

**Data sheet | Item number: 250-421**

PCB terminal block; push-button; 0.5 mm<sup>2</sup>; Pin spacing 2.5 mm; 21-pole;  
Push-in CAGE CLAMP®; 0,50 mm<sup>2</sup>; gray



[www.wago.com/250-421](http://www.wago.com/250-421)



RoHS  
Compliant ✓

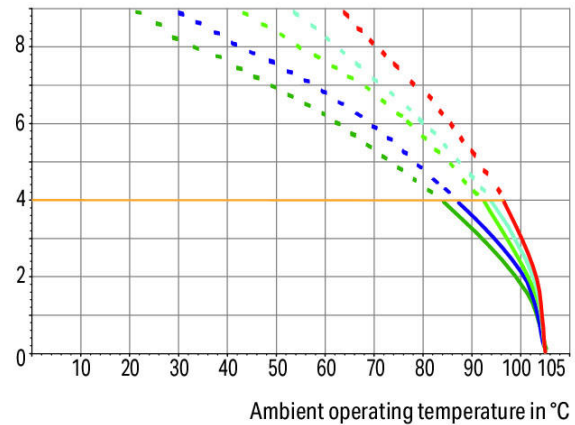
BOMcheck.net

Color: ■

**Current-Carrying Capacity Curve**

Pin spacing: 2.5 mm / Conductor cross-section: 0.5 mm<sup>2</sup> "f-st"  
Based on: EN 60512-5-2 / Reduction factor: 1

Current in A



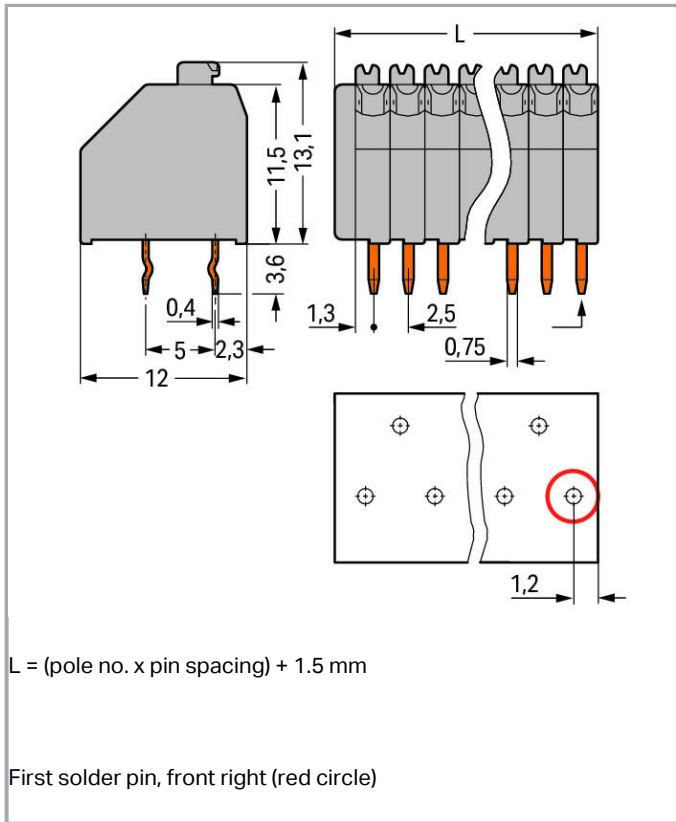
2-, 4-, 6-, 12-, 24- pole

— Conductor rated current

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

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## 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

## Data

### Electrical data

### Ratings per IEC/EN 60664-1

Ratings per	IEC/EN 60664-1
Rated voltage (III / 3)	160 V
Rated impulse voltage (III / 3)	2.5 kV
Rated voltage (III / 2)	160 V

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Rated impulse voltage (III / 2)	2.5 kV
Rated voltage (II / 2)	320 V
Rated impulse voltage (II / 2)	2.5 kV
Rated current	4 A
Legend (ratings)	(III / 2) $\hat{=}$ Overvoltage category III / Pollution degree 2

### 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
Approvals per	UL 1059

### 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

### Connection data

Connection technology	Push-in CAGE CLAMP®
Actuation type	Push-button
Solid conductor	0,14 ... 0,5 mm <sup>2</sup> / 24 ... 20 AWG
Fine-stranded conductor	0,2 ... 0,5 mm <sup>2</sup> / 24 ... 20 AWG
Conductor diameter	0,4 ... 0,8 mm
Strip length	8,5 ... 9,5 mm / 0.33 ... 0.37 inch
Conductor entry angle to the PCB	45°
No. of poles	21
Total number of connection points	21
Total number of potentials	21
Number of connection types	1
Number of levels	1

### Geometrical Data

Pin spacing	2,5 mm / 0.098 inch
Width	54 mm / 2.126 inch

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



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 (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
Insulating material	Polyamide 66 (PA 66)
Flammability class per UL94	V0
Clamping spring material	Copper alloy
Contact material	Electrolytic copper (E <sub>Cu</sub> )
Contact plating	tin-plated
Fire load	0.153 MJ
Weight	7.5 g

### Environmental Requirements

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

Product Group	4 (Printed Circuit)
Packaging type	BOX
Country of origin	CH
GTIN	4017332648455
Customs Tariff No.	85369010000

### Approvals / Certificates


#### Country specific Approvals

Certificate



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Logo	Approval	Additional Approval Text	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 DEKRA Certification B.V.	EN 60947	2160584.18
	VDE VDE Prüf- und Zertifizierungsinstitut	EN 60998	40028888

## Ship Approvals

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

## UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	UL UL International Germany GmbH	UL 1059	E45172 sec. 6

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



## Counterpart

## Compatible products

### Test 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

**Item no.:** 210-647

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

[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

**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)

**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

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

## Downloads

### Documentation

#### Additional Information

Technical explanations

Apr 3, 2019

pdf  
3.6 MB

Download

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

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## CAD/CAE-Data

### CAD data

2D/3D Models 250-421	<a href="#">URL</a>	<a href="#">Download</a>
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### CAE data

EPLAN Data Portal 250-421	<a href="#">URL</a>	<a href="#">Download</a>
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### PCB Design

Symbol and Footprint 250-421	<a href="#">URL</a>	<a href="#">Download</a>
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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
- 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

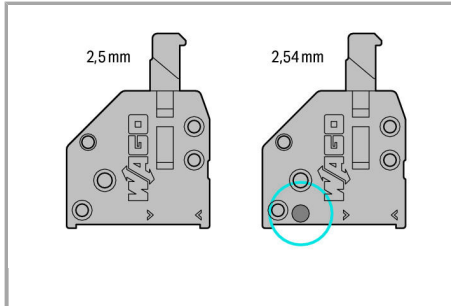
PCB Component Libraries (EDA), PCB CAD Library Ultra Librarian

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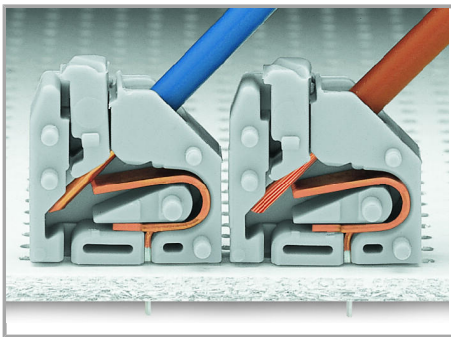
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## Installation Notes



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

## Conductor termination



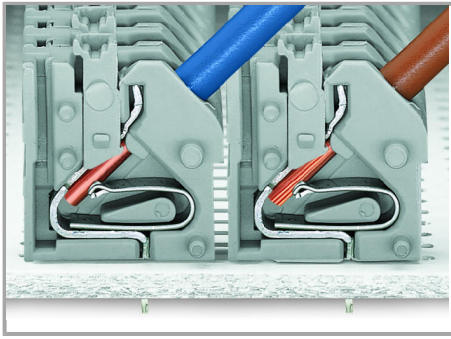
Inserting solid conductors via push-in termination.

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

## Conductor termination

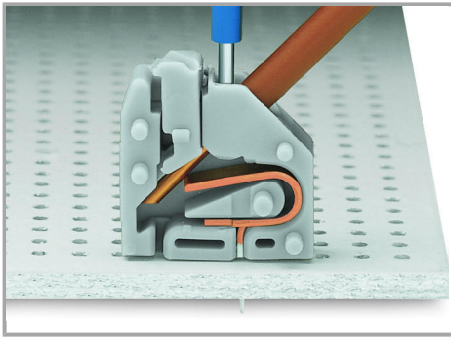
Subject to changes. Please also observe the further product documentation!



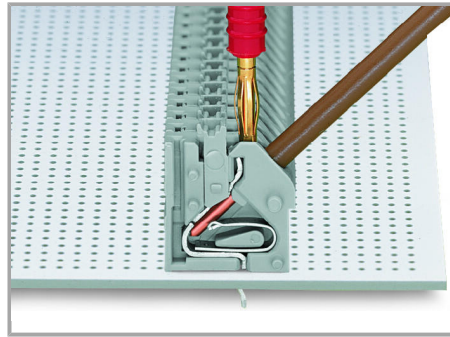


Space-saving wiring, 250 Series – 5 mm pin spacing.

### Testing

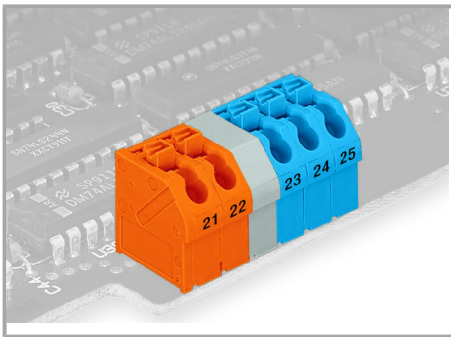


Testing with 11 mm Ø test pin, on the conductor, 250 Series – 2.5 ... 3.5 mm pin spacing.

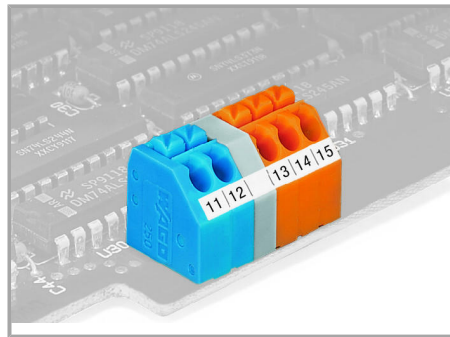


Testing with 2 mm Ø test plug, touch contact, 250 Series – 5 mm pin spacing.

### Marking



Labeling via self-adhesive strips or direct marking. Mixed-color terminal strips (with or without spacer) are available upon request.



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