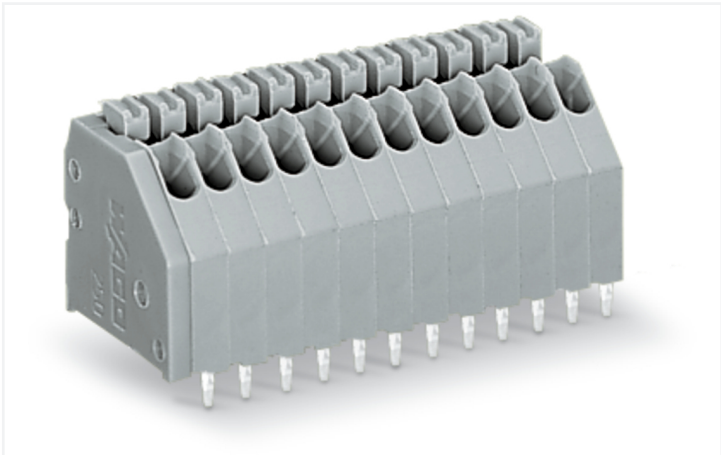
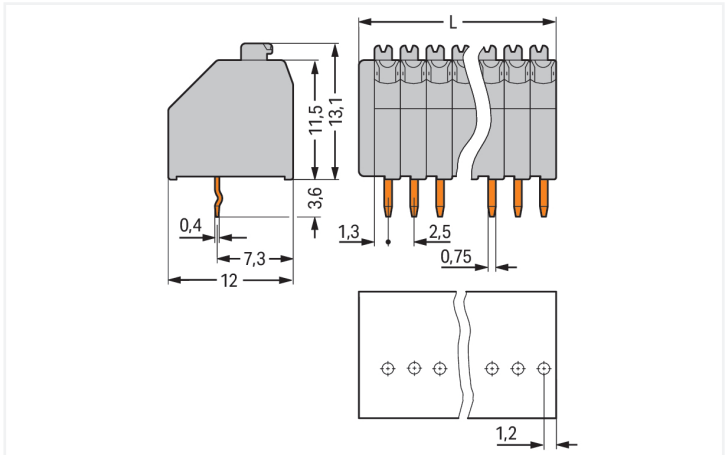


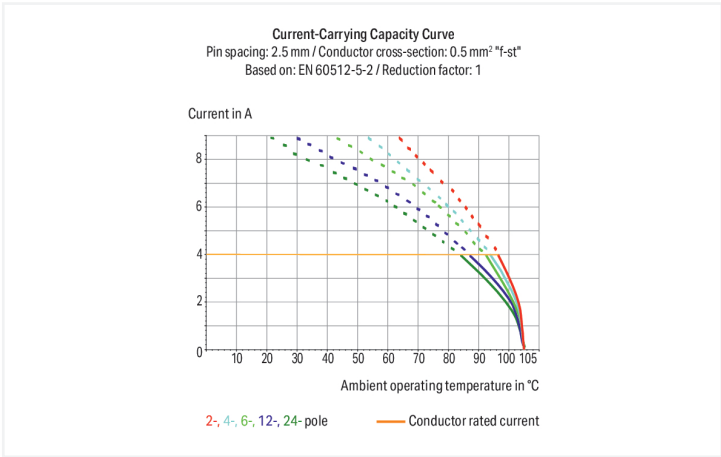
Data Sheet | Item Number: 250-321
PCB terminal block; push-button; 0.5 mm²; Pin spacing 2.5 mm; 21-pole; Push-in
CAGE CLAMP®; gray
<https://www.wago.com/250-321>



Color: ■ gray Similar to illustration



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



PCB terminal block, 250 Series, gray

This PCB terminal block (item number 250-321) streamlines wire connections, making them both quick and easy. You can count on tried and tested safety with these PCB terminal blocks, perfect for a wide range of applications when designing your devices. This PCB terminal block has a rated voltage of 160 V and can handle currents up to 4 A. Ensure that the strip lengths are between 8.5 mm and 9.5 mm when connecting conductors to this PCB terminal block. This product features one conductor terminal and utilizes Push-in CAGE CLAMP®. Push-in CAGE CLAMP® technology provides a universal connection solution for all conductor types. It allows both solid and fine-stranded conductors with ferrules to be inserted directly into the clamping point without the need for tools. The dimensions are 54 x 16.7 x 12 mm (width x height x depth). Depending on the conductor type, this PCB terminal block is suitable for conductor cross sections ranging from 0.14 mm² to 0.5 mm². It has one level. Twenty-one potentials can connect twenty-one poles using the twenty-one clamping points. The gray housing is made of polyamide (PA66) for insulation and the clamping spring is made of a Copper alloy. 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. Insert the conductor at a 45° angle. The solder pins, which are 0.4 x 0.75 mm in cross-section and 3.6 mm long, are arranged over the entire terminal strip (in-line). There are one solder pin per potential.

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 surge voltage	2.5 kV	2.5 kV	2.5 kV	
Rated current	4 A	4 A	4 A	
Approvals per		CSA		
Use group	B	C	D	
Rated voltage	300 V	-	300 V	
Rated current	2 A	-	2 A	

Approvals per				UL 1059	
Use group	B		C	D	
Rated voltage	300 V		-	300 V	
Rated current	5 A		-	5 A	

Connection data					
Clamping units	21	Connection 1			
Total number of potentials	21	Connection technology	Push-in CAGE CLAMP®		
Number of connection types	1	Actuation type	Push-button		
Number of levels	1	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	21		
Physical data					
Pin spacing			2.5 mm / 0.098 inches		
Width			54 mm / 2.126 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 (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			0.174 MJ		
Weight			7.3 g		



Environmental requirements	
Limit temperature range	-60 ... +105 °C

Commercial data	
Product Group	4 (Printed Circuit Connectors)
PU (SPU)	80 (20) pcs
Packaging type	Box
Country of origin	CH
GTIN	4050821573272
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 8.0	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

Downloads

Environmental Product Compliance


Compliance Search	
Environmental Product Compliance 250-321	






Documentation

Additional Information			
Technical Section	03.04.2019	pdf 2027.26 KB	

CAD/CAE-Data

CAD data
2D/3D Models 250-321 

CAE data
ZUKEN Portal 250-321 

PCB Design
Symbol and Footprint via SamacSys 250-321 
Symbol and Footprint via Ultra Librarian 250-321 

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; MAR-KED; 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; MAR-KED; 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; MAR-KED; 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; MAR-KED; 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

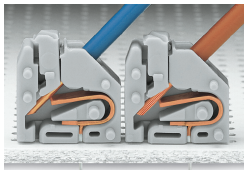


Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

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

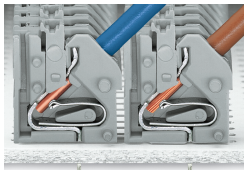
Installation Notes

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

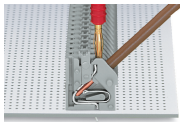


Space-saving wiring, 250 Series – 5 mm pin spacing.

Testing

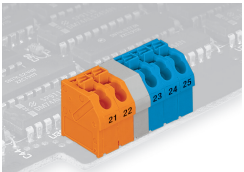


Testing with 11 mm Ø test pin, on the conductor, 250 Series – 2.5 ... 3.5 mm pin spacing.

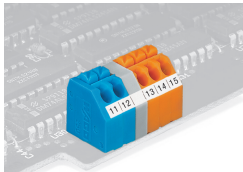


Testing with 2 mm Ø test plug, touch contact, 250 Series – 5 mm pin spacing.

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.

Subject to changes. Please also observe the further product documentation!

Current addresses can be found at: www.wago.com