# Data Sheet | Item Number: 250-405/000-006

## PCB terminal block; push-button; 0.5 mm²; Pin spacing 2.5 mm; 5-pole; Push-in CAGE CLAMP®; blue
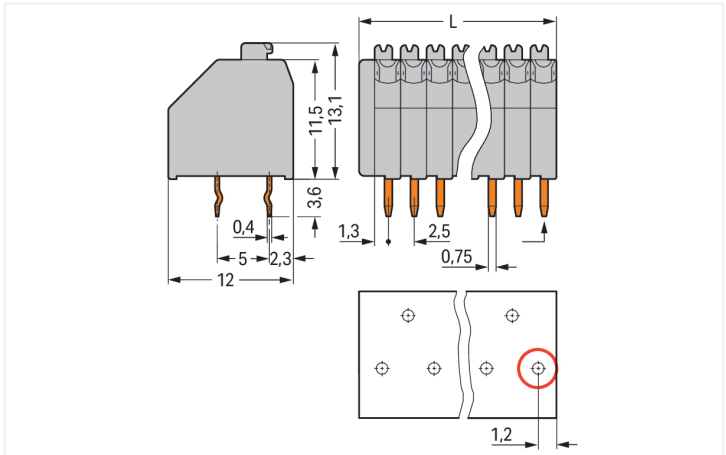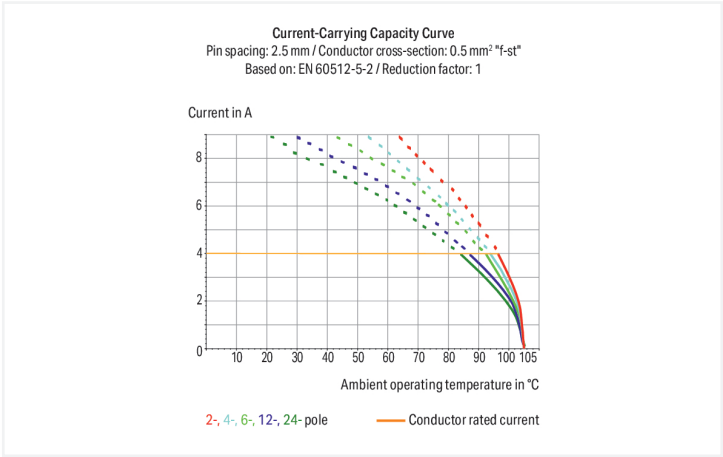
https://www.wago.com/250-405/000-006



Color: ■ blue

Similar to illustration



Dimensions in mm

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

First solder pin, front right (red circle)



**Current-Carrying Capacity Curve**
Pin spacing: 2.5 mm / Conductor cross-section: 0.5 mm² "f-st"
Based on: EN 60512-5-2 / Reduction factor: 1

Current in A

Ambient operating temperature in °C

2-, 4-, 6-, 12-, 24- pole — Conductor rated current

PCB terminal block, 250 Series, 45 °conductor entry to board

Quick and easy connections are guaranteed with this PCB terminal block (item number 250-405/000-006). It offers the flexibility needed for different mounting types. Our PCB terminal block is rated for 160 V and is designed for use with a rated current of up to 4 A. Strip lengths must be between 8.5 mm and 9.5 mm when connecting conductors to this PCB terminal block. Featuring one conductor terminal along with Push-in CAGE CLAMP®, this connector is highly versatile. Push-in CAGE CLAMP® connection technology is ideal for connecting all conductor types. Both solid and fine-stranded conductors with ferrules can be inserted without the need for tools—all thanks to its pluggable design. Dimensions: 14 x 16.7 x 12 mm (width x height x depth). Depending on the conductor type, this PCB terminal block is designed for conductor cross sections ranging from 0.14 mm² to 0.5 mm². It has one level. Five potentials can connect five poles using the five clamping points The blue housing is made of polyamide (PA66) for insulation and the clamping spring is made of a Copper alloy. The contact surface is coated with tin. A push-button is used to operate this PCB terminal block. The PCB terminal block is designed for THT soldering. Insert the conductor into the board at a 45° angle.. The solder pins are organized over the entire terminal strip (staggered). They are 0.4 x 0.75 mm cross-section and 3.6 mm in length. Each potential has one solder pin.

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

**W**AGO

## 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 surge voltage | 2.5 kV | 2.5 kV | 2.5 kV |
| Rated current | 4 A | 4 A | 4 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 | 5 A | - | 5 A |

## Connection data

| | |
|---|---|
| Clamping units | 5 |
| Total number of potentials | 5 |
| Number of connection types | 1 |
| Number of levels | 1 |

### Connection 1

| | |
|---|---|
| Connection technology | Push-in CAGE CLAMP® |
| Actuation type | Push-button |
| Solid conductor | 0.14 … 0.5 mm² / 24 … 20 AWG |
| Fine-stranded conductor | 0.2 … 0.5 mm² / 24 … 20 AWG |
| Conductor diameter | 0.4 … 0.8 mm / 24 … 20 AWG |
| Strip length | 8.5 … 9.5 mm / 0.33 … 0.37 inches |
| Conductor connection direction to PCB | 45 ° |
| Pole number | 5 |

## Physical data

| | |
|---|---|
| Pin spacing | 2.5 mm / 0.098 inches |
| Width | 14 mm / 0.551 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 | 3.6 mm |
| Solder pin dimensions | 0.4 x 0.75 mm |
| Drilled hole diameter with tolerance | 1.1 $^{(+0.1)}$ mm |

## PCB contact

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

## Material data

| | |
|---|---|
| Note (material data) | Information on material specifications can be found here |
| 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 | 0.006 MJ |
| Weight | 1.9 g |

## Environmental requirements

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

## Commercial data

| | |
|---|---|
| Product Group | 4 (Printed Circuit Connectors) |
| PU (SPU) | 340 (85) pcs |
| Packaging type | Box |
| Country of origin | CH |
| GTIN | 4044918642910 |
| 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 8.0 | 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 |
| UL<br>UL International Germany GmbH | UL 1059 | E45172 |

## Downloads

### Environmental Product Compliance

**Compliance Search**

| | |
|---|---|
| Environmental Product Compliance 250-405/000-006 | ↓ |

## Documentation

### Additional Information

| | | | |
|---|---|---|---|
| Technical Section | 03.04.2019 | pdf 2027.26 KB | ↓ |

## CAD/CAE-Data

### CAD data

| | |
|---|---|
| 2D/3D Models 250-405/000-006 | ↓ |

### CAE data

| | |
|---|---|
| EPLAN Data Portal 250-405/000-006 | ↓ |
| ZUKEN Portal 250-405/000-006 | ↓ |

### PCB Design

| | |
|---|---|
| Symbol and Footprint via SamacSys 250-405/000-006 | ↓ |
| Symbol and Footprint via Ultra Librarian 250-405/000-006 | ↓ |

## 1 Compatible Products

### 1.1 Optional Accessories

### 1.1.1 Marking

### 1.1.1.1 Marking strip

**Item No.: 210-331/250-202**
Marking strips; as a DIN A4 sheet; MARKED; 1-16 (400x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white

**Item No.: 210-331/250-207**
Marking strips; as a DIN A4 sheet; MARKED; 1-48 (100x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white

**Item No.: 210-331/250-204**
Marking strips; as a DIN A4 sheet; MARKED; 17-32 (400x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white

**Item No.: 210-331/250-206**
Marking strips; as a DIN A4 sheet; MARKED; 33-48 (400x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white

### 1.1.2 Test and measurement

### 1.1.2.1 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 0,5mm²
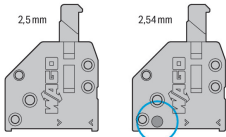
**WAGO**

## 1.1.3 Tool

### 1.1.3.1 Operating tool

**Item No.: 210-719**
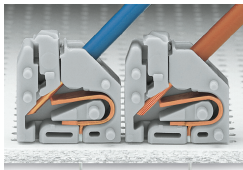Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

**Item No.: 210-647**
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; multicoloured
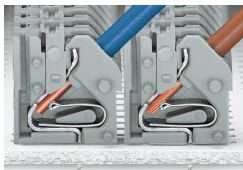
## Installation Notes

A groove at the back of the terminal strip differentiates between the two pin spacings.
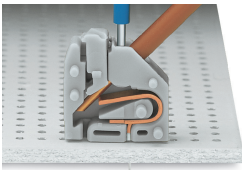
## Conductor termination

Inserting solid conductors via push-in termination.
Inserting fine-stranded conductors via push-buttons, 250 Series – 3.5 mm pin spacing.
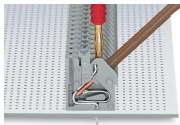
## Conductor termination

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

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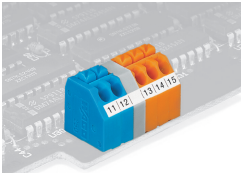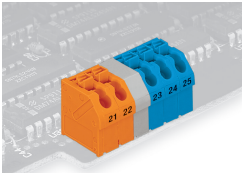
Testing with 11 mm Ø test pin, on the conductor, 250 Series – 2.5 … 3.5 mm pin spacing.

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.

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