

Data Sheet | Item Number: 218-509

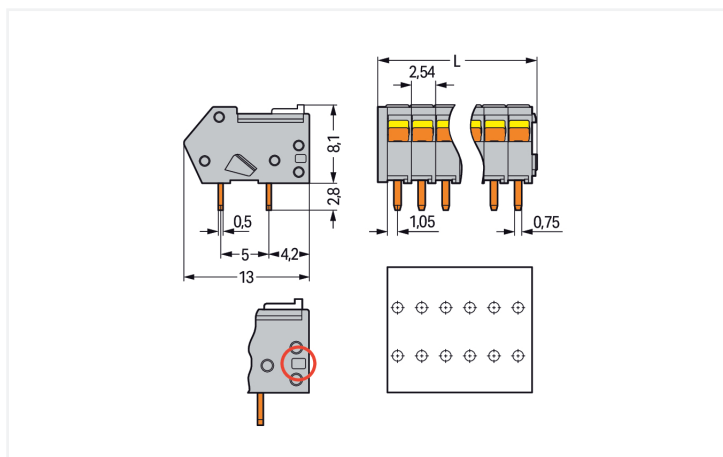
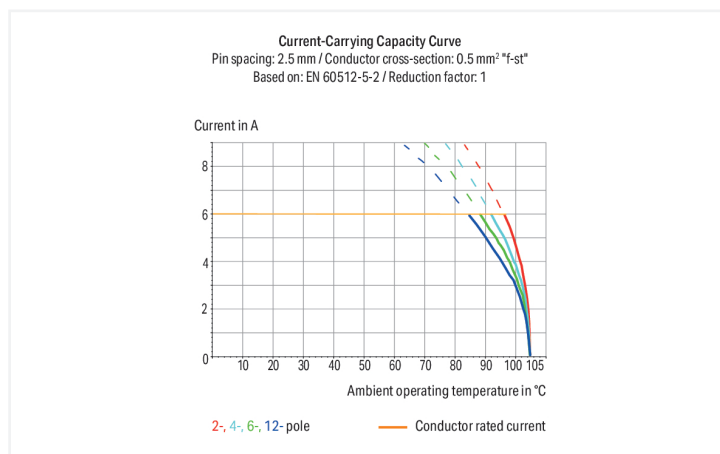
PCB terminal block; Locking slides; 0.5 mm²; Pin spacing 2.54 mm; 9-pole; CAGE CLAMP®; gray

<https://www.wago.com/218-509>



Color: ■ gray

Similar to illustration



Dimensions in mm

L = (pole no. x pin spacing) + 1.5 mm A groove at the back of the terminal strip indicates the 2.54 mm pin spacing (red circle).

PCB terminal block, 218 Series, gray

Easily, quickly and safely connect conductors with this PCB terminal block (item number 218-509). You can rely on tried and tested safety with these PCB terminal blocks, perfect for a host of applications when designing your devices. Conductors should only be connected to this PCB terminal block if their strip length is between 5 and 6 mm. This product incorporates one conductor terminal and utilizes CAGE CLAMP®. Our CAGE CLAMP® connection offers a convenient 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. Dimensions: (24.36 x 10.9 x 13) mm (width x height x depth). This PCB terminal block is suitable for conductor cross sections ranging from 0.08 mm² to 0.5 mm².

Tin is used for coating the contact surfaces. This PCB terminal block is operated with a slider. THT is used to solder the PCB terminal block. Insert the conductor at an angle of 40°.



Notes	
Variants:	Other pole numbers 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		80 V	160 V	320 V
Rated impulse withstand voltage		2.5 kV	2.5 kV	2.5 kV
Rated current		6 A	6 A	6 A
Approvals per		UL 1059		
Use group		B	C	D
Rated voltage		150 V	-	-
Rated current		4 A	-	-
Approvals per		CSA		
Use group		B	C	D
Rated voltage		150 V	-	-
Rated current		4 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	Slider	
Solid conductor	0.08 ... 0.5 mm² / 28 ... 20 AWG	
Fine-stranded conductor	0.08 ... 0.5 mm² / 28 ... 20 AWG	
Fine-stranded conductor; with insulated ferule	0.25 mm²	
Fine-stranded conductor; with uninsulated ferrule	0.25 mm²	
Note (conductor cross-section)	Terminating 0.75 mm²/18 AWG conductors is possible; however insulation diameter allows only every other clamping unit to be terminated with this conductor size.	
Strip length	5 ... 6 mm / 0.2 ... 0.24 inches	
Conductor connection direction to PCB	40 °	
Pole number	9	

Physical data	
Pin spacing	2.54 mm / 0.1 inches
Width	24.36 mm / 0.959 inches
Height	10.9 mm / 0.429 inches
Height from the surface	8.1 mm / 0.319 inches
Depth	13 mm / 0.512 inches
Solder pin length	2.8 mm
Solder pin dimensions	0.5 x 0.75 mm
Drilled hole diameter	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		0.038 MJ
Weight		3 g

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

Commercial data		
Product Group		4 (Printed Circuit Connectors)
PU (SPU)		180 (45) pcs
Packaging type		Box
Country of origin		PL
GTIN		4044918878456
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		
			CSA	C22.2 No. 158	1565656
CCA DEKRA Certification B.V.			DEKRA Certification B.V.		
CCA			ENEC	EN 60947	2160584.01
DEKRA Certification B.V.			DEKRA Certification B.V.		
CCA			UL	UL 1059	E45172
DEKRA Certification B.V.			UL International Germany GmbH		
Approval	Standard	Certificate Name			
CCA DEKRA Certification B.V.	EN 60947	NTR NL-7076			
CCA DEKRA Certification B.V.	EN 60947-7-4	NTR NL-7785			
CCA DEKRA Certification B.V.	EN 60947-7-4	77-111038			



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 218-509

Documentation

Additional Information
Technical Section
03.04.2019
pdf 2027.26 KB

CAD/CAE-Data

CAD data
2D/3D Models 218-509

CAE data
EPLAN Data Portal 218-509

ZUKEN Portal 218-509

PCB Design

Symbol and Footprint via SamacSys 218-509

Symbol and Footprint via Ultra Librarian 218-509
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1 Compatible Products

1.1 Optional Accessories

1.1.1 Ferrule

1.1.1.1 Ferrule



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; silver-colored

1.1.2 Marking

1.1.2.1 Marking strip



Item No.: 210-331/254-202
Marking strips; as a DIN A4 sheet; MARKED; 1-16 (400x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-331/254-207
Marking strips; as a DIN A4 sheet; MARKED; 1-48 (100x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-331/254-204
Marking strips; as a DIN A4 sheet; MARKED; 17-32 (400x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-331/254-206
Marking strips; as a DIN A4 sheet; MARKED; 33-48 (400x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white

1.1.3 Test and measurement

1.1.3.1 Testing accessories



Item No.: 735-500
WAGO Test pin; 1 mm Ø; 30 V AC / 60 V DC; CAT0; 1 A; 6 mm uninsulated; Test lead for soldering up to 0,5mm²

1.1.4 Tool

1.1.4.1 Operating tool



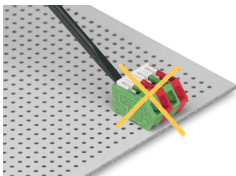
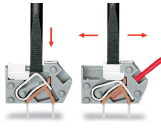
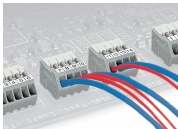
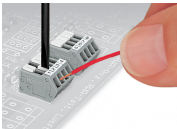
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft



Item No.: 210-648
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; angled; short

Installation Notes

Conductor termination



Terminating stranded conductors in confined spaces requires a great deal of patience, unless you use the new 218 Series PCB Terminal Strips. The clamping units of these strips can be held open during termination process via integrated locking slide.

Terminating 0.75 mm²/18 AWG conductors is possible; however insulation diameter allows only every other clamping unit to be terminated with this conductor size.

Conductor termination: To momentarily open the clamping unit, use screwdriver and then insert a stripped conductor. To open clamping unit for an extended period, move locking slide toward conductor entry hole. Then fully insert stripped conductor and move locking slide back to original position (also possible to perform with fingernail).

Incorrect – do not operate the locking slides from the back.

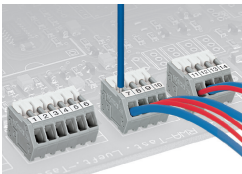
Marking



Labeling with self-adhesive marking strips.

Labeling via factory direct marking.

Testing



Testing directly on the clamping spring.