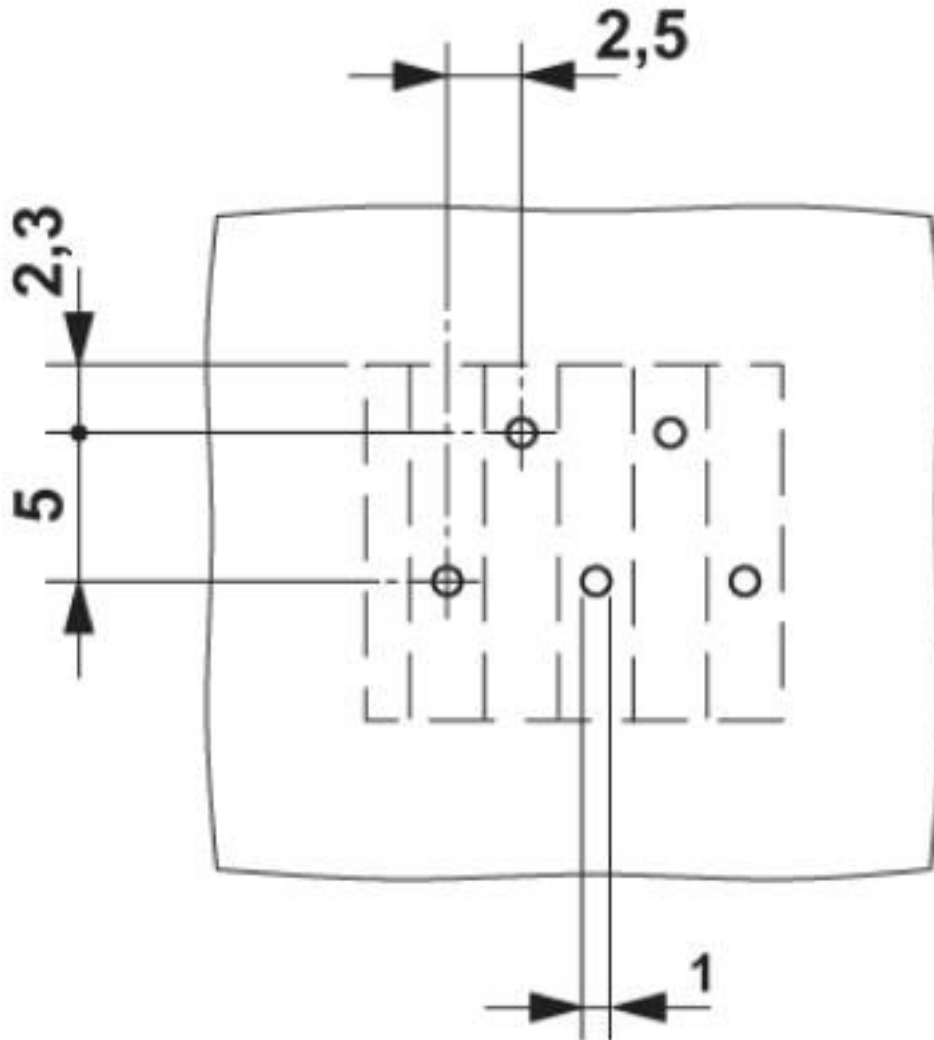
#### Environmental Product Compliance

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

### Drawings

## PCB terminal block - PTSA 0,5/ 8-2,5-Z - 1990067

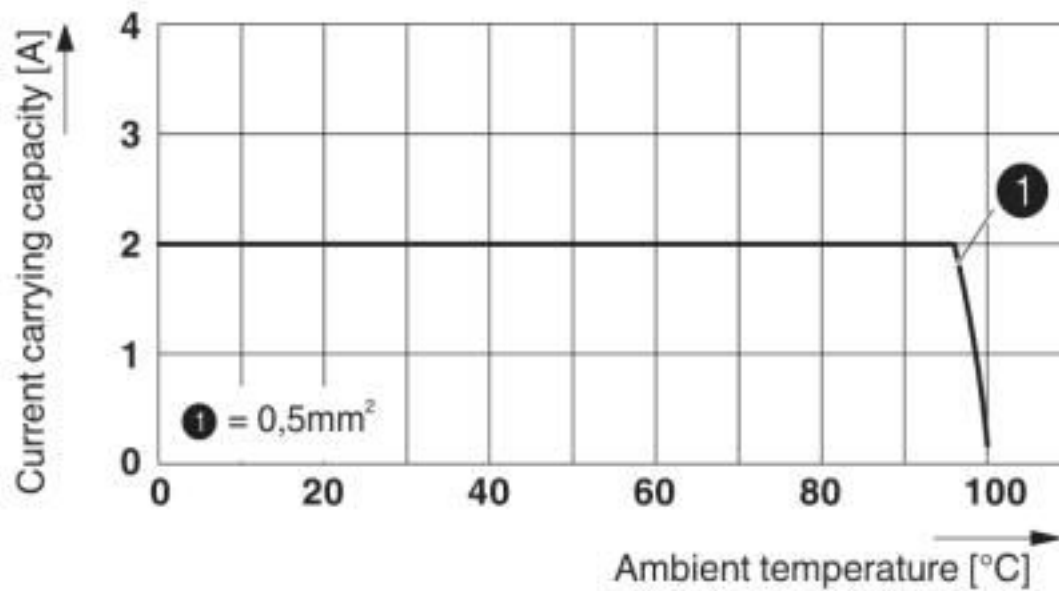
Drilling diagram



The figure shows the 5-pos. version – Zig-zag pinning starts at the right-hand position. Other pinning available on request.

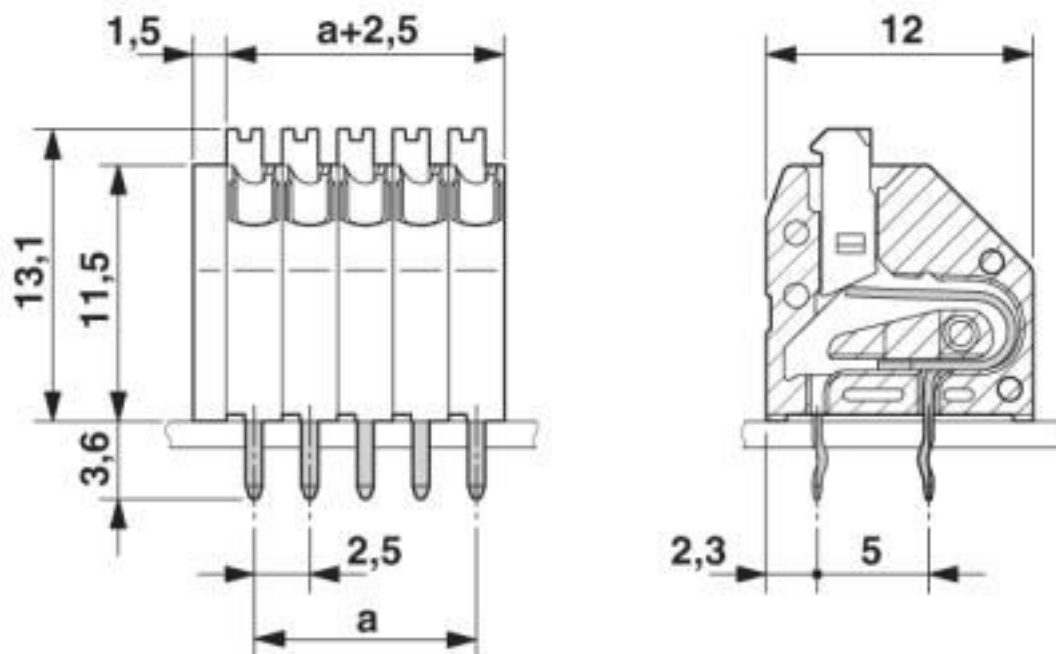
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Diagram



Derating diagram for 5 pins;reduction factor=1

Dimensional drawing



The figure shows the 5-pos. version

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### Classifications

#### eCl@ss

|               |          |
|---------------|----------|
| eCl@ss 10.0.1 | 27440401 |
| eCl@ss 11.0   | 27460101 |
| eCl@ss 4.0    | 27260700 |
| eCl@ss 4.1    | 27260700 |
| eCl@ss 5.0    | 27141100 |
| eCl@ss 5.1    | 27261100 |
| eCl@ss 6.0    | 27261100 |
| eCl@ss 7.0    | 27440401 |
| eCl@ss 8.0    | 27440401 |
| eCl@ss 9.0    | 27440401 |

#### ETIM

|          |          |
|----------|----------|
| ETIM 3.0 | EC001121 |
| ETIM 4.0 | EC002643 |
| ETIM 5.0 | EC002643 |
| ETIM 6.0 | EC002643 |
| ETIM 7.0 | EC002643 |

#### UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 30211801 |
| UNSPSC 7.0901 | 39121432 |
| UNSPSC 11     | 34131203 |
| UNSPSC 12.01  | 39121432 |
| UNSPSC 13.2   | 39121432 |
| UNSPSC 18.0   | 39121432 |
| UNSPSC 19.0   | 39121432 |
| UNSPSC 20.0   | 39121432 |
| UNSPSC 21.0   | 39121432 |

### Approvals

#### Approvals

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##### Approvals

CCA / VDE Gutachten mit Fertigungsüberwachung / EAC / cULus Recognized

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##### Ex Approvals

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#### Approval details

## PCB terminal block - PTSA 0,5/ 8-2,5-Z - 1990067

### Approvals

|                                |               |
|--------------------------------|---------------|
| CCA                            | CCA/DE1 34204 |
| Nominal current I <sub>N</sub> | 2 A           |
| mm <sup>2</sup> /AWG/kcmil     | 0.5           |

|                                            |                                                                                   |                                                                                                                                                                                                                |          |
|--------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| VDE Gutachten mit<br>Fertigungsüberwachung |  | <a href="http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx">http://www2.vde.com/de/Institut/Online-Service/<br/>VDE-gepruefteProdukte/Seiten/Online-Suche.aspx</a> | 40013932 |
| Nominal voltage U <sub>N</sub>             | 250 V                                                                             |                                                                                                                                                                                                                |          |
| Nominal current I <sub>N</sub>             | 2 A                                                                               |                                                                                                                                                                                                                |          |
| mm <sup>2</sup> /AWG/kcmil                 | 0.5                                                                               |                                                                                                                                                                                                                |          |

|     |                                                                                   |         |
|-----|-----------------------------------------------------------------------------------|---------|
| EAC |  | B.01687 |
|-----|-----------------------------------------------------------------------------------|---------|

|                                |                                                                                     |                                                                                                                                                       |                 |
|--------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| cULus Recognized               |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | E60425-20030527 |
|                                | B                                                                                   | D                                                                                                                                                     |                 |
| Nominal voltage U <sub>N</sub> | 300 V                                                                               | 300 V                                                                                                                                                 |                 |
| Nominal current I <sub>N</sub> | 2 A                                                                                 | 2 A                                                                                                                                                   |                 |
| mm <sup>2</sup> /AWG/kcmil     | 26-20                                                                               | 26-20                                                                                                                                                 |                 |

### Accessories

#### Accessories

#### Screwdriver tools

Screwdriver - SZF 0-0,4X2,5 - 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

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