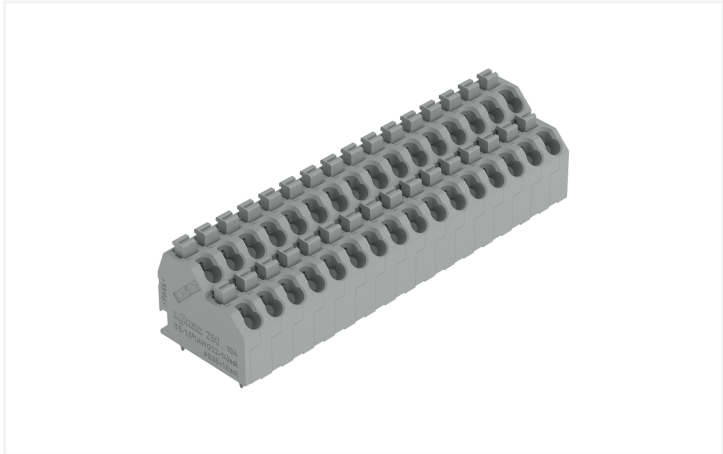


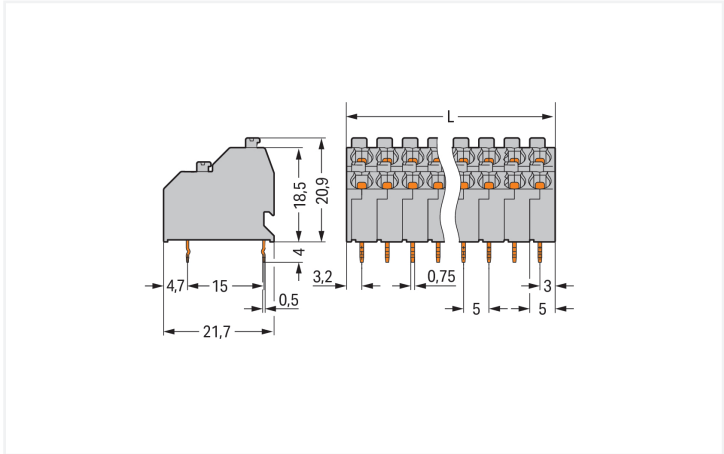
Data Sheet | Item Number: 250-716

Double-deck PCB terminal block; push-button; 1.5 mm²; Pin spacing 5 mm; 32-pole;
Push-in CAGE CLAMP®; agate gray

<https://www.wago.com/250-716>



Color: ■ agate gray



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

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

Quick and easy connections are guaranteed with this PCB terminal block (item number 250-716). You can rely on trusted safety with these PCB terminal blocks, perfect for a host of applications when designing your devices. Conductors can 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 product delivers reliable performance. Push-in CAGE CLAMP® technology provides a universal connection solution for any type of conductor. It allows both solid and fine-stranded conductors with ferrules to be inserted directly into the clamping point without the need for tools. Dimensions: (81.2 x 24.9 x 21.7) mm (width x height x depth). Depending on the type of conductor, this PCB terminal block is ideal for conductor cross sections ranging from 0.5 mm² to 1.5 mm².

The contact surface is coated with tin. A push-button is used to operate this PCB terminal block. THT is used to assemble the PCB terminal block. The conductor is designed to be inserted 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		
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	32	Connection 1	
Total number of potentials	32	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 ferule	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	32

Physical data		
Pin spacing		5 mm / 0.197 inches
Width		81.2 mm / 3.197 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		0.582 MJ
Weight		30.5 g



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

Commercial data	
Product Group	4 (Printed Circuit Connectors)
PU (SPU)	36 (9) pcs
Packaging type	Box
Country of origin	PL
GTIN	4044918301046
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 250-716



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 250-716



CAE data
EPLAN Data Portal 250-716
ZUKEN Portal 250-716



PCB Design
Symbol and Footprint via SamacSys 250-716
Symbol and Footprint via Ultra Librarian 250-716





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

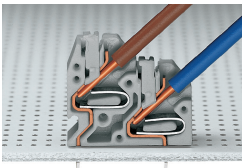


Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

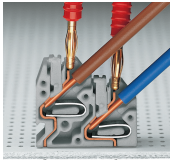


Item No.: 210-647
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; multicoloured

Installation Notes

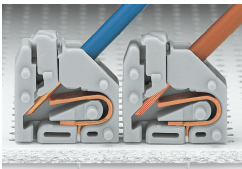


Space-saving wiring – push-in termination of solid conductors.



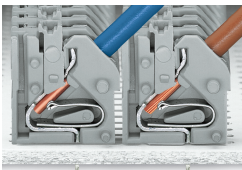
Testing with 2 mm Ø test plug – touch contact.

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

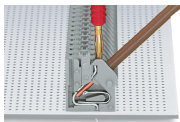


Space-saving wiring, 250 Series – 5 mm pin spacing.

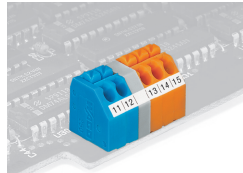
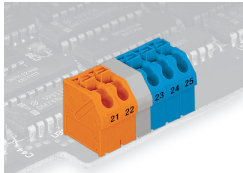
Testing



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.