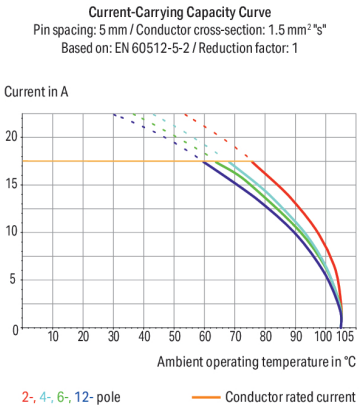
Data Sheet | Item Number: 250-610

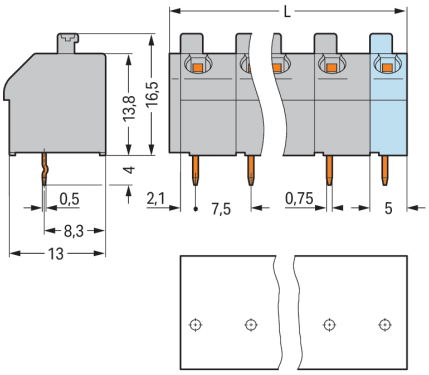
PCB terminal block; push-button; 1.5 mm²; Pin spacing 7.5 mm; 10-pole; Push-in CAGE CLAMP®; gray

https://www.wago.com/250-610





Color: gray



Dimensions in mm
L = (pole no. – 1) x pin spacing + 5 mm + 1.5 mm

PCB terminal block, 250 Series, solder pin dimensions 0.5 x 0.75 mm

This PCB terminal block (item number 250-610) streamlines wire connections, making them both quick and easy. You can rely on proven safety with these PCB terminal blocks, perfect for a host of applications when designing your devices. Conductors can only be connected to this PCB terminal block if their strip length is between 9 and 10 mm . Featuring one conductor terminal along with Push-in CAGE CLAMP®, this connector is highly versatile. Push-in CAGE CLAMP® connection technology is ideal for connecting all conductor types. It allows direct insertion of both solid and fine-stranded conductors with ferrules without needing to use any tools—all thanks to its pluggable design. The item's dimensions are (74 x 20.5 x 13) mm (width x height x depth). This PCB terminal block is suitable for conductor cross-sections ranging from 0.5 mm² to 1.5 mm².

Push-in CAGE CLAMP® spring pressure connection – for reliable installations instead of time-consuming screw connections

The contact surface is tin-coated 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..

- Compact sizes
- Actuation via push-button
- Pin spacing: 7.5 mm
- Number of poles: 10
- Safe and fast installation

Notes

General safety information	**NOTICE: Observe installation and safety instructions!** **To be sold only with installation instructions!**
Variants:	Other pole numbers Other colors Mixed-color PCB connector strips 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	500 V	630 V	1000 V
Rated impulse withstand voltage	6 kV	6 kV	6 kV
Rated current	17.5 A	17.5 A	17.5 A

Approvals per	UL 1059		
Use group	B	C	D
Rated voltage	300 V	-	300 V
Rated current	10 A	-	10 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	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	0.5 … 1.5 mm² / 20 … 14 AWG
Fine-stranded conductor	0.75 … 1.5 mm² / 18 … 16 AWG
Fine-stranded conductor; with insulated ferrule	0.5 … 1 mm²
Fine-stranded conductor; with uninsulated ferrule	0.5 … 1 mm²
Note (conductor cross-section)	Fine-stranded conductor 0.75 … 1.5 mm² (I max. 4 A) Fine-stranded conductor 0.5 mm² (I max. 2 A)
Strip length	9 … 10 mm / 0.35 … 0.39 inches
Conductor connection direction to PCB	45 °
Pole number	10

Physical data

Pin spacing	7.5 mm / 0.295 inches
Width	74 mm / 2.913 inches
Height	20.5 mm / 0.807 inches
Height from the surface	16.5 mm / 0.65 inches
Depth	13 mm / 0.512 inches
Solder pin length	4 mm
Solder pin dimensions	0.5 x 0.75 mm
Drilled hole diameter	1.2 $^{(+0.1)}$ 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	Chrome-nickel spring steel (CrNi)
Contact material	Electrolytic copper (E_{Cu})
Contact Plating	Tin
Fire load	0.259 MJ
Weight	12.3 g

Environmental requirements

Limit temperature range	-60 … +105 °C

Commercial data

Product Group	4 (Printed Circuit Connectors)
PU (SPU)	60 (15) pcs
Packaging type	Box
Country of origin	PL
GTIN	4044918304238
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
CCA DEKRA Certification B.V.	EN 60947	NTR NL-8036

General approvals

CCA DEKRA Certification B.V.	EN 60998	NTR NL-7705/1
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 60947	2160584.18
KEMA/KEUR DEKRA Certification B.V.	EN 60998	71-124629

Continued on next page

General approvals

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	-	24-0095975-PDA
DNV DNV GL SE	-	TAE000016Z
PRS Polski Rejestr Statków	-	TE/1095/880590/23

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 250-610

Documentation

Safety Data Sheet

Handling and Safety Instructions of PCB Terminal Blocks with Push-In Cage Clamp	pdf 393.90 KB	

Additional Information

Technical Section	03.04.2019	pdf 2027.26 KB	

CAD/CAE-Data

CAD data

2D/3D Models 250-610

CAE data

EPLAN Data Portal 250-610

ZUKEN Portal 250-610

Continued on next page

PCB Design
Symbol and Footprint via SamacSys 250-610
Symbol and Footprint via Ultra Librarian 250-610

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 mm² / 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 mm² / 20 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92

Item No.: 216-242
Ferrule; Sleeve for 0.75 mm² / 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 mm² / 18 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92

Item No.: 216-243
Ferrule; Sleeve for 1 mm² / 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 mm² / AWG 18; uninsulated; 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.: 210-332/750-020
Marking strips; as a DIN A4 sheet; MARKED; 1-20 (80x); 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.: 210-136
Test plug; 2 mm Ø; with 500 mm cable; red

Continued on next page

1.1.4 Tool

1.1.4.1 Operating tool



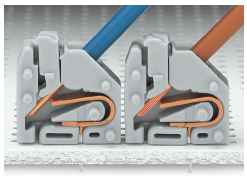
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft



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

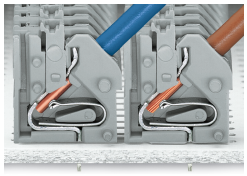
Installation Notes

Conductor termination



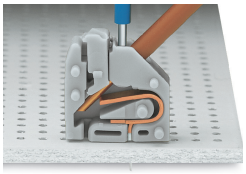
Inserting solid conductors via push-in termination.
Inserting fine-stranded conductors via push-buttons, 250 Series – 3.5 mm pin spacing.

Conductor termination

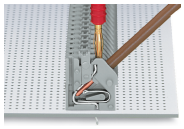


Space-saving wiring, 250 Series – 5 mm pin spacing.

Testing

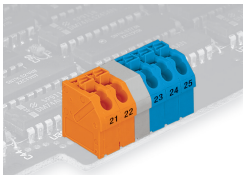


Testing with 11 mm Ø test pin, on the conductor, 250 Series – 2.5 … 3.5 mm pin spacing.

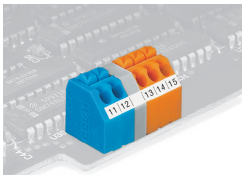


Testing with 2 mm Ø test plug, touch contact, 250 Series – 5 mm pin spacing.

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.