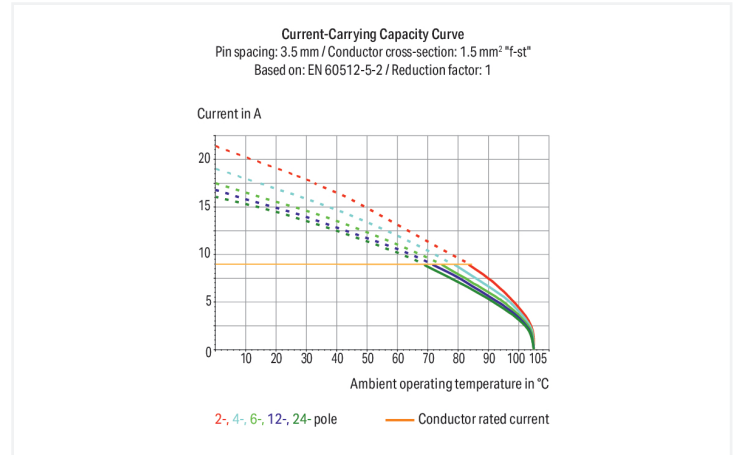


## Data Sheet | Item Number: 250-224

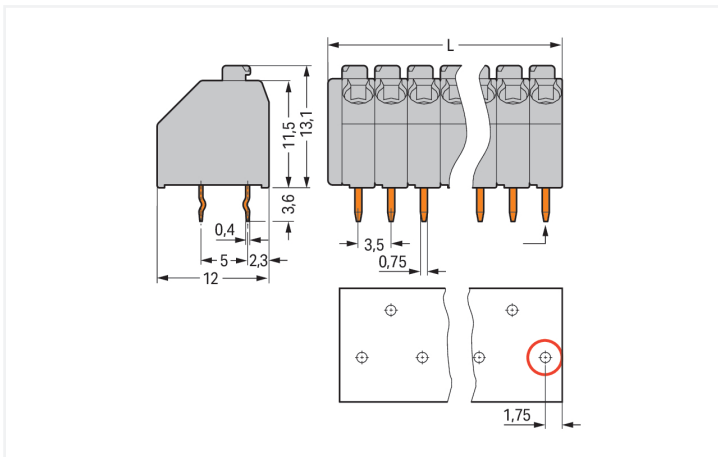
PCB terminal block; push-button; 1.5 mm<sup>2</sup>; Pin spacing 3.5 mm; 24-pole; Push-in CAGE CLAMP®; gray

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



Color: ■ gray

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, Push-in CAGE CLAMP®

Our PCB terminal block (item number 250-224) ensures effortless electrical installations. 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. Conductors can 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®. Push-in CAGE CLAMP® technology provides a universal connection solution for any type of conductor. It allows both solid and fine-stranded conductors with ferrules to be inserted directly into the clamping point without the need for tools. The item's 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 mm<sup>2</sup> to 1.5 mm<sup>2</sup>.

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°.

## 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	250 V	320 V	630 V
Rated impulse withstand voltage	4 kV	4 kV	4 kV
Rated current	8 A	8 A	8 A

Approvals per	UL 1059		
Use group	B	C	D
Rated voltage	300 V	-	300 V
Rated current	8 A	-	5 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
Total number of potentials	24
Number of connection types	1
Number of levels	1

Connection 1	
Connection technology	Push-in CAGE CLAMP®
Actuation type	Push-button
Solid conductor	0.2 ... 1.5 mm <sup>2</sup> / 24 ... 16 AWG
Fine-stranded conductor	0.2 ... 1.5 mm <sup>2</sup> / 24 ... 16 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 1 mm <sup>2</sup>
Fine-stranded conductor; with uninsulated ferrule	0.25 ... 1 mm <sup>2</sup>
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	3.4 mm
Solder pin dimensions	0.4 x 0.75 mm
!	1.1 <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

Note (material data)	<a href="#">Information on material specifications can be found here</a>
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	0.246 MJ
Weight	11.4 g

### Environmental requirements

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

Product Group	4 (Printed Circuit Connectors)
PU (SPU)	40 (10) pcs
Packaging type	Box
Country of origin	CH
GTIN	4044918648981
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
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### Approvals / Certificates

#### General approvals



Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60947	NTR NL 7833/2
CCA DEKRA Certification B.V.	EN 60998	NTR NL-7705/1

#### General approvals

CSA DEKRA Certification B.V.	C22.2	1132097
DEKRA DEKRA Certification B.V.	EN 60947-7-4	71-141963
KEMA/KEUR DEKRA Certification B.V.	EN 60998	71-124629
KEMA/KEUR DEKRA Certification B.V.	EN 60947	2160584.18
UL UL International Germany GmbH	UL 1977	E45171

General approvals		
UL	UL 1059	E45172
UL International Germany GmbH		

Declarations of conformity and manufacturer's declarations		
Approval	Standard	Certificate Name
EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Approvals for marine applications



Approval	Standard	Certificate Name
ABS American Bureau of Shipping	-	24-0095975-PDA
BV Bureau Veritas S.A.	IEC 60998	11915/E0 BV
DNV DNV GL SE	-	TAE000016Z
PRS Polski Rejestr Statków	-	TE/1095/880590/23

Downloads

Environmental Product Compliance

Compliance Search	
Environmental Product Compliance 250-224	<a href="#">↓</a>

Documentation

Additional Information			
Technical Section	03.04.2019	pdf 2027.26 KB	<a href="#">↓</a>

CAD/CAE-Data

CAD data	
2D/3D Models 250-224	<a href="#">↓</a>

CAE data	
EPLAN Data Portal 250-224	<a href="#">↓</a>
ZUKEN Portal 250-224	<a href="#">↓</a>

PCB Design

Symbol and Footprint  
via SamacSys 250-224



Symbol and Footprint  
via Ultra Librarian  
250-224



1 Compatible Products

1.1 Optional Accessories

1.1.1 Ferrule

1.1.1.1 Ferrule



[Item No.: 216-241](#)

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white



[Item No.: 216-141](#)

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92



[Item No.: 216-242](#)

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray



[Item No.: 216-262](#)

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray



[Item No.: 216-142](#)

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92



[Item No.: 216-243](#)

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red



[Item No.: 216-263](#)

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red



[Item No.: 216-143](#)

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92

1.1.2 Marking

1.1.2.1 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

1.1.3 Test and measurement

1.1.3.1 Testing accessories



[Item No.: 735-500](#)

WAGO Test pin; 1 mm Ø; 30 V AC / 60 V DC; CAT0; 1 A; 6 mm un-insulated; Test lead for soldering up to 0,5mm<sup>2</sup>

### 1.1.4 Tool

#### 1.1.4.1 Operating tool



**Item No.: 210-720**

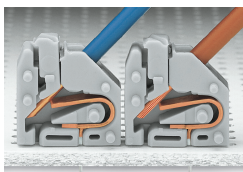
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

**Item No.: 210-657**

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

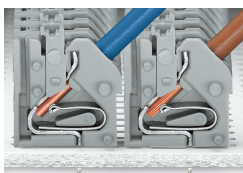
### Installation Notes

#### 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

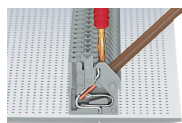


Space-saving wiring, 250 Series – 5 mm pin spacing.

### Testing

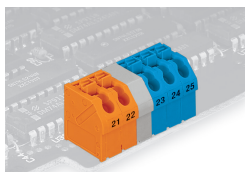


Testing with 11 mm Ø test pin, on the conductor, 250 Series – 2.5 ... 3.5 mm pin spacing.

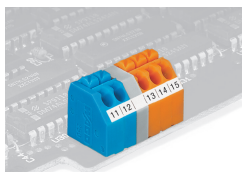


Testing with 2 mm Ø test plug, touch contact, 250 Series – 5 mm pin spacing.

### 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.

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

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Current addresses can be found at: [www.wago.com](http://www.wago.com)