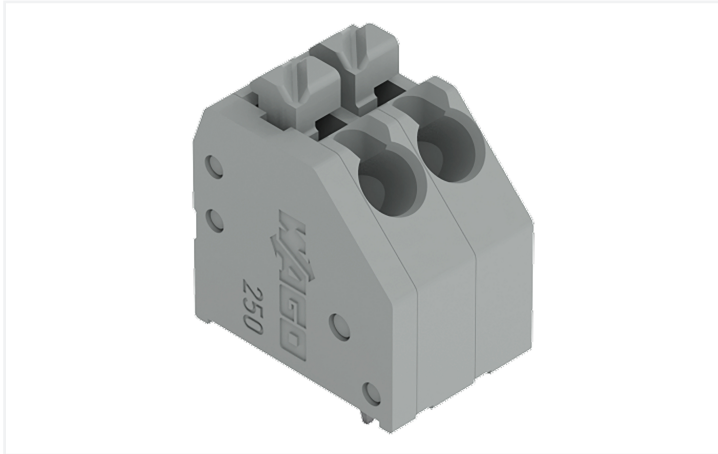


Data Sheet | Item Number: 250-102

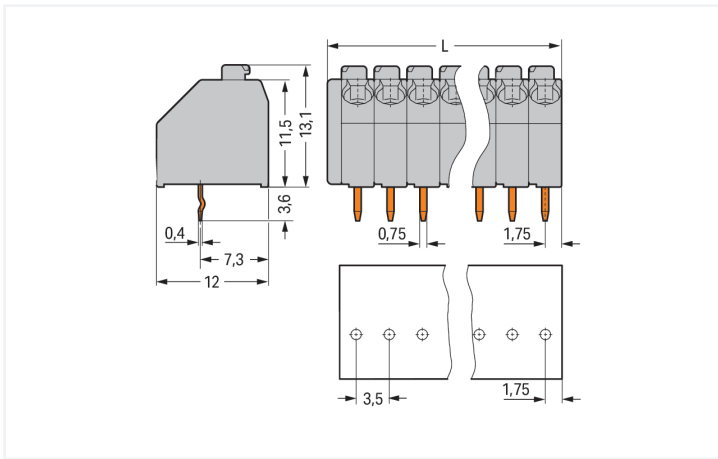
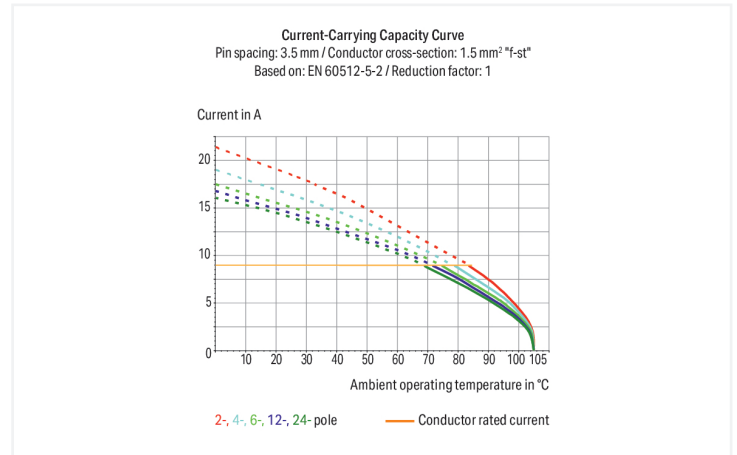
PCB terminal block; push-button; 1.5 mm²; Pin spacing 3.5 mm; 2-pole; Push-in CAGE

CLAMP®; 1,50 mm²; gray

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



Color: ■ gray



Dimensions in mm

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

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

Connect conductors quickly and safely with this PCB terminal block (item number 250-102). You can rely on tried and tested safety with these PCB terminal blocks, perfect for a host of applications when designing your devices. Conductors should only be connected to this PCB terminal block if their strip length is between 8.5 and 9.5 mm. This product incorporates 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: both solid and fine-stranded conductors with ferrules can be directly inserted without the need for tools or any preparation, such as crimping the ferrule. The item's dimensions are (8.5 x 16.7 x 12) mm (width x height x depth). Depending on the type of conductor, this PCB terminal block is ideal for conductor cross sections ranging from 0.2 mm² to 1.5 mm².

The universal connection for all conductor types – Push-in CAGE CLAMP®

The contact surface is coated with tin. This PCB terminal block is operated with a push-button. THT is used to assemble the PCB terminal block. Insert the conductor into the board at an angle of 45°..

- Compact sizes
- Permanently secure connections
- Reliable soldering thanks to THT
- Pin spacing: 3.5 mm
- Number of poles: 2

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 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	Connection 1
Total number of potentials	2	
Number of connection types	1	
Number of levels	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 fer- rule		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
Drilled hole diameter	1.1 (+0.1) mm

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	0.023 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-8036
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



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

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 250-102 

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 

1 Compatible Products

1.1 Optional Accessories

1.1.1 Marking

1.1.1.1 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

1.1.2 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



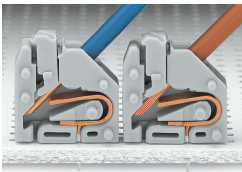
Item No.: 210-720
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured



Item No.: 210-657
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short; multicoloured

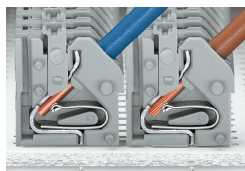
Installation Notes

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

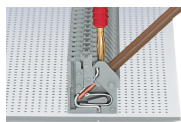


Space-saving wiring, 250 Series – 5 mm pin spacing.

Testing

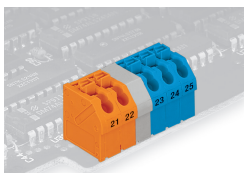


Testing with 11 mm Ø test pin, on the conductor, 250 Series – 2.5 ... 3.5 mm pin spacing.

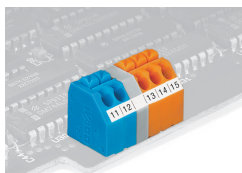


Testing with 2 mm Ø test plug, touch contact, 250 Series – 5 mm pin spacing.

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.