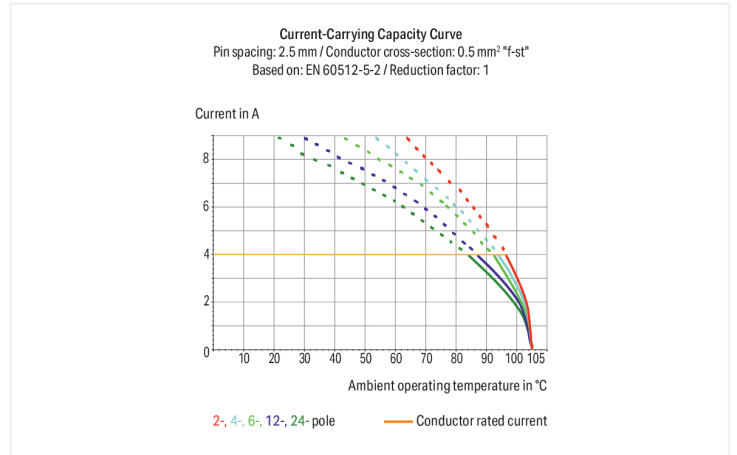


Data Sheet | Item Number: 250-412/000-012

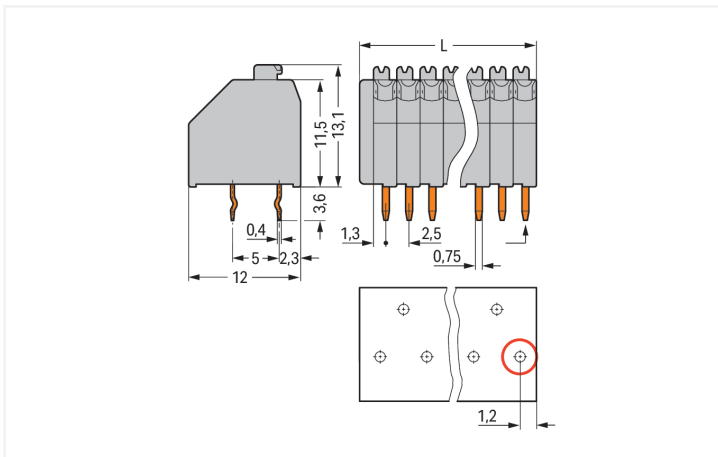
PCB terminal block; push-button; 0.5 mm²; Pin spacing 2.5 mm; 12-pole; Push-in CAGE CLAMP®; orange

<https://www.wago.com/250-412/000-012>



Color: ■ orange

Similar to illustration



Dimensions in mm

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

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

Our PCB terminal block (item number 250-412/000-012) ensures effortless electrical installations. It offers the flexibility needed for different mounting types. Conductors should only be connected to this PCB terminal block if their strip length is between 8.5 and 9.5 mm . This product features one conductor terminal and utilizes Push-in CAGE CLAMP®. Our Push-in CAGE CLAMP® is a universal, maintenance-free connection solution for all conductor types, featuring a winning design: It allows direct insertion of both solid and fine-stranded conductors with ferrules without needing tools. No preparation is required; for example, crimping the conductor's ferrule is not necessary. The dimensions are (31.5 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. 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. The conductor is designed to be inserted into the board at an angle of 45°..

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/ . |
|-----------|--|

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 | 12 |
| Total number of potentials | 12 |
| 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 mm ² / 24 ... 20 AWG |
| Fine-stranded conductor | 0.2 ... 0.5 mm ² / 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 | 12 |

Physical data

| | |
|-------------------------|--------------------------|
| Pin spacing | 2.5 mm / 0.098 inches |
| Width | 31.5 mm / 1.24 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 |
| ! | 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 | orange |
| Material group | I |
| Insulation material (main housing) | Polyamide (PA66) |
| Flammability class per UL94 | V0 |
| Clamping spring material | Copper alloy |
| Contact Plating | Tin |
| Fire load | 0.102 MJ |
| Weight | 4.3 g |

Environmental requirements

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

Commercial data

| | |
|-----------------------|--------------------------------|
| Product Group | 4 (Printed Circuit Connectors) |
| PU (SPU) | 140 (35) pcs |
| Packaging type | Box |
| Country of origin | CH |
| GTIN | 4044918643115 |
| 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 DEKRA Certification B.V. | C22.2 | 1132097 |
| DEKRA DEKRA Certification B.V. | EN 60947-7-4 | 71-141963 |
| UL UL International Germany GmbH | UL 1059 | E45172 |

Downloads

Environmental Product Compliance

| Compliance Search | |
|---|-------------------|
| Environmental Product Compliance 250-412/000-012 | ↓ |

Documentation

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

CAD/CAE-Data

| CAD data | |
|---------------------------------|-------------------|
| 2D/3D Models 250-412/000-012 | ↓ |

| CAE data | |
|--------------------------------------|-------------------|
| EPLAN Data Portal 250-412/000-012 | ↓ |

| | |
|---------------------------------|-------------------|
| ZUKEN Portal 250-412/000-012 | ↓ |
|---------------------------------|-------------------|

PCB Design

| | |
|---|-------------------|
| Symbol and Footprint via SamacSys 250-412/000-012 | ↓ |
|---|-------------------|

| | |
|--|-------------------|
| Symbol and Footprint via Ultra Librarian 250-412/000-012 | ↓ |
|--|-------------------|

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

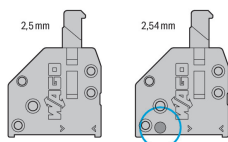
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft



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.

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.