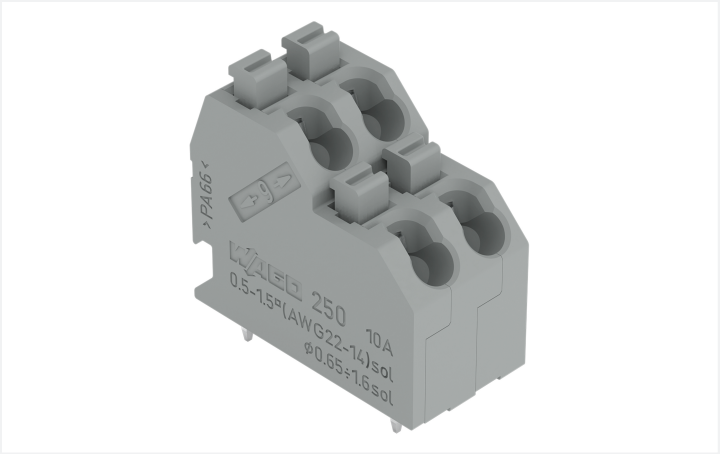
Data Sheet | Item Number: 250-710

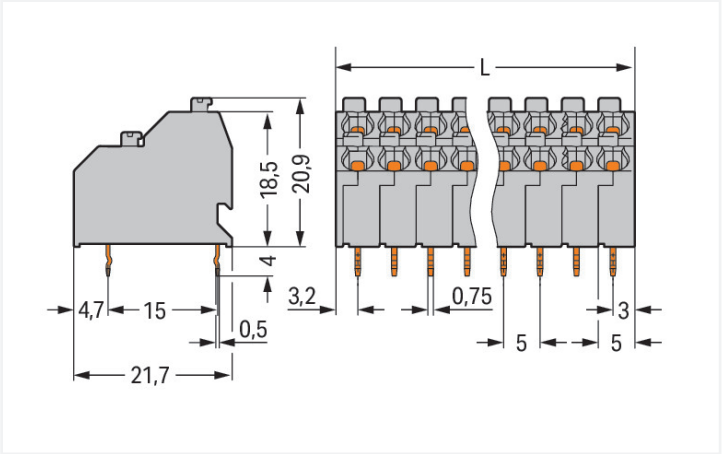
Double-deck PCB terminal block; push-button; 1.5 mm²; Pin spacing 5 mm; 20-pole; Push-in CAGE CLAMP®; agate gray

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



Color: agate gray

Similar to illustration



Dimensions in mm
L = ((Polzahl / 2) x Rastermaß) + 1,2 mm

PCB terminal block, 250 Series, Push-in CAGE CLAMP®

This PCB terminal block (item number 250-710) is designed for quick and simple connections. It offers the flexibility needed for different mounting types. This PCB terminal block has a rated voltage of 320 V and can handle currents up to 10 A. 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. The 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. It features two levels and twenty clamping points for connecting twenty potentials / 20 poles. The clamping spring is made of chrome-nickel spring steel (CrNi), the agate gray housing is made of polyamide (PA66) for insulation, and the contacts are made of electrolytic copper (ECu). 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. The conductor is designed to be inserted at an angle of 45°.. The solder pins measure 0.5 x 0.75 mm in cross-section and 4 mm in length and are laid out over the entire terminal strip (in-line). There are one solder pin per potential.

Notes

Variants:	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		
Overvoltage category	III	III	II
Pollution degree	3	2	2
Nominal voltage	320 V	320 V	630 V
Rated impulse withstand voltage	4 kV	4 kV	4 kV
Rated current	10 A	10 A	10 A

Approvals per	UL 1059		
Use group	B	C	D
Rated voltage	300 V	-	300 V
Rated current	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
Total number of potentials	20
Number of connection types	1
Number of levels	2

Connection 1

Connection technology	Push-in CAGE CLAMP®
Actuation type	Push-button
Solid conductor	0.5 … 1.5 mm² / 20 … 16 AWG
Fine-stranded conductor	0.75 … 1.5 mm²
Fine-stranded conductor; with insulated ferrule	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 with tolerance	1.2 $^{(-0.1 \ldots +0.1)}$ 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	0.755 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

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	-	-

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 250-710

Documentation

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.: 216-262
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.: 210-332/500-202
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

Continued on next page

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

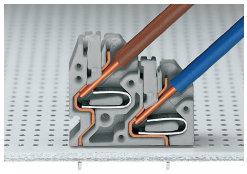
1.1.4 Tool

1.1.4.1 Operating tool

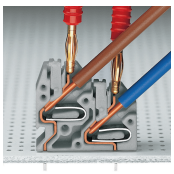
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

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

Installation Notes

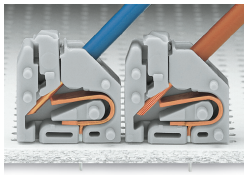


Space-saving wiring – push-in termination of solid conductors.



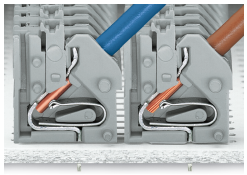
Testing with 2 mm Ø test plug – touch contact.

Conductor termination



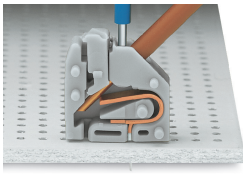
Inserting solid conductors via push-in termination.
Inserting fine-stranded conductors via push-buttons, 250 Series – 3.5 mm pin spacing.

Conductor termination

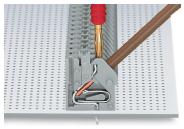


Space-saving wiring, 250 Series – 5 mm pin spacing.

Testing

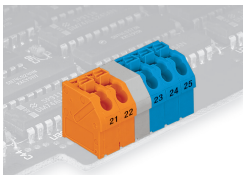


Testing with 11 mm Ø test pin, on the conductor, 250 Series – 2.5 … 3.5 mm pin spacing.

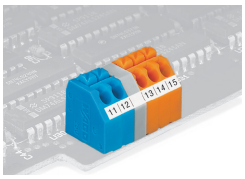


Testing with 2 mm Ø test plug, touch contact, 250 Series – 5 mm pin spacing.

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.