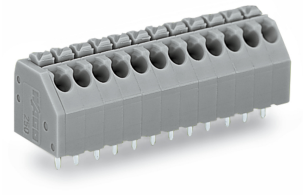
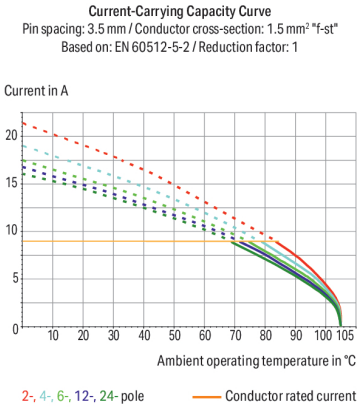
Data Sheet | Item Number: 250-102

PCB terminal block; push-button; 1.5 mm²; Pin spacing 3.5 mm; 2-pole; Push-in CAGE CLAMP®; 1,50 mm²; gray

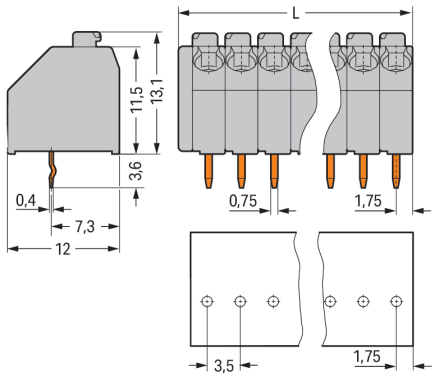
https://www.wago.com/250-102





Color: gray

Similar to illustration



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

PCB terminal block, 250 Series, solder pin dimensions 0.4 x 0.75 mm

Connect conductors quickly and safely with this PCB terminal block (item number 250-102). 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. Ensure that the strip lengths are 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 connector is highly versatile. 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. Dimensions: (8.5 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 mm² to 1.5 mm².

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. Insert the conductor 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	160 V	160 V	320 V
Rated impulse withstand voltage	2.5 kV	2.5 kV	2.5 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	5 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	2
Total number of potentials	2
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 mm² / 24 … 16 AWG
Fine-stranded conductor	0.2 … 1.5 mm² / 24 … 16 AWG
Fine-stranded conductor; with insulated ferrule	0.25 … 1 mm²
Fine-stranded conductor; with uninsulated ferrule	0.25 … 1 mm²
Strip length	8.5 … 9.5 mm / 0.33 … 0.37 inches
Conductor connection direction to PCB	45 °
Pole number	2

Physical data

Pin spacing	3.5 mm / 0.138 inches
Width	8.5 mm / 0.335 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 $^{(+0.1)}$ 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	0.026 MJ
Weight	1.1 g

Environmental requirements

Limit temperature range	-60 … +105 °C

Commercial data

Product Group	4 (Printed Circuit Connectors)
PU (SPU)	560 (140) pcs
Packaging type	Box
Country of origin	CH
GTIN	4044918647076
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 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 60947	2160584.18
KEMA/KEUR DEKRA Certification B.V.	EN 60998	71-124629
UL UL International Germany GmbH	UL 1059	E45172

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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 250-102

Documentation

Additional Information

Technical Section	03.04.2019	pdf 2027.26 KB

CAD/CAE-Data

CAD data

2D/3D Models 250-102

CAE data

EPLAN Data Portal 250-102

ZUKEN Portal 250-102

PCB Design

Symbol and Footprint via SamacSys 250-102

Symbol and Footprint via Ultra Librarian 250-102

Continued on next page

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.: 216-262
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.: 216-263
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.: 210-332/350-202
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 uninsulated; Test lead for soldering up to 0,5mm²

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

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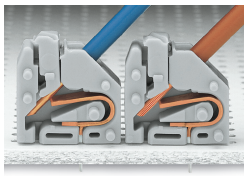
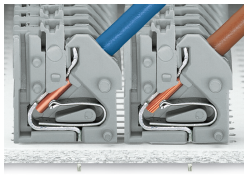
Installation Notes

Conductor termination



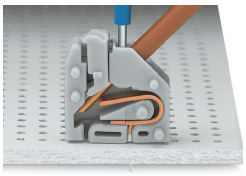
Inserting solid conductors via push-in termination.
Inserting fine-stranded conductors via push-buttons, 250 Series – 3.5 mm pin spacing.

Conductor termination

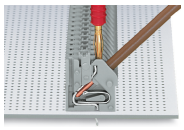


Space-saving wiring, 250 Series – 5 mm pin spacing.

Testing

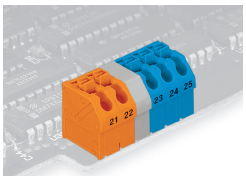


Testing with 11 mm Ø test pin, on the conductor, 250 Series – 2.5 … 3.5 mm pin spacing.

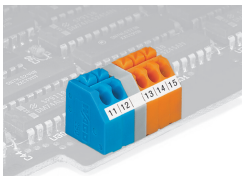


Testing with 2 mm Ø test plug, touch contact, 250 Series – 5 mm pin spacing.

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.