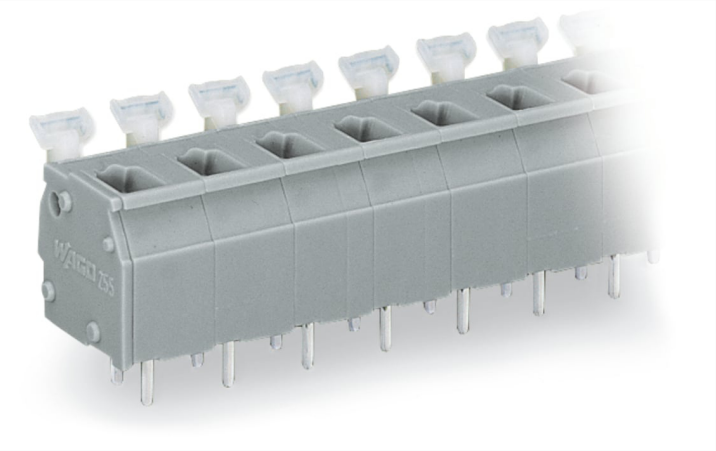
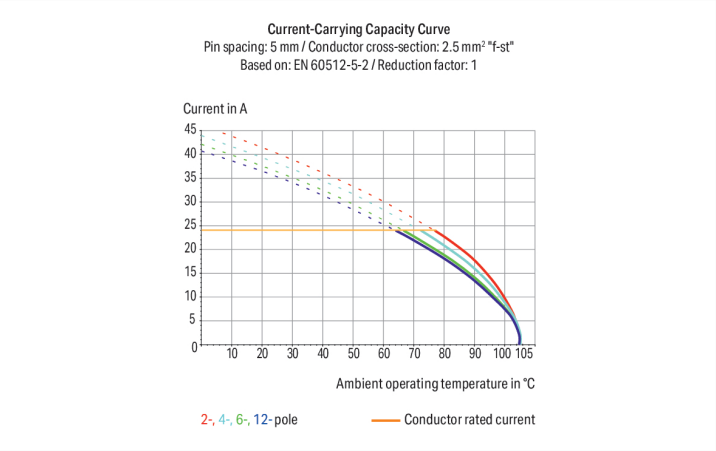
Data Sheet | Item Number: 255-504/000-009/999-950

PCB terminal block; push-button; 2.5 mm²; Pin spacing 7.5/7.62 mm; 4-pole; suitable for Ex-e applications; CAGE CLAMP®; commoning option; 2,50 mm²; light gray

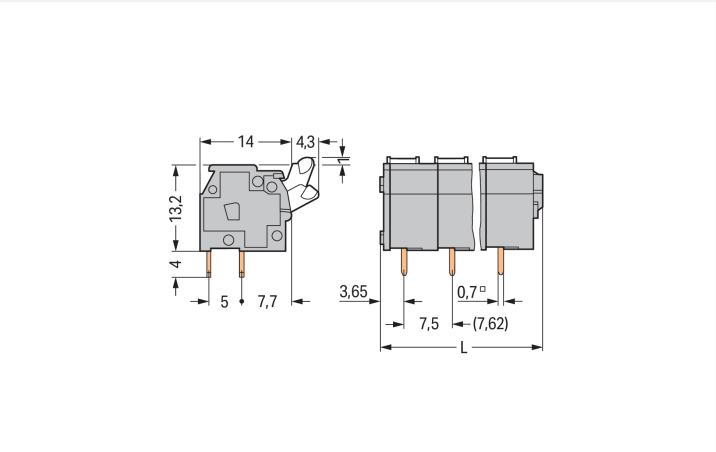
https://www.wago.com/255-504/000-009/999-950





Color: light 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

Our PCB terminal block (item number 255-504/000-009/999-950) makes connecting wires quick and easy. It is perfect for custom installations with different mounting types. Conductors can 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 proven universal connection known as CAGE CLAMP® is the industry standard for connection technology and electrical interconnections. The item's dimensions are (32.9 x 18.2 x 18.3) 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. A push-button is used to operate this PCB terminal block. THT is used to assemble the PCB terminal block. The conductor is designed to be inserted at an angle of 90°..

Electrical data

Ex information

Ratings per	ATEX: PTB 06 ATEX 1061 U / IECEx: PTB 06.0042 U
Rated voltage EN (Ex e II)	275 V
Rated current (Ex e II)	16 A

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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	Push-button
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	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	18.2 mm / 0.717 inches
Height from the surface	14.2 mm / 0.559 inches
Depth	18.3 mm / 0.72 inches
Solder pin length	4 mm
Solder pin dimensions	0.7 x 0.7 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	light 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	0.126 MJ
Weight	5.8 g

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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	4044918661478
Customs tariff number	85369010000
End of Sale	2021-06-30
End of Production	2021-07-05
End of Delivery	2021-07-15
End of Service and Repair	2023-06-30

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

Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
ATEX-Attestation of Conformity WAGO GmbH & Co. KG	-	-

Approvals for hazardous areas

Approval	Standard	Certificate Name
AEx UL International Germany GmbH c/o Physikalisch Technische Bundesanstalt	UL 60079	E185892 (AEx eb IIC resp. Ex eb IIC)
CCC CNEX	GB/T 3836.3	2020312313000274 (Ex eb IIC Gb, Ex eb I Mb)
IECEx Physikalisch Technische Bundesanstalt	-	IECEx PTB 06.0042U (Ex eb IIC GB or Ex eb I Mb)

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Downloads

Environmental Product Compliance

Compliance Search

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

CAE data

PCB Design

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

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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

1.1.4 Tool

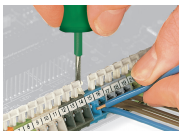
1.1.4.1 Operating tool

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

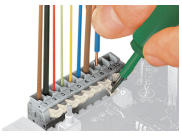
Item No.: 210-720
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

Installation Notes

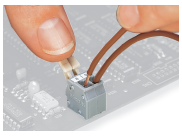
Conductor termination



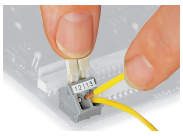
Inserting/removing a conductor – 256 Series.



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).

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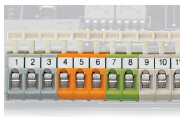
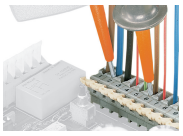
Marking



Formation of groups using housings of different colors

Testing



Testing with test probes.

Testing with test plug modules.

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