

Data Sheet | Item Number: 257-448

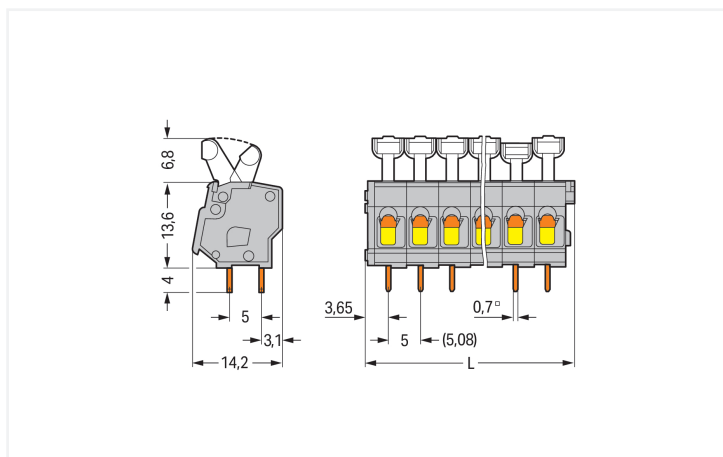
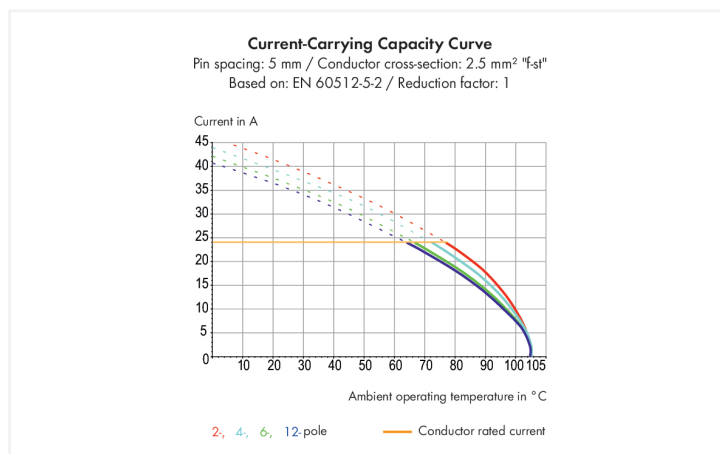
PCB terminal block; push-button; 2.5 mm²; Pin spacing 5/5.08 mm; 48-pole; CAGE CLAMP®; commoning option; gray

<https://www.wago.com/257-448>



Color: ■ gray

Similar to illustration



Dimensions in mm

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

PCB terminal block, 257 Series, gray

This PCB terminal block (item number 257-448) is designed for quick and easy connections. It is a universal connector that can be used practically anywhere, for example, as a pluggable PCB connector, panel feedthrough header, connector for rail-mount terminal blocks, or a floating connector for different mounting methods. Conductors can only be connected to this PCB terminal block if their strip length is between 5 and 6 mm. Featuring one conductor terminal along with CAGE CLAMP®, this connector is highly versatile. Our highly-rated 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. The item's dimensions are (242.9 x 24.4 x 14.2) mm (width x height x depth). Depending on the conductor type, 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 into the board at a 0° angle..



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	250 V	320 V	630 V
Rated impulse withstand voltage	4 kV	4 kV	4 kV
Rated current	24 A	24 A	24 A

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

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

Connection Data

Clamping units	48
Total number of potentials	48
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 ferule	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	0 °
Pole number	48

Physical data

Pin spacing	5/5.08 mm / 0.197/0.2 inches
Width	242.9 mm / 9.563 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	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		0.725 MJ
Weight		54.5 g

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

Commercial data		
Product Group		4 (Printed Circuit Connectors)
PU (SPU)		20 (5) pcs
Packaging type		Box
Country of origin		PL
GTIN		4044918411929
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	
   		CCA DEKRA Certification B.V.	EN 60947-7-4 NTR NL-7821
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	
		CSA DEKRA Certification B.V.	C22.2 No. 158 70049157
		UR Underwriters Laboratories Inc.	UL 1059 E45172



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	-	-

Approvals for marine applications



Approval	Standard	Certificate Name
ABS American Bureau of Shipping	-	24-0095975-PDA
BV Bureau Veritas S.A.	IEC 60998	11915/E0 BV
DNV DNV GL SE	-	TAE000016Z
PRS Polski Rejestr Statków	-	TE/1095/880590/23

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 257-448 

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 257-448 

CAE data
EPLAN Data Portal 257-448 
ZUKEN Portal 257-448 

PCB Design
Symbol and Footprint via SamacSys 257-448 
Symbol and Footprint via Ultra Librarian 257-448 



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

1.1.2 Marking

1.1.2.1 Marking strip



Item No.: 210-332/500-202
Marking strips; as a DIN A4 sheet; MARKED; 1-16 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-332/508-202
Marking strips; as a DIN A4 sheet; MARKED; 1-16 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-332/500-205
Marking strips; as a DIN A4 sheet; MARKED; 1-32 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-332/508-205
Marking strips; as a DIN A4 sheet; MARKED; 1-32 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-332/500-204
Marking strips; as a DIN A4 sheet; MARKED; 17-32 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-332/508-204
Marking strips; as a DIN A4 sheet; MARKED; 17-32 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-332/500-206
Marking strips; as a DIN A4 sheet; MARKED; 33-48 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-332/508-206
Marking strips; as a DIN A4 sheet; MARKED; 33-48 (160x); 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.: 249-110
Test plug adapter; suitable for 255, 256, 257 Series PCB terminal blocks; 1-pole; Pin spacing 5 mm / 0.197 in; gray



Item No.: 249-111
Test plug adapter; suitable for 255, 256, 257 Series PCB terminal blocks; 1-pole; Pin spacing 5.08 mm / 0.2 in; orange

1.1.4 Tool

1.1.4.1 Operating tool

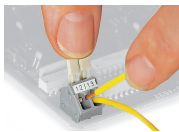
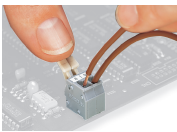
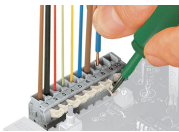
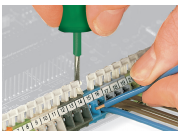


Item No.: 210-658
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; angled; short; multi-coloured

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



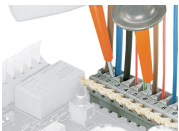
Possible conductor arrangement with terminal strips staggered (for 256 Series only).

Marking



Formation of groups using housings of different colors

Testing



Testing with test probes.

Testing with test plug modules.