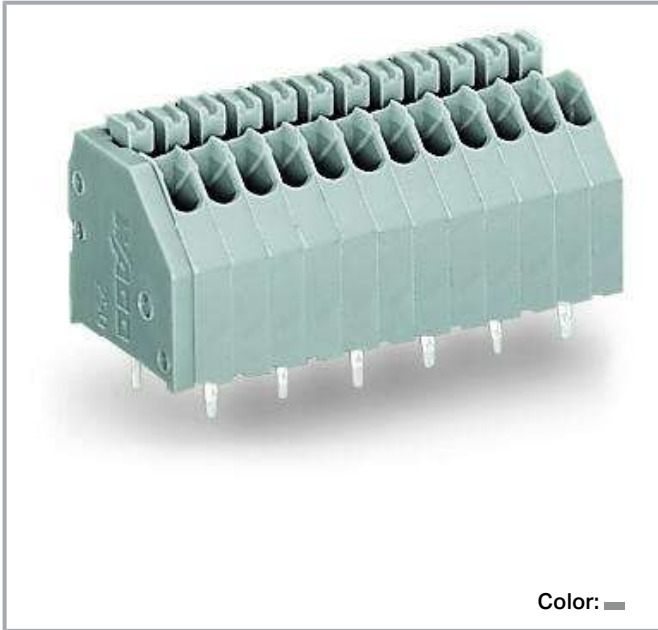


**Data sheet | Item number: 250-412**

PCB terminal block; push-button; 0.5 mm<sup>2</sup>; Pin spacing 2.5 mm; 12-pole;  
Push-in CAGE CLAMP®; 0,50 mm<sup>2</sup>; gray

[www.wago.com/250-412](http://www.wago.com/250-412)



Subject to changes. Please also observe the further product documentation!

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Dimensions in mm

$L = (\text{pole no.} \times \text{pin spacing}) + 1.5 \text{ mm}$

First solder pin, front right (red circle)

## Item description

- Compact PCB terminal strips with push-buttons
- Push-in termination of solid conductors
- Termination/removal of fine-stranded conductors via push-buttons
- 45° conductor entry angle provides easy, space-saving wiring
- Custom color combinations
- Terminal strips also available with spacers upon request

Subject to changes. Please also observe the further product documentation!

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**Data****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****IEC Approvals**

Ratings per	IEC/EN 60664-1
Rated voltage (III / 3)	160 V
Rated surge voltage (III/3)	2.5 kV
Rated voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV
Nominal voltage (II/2)	320 V
Rated surge voltage (II/2)	2.5 kV
Rated current	4 A
Legend (ratings)	(III / 2) $\hat{=}$ Overvoltage category III / Pollution degree 2

**UL Approvals**

Approvals per	UL 1059
Rated voltage UL (Use Group B)	300 V
Rated current UL (Use Group B)	5 A
Rated voltage UL (Use Group D)	300 V
Rated current UL (Use Group D)	5 A

**CSA Approvals**

Approvals per	CSA
Rated voltage CSA (Use Group B)	300 V
Rated current CSA (Use Group B)	5 A
Rated voltage CSA (Use Group D)	300 V
Rated current CSA (Use Group D)	5 A

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## Connection data

Total number of connection points	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 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 inch
Conductor connection direction to PCB	45°
Number of poles	12

## Physical data

Pin spacing	2.5 mm / 0.098 inch
Width	31.5 mm / 1.24 inch
Height	16.7 mm / 0.657 inch
Height from the surface	13.1 mm / 0.516 inch
Depth	12 mm / 0.472 inch
Solder pin length	3.6 mm
Solder pin dimensions	0.4 x 0.75 mm
Drilled hole diameter with tolerance	1 <sup>(+0.1)</sup> mm

## PCB contact

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

## Material data

Color	gray
Material group	I
Insulation material	Polyamide (PA66)

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Flammability class per UL94	V0
Clamping spring material	Copper alloy
Contact material	Electrolytic copper ( $E_{Cu}$ )
Contact plating	tin-plated
Fire load	0.102 MJ
Weight	4.4 g

## Environmental requirements

Limit temperature range	-60 ... +105 °C
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## Commercial data

Product Group	4 (Printed Circuit)
PU (SPU)	140 (35) Stück
Packaging type	box
Country of origin	CH
GTIN	4044918643108
Customs tariff number	8536904000

## Approvals / Certificates

### Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate name
	CCA DEKRA Certification B.V.	EN 60998	NTR NL-7449
	CCA DEKRA Certification B.V.	EN 60947	NTR NL-7100
	CSA DEKRA Certification B.V.	C22.2	1132097
	KEMA/KEUR DEKRA Certification B.V.	EN 60998	71-105258
	KEMA/KEUR	EN 60947	2160584.18

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DEKRA Certification B.V.




**VDE**  
VDE Prüf- und Zertifizierungsinstitut


EN 60998

40028888

## Ship Approvals

Logo	Approval	Additional Approval Text	Certificate name
	<b>ABS</b> American Bureau of Shipping	-	19- HG1869876- PDA
	<b>DNV GL</b> Det Norske Veritas, Germanischer Lloyd	-	TAE000016Z

## UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	<b>UL</b> UL International Germany GmbH	UL 1059	E45172

## Optional accessories

## Testing accessories

## Testing accessories

**Item no.: 735-500**

Test pin; 1 mm Ø; with solder connection for test wire

[www.wago.com/735-500](http://www.wago.com/735-500)

## Tools

## Operating tool

**Item no.: 210-647**

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

[www.wago.com/210-647](http://www.wago.com/210-647)**Item no.: 210-719**

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

[www.wago.com/210-719](http://www.wago.com/210-719)

## Marking accessories

## Marking strip

**Item no.: 210-331/250-207**

Subject to changes. Please also observe the further product documentation!

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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

[www.wago.com/210-331/250-207](http://www.wago.com/210-331/250-207)

**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

[www.wago.com/210-331/250-202](http://www.wago.com/210-331/250-202)

**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

[www.wago.com/210-331/250-204](http://www.wago.com/210-331/250-204)

**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

[www.wago.com/210-331/250-206](http://www.wago.com/210-331/250-206)

## Downloads

### Documentation

#### Additional Information

Technical explanations	2019 Apr 3	pdf 2.0 MB	Download
		pdf 125.0 kB	Download

## CAD files

### CAE data

EPLAN Data Portal 250-412	URL	Download
ZUKEN Portal 250-412	URL	Download

### PCB Design

Symbol and Footprint 250-412	URL	Download
CAx data for your PCB design, consisting of "schematic symbols and PCB footprints", allow easy integration of the WAGO component into your development environment.		

### Supported formats:

- Accel EDA 14 & 15
- Altium 6 to current version
- Cadence Allegro
- DesignSpark

—  
Subject to changes. Please also observe the further product documentation!

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- Eagle Libraries
- KiCad
- Mentor Graphics BoardStation
- Mentor Graphics Design Architect
- Mentor Graphics Design Expedition 99 and 2000
- OrCAD 9.X PCB and Capture
- PADS PowerPCB 3, 3.5, 4.X, and 5.X
- PADS PowerPCB and PowerLogic 3.0
- PCAD 2000, 2001, 2002, 2004, and 2006
- Pulsonix 8.5 or newer
- STL
- 3D STEP
- TARGET 3001!
- View Logic ViewDraw
- Quadcept
- Zuken CadStar 3 and 4
- Zuken CR-5000 and CR-8000

PCB Component Libraries (EDA), PCB CAD Library Ultra Librarian

## CAD data

2D/3D Models 250-412	URL	Download
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## Environmental Product Compliance

### Compliance Search

Environmental Product Compliance 250-412	URL	Download
PCB terminal block; push-button; 0.5 mm <sup>2</sup> ; Pin spacing 2.5 mm; 12-pole; Push-in CAGE CLAMP®; 0,50 mm <sup>2</sup> ; gray		

## Installation Notes

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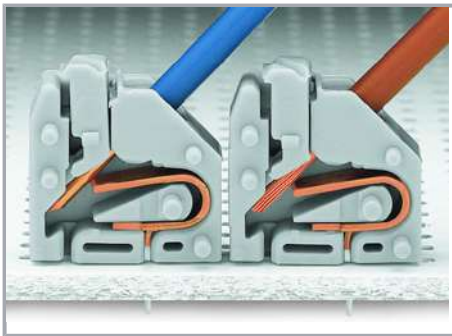
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A groove at the back of the terminal strip differentiates between the two pin spacings.

#### 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



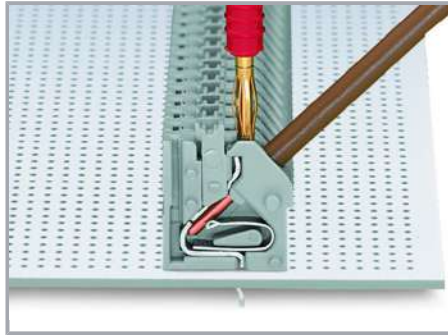
Space-saving wiring, 250 Series – 5 mm pin spacing.

Subject to changes. Please also observe the further product documentation!

## Testing

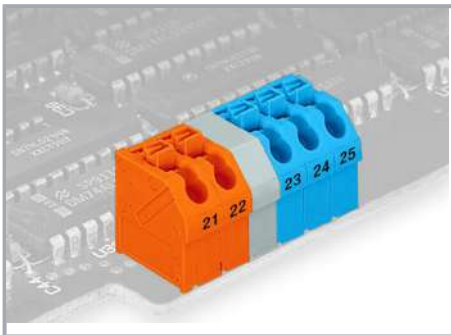


Testing with 11 mm Ø test pin, on the conductor, 250 Series – 2.5 ... 3.5 mm pin spacing.

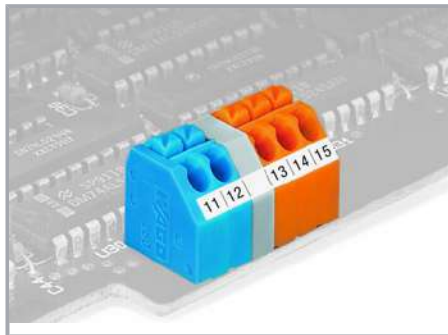


Testing with 2 mm Ø test plug, touch contact, 250 Series – 5 mm pin spacing.

## 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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