

Data Sheet | Item Number: 255-509/333-000

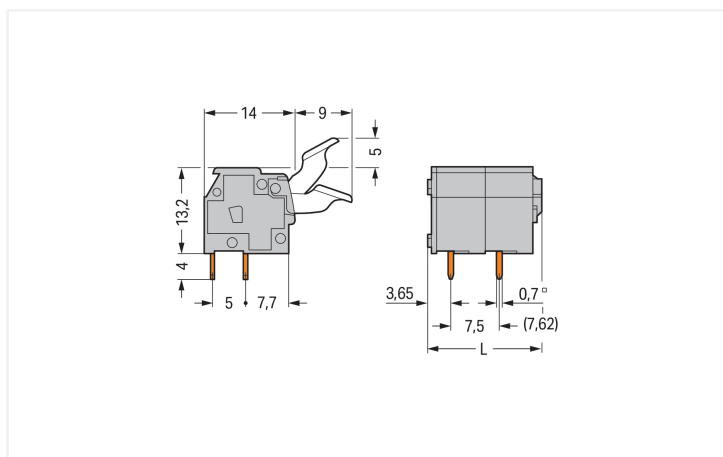
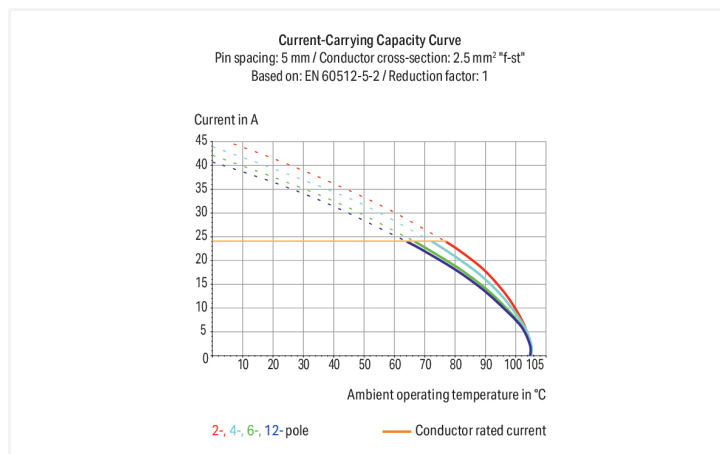
PCB terminal block; finger-operated levers; 2.5 mm²; Pin spacing 7.5/7.62 mm; 9-pole; CAGE CLAMP®; commoning option; gray

<https://www.wago.com/255-509/333-000>



Color: ■ gray

Similar to illustration



Dimensions in mm

L = (pole no. x pin spacing) + 2.9 mm

PCB terminal block, 255 Series, CAGE CLAMP®

This PCB terminal block (item number 255-509/333-000) streamlines wire connections, making them both quick and easy. It is perfect for custom installations with different mounting types. Strip lengths must be between 5 and 6 mm when connecting conductors to this PCB terminal block. This product features one conductor terminal and utilizes CAGE CLAMP®. Our CAGE CLAMP® connection offers a safe and maintenance-free way to connect all types of conductors. You do not need to prepare the conductor in any way, such as crimping ferrules. The item's dimensions are (70.4 x 22.2 x 23) mm (width x height x depth). This PCB terminal block is suitable for conductor cross sections ranging from 0.08 mm² to 2.5 mm².

The contact surface is coated with tin. Finger-operated lever is used to operate this PCB terminal block. The PCB terminal block is designed for THT soldering. Insert the conductor at a 90° angle..



Notes	
Variants:	Other pole numbers Versions for Ex e II and Ex i 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/ .

Electrical data			
Ratings per		IEC/EN 60664-1	
Overvoltage category	III	III	II
Pollution degree	3	2	2
Nominal voltage	500 V	630 V	1000 V
Rated impulse withstand voltage	6 kV	6 kV	6 kV
Rated current	24 A	24 A	24 A
Approvals per		UL 1059	
Use group	B	C	D
Rated voltage	300 V	-	300 V
Rated current	15 A	-	10 A
Approvals per		CSA	
Use group	B	C	D
Rated voltage	300 V	-	300 V
Rated current	15 A	-	10 A

Connection Data	
Clamping units	9
Total number of potentials	9
Number of connection types	1
Number of levels	1
Connection 1	
Connection technology	CAGE CLAMP®
Actuation type	Finger-operated lever
Solid conductor	0.08 ... 2.5 mm² / 25 ... 12 AWG
Fine-stranded conductor	0.08 ... 2.5 mm² / 28 ... 12 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 1.5 mm²
Fine-stranded conductor; with uninsulated ferrule	0.25 ... 1.5 mm²
Note (conductor cross-section)	12 AWG: THHN, THWN
Strip length	5 ... 6 mm / 0.2 ... 0.24 inches
Conductor connection direction to PCB	90 °
Pole number	9

Physical data	
Pin spacing	7.5/7.62 mm / 0.295/0.3 inches
Width	70.4 mm / 2.772 inches
Height	22.2 mm / 0.874 inches
Height from the surface	18.2 mm / 0.559 inches
Depth	23 mm / 0.906 inches
Solder pin length	4 mm
Solder pin dimensions	0.7 x 0.7 mm
!	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		2

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		Chrome-nickel spring steel (CrNi)
Contact material		Electrolytic copper (E _{cu})
Contact Plating		Tin
Fire load		0.339 MJ
Weight		13.3 g

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

Commercial data		
PU (SPU)		60 (15) pcs
Packaging type		Box
Country of origin		CH
GTIN		4055143494564
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



Downloads				
Environmental Product Compliance				
Compliance Search				
Environmental Product Compliance 255-509/333-000				
Documentation				
Additional Information				
Technical Section	03.04.2019	pdf 2027.26 KB		
Gebrückte Klemmen- leisten für Leiterplatten		pdf 303.71 KB		
CAD/CAE-Data				
CAD data		CAE data		
2D/3D Models 255-509/333-000		ZUKEN Portal 255-509/333-000		
PCB Design				
Symbol and Footprint via SamacSys 255-509/333-000				
Symbol and Footprint via Ultra Librarian 255-509/333-000				
1 Compatible Products				
1.1 Optional Accessories				
1.1.1 Ferrule				
1.1.1.1 Ferrule				
Item No.: 216-301 Ferrule; Sleeve for 0.25 mm² / AWG 24; in- sulated; electro-tin plated; yellow	Item No.: 216-321 Ferrule; Sleeve for 0.25 mm² / AWG 24; in- sulated; electro-tin plated; yellow	Item No.: 216-151 Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated	Item No.: 216-131 Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated; silver-co- lored	
Item No.: 216-302 Ferrule; Sleeve for 0.34 mm² / 22 AWG; in- sulated; electro-tin plated; light turquoise	Item No.: 216-322 Ferrule; Sleeve for 0.34 mm² / 22 AWG; in- sulated; electro-tin plated; light turquoise	Item No.: 216-132 Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated	Item No.: 216-152 Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated	
Item No.: 216-201 Ferrule; Sleeve for 0.5 mm² / 20 AWG; in- sulated; electro-tin plated; electrolytic copper; acc. to DIN 46228, Part 4/09.90; white	Item No.: 216-241 Ferrule; Sleeve for 0.5 mm² / 20 AWG; in- sulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white	Item No.: 216-221 Ferrule; Sleeve for 0.5 mm² / 20 AWG; in- sulated; electro-tin plated; white	Item No.: 216-141 Ferrule; Sleeve for 0.5 mm² / 20 AWG; un- insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	



1.1.1.1 Ferrule

 Item No.: 216-101 Ferrule; Sleeve for 0.5 mm² / AWG 22; un-insulated; electro-tin plated; silver-colored	 Item No.: 216-121 Ferrule; Sleeve for 0.5 mm² / AWG 22; un-insulated; electro-tin plated; silver-colored	 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.: 216-202 Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray	 Item No.: 216-222 Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray	 Item No.: 216-142 Ferrule; Sleeve for 0.75 mm² / 18 AWG; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	 Item No.: 216-102 Ferrule; Sleeve for 0.75 mm² / AWG 20; un-insulated; electro-tin plated; silver-colored
 Item No.: 216-122 Ferrule; Sleeve for 0.75 mm² / AWG 20; un-insulated; electro-tin plated; silver-colored	 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.: 216-203 Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red
 Item No.: 216-223 Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red	 Item No.: 216-103 Ferrule; Sleeve for 1 mm² / AWG 18; un-insulated; electro-tin plated	 Item No.: 216-143 Ferrule; Sleeve for 1 mm² / AWG 18; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	 Item No.: 216-123 Ferrule; Sleeve for 1 mm² / AWG 18; un-insulated; electro-tin plated; silver-colored
 Item No.: 216-204 Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black	 Item No.: 216-224 Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black	 Item No.: 216-244 Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black	 Item No.: 216-264 Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black
 Item No.: 216-284 Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black	 Item No.: 216-124 Ferrule; Sleeve for 1.5 mm² / AWG 16; un-insulated; electro-tin plated	 Item No.: 216-144 Ferrule; Sleeve for 1.5 mm² / AWG 16; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92; silver-colored	 Item No.: 216-104 Ferrule; Sleeve for 1.5 mm² / AWG 16; un-insulated; electro-tin plated; silver-colored

1.1.2 Marking

1.1.2.1 Marking strip

 Item No.: 210-833 Marking strips; 25 m on roll; 6 mm wide; plain; Self-adhesive; white	 Item No.: 210-332/750-020 Marking strips; as a DIN A4 sheet; MARKED; 1-20 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white	 Item No.: 210-332/762-020 Marking strips; as a DIN A4 sheet; MARKED; 1-20 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white
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1.1.3 Test and measurement

1.1.3.1 Testing accessories



Item No.: 249-112

Test plug adapter; suitable for 255, 256, 257 Series PCB terminal blocks; 1-pole; Pin spacing 7.5 mm / 0.295 in; gray

Item No.: 249-113

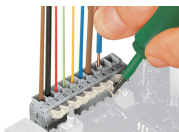
Test plug adapter; suitable for 255, 256, 257 Series PCB terminal blocks; 1-pole; Pin spacing 7.62 mm / 0.3 in; orange

Installation Notes

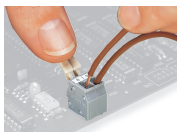
Conductor termination



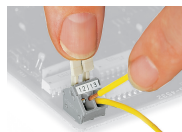
Inserting/removing a conductor – 256 Series.



Inserting/removing a conductor (255 Series)



Inserting/removing a conductor via finger-operated lever – 255 Series.



Inserting/removing a conductor via finger-operated lever – 256 Series.

Installation



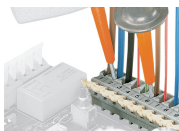
Possible conductor arrangement with terminal strips staggered (for 256 Series only).

Marking



Formation of groups using housings of different colors

Testing



Testing with test probes.



Testing with test plug modules.

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

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