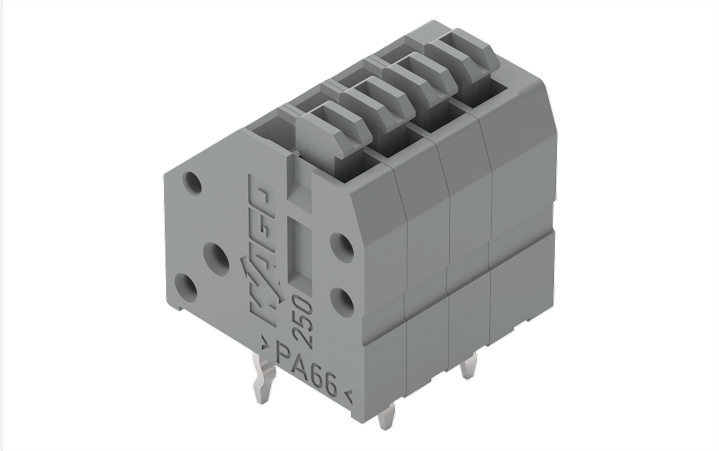
# Data Sheet | Item Number: 250-404

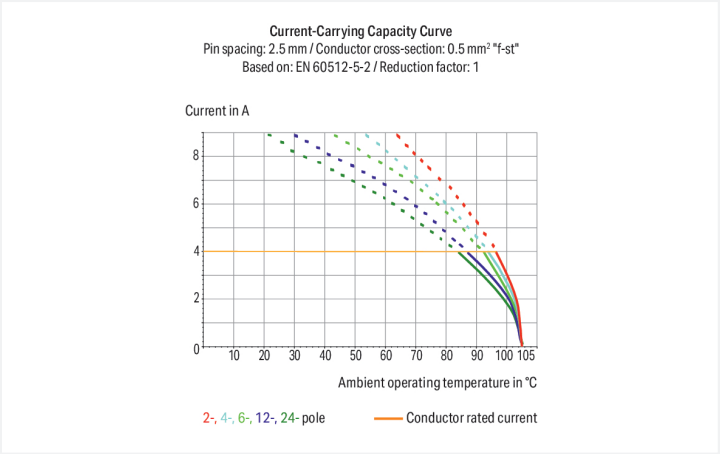
PCB terminal block; push-button; 0.5 mm²; Pin spacing 2.5 mm; 4-pole; Push-in CAGE CLAMP®; gray

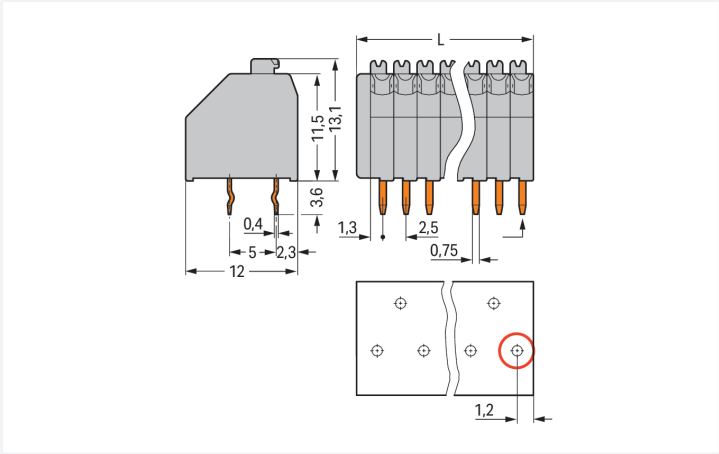
https://www.wago.com/250-404





Color: gray




Dimensions in mm
L = (pole no. x pin spacing) + 1.5 mmFirst solder pin, front right (red circle)

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

This PCB terminal block (item number 250-404) is designed to connect conductors quickly and easily. You can rely on proven safety with these PCB terminal blocks, perfect for a host of applications when designing your devices. Strip lengths must be between 8.5 and 9.5 mm when connecting conductors to this PCB terminal block. This product features one conductor terminal and utilizes Push-in CAGE CLAMP®. Push-in CAGE CLAMP® connection technology is ideal for connecting all conductor types. It allows direct insertion of both solid and fine-stranded conductors with ferrules without the need for tools—all thanks to its pluggable design. The item's dimensions are (11.5 x 16.7 x 12) mm (width x height x depth). This PCB terminal block is suitable for conductor cross-sections ranging from 0.14 mm² to 0.5 mm².

Perfect termination for all conductor types thanks to Push-in CAGE CLAMP®

Tin is used for coating the contact surfaces. This PCB terminal block is operated with a push-button. THT is used to assemble the PCB terminal block. Insert the conductor into the board at an angle of 45°..

- Safe and fast installation
- Reliable soldering thanks to THT
- Pin spacing: 2.5 mm
- Actuation via push-button
- Number of poles: 4

## Notes

| | |
|---|---|
| General safety information | **NOTICE: Observe installation and safety instructions!**<br><br>**To be sold only with installation instructions!** |
| 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 https://configurator.wago.com/. |

## 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 | 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 | 4 |
| Total number of potentials | 4 |
| 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 | 4 |

## Physical data

| | |
|---|---|
| Pin spacing | 2.5 mm / 0.098 inches |
| Width | 11.5 mm / 0.453 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 | 1.1 $^{(+0.1)}$ mm |


Continued on next page

## 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 | gray |
| Material group | I |
| Insulation material (main housing) | Polyamide (PA66) |
| Flammability class per UL94 | V0 |
| Clamping spring material | Copper alloy |
| Contact Plating | Tin |
| Fire load | 0.033 MJ |
| Weight | 1.6 g |

## Environmental requirements

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

## Commercial data

| | |
|---|---|
| Product Group | 4 (Printed Circuit Connectors) |
| PU (SPU) | 400 (100) pcs |
| Packaging type | Box |
| Country of origin | CH |
| GTIN | 4044918642859 |
| 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 |
|---|---|---|
| CCA<br>DEKRA Certification B.V. | EN 60947 | NTR NL-8036 |
| CCA<br>DEKRA Certification B.V. | EN 60998 | NTR NL-7705/1 |

### General approvals

| | | |
|---|---|---|
| CSA<br>DEKRA Certification B.V. | C22.2 | 1132097 |
| DEKRA<br>DEKRA Certification B.V. | EN 60947-7-4 | 71-141963 |
| KEMA/KEUR<br>DEKRA Certification B.V. | EN 60947 | 2160584.18 |
| KEMA/KEUR<br>DEKRA Certification B.V. | EN 60998 | 71-124629 |
| UL<br>UL International Germany GmbH | UL 1059 | E45172 |


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## Declarations of conformity and manufacturer's declarations

| Approval | Standard | Certificate Name |
|---|---|---|
| EU-Declaration of Conformity<br>WAGO GmbH & Co. KG | - | - |
| UK-Declaration of Conformity<br>WAGO GmbH & Co. KG | - | - |

## Approvals for marine applications

| Approval | Standard | Certificate Name |
|---|---|---|
| ABS<br>American Bureau of Shipping | - | 24-0095975-PDA |
| DNV<br>DNV GL SE | - | TAE000016Z |

## Downloads

### Environmental Product Compliance

**Compliance Search**

Environmental Product Compliance 250-404

### Documentation

**Safety Data Sheet**

Handling and Safety Instructions of PCB Terminal Blocks with Push-In Cage Clamp — pdf, 393.90 KB

**Additional Information**

Technical Section — 03.04.2019 — pdf, 2027.26 KB

### CAD/CAE-Data

**CAD data**

2D/3D Models 250-404

**CAE data**

EPLAN Data Portal 250-404

ZUKEN Portal 250-404

**PCB Design**

Symbol and Footprint via SamacSys 250-404

Symbol and Footprint via Ultra Librarian 250-404


Continued on next page

# 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

### 1.1.3 Tool

#### 1.1.3.1 Operating tool

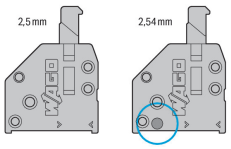


Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft



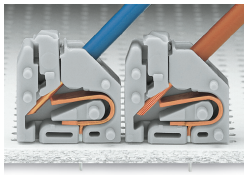
Item No.: 210-647
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; multicoloured

# Installation Notes




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

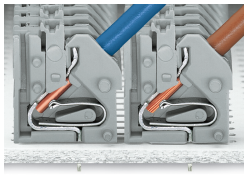
# Conductor termination



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

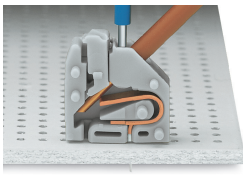

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## Conductor termination

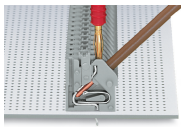


Space-saving wiring, 250 Series – 5 mm pin spacing.

## Testing

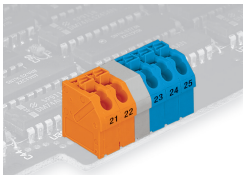


Testing with 11 mm Ø test pin, on the conductor, 250 Series – 2.5 … 3.5 mm pin spacing.

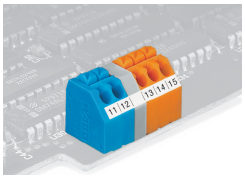


Testing with 2 mm Ø test plug, touch contact, 250 Series – 5 mm pin spacing.

## 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.