

Data Sheet | Item Number: 250-224/000-012

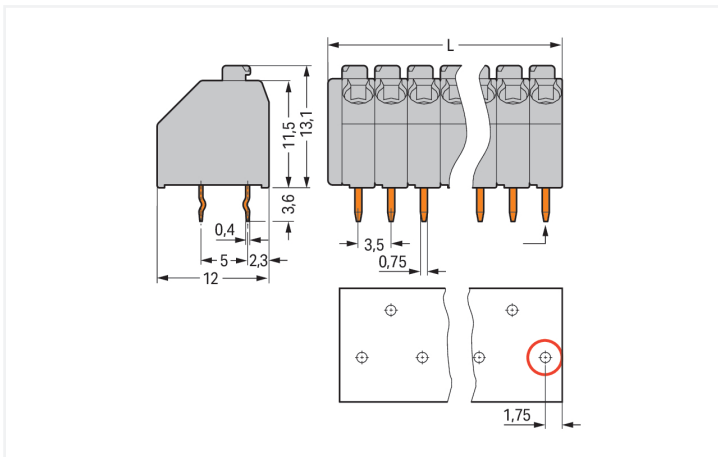
PCB terminal block; push-button; 1.5 mm²; Pin spacing 3.5 mm; 24-pole; Push-in CAGE CLAMP®; orange

<https://www.wago.com/250-224/000-012>



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 250-224/000-012) makes connections quick and easy. 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. Ensure that the strip lengths are between 8.5 and 9.5 mm when connecting conductors to this PCB terminal block. Featuring one conductor terminal along with Push-in CAGE CLAMP®, this connector outperforms the competition. Our Push-in CAGE CLAMP® is a universal, maintenance-free connection solution for all conductor types, featuring a winning design: 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. The dimensions are (85.5 x 16.7 x 12) mm (width x height x depth). This PCB terminal block is suitable for conductor cross sections ranging from 0.2 mm² to 1.5 mm². Tin is used for coating the contact surfaces. A push-button is used to operate this PCB terminal block. THT is used to solder the PCB terminal block. 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 | | | Approvals per | UL 1059 | | |
|---------------------------------|----------------|--------|--------|---------------|---------|---|-------|
| Overvoltage category | III | III | II | Use group | B | C | D |
| Pollution degree | 3 | 2 | 2 | Rated voltage | 300 V | - | 300 V |
| Nominal voltage | 250 V | 320 V | 630 V | Rated current | 8 A | - | 5 A |
| Rated impulse withstand voltage | 4 kV | 2.5 kV | 2.5 kV | | | | |
| Rated current | 8 A | 8 A | 8 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 | 24 | Connection 1 | |
| Total number of potentials | 24 | Connection technology | Push-in CAGE CLAMP® |
| Number of connection types | 1 | Actuation type | Push-button |
| Number of levels | 1 | Solid conductor | 0.2 ... 1.5 mm ² / 24 ... 16 AWG |
| | | Fine-stranded conductor | 0.2 ... 1.5 mm ² / 24 ... 16 AWG |
| | | Fine-stranded conductor; with insulated ferrule | 0.25 ... 1 mm ² |
| | | Fine-stranded conductor; with uninsulated ferrule | 0.25 ... 1 mm ² |
| | | Strip length | 8.5 ... 9.5 mm / 0.33 ... 0.37 inches |
| | | Conductor connection direction to PCB | 45 ° |
| | | Pole number | 24 |

Physical data

| | |
|--------------------------------------|------------------------|
| Pin spacing | 3.5 mm / 0.138 inches |
| Width | 85.5 mm / 3.366 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 | 3.8 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 | 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 | 0.221 MJ |
| Weight | 11.3 g |

Environmental requirements

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

Commercial data

| | |
|-----------------------|--------------------------------|
| Product Group | 4 (Printed Circuit Connectors) |
| PU (SPU) | 40 (10) pcs |
| Packaging type | Box |
| Country of origin | CH |
| GTIN | 4044918649001 |
| 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 1977 | E45171 |

General approvals

| | | |
|--|---------|--------|
| UL UL International Germany GmbH | UL 1059 | E45172 |
|--|---------|--------|

Downloads

Environmental Product Compliance

Compliance Search

| | |
|---|---|
| Environmental Product Compliance 250-224/000-012 | ↓ |
|---|---|

Documentation

Additional Information

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

CAD/CAE-Data

CAD data

| | |
|---------------------------------|---|
| 2D/3D Models 250-224/000-012 | ↓ |
|---------------------------------|---|

CAE data

| | |
|--------------------------------------|---|
| EPLAN Data Portal 250-224/000-012 | ↓ |
| ZUKEN Portal 250-224/000-012 | ↓ |

PCB Design

| | |
|--|---|
| Symbol and Footprint via SamacSys 250-224/000-012 | ↓ |
| Symbol and Footprint via Ultra Librarian 250-224/000-012 | ↓ |

1 Compatible Products

1.1 Optional Accessories

1.1.1 Marking

1.1.1.1 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

1.1.2 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.: 210-720

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

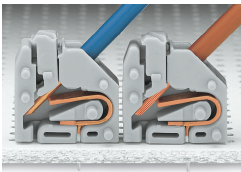


Item No.: 210-657

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

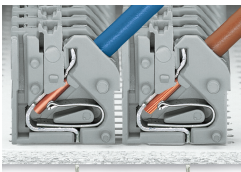
Installation Notes

Conductor termination



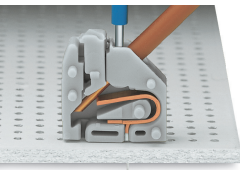
Inserting solid conductors via push-in termination.
Inserting fine-stranded conductors via push-buttons, 250 Series – 3.5 mm pin spacing.

Conductor termination

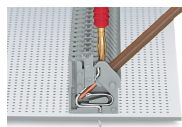


Space-saving wiring, 250 Series – 5 mm pin spacing.

Testing

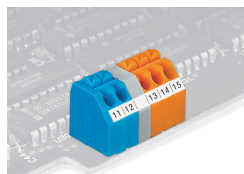
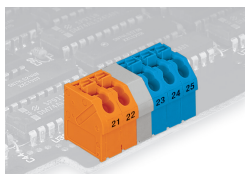


Testing with 11 mm Ø test pin, on the conductor, 250 Series – 2.5 ... 3.5 mm pin spacing.



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.