## Data Sheet | Item Number: 218-509

PCB terminal block; Locking slides; 0.5 mm<sup>2</sup>; Pin spacing 2.54 mm; 9-pole; CAGE

CLAMP®; 0,50 mm²; gray

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





 $\begin{array}{c} 0.5 \\ -5 \\ -4.2 \\ \hline \end{array}$ 

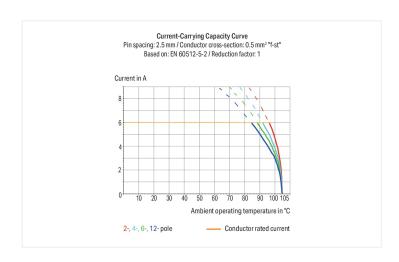
Color: ■ gray

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).



- Terminal strips are just 8.1 mm tall and feature an innovative, locking slide-actuated CAGE CLAMP®.
- Several clamping units can be held open simultaneously.
- Easily terminate stranded conductors in tight spaces (e.g., bus connectors).

Notes	
Variants:	Direct marking Other versions (or variants) can be requested from WAGO Sales or configured at https:// configurator.wago.com/. Other pole numbers Other colors Mixed-color PCB connector strips

Electrical data							
Ratings per	IEG	C/EN 60664	-1	Approvals per		UL 1059	
Overvoltage category	III	III	II	Use group	В	С	
Pollution degree	3	2	2	Rated voltage	150 V	-	-
Nominal voltage	80 V	160 V	320 V	Rated current	4 A	-	-
Rated surge voltage	2.5 kV	2.5 kV	2.5 kV				
Rated current	6 A	6 A	6 A				

# Data Sheet | Item Number: 218-509 https://www.wago.com/218-509



Approvals per		CSA	
Use group	В	С	D
Rated voltage	150 V	-	-
Rated current	4 A	-	-

Connection data			
Clamping units	9	Connection 1	
Total number of potentials	9	Connection technology	CAGE CLAMP®
Number of connection types	1	Actuation type	Slider
Number of levels 1		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 ferrule	0.25 mm <sup>2</sup>
	Fine-stranded conductor; with uninsulated ferrule	0.25 mm²	
	Note (conductor cross-section)	Terminating 0.75 mm <sup>2</sup> /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 with tolerance	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	ī
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Clamping spring material	Chrome-nickel spring steel (CrNi)
Contact material	Electrolytic copper (E <sub>Cu</sub> )
Contact Plating	Tin
Fire load	0.147 MJ
Weight	3 g

# Data Sheet | Item Number: 218-509

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



#### **Environmental requirements**

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

Commercial data	
Product Group	4 (Printed Circuit Connectors)
eCl@ss 10.0	27-44-04-01
eCl@ss 9.0	27-44-04-01
ETIM 9.0	EC002643
ETIM 8.0	EC002643
PU (SPU)	180 (45) pcs
Packaging type	Box
Country of origin	PL
GTIN	4044918878456
Customs tariff number	85369010000

## **Environmental Product Compliance**

RoHS Compliance Status Compliant, No Exemption

## Approvals / Certificates

#### General approvals











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
CSA DEKRA Certification B.V.	C22.2 No. 158	1565656
ENEC DEKRA Certification B.V.	EN 60947	2160584.01
UL UL International Germany GmbH	UL 1059	E45172

#### Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

## Downloads

## **Environmental Product Compliance**

## Compliance Search

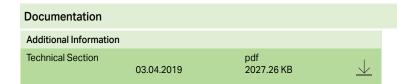
**Environmental Product** Compliance 218-509

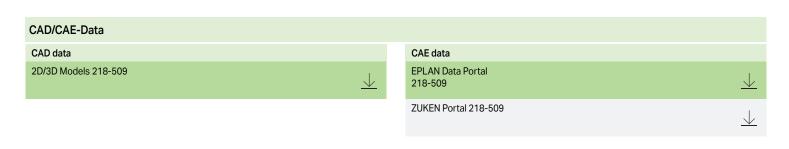


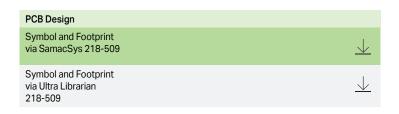
## Data Sheet | Item Number: 218-509

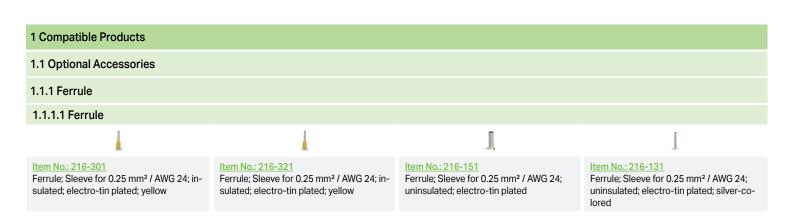
https://www.wago.com/218-509











#### 1.1.2 Marking

## 1.1.2.1 Marking strip

## Item No.: 210-331/254-202

Marking strips; as a DIN A4 sheet; MAR-KED; 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; MAR-KED; 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; MAR-KED; 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; MAR-KED; 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 0,5mm<sup>2</sup>

#### 1.1.4 Tool

### 1.1.4.1 Operating tool



Item No.: 210-719

Operating tool; Blade:  $2.5 \times 0.4 \, \text{mm}$ ; 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



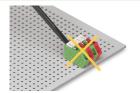
Terminating stranded conductors in confined spaces requires a great deal of patience, unless you use the new 218 Series PCB Terminal Strips. The clamping units of these strips can be held open during termination process via integrated locking slide.



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

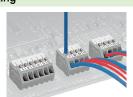


Labeling with self-adhesive marking strips.



Labeling via factory direct marking.

# Testing



Testing directly on the clamping spring.



Page 6/6 Version 03.10.2024