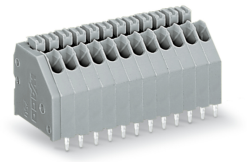
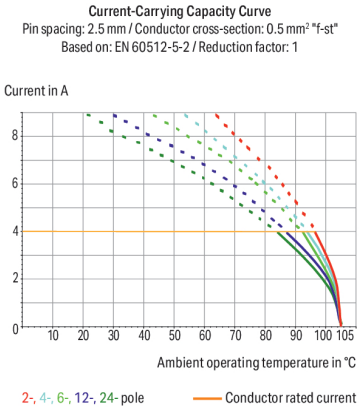
Data Sheet | Item Number: 250-310

PCB terminal block; push-button; 0.5 mm²; Pin spacing 2.5 mm; 10-pole; Push-in CAGE CLAMP®; gray

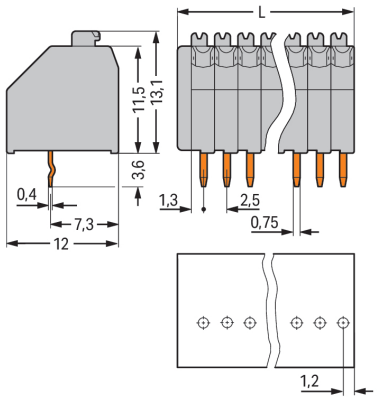
https://www.wago.com/250-310





Color: gray

Similar to illustration



Dimensions in mm
L = (pole no. x pin spacing) + 1.5 mm

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

This PCB terminal block (item number 250-310) streamlines wire connections, making them both quick and easy. It is perfect for custom installations with different mounting types. Conductors should 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®. Our Push-in CAGE CLAMP® is a universal, maintenance-free connection solution for all conductor types, boasting a key feature: It allows direct insertion of both solid and fine-stranded conductors with ferrules without needing tools. No preparation is required; for example, crimping the conductor's ferrule is not necessary. The dimensions are (26.5 x 16.7 x 12) mm (width x height x depth). Depending on the conductor type, 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. This PCB terminal block is operated with a push-button. The PCB terminal block is designed for THT soldering. Insert the conductor into the board at a 45° angle..

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	100 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	2 A	-	2 A

Connection Data

Clamping units	10
Total number of potentials	10
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 inches
Conductor connection direction to PCB	45 °
Pole number	10

Physical data

Pin spacing	2.5 mm / 0.098 inches
Width	26.5 mm / 1.043 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
!	1.1 $^{(+0.1)}$ mm

Continued on next page

PCB contact

PCB contact	THT
Solder pin arrangement	over the entire terminal strip (in-line)
Number of solder pins per potential	1

Material data

Note (material data)	Information on material specifications can be found here
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	0.086 MJ
Weight	3.6 g

Environmental requirements

Limit temperature range	-60 … +105 °C

Commercial data

Product Group	4 (Printed Circuit Connectors)
PU (SPU)	180 (45) pcs
Packaging type	Box
Country of origin	CH
GTIN	4050821573166
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

Approvals / Certificates

General approvals

Approval	Standard	Certificate Name
CSA DEKRA Certification B.V.	C22.2 No. 158	1132097
DEKRA DEKRA Certification B.V.	EN 60947-7-4	71-141963
UL UL International Germany GmbH	UL 1059	E45172

 Continued on next page

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 250-310

Documentation

Additional Information

Technical Section	03.04.2019	pdf 2027.26 KB

CAD/CAE-Data

CAD data

2D/3D Models 250-310

CAE data

ZUKEN Portal 250-310

PCB Design

Symbol and Footprint via SamacSys 250-310

Symbol and Footprint via Ultra Librarian 250-310

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



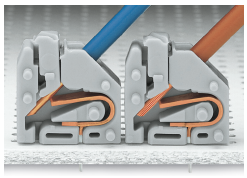
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft



Item No.: 210-647
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; multicoloured

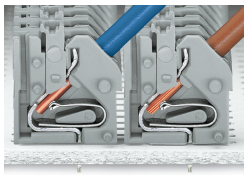
Installation Notes

Conductor termination



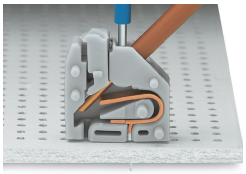
Inserting solid conductors via push-in termination.
Inserting fine-stranded conductors via push-buttons, 250 Series – 3.5 mm pin spacing.

Conductor termination

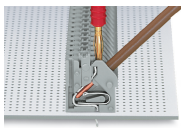


Space-saving wiring, 250 Series – 5 mm pin spacing.

Testing

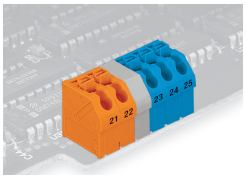


Testing with 11 mm Ø test pin, on the conductor, 250 Series – 2.5 … 3.5 mm pin spacing.

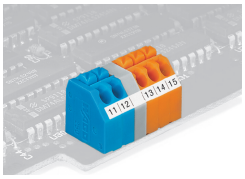


Testing with 2 mm Ø test plug, touch contact, 250 Series – 5 mm pin spacing.

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.