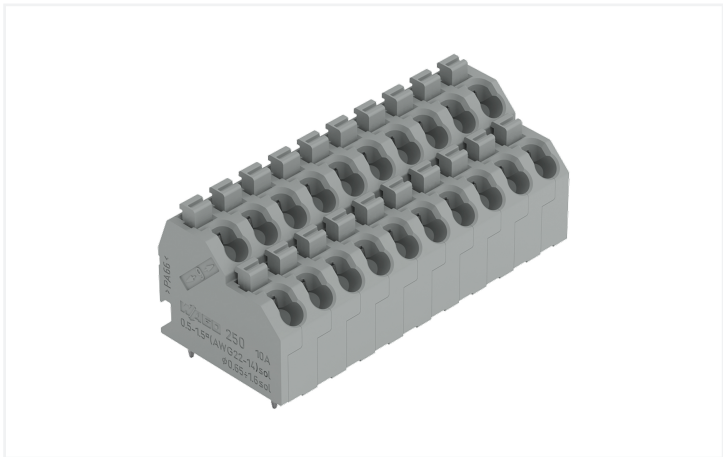


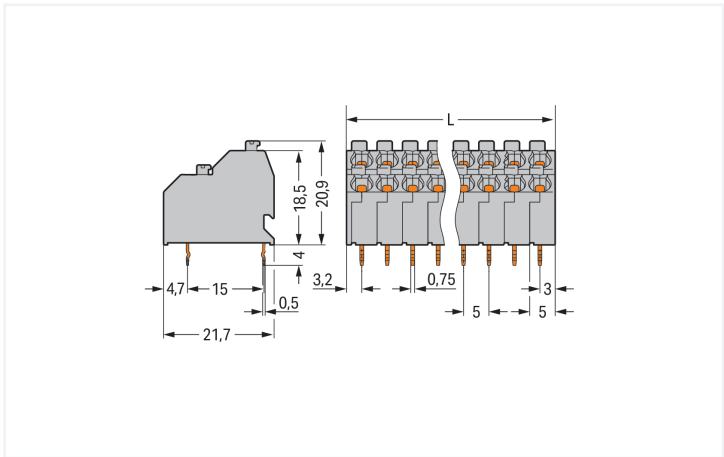
Data Sheet | Item Number: 250-710

Double-deck PCB terminal block; push-button; 1.5 mm²; Pin spacing 5 mm; 20-pole;
Push-in CAGE CLAMP®; agate gray

<https://www.wago.com/250-710>



Color: ■ agate gray



Dimensions in mm
 $L = ((\text{Polzahl} / 2) \times \text{Rastermaß}) + 1,2 \text{ mm}$

PCB terminal block, 250 Series, agate gray

Easily, quickly and safely connect conductors with this PCB terminal block (item number 250-710). You can count on tried and tested safety with these PCB terminal blocks, perfect for a wide range of applications when designing your devices. Conductors should 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. 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. The item's dimensions are (51.2 x 24.9 x 21.7) 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. 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 into the board at an angle of 45°..

Notes

General safety information

NOTICE: Observe installation and safety instructions!

Variants:

To be sold only with installation instructions!

Other pole numbers
Other colors
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			Approvals per		UL 1059
Overvoltage category		III	III	II	Use group	B	C D
Pollution degree		3	2	2	Rated voltage	300 V	- 300 V
Nominal voltage		320 V	320 V	630 V	Rated current	10 A	- 10 A
Rated impulse withstand voltage		4 kV	4 kV	4 kV			
Rated current		10 A	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	20	Connection 1	
Total number of potentials	20	Connection technology	Push-in CAGE CLAMP®
Number of connection types	1	Actuation type	Push-button
Number of levels	2	Solid conductor	0.5 ... 1.5 mm² / 20 ... 16 AWG
		Fine-stranded conductor	0.75 ... 1.5 mm²
		Fine-stranded conductor; with insulated fer- rule	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	20

Physical data		
Pin spacing		5 mm / 0.197 inches
Width		51.2 mm / 2.016 inches
Height		24.9 mm / 0.98 inches
Height from the surface		20.9 mm / 0.823 inches
Depth		21.7 mm / 0.854 inches
Solder pin length		4 mm
Solder pin dimensions		0.5 x 0.75 mm
Drilled hole diameter		1.2 (+0.1 ... +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		agate 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		0.366 MJ
Weight		19.2 g



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

Commercial data	
Product Group	4 (Printed Circuit Connectors)
PU (SPU)	48 (12) pcs
Packaging type	Box
Country of origin	CH
GTIN	4044918300988
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			Declarations of conformity and manufacturer's declarations		
			Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60947	NTR NL 7833/2	EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
CCA DEKRA Certification B.V.	EN 60998	NTR NL-7705/1	UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-
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			



Approvals for marine applications



Approval	Standard	Certificate Name
ABS American Bureau of Ship- ping	-	24-0095975-PDA
DNV DNV GL SE	-	TAE000016Z

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 250-710



Documentation

Safety Data Sheet
Handling and Safety In- structions of PCB Termi- nal 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 250-710



CAE data
EPLAN Data Portal 250-710
ZUKEN Portal 250-710



PCB Design
Symbol and Footprint via SamacSys 250-710
Symbol and Footprint via Ultra Librarian 250-710





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.: 210-332/500-202
Marking strips; as a DIN A4 sheet; MARKED; 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; MARKED; 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; MARKED; 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; MARKED; 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

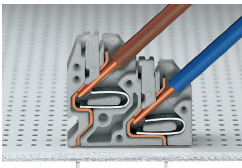


Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

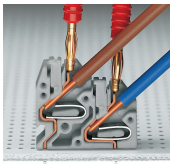


Item No.: 210-647
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; multicoloured

Installation Notes

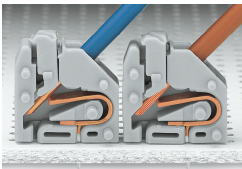


Space-saving wiring – push-in termination of solid conductors.



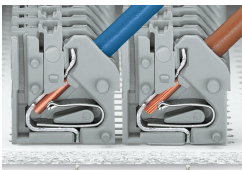
Testing with 2 mm Ø test plug – touch contact.

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

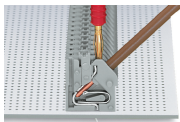


Space-saving wiring, 250 Series – 5 mm pin spacing.

Testing

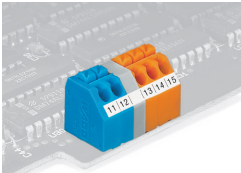
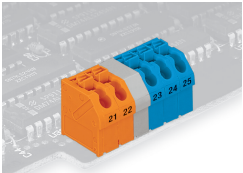


Testing with 11 mm Ø test pin, on the conductor, 250 Series – 2.5 ... 3.5 mm pin spacing.



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.