

# Data Sheet | Item Number: 250-117/000-006

PCB terminal block; push-button; 1.5 mm<sup>2</sup>; Pin spacing 3.5 mm; 17-pole; Push-in CAGE CLAMP®; blue

<https://www.wago.com/250-117/000-006>



Color: ■ blue

Similar to illustration



Dimensions in mm

L = (pole no. x pin spacing) + 1.5 mm

PCB terminal block, 250 Series, solder pin dimensions 0.4 x 0.75 mm

Our PCB terminal block (item number 250-117/000-006) is the perfect way to connect conductors quickly and easily. It is a universal connector that can be used practically anywhere, for example, as a pluggable PCB connector, panel feedthrough header, connector for rail-mount terminal blocks, or a floating connector for different mounting methods. Conductors should only be connected to this PCB terminal block if their strip length is between 8.5 and 9.5 mm. Featuring one conductor terminal along with Push-in CAGE CLAMP®, this product is highly versatile. Our Push-in CAGE CLAMP® is a universal, maintenance-free connection solution for all conductor types, offering a key advantage: both solid and fine-stranded conductors with ferrules can be directly inserted without the need for tools or any preparation, such as crimping the ferrule. Dimensions: (61 x 16.7 x 12) mm (width x height x depth). Depending on the conductor type, this PCB terminal block is ideal for conductor cross sections ranging from 0.2 mm<sup>2</sup> to 1.5 mm<sup>2</sup>. The contact surface is coated with tin. This PCB terminal block is operated with a push-button. The PCB terminal block is designed for THT soldering. Insert the conductor at a 45° angle..

## Notes

|           |  |
|-----------|--|
| Variants: | Other pole numbers<br>Other colors<br>Mixed-color PCB connector strips<br>Terminal strips with spacers<br>Direct marking<br>Other versions (or variants) can be requested from WAGO Sales or configured at <a href="https://configurator.wago.com/">https://configurator.wago.com/</a> . |
|-----------|--|

## Electrical data

| Ratings per                     | IEC/EN 60664-1 |        |        |
|---------------------------------|----------------|--------|--------|
| Overvoltage category            | III            | III    | II     |
| Pollution degree                | 3              | 2      | 2      |
| Nominal voltage                 | 160 V          | 160 V  | 320 V  |
| Rated impulse withstand voltage | 2.5 kV         | 2.5 kV | 2.5 kV |
| Rated current                   | 8 A            | 8 A    | 8 A    |

| Approvals per | UL 1059 |   |       |
|---------------|---------|---|-------|
| Use group     | B       | C | D     |
| Rated voltage | 300 V   | - | 300 V |
| Rated current | 5 A     | - | 5 A   |

| Approvals per | CSA   |   |       |
|---------------|-------|---|-------|
| Use group     | B     | C | D     |
| Rated voltage | 300 V | - | 300 V |
| Rated current | 10 A  | - | 10 A  |

## Connection Data

|                            |    |
|----------------------------|----|
| Clamping units             | 17 |
| Total number of potentials | 17 |
| Number of connection types | 1  |
| Number of levels           | 1  |

| Connection 1                                      |   |
|---|---|
| Connection technology                             | Push-in CAGE CLAMP®                         |
| Actuation type                                    | Push-button                                 |
| Solid conductor                                   | 0.2 ... 1.5 mm <sup>2</sup> / 24 ... 16 AWG |
| Fine-stranded conductor                           | 0.2 ... 1.5 mm <sup>2</sup> / 24 ... 16 AWG |
| Fine-stranded conductor; with insulated ferrule   | 0.25 ... 1 mm <sup>2</sup>                  |
| Fine-stranded conductor; with uninsulated ferrule | 0.25 ... 1 mm <sup>2</sup>                  |
| Strip length                                      | 8.5 ... 9.5 mm / 0.33 ... 0.37 inches       |
| Conductor connection direction to PCB             | 45 °  |
| Pole number                                       | 17  |

## Physical data

|                                      |                          |
|--------------------------------------|--------------------------|
| Pin spacing                          | 3.5 mm / 0.138 inches    |
| Width                                | 61 mm / 2.402 inches     |
| Height                               | 16.7 mm / 0.657 inches   |
| Height from the surface              | 13.1 mm / 0.516 inches   |
| Depth                                | 12 mm / 0.472 inches     |
| Solder pin length                    | 3.4 mm                   |
| Solder pin dimensions                | 0.4 x 0.75 mm            |
| Drilled hole diameter with tolerance | 1.1 <sup>(+0.1)</sup> mm |

### PCB contact

|                                     |  |
|-------------------------------------|--|
| PCB contact                         | THT                                      |
| Solder pin arrangement              | over the entire terminal strip (in-line) |
| Number of solder pins per potential | 1  |

### Material data

|                                    |  |
|------------------------------------|--|
| Note (material data)               | <a href="#">Information on material specifications can be found here</a> |
| Color                              | blue   |
| Material group                     | I  |
| Insulation material (main housing) | Polyamide (PA66)   |
| Flammability class per UL94        | V0   |
| Clamping spring material           | Copper alloy   |
| Contact Plating                    | Tin  |
| Fire load                          | 0.087 MJ   |
| Weight                             | 1.1 g  |

### Environmental requirements

|                         |                 |
|-------------------------|-----------------|
| Limit temperature range | -60 ... +105 °C |
|-------------------------|-----------------|

### Commercial data

|                       |                                |
|-----------------------|--------------------------------|
| Product Group         | 4 (Printed Circuit Connectors) |
| PU (SPU)              | 60 (15) pcs                    |
| Packaging type        | Box                            |
| Country of origin     | CH                             |
| GTIN                  | 4017332328920                  |
| Customs tariff number | 85369010000                    |

### Product Classification

|             |                      |
|-------------|----------------------|
| UNSPSC      | 39121409             |
| eCl@ss 10.0 | 27-44-04-01          |
| eCl@ss 9.0  | 27-44-04-01          |
| ETIM 9.0    | EC002643             |
| ETIM 10.0   | EC002643             |
| ECCN        | NO US CLASSIFICATION |

### Environmental Product Compliance

|                        |                         |
|------------------------|-------------------------|
| RoHS Compliance Status | Compliant, No Exemption |
|------------------------|-------------------------|

### Approvals / Certificates

#### General approvals



| Approval                               | Standard     | Certificate Name |
|--|--------------|------------------|
| CSA<br>DEKRA Certification B.V.        | C22.2        | 1132097          |
| DEKRA<br>DEKRA Certification B.V.      | EN 60947-7-4 | 71-141963        |
| UL<br>UL International Germany<br>GmbH | UL 1059      | E45172           |

## Downloads

### Environmental Product Compliance

|                                  |  |  |   |
|----------------------------------|--|--|---|
| Compliance Search                |  |  |   |
| Environmental Product Compliance |  |  | ↓ |
| 250-117/000-006                  |  |  |   |

## Documentation

|                        |            |                   |   |
|------------------------|------------|-------------------|---|
| Additional Information |            |                   |   |
| Technical Section      | 03.04.2019 | pdf<br>2027.26 KB | ↓ |

## CAD/CAE-Data

|                 |  |  |   |
|-----------------|--|--|---|
| CAD data        |  |  |   |
| 2D/3D Models    |  |  | ↓ |
| 250-117/000-006 |  |  |   |

|                   |  |  |   |
|-------------------|--|--|---|
| CAE data          |  |  |   |
| EPLAN Data Portal |  |  | ↓ |
| 250-117/000-006   |  |  |   |

|                 |  |  |   |
|-----------------|--|--|---|
| ZUKEN Portal    |  |  | ↓ |
| 250-117/000-006 |  |  |   |

## PCB Design

|                                   |  |  |   |
|-----------------------------------|--|--|---|
| Symbol and Footprint via SamacSys |  |  |   |
|                                   |  |  | ↓ |
| 250-117/000-006                   |  |  |   |

|  |  |  |   |
|--|--|--|---|
| Symbol and Footprint via Ultra Librarian |  |  |   |
|  |  |  | ↓ |
| 250-117/000-006                          |  |  |   |

## 1 Compatible Products

### 1.1 Optional Accessories

#### 1.1.1 Ferrule

##### 1.1.1.1 Ferrule

|   |   |   |   |
|---|---|---|---|
|   |   |   |   |
| <p><b>Item No.: 216-241</b><br/>                 Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white</p> | <p><b>Item No.: 216-141</b><br/>                 Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92</p>    | <p><b>Item No.: 216-242</b><br/>                 Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray</p> | <p><b>Item No.: 216-262</b><br/>                 Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray</p> |
|   |   |   |   |
| <p><b>Item No.: 216-142</b><br/>                 Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92</p>       | <p><b>Item No.: 216-243</b><br/>                 Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red</p> | <p><b>Item No.: 216-263</b><br/>                 Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red</p>     | <p><b>Item No.: 216-143</b><br/>                 Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92</p>          |

## 1.1.2 Marking

### 1.1.2.1 Marking strip



#### Item No.: 210-332/350-202

Marking strips; as a DIN A4 sheet; MARKED; 1-16 (240x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



#### Item No.: 210-332/350-204

Marking strips; as a DIN A4 sheet; MARKED; 17-32 (240x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



#### Item No.: 210-332/350-206

Marking strips; as a DIN A4 sheet; MARKED; 33-48 (240x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white

## 1.1.3 Test and measurement

### 1.1.3.1 Testing accessories



#### Item No.: 735-500

WAGO Test pin; 1 mm Ø; 30 V AC / 60 V DC; CAT0; 1 A; 6 mm uninsulated; Test lead for soldering up to 0,5mm<sup>2</sup>

## 1.1.4 Tool

### 1.1.4.1 Operating tool



#### Item No.: 210-720

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured



#### Item No.: 210-657

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short; multicoloured

## Installation Notes

### Conductor termination



Inserting solid conductors via push-in termination.

Inserting fine-stranded conductors via push-buttons, 250 Series – 3.5 mm pin spacing.

### Conductor termination



Space-saving wiring, 250 Series – 5 mm pin spacing.

## Testing



Testing with 11 mm Ø test pin, on the conductor, 250 Series – 2.5 ... 3.5 mm pin spacing.



Testing with 2 mm Ø test plug, touch contact, 250 Series – 5 mm pin spacing.

## Marking



Labeling via self-adhesive strips or direct marking. Mixed-color terminal strips (with or without spacer) are available upon request.



Labeling via self-adhesive strips or direct marking. Mixed-color terminal strips (with or without spacer) are available upon request.