





Color: 🔳 gray

Similar to illustration

Dimensions in mm

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



PCB terminal block, 250 Series, push-button

This PCB terminal block (item number 250-503) is designed for quick and easy connections. You can count on proven safety with these PCB terminal blocks, perfect for a wide variety of applications when designing your devices. Our PCB terminal block is rated for 320 V and is designed to handle a rate d current of up to 17.5 A. It can therefore be used in high-load applications. Ensure that the strip lengths are between 9 mm and 10 mm when connecting conductors to this PCB terminal block. 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, featuring a winning design: 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. Dimensions: 16.5 x 20.5 x 13 mm (width x height x depth). Depending on the type of conductor, this PCB terminal block is suitable for conductor cross sections ranging from 0.5 mm² to 1.5 mm². Up to three potentials / three poles can be connected to this terminal strip using three clamping points on one level. The gray housing is made of polyamide (PA66) for insulation, the clamping spring is made of chrome-nickel spring steel (CrNi), and the contacts are made of electrolytic copper (ECu). 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. The conductor is designed to be inserted into the board at a 45° angle.. The solder pins, which are 0.5 x 0.75 mm in cross-section and 4 mm long, are set out 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 Direct marking Other versions (or variants) can be requested from WAGO Sales or configured at https:// configurator.wago.com/.

# Data Sheet | Item Number: 250-503

https://www.wago.com/250-503



IEC/EN 60664-1		
III	III	Ш
3	2	2
320 V	320 V	630 V
4 kV	4 kV	4 kV
17.5 A	17.5 A	17.5 A
	CSA	
В	С	D
300 V	-	300 V
10 A	-	10 A
	III 3 320 V 4 kV 17.5 A B 300 V	III III   3 2   320 V 320 V   4 kV 4 kV   17.5 A 17.5 A   CSA   B C   300 V -

Approvals per		UL 1059	
Use group	В	С	D
Rated voltage	300 V	-	300 V
Rated current	10 A	-	10 A

Connection data				
Clamping units	3		Connection 1	
Total number of potentials	3		Connection technology	Push-in CAGE CLAMP®
Number of connection types	1		Actuation type	Push-button
Number of levels	1		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 uninsula- ted ferrule	0.5 1 mm²		
	Note (conductor cross-section)	Fine-stranded conductor 0.75 1.5 mm <sup>2</sup> (I max. 4 A) Fine-stranded conductor 0.5 mm <sup>2</sup> (I max. 2 A)		
		Strip length	9 10 mm / 0.35 0.39 inches	
		Conductor connection direction to PCB	45 °	
		Pole number	3	

Physical data	
Pin spacing	5 mm / 0.197 inches
Width	16.5 mm / 0.65 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 with tolerance	1.2 <sup>(+0.1)</sup> mm

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

# Data Sheet | Item Number: 250-503 https://www.wago.com/250-503

Material data



Note (material data)	
	Information on material specifications can be found here
Color	gray
Material group	1
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	VO
Clamping spring material	Chrome-nickel spring steel (CrNi)
Contact material	Electrolytic copper (E <sub>cu</sub> )
Contact Plating	Tin
Fire load	0.068 MJ
Weight	3.1 g

Environmenta	l requirements
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Limit temperature range

-60 ... +105 °C

Commercial data	
Product Group	4 (Printed Circuit Connectors)
PU (SPU)	280 (70) pcs
Packaging type	Box
Country of origin	PL
GTIN	4044918634526
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

CCA CCA	DEKRA	KEUR KEUR
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
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	71-124227
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General approvals		
KEMA/KEUR DEKRA Certification B.V.	EN 60998	71-124629
UL UL International Germany GmbH	UL 1059	E45172

Approvals / Certificates

General approvals

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https://www.wago.com/250-503

# Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
UK-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-

# Approvals for marine applications



Approval	Standard	Certificate Name
ABS American Bureau of Ship- ping	-	19-HG1869876-PDA
DNV DNV GL SE	-	TAE000016Z

Downloads	
Environmental Product Compliance	
Compliance Search	
Environmental Product Compliance 250-503	$\underline{\checkmark}$

I	Documentation			
	Additional Information			
	Technical Section	03.04.2019	pdf 2027.26 KB	$\downarrow$

CAD/CAE-Data	
CAD data	CAE data
2D/3D Models 250-503	EPLAN Data Portal 250-503

ZUKEN Portal 250-503

PCB Design	
Symbol and Footprint via SamacSys 250-503	$\underline{\downarrow}$
Symbol and Footprint via Ultra Librarian 250-503	$\downarrow$

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#### **1** Compatible Products

### 1.1 Optional Accessories

#### 1.1.1 Ferrule

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#### Item No.: 216-241

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white

#### Item No.: 216-142

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92

#### Item No.: 216-141

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 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 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red

#### Item No.: 216-242

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray

#### Item No.: 216-263

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red

#### Item No.: 216-262

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray

# Item No.: 216-143

Ferrule; Sleeve for 1 mm<sup>2</sup> / 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.: 210-332/500-202

Marking strips; as a DIN A4 sheet; MAR-KED; 1-16 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white

## Item No.: 210-332/500-205

Marking strips; as a DIN A4 sheet; MAR-KED; 1-32 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white

#### Item No.: 210-332/500-204

Marking strips; as a DIN A4 sheet; MAR-KED; 17-32 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white

#### Item No.: 210-332/500-206

Marking strips; as a DIN A4 sheet; MAR-KED; 33-48 (160x); 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

#### 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



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https://www.wago.com/250-503

#### 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:: <u>www.wago.com</u>

