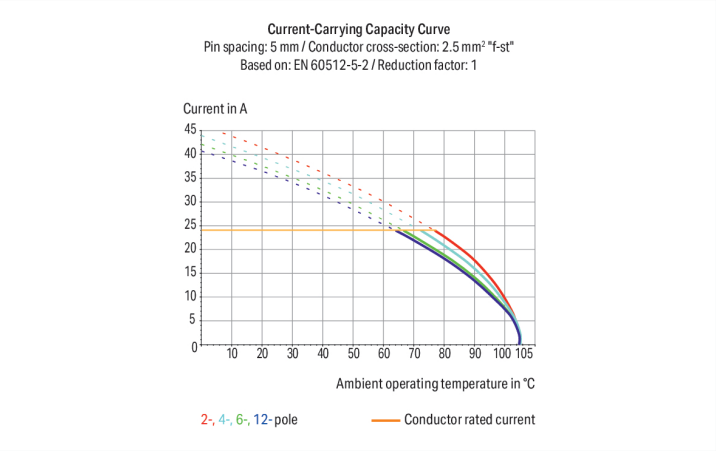
Data Sheet | Item Number: 255-504/333-000

PCB terminal block; finger-operated levers; 2.5 mm²; Pin spacing 7.5/7.62 mm; 4-pole; CAGE CLAMP®; commoning option; gray

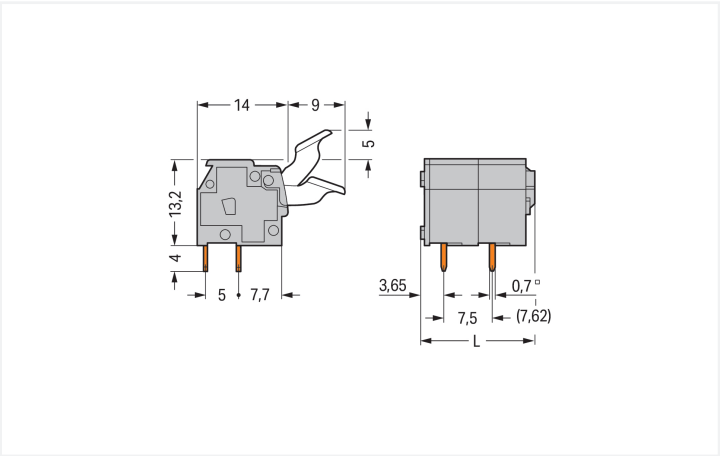
https://www.wago.com/255-504/333-000





Color: gray

Similar to illustration



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

PCB terminal block, 255 Series, solder pin dimensions 0.7 x 0.7 mm

This PCB terminal block (item number 255-504/333-000) is designed for easy and secure connections. 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. Strip lengths must be between 5 and 6 mm when connecting conductors to this PCB terminal block. Featuring one conductor terminal along with CAGE CLAMP®, this product is highly versatile. Our reliable and maintenance-free CAGE CLAMP® connection makes it easy to connect all types of conductors without having to prepare the conductor. For example, you don't need to crimp ferrules. Dimensions: (32.9 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.

Tin is used for coating the contact surfaces. This PCB terminal block is operated with finger-operated lever. The PCB terminal block is designed for THT soldering. The conductor is designed to be inserted into the board at an angle of 90°..

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	CSA		
Use group	B	C	D
Rated voltage	300 V	-	300 V
Rated current	15 A	-	10 A

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

Connection Data

Clamping units	4
Total number of potentials	4
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	4

Physical data

Pin spacing	7.5/7.62 mm / 0.295/0.3 inches
Width	32.9 mm / 1.295 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
Drilled hole diameter	1.1 $^{(+0.1)}$ mm

Continued on next page

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	0.101 MJ
Weight	6.1 g

Environmental requirements

Limit temperature range	-60 … +105 °C

Commercial data

Product Group	4 (Printed Circuit Connectors)
PU (SPU)	140 (35) pcs
Packaging type	Box
Country of origin	CH
GTIN	4044918661508
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

Approval	Standard	Certificate Name
UR Underwriters Laboratories Inc.	UL 1059	E45172

Continued on next page

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 255-504/333-000

Documentation

Additional Information

Technical Section	03.04.2019	pdf 2027.26 KB
Gebrückte Klemmenleisten für Leiterplatten		pdf 303.71 KB

CAD/CAE-Data

CAD data

2D/3D Models 255-504/333-000

CAE data

ZUKEN Portal 255-504/333-000

PCB Design

Symbol and Footprint via SamacSys 255-504/333-000

Symbol and Footprint via Ultra Librarian 255-504/333-000

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

Item No.: 216-322
Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise



Item No.: 216-152
Ferrule; Sleeve for 0.34 mm² / 22 AWG; uninsulated; electro-tin plated; silver-colored

Item No.: 216-221
Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white



Item No.: 216-121
Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated; silver-colored

Item No.: 216-222
Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray



Item No.: 216-122
Ferrule; Sleeve for 0.75 mm² / 18 AWG; uninsulated; electro-tin plated; silver-colored

Item No.: 216-223
Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red



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



Item No.: 216-224
Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black



Item No.: 216-124
Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin plated

Continued on next page

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

1.1.3 Test and measurement

1.1.3.1 Testing accessories



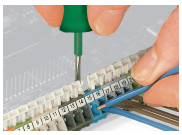
Item No.: 249-112
Test plug adapter; suitable for 255, 256, 257 Series PCB terminal blocks; 1-pole; Pin spacing 7.5 mm / 0.295 in; gray



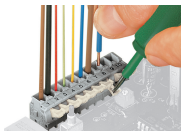
Item No.: 249-113
Test plug adapter; suitable for 255, 256, 257 Series PCB terminal blocks; 1-pole; Pin spacing 7.62 mm / 0.3 in; orange

Installation Notes

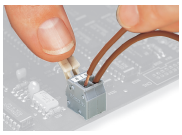
Conductor termination



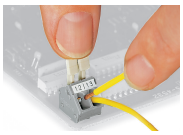
Inserting/removing a conductor – 256 Series.



Inserting/removing a conductor (255 Series)



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



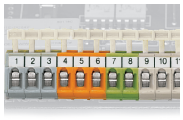
Inserting/removing a conductor via finger-operated lever – 256 Series.

Installation



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

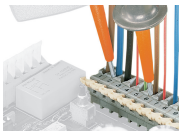
Marking



Formation of groups using housings of different colors

Continued on next page

Testing



Testing with test probes.



Testing with test plug modules.