

Data Sheet | Item Number: 250-412/000-006

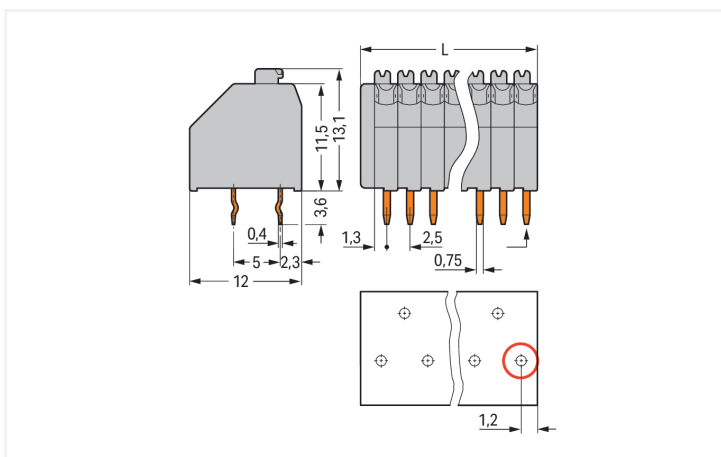
PCB terminal block; push-button; 0.5 mm²; Pin spacing 2.5 mm; 12-pole; Push-in CAGE CLAMP®; blue

<https://www.wago.com/250-412/000-006>



Color: ■ blue

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-button

Connecting conductors is quick and easy with this PCB terminal block (item number 250-412/000-006). It is a universal connector that can be used practically anywhere, e.g., as a pluggable PCB connector, panel feedthrough header, connector for rail-mount terminal blocks, or a floating connector for different mounting methods. Strip lengths must be 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 product delivers reliable performance. Push-in CAGE CLAMP® connection technology is ideal for connecting all conductor types. Both solid and fine-stranded conductors with ferrules can be inserted without needing to use any tools—all thanks to its pluggable design. The dimensions are (31.5 x 16.7 x 12) mm (width x height x depth). Depending on the type of conductor, this PCB terminal block is designed for conductor cross sections ranging from 0.14 mm² to 0.5 mm².

Tin is used for coating the contact surfaces. 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°.

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/ .
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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 impulse withstand 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	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 mm ² / 24 ... 20 AWG
Fine-stranded conductor	0.2 ... 0.5 mm ² / 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	12

Physical data

Pin spacing	2.5 mm / 0.098 inches
Width	31.5 mm / 1.24 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)	Information on material specifications can be found here
Color	blue
Material group	I
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Clamping spring material	Copper alloy
Contact Plating	Tin
Fire load	0.05 MJ
Weight	4.3 g

Environmental requirements

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

Product Group	4 (Printed Circuit Connectors)
PU (SPU)	140 (35) pcs
Packaging type	Box
Country of origin	CH
GTIN	4017332647885
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
CSA DEKRA Certification B.V.	C22.2	1132097
UL UL International Germany GmbH	UL 1059	E45172

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance
250-412/000-006



Documentation

Additional Information

Technical Section

03.04.2019

pdf

2027.26 KB



CAD/CAE-Data

CAD data

2D/3D Models
250-412/000-006



CAE data

EPLAN Data Portal
250-412/000-006



ZUKEN Portal
250-412/000-006



PCB Design

Symbol and Footprint
via SamacSys
250-412/000-006



Symbol and Footprint
via Ultra Librarian
250-412/000-006



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 0,5mm²

1.1.3 Tool

1.1.3.1 Operating tool



Item No.: 210-719

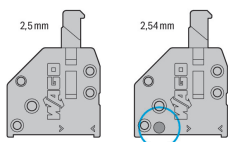
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft



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.