

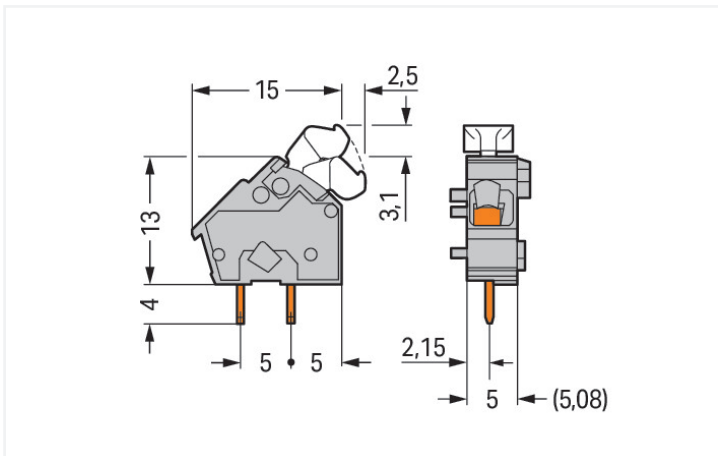
Data Sheet | Item Number: 256-461

Stackable PCB terminal block; push-button; 2.5 mm²; Pin spacing 5/5.08 mm; 1-pole; CAGE CLAMP®; commoning option; gray

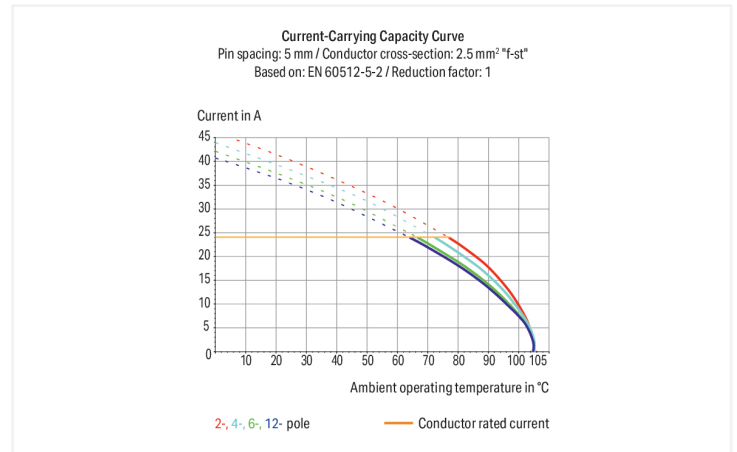
<https://www.wago.com/256-461>



Color: ■ gray



Dimensions in mm



PCB terminal block, 256 Series, 45° conductor entry to board

Connect conductors quickly and easily with this PCB terminal block (item number 256-461). It is a universal connector that can be used almost anywhere, for example, as a pluggable PCB connector, panel feedthrough header, connector for rail-mount terminal blocks, or a floating connector for different mounting methods. 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 highly-rated and maintenance-free CAGE CLAMP® connection makes it easy to connect all conductor types without having to prepare the conductor. For example, you don't need to crimp ferrules. The dimensions are (7.8 x 20.1 x 17.2) mm (width x height x depth). Depending on the type of conductor, this PCB terminal block is designed for conductor cross sections ranging from 0.08 mm² to 2.5 mm².

The contact surface is coated with tin. This PCB terminal block is operated with push-button (angled). The PCB terminal block is designed for THT soldering. Insert the conductor at a 45° angle..



Notes	
Variants:	Other colors Versions for Ex e II and Ex i Solder pin length: 5.5 mm 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		250 V	320 V	630 V
Rated impulse withstand voltage		4 kV	4 kV	4 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	1	Connection 1 <table><tr><td>Connection technology</td><td>CAGE CLAMP®</td></tr><tr><td>Actuation type</td><td>Push-button (angled)</td></tr><tr><td>Solid conductor</td><td>0.08 ... 2.5 mm² / 28 ... 12 AWG</td></tr><tr><td>Fine-stranded conductor</td><td>0.08 ... 2.5 mm² / 28 ... 12 AWG</td></tr><tr><td>Fine-stranded conductor; with insulated ferrule</td><td>0.25 ... 1.5 mm²</td></tr><tr><td>Fine-stranded conductor; with uninsulated ferrule</td><td>0.25 ... 1.5 mm²</td></tr><tr><td>Note (conductor cross-section)</td><td>12 AWG: THHN, THWN</td></tr><tr><td>Strip length</td><td>5 ... 6 mm / 0.2 ... 0.24 inches</td></tr><tr><td>Conductor connection direction to PCB</td><td>45 °</td></tr><tr><td>Pole number</td><td>1</td></tr></table>	Connection technology	CAGE CLAMP®	Actuation type	Push-button (angled)	Solid conductor	0.08 ... 2.5 mm² / 28 ... 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	45 °	Pole number	1
Connection technology	CAGE CLAMP®																					
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Solid conductor	0.08 ... 2.5 mm² / 28 ... 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	45 °																					
Pole number	1																					
Total number of potentials	1																					
Number of connection types	1																					
Number of levels	1																					

Physical data	
Pin spacing	5/5.08 mm / 0.197/0.2 inches
Width	7.8 mm / 0.307 inches
Height	20.1 mm / 0.791 inches
Height from the surface	16.1 mm / 0.634 inches
Depth	17.2 mm / 0.677 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		within the terminal block (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		0.02 MJ
Weight		1 g

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

Commercial data		
Product Group		4 (Printed Circuit Connectors)
PU (SPU)		600 (100) pcs
Packaging type		Box
Country of origin		CH
GTIN		4050821570868
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		General approvals	
  		UL	UL 1059
		Underwriters Laboratories Inc.	20190731-E45172

Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	IEC 60947-7-4	71-113042
CSA DEKRA Certification B.V.	C22.2 No. 158	70049157



Approvals for marine applications



Approval	Standard	Certificate Name
BV Bureau Veritas S.A.	IEC 60998	11915/E0 BV
DNV DNV GL SE	-	TAE000016Z
PRS Polski Rejestr Statków	-	TE/1095/880590/23

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 256-461

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
2D/3D Models 256-461

CAE data
ZUKEN Portal 256-461

PCB Design
Symbol and Footprint via SamacSys 256-461
Symbol and Footprint via Ultra Librarian 256-461



1 Compatible Products

1.1 Required Accessories

1.1.1 End plate

1.1.1.1 End plate

			
Item No.: 256-800 End plate; snap-fit type; 1 mm thick; black	Item No.: 256-400 End plate; snap-fit type; 1 mm thick; blue	Item No.: 256-200 End plate; snap-fit type; 1 mm thick; dark gray	Item No.: 256-100 End plate; snap-fit type; 1 mm thick; gray
			
Item No.: 256-300 End plate; snap-fit type; 1 mm thick; light gray	Item No.: 256-700 End plate; snap-fit type; 1 mm thick; light green	Item No.: 256-600 End plate; snap-fit type; 1 mm thick; orange	Item No.: 256-500 End plate; snap-fit type; 1 mm thick; red

1.2 Optional Accessories

1.2.1 Ferrule

1.2.1.1 Ferrule

			
Item No.: 216-301 Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow	Item No.: 216-321 Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; 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-colored
			
Item No.: 216-302 Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise	Item No.: 216-322 Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; 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; insulated; 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; insulated; 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; insulated; electro-tin plated; 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.: 216-101 Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated; silver-colored	Item No.: 216-121 Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; 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; uninsulated; 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; uninsulated; electro-tin plated; silver-colored
			
Item No.: 216-122 Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; 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



1.2.1.1 Ferrule

 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; uninsulated; electro-tin plated	 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	 Item No.: 216-123 Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; 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; uninsulated; electro-tin plated	 Item No.: 216-144 Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; 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; uninsulated; electro-tin plated; silver-colored

1.2.2 Marking

1.2.2.1 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.: 210-332/508-202 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.: 210-332/508-205 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.: 210-332/508-204 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	 Item No.: 210-332/508-206 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

1.2.3 Test and measurement

1.2.3.1 Testing accessories

 Item No.: 249-110 Test plug adapter; suitable for 255, 256, 257 Series PCB terminal blocks; 1-pole; Pin spacing 5 mm / 0.197 in; gray	 Item No.: 249-111 Test plug adapter; suitable for 255, 256, 257 Series PCB terminal blocks; 1-pole; Pin spacing 5.08 mm / 0.2 in; orange
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1.2.4 Tool

1.2.4.1 Operating tool

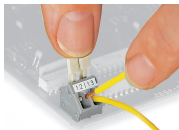
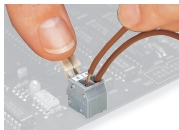
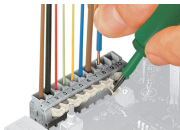


Item No.: 210-658
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; angled; short; multicoloured

Item No.: 210-720
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

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



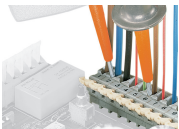
Possible conductor arrangement with terminal strips staggered (for 256 Series only).

Marking



Formation of groups using housings of different colors

Testing



Testing with test probes.

Testing with test plug modules.