Data Sheet | Item Number: 257-507 PCB terminal block; push-button; 2.5 mm²; Pin spacing 7.5/7.62 mm; 7-pole; CAGE CLAMP[®]; commoning option; gray

https://www.wago.com/257-507

Color: 🔳 gray

PCB terminal block, 257 Series, 0 °conductor entry to board

Our PCB terminal block (item number 257-507) simplifies electrical installations. It is a universal connector that can be used practically anywhere, e.g., as a pluggable PCB connector, panel feedthrough header, connector for rail-mount terminal blocks, or a floating connector for different mounting methods. Our PCB terminal block is rated for 630 V and is designed to handle a rated current of up to 24 A. It is therefore suitable for high-load applications. Strip lengths must be between 5 mm and 6 mm when connecting conductors to this PCB terminal block. This product features one conductor terminal and utilizes CAGE CLAMP®. Our trusted universal connection known as CAGE CLAMP® leads the way when it comes to connection technology and electrical interconnections. Dimensions: 55.4 x 24.4 x 14.2 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. It comes with one level and seven clamping points for connecting seven potentials / 7 poles. The clamping spring is made of chrome-nickel spring steel (CrNi), the gray housing is made of polyamide (PA66) for insulation, and the contacts are made of electrolytic copper (ECu). Tin is used for coating the contact surfaces. This PCB terminal block is operated with a push-button. The PCB terminal block is designed for THT soldering. Insert the conductor at a 0° angle. The solder pins are organized over the entire terminal strip (in-line). They are 0.7 x 0.7 mm cross-section and 4 mm in length. Each potential has two solder pins.

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/.

Similar to illustration Dimensions in





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



https://www.wago.com/257-507



Electrical data			
Ratings per	IEC/EN 60664-1		
Overvoltage category	III	III	Ш
Pollution degree	3	2	2
Nominal voltage	400 V	630 V	1000 V
Rated surge voltage	6 kV	6 kV	6 kV
Rated current	24 A	24 A	24 A
Approvals per		CSA	
Use group	В	С	D
Rated voltage	300 V	-	300 V
Rated current	15 A	-	10 A

Approvals per		UL 1059	
Use group	В	С	D
Rated voltage	300 V	-	300 V
Rated current	15 A	-	10 A

7

Connection data				
Clamping units	7		Connection 1	
Total number of potentials	7		Connection technology	CAGE CLAMP®
Number of connection types	1		Actuation type	Push-button
Number of levels	1		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 uninsula- ted 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	0°

Pole number

Physical data	
Pin spacing	7.5/7.62 mm / 0.295/0.3 inches
Width	55.4 mm / 2.181 inches
Height	24.4 mm / 0.961 inches
Height from the surface	20.4 mm / 0.803 inches
Depth	14.2 mm / 0.559 inches
Solder pin length	4 mm
Solder pin dimensions	0.7 x 0.7 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

https://www.wago.com/257-507

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	VO
Clamping spring material	Chrome-nickel spring steel (CrNi)
Contact material	Electrolytic copper (E _{Cu})
Contact Plating	Tin
Fire load	0.187 MJ
Weight	9.8 g

Environmental r	equirements
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Limit temperature range

-60 ... +105 °C

Commercial data	
Product Group	4 (Printed Circuit Connectors)
PU (SPU)	80 (20) pcs
Packaging type	Box
Country of origin	PL
GTIN	4044918412742
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 8.0	EC002643
ECCN	NO US CLASSIFICATION

Environmental Product Compliance	
RoHS Compliance Status	Compliant,No Exemption

Approvals / Certificates

General approvals

KEWA CCA KEWA CCA

Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60947	2160584.28
CCA DEKRA Certification B.V.	EN 60947	NTR NL-7128
CCA DEKRA Certification B.V.	EN 60947-7-4	71-113014
CCA DEKRA Certification B.V.	EN 60947-7-4	NTR NL-7821

Declarations of conformity and manufacturer's declarations

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

https://www.wago.com/257-507

Approvals for marine applications



ABS:	CALCULAR
Approval	Standard

ABS American Bureau of Ship- ping	-	19-HG1869876-PDA
BV Bureau Veritas S.A.	IEC 60998	11915/D0 BV
DNV DNV GL SE	-	TAE000016Z

Certificate Name

Downloads

Environmental Product Compliance



Documentation

Additional Information			
Technical Section	03.04.2019	pdf 2027.26 KB	$\underline{\checkmark}$
Gebrückte Klemmen- leisten für Leiterplatten		pdf 303.71 KB	\downarrow

CAD/CAE-Data

CAD data	
2D/3D Models 257-507	\downarrow

CAE data	
EPLAN Data Portal 257-507	$\underline{\downarrow}$
ZUKEN Portal 257-507	$\underline{\downarrow}$

PCB Design	
Symbol and Footprint via SamacSys 257-507	$\underline{\downarrow}$
Symbol and Footprint via Ultra Librarian 257-507	\downarrow

https://www.wago.com/257-507

1 Compatible Products

1.1 Optional Accessories

1.1.1 Ferrule

1.1.1.1 Ferrule

Item No.: 216-301 Item No.: 216-321 Item No.: 216-151 Item No.: 216-131 Ferrule; Sleeve for 0.25 mm² / AWG 24; in-Ferrule; Sleeve for 0.25 mm² / AWG 24; in-Ferrule; Sleeve for 0.25 mm² / AWG 24; Ferrule; Sleeve for 0.25 mm² / AWG 24; sulated; electro-tin plated; yellow sulated; electro-tin plated; yellow uninsulated; electro-tin plated uninsulated; electro-tin plated; silver-colored Item No.: 216-302 Item No.: 216-322 Item No.: 216-132 Item No.: 216-152 Ferrule; Sleeve for 0.34 mm² / 22 AWG; in-Ferrule; Sleeve for 0.34 mm² / AWG 24; Ferrule; Sleeve for 0.34 mm² / 22 AWG; in-Ferrule; Sleeve for 0.34 mm² / AWG 24; sulated; electro-tin plated; light turquoise sulated; electro-tin plated; light turquoise uninsulated; electro-tin plated uninsulated; electro-tin plated Item No.: 216-201 Item No.: 216-241 Item No.: 216-221 Item No.: 216-141 Ferrule; Sleeve for 0.5 mm² / 20 AWG; in-Ferrule; Sleeve for 0.5 mm² / 20 AWG; in-Ferrule; Sleeve for 0.5 mm² / 20 AWG; in-Ferrule; Sleeve for 0.5 mm² / 20 AWG; unsulated; electro-tin plated; electrolytic insulated; electro-tin plated; electrolytic sulated: electro-tin plated: electrolytic sulated; electro-tin plated; white copper; acc. to DIN 46228, Part 4/09.90; copper; gastight crimped; acc. to DIN copper; gastight crimped; acc. to DIN white 46228, Part 4/09.90; white 46228, Part 1/08.92 Item No.: 216-121 Item No.: 216-262 Item No.: 216-101 Item No.: 216-242 Ferrule; Sleeve for 0.5 mm² / AWG 22; un-Ferrule; Sleeve for 0.5 mm² / AWG 22; un-Ferrule; Sleeve for 0.75 mm² / 18 AWG; in-Ferrule; Sleeve for 0.75 mm² / 18 AWG; ininsulated; electro-tin plated; silver-coloinsulated; electro-tin plated; silver-colosulated; electro-tin plated; electrolytic sulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN copper; gastight crimped; acc. to DIN red red 46228, Part 4/09.90; gray 46228, Part 4/09.90; gray Item No.: 216-202 Item No.: 216-222 Item No.: 216-142 Item No.: 216-102 Ferrule; Sleeve for 0.75 mm² / 18 AWG; in-Ferrule; Sleeve for 0.75 mm² / 18 AWG; in-Ferrule; Sleeve for 0.75 mm² / 18 AWG; Ferrule; Sleeve for 0.75 mm² / AWG 20; sulated; electro-tin plated; gray sulated; electro-tin plated; gray uninsulated; electro-tin plated; electrolyuninsulated; electro-tin plated; silver-cotic copper; gastight crimped; acc. to DIN lored 46228, Part 1/08.92 Item No.: 216-122 Item No.: 216-243 Item No.: 216-263 Item No.: 216-203 Ferrule; Sleeve for 0.75 mm² / AWG 20; Ferrule; Sleeve for 1 mm² / AWG 18; insu-Ferrule; Sleeve for 1 mm² / AWG 18; insu-Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic coplated; electro-tin plated; electrolytic copuninsulated; electro-tin plated; silver-colated; electro-tin plated; red per; gastight crimped; acc. to DIN 46228, per; gastight crimped; acc. to DIN 46228, lored Part 4/09.90; red Part 4/09.90; red Item No.: 216-223 Item No.: 216-103 Item No.: 216-143 Item No.: 216-123 Ferrule; Sleeve for 1 mm² / AWG 18; unin-Ferrule; Sleeve for 1 mm² / AWG 18; insu-Ferrule; Sleeve for 1 mm² / AWG 18; unin-Ferrule; Sleeve for 1 mm² / AWG 18; uninlated; electro-tin plated; red sulated; electro-tin plated sulated; electro-tin plated; electrolytic sulated; electro-tin plated; silver-colored copper; gastight crimped; acc. to DIN 46228, Part 1/08.92 Item No.: 216-204 Item No.: 216-224 Item No.: 216-244 Item No.: 216-264 Ferrule; Sleeve for 1.5 mm² / AWG 16; in-Ferrule; Sleeve for 1.5 mm² / AWG 16; in-Ferrule; Sleeve for 1.5 mm² / AWG 16; in-Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black sulated; electro-tin plated; black sulated; electro-tin plated; electrolytic sulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black 46228, Part 4/09.90; black Item No.: 216-124 Item No.: 216-284 Item No.: 216-144 Item No.: 216-104 Ferrule; Sleeve for 1.5 mm² / AWG 16; un-Ferrule; Sleeve for 1.5 mm² / AWG 16; un-Ferrule; Sleeve for 1.5 mm² / AWG 16; in-Ferrule; Sleeve for 1.5 mm² / AWG 16; unsulated; electro-tin plated; electrolytic insulated; electro-tin plated insulated; electro-tin plated; electrolytic insulated; electro-tin plated; silver-colocopper; gastight crimped; acc. to DIN copper; gastight crimped; acc. to DIN red



46228, Part 4/09.90; black

46228, Part 1/08.92; silver-colored

https://www.wago.com/257-507



1.1.2 Marking

1.1.2.1 Marking strip

Item No.: 210-332/750-020

Marking strips; as a DIN A4 sheet; MAR-KED; 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; MAR-KED; 1-20 (80x); 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.: 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

1.1.4 Tool

1.1.4.1 Operating tool

Item No.: 210-658

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; angled; short; multicoloured



Installation Notes

Conductor termination







Inserting/removing a conductor (255 Series)

Inserting/removing a conductor via fin-

ger-operated lever - 255 Series.



Inserting/removing a conductor via fingeroperated lever – 256 Series.

Installation

ries.



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

https://www.wago.com/257-507

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:: <u>www.wago.com</u>