

## Data Sheet | Item Number: 250-406

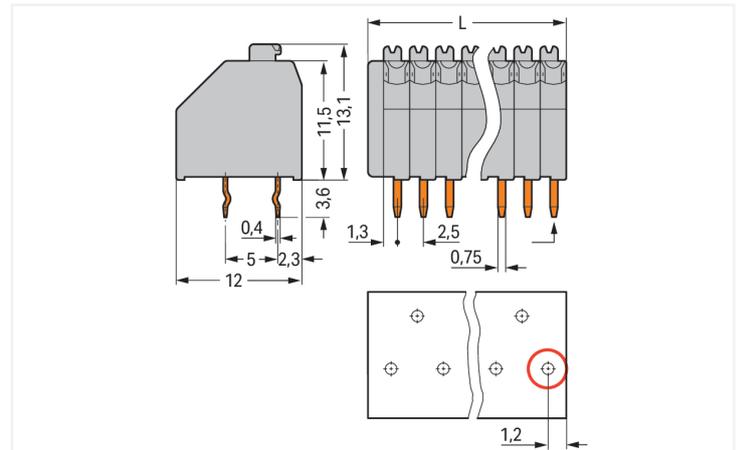
PCB terminal block; push-button; 0.5 mm<sup>2</sup>; Pin spacing 2.5 mm; 6-pole; Push-in CAGE CLAMP®; gray

<https://www.wago.com/250-406>



Color: ■ gray

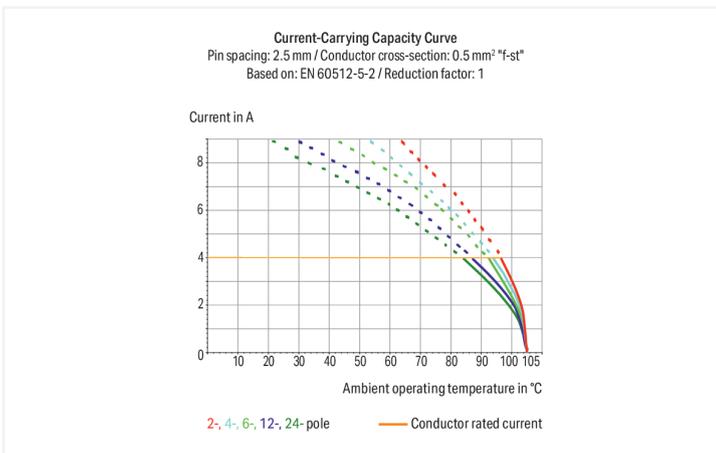
Similar to illustration



Dimensions in mm

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

First solder pin, front right (red circle)



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

Our PCB terminal block (item number 250-406) makes connecting wires quick and easy. You can count on tried and tested safety with these PCB terminal blocks, perfect for a wide variety of applications when designing your devices. Our PCB terminal block is rated for 160 V and is designed to handle a rated current of up to 4 A. Conductors should only be connected to this PCB terminal block if their strip length is between 8.5 mm and 9.5 mm. This product incorporates one conductor terminal and utilizes Push-in CAGE CLAMP®. Push-in CAGE CLAMP® technology provides a universal connection solution for all conductor types. It allows both solid and fine-stranded conductors with ferrules to be inserted directly into the clamping point without the need for tools. Dimensions: 16.5 x 16.7 x 12 mm (width x height x depth). Depending on the conductor type, this PCB terminal block is suitable for conductor cross sections ranging from 0.14 mm<sup>2</sup> to 0.5 mm<sup>2</sup>. It has one level. Six potentials can connect six poles using the six clamping points. The gray housing is made of polyamide (PA66) for insulation and the clamping spring is made of a Copper alloy. 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°. The solder pins measure 0.4 x 0.75 mm in cross-section and 3.6 mm in length and are arranged over the entire terminal strip (staggered). There are one solder pin per potential.

### 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 surge 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	6
Total number of potentials	6
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 <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 / 24 ... 20 AWG
Strip length	8.5 ... 9.5 mm / 0.33 ... 0.37 inches
Conductor connection direction to PCB	45 °
Pole number	6

## Physical data

Pin spacing	2.5 mm / 0.098 inches
Width	16.5 mm / 0.65 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
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)	<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	0.054 MJ
Weight	2.3 g

### Environmental requirements

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

Product Group	4 (Printed Circuit Connectors)
PU (SPU)	280 (70) pcs
Packaging type	Box
Country of origin	CH
GTIN	4044918642934
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 8.0	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
CSA DEKRA Certification B.V.	C22.2	1132097
KEMA/KEUR DEKRA Certification B.V.	EN 60947	2160584.18
KEMA/KEUR DEKRA Certification B.V.	EN 60998	71-124629
UL UL International Germany GmbH	UL 1059	E45172

#### 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	-	19-HG1869876-PDA
DNV DNV GL SE	-	TAE000016Z

**Downloads**

**Environmental Product Compliance**

**Compliance Search**

Environmental Product Compliance 250-406



**Documentation**

**Additional Information**

Technical Section

03.04.2019

pdf

2027.26 KB



**CAD/CAE-Data**

**CAD data**

2D/3D Models 250-406



**CAE data**

EPLAN Data Portal 250-406



ZUKEN Portal 250-406



**PCB Design**

Symbol and Footprint via SamacSys 250-406



Symbol and Footprint via Ultra Librarian 250-406



**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 0,5mm<sup>2</sup>

## 1.1.3 Tool

### 1.1.3.1 Operating tool



**Item No.: 210-719**

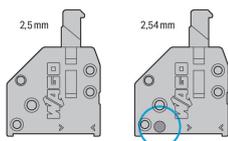
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft



**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

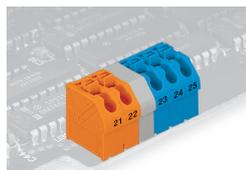


Testing with 11 mm Ø test pin, on the conductor, 250 Series – 2.5 ... 3.5 mm pin spacing.

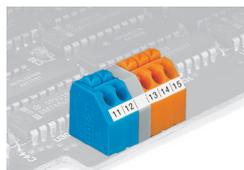


Testing with 2 mm Ø test plug, touch contact, 250 Series – 5 mm pin spacing.

## 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.