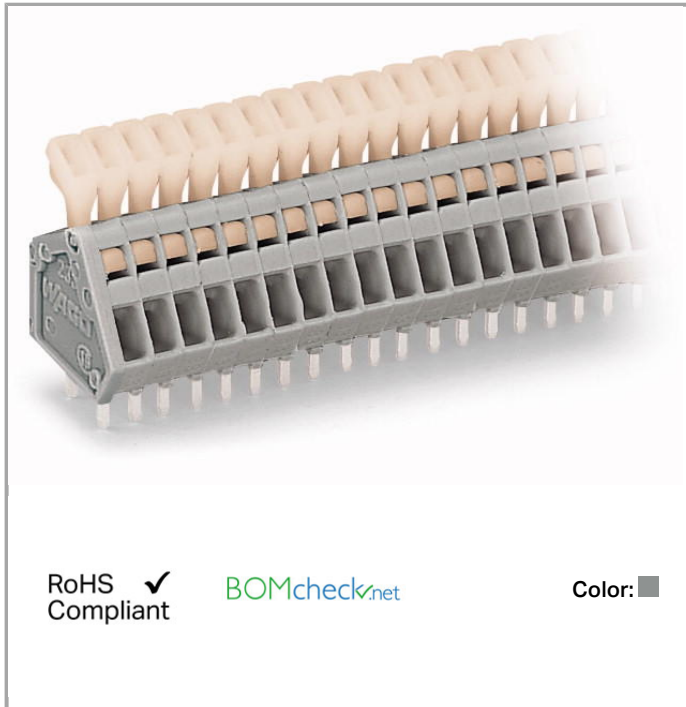


Data sheet | Item number: 233-248

PCB terminal block; Push-button; 0.5 mm²; Pin spacing 2.5 mm; 48-pole;
CAGE CLAMP®



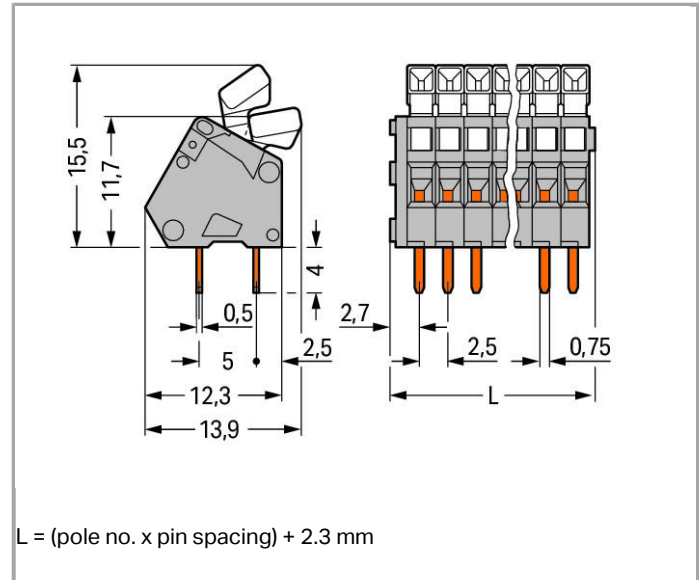
www.wago.com/233-248



RoHS
Compliant

BOMcheck.net

Color: ■



Item description

- Compact PCB terminal strips with CAGE CLAMP® connection and screwdriver actuation parallel or perpendicular to conductor entry
- Double solder pins for high mechanical
- Custom color combinations

Other variants can be requested via the WAGO sales department or, if necessary, configured at <https://configurator.wago.com/>: Direct marking, Mixed-color terminal strips, Other colors, Other pole numbers

Data

Electrical data

Ratings per IEC/EN 60664-1

Rated voltage (III / 3)	63 V
Rated impulse voltage (III / 3)	2.5 kV
Rated voltage (III / 2)	160 V
Rated impulse voltage (III / 2)	2.5 kV
Rated voltage (II / 2)	320 V
Rated impulse voltage (II / 2)	2.5 kV



Rated current	6 A
Legend (ratings)	(III / 2) $\hat{=}$ Overvoltage category III / Pollution degree 2

Approvals per UL 1059

Rated voltage UL (Use Group B)	150 V
Rated current UL (Use Group B)	4 A

Approvals per CSA

Rated voltage CSA (Use Group B)	150 V
Rated current CSA (Use Group B)	4 A

Connection data

Connection technology	CAGE CLAMP®
Actuation type	Push-button
Solid conductor	0.08 ... 0.5 mm ² / 28 ... 20 AWG
Fine-stranded conductor	0.08 ... 0.5 mm ² / 28 ... 20 AWG
Fine-stranded conductor with ferrule with plastic collar	0.25 mm ²
Fine-stranded conductor with ferrule without plastic collar	0.25 mm ²
Strip length	5 ... 6 mm / 0.2 ... 0.24 Inch
Conductor entry angle to the PCB	30°
No. of poles	48
Total number of connection points	48
Total number of potentials	48
Number of connection types	1
Number of levels	1

Geometrical Data

Pin spacing	2.5 mm (0.098 inch)
Width	122.3 mm / 4.815 inch
Height	19.5 mm / 0.768 inch
Height from the surface	15.5 mm / 0.61 inch
Depth	13.9 mm / 0.547 inch
Solder pin length	4 mm
Solder pin dimensions	0.5 x 0.75 mm
Drilled hole diameter (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
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Material Data

Color	gray
Material group	I
Insulating material	Polyamide 66 (PA 66)
Flammability class per UL94	V0
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Electrolytic copper (Ecu)
Contact plating	tin-plated
Fire load	0.292 MJ
Weight	18.222 g

Environmental Requirements

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


Country of origin	CH
GTIN	4045454051006
Customs Tariff No.	85369010000
Product Group	4 (Printed Circuit)

Approvals / Certificates


Country specific Approvals

Logo	Approval	Certificate name
	CCA DEKRA Certification B.V.	NTR NL 6946
	CCA DEKRA Certification B.V.	2153951.01
	CSA DEKRA Certification B.V.	1465035
	CSA DEKRA Certification B.V.	1465035

Ship Approvals





Logo	Approval	Certificate name
	DNV GL Det Norske Veritas, Germanischer Lloyd	TAE000016Z

UL-Approvals

Logo	Approval	Certificate name
	UL UL International Germany GmbH	E45172

Compatible products

ferrule

	Item no.: 216-131 Ferrule; Sleeve for 0.25 mm ² / AWG 24; uninsulated; electro-tin plated	www.wago.com/216-131
	Item no.: 216-151 Ferrule; Sleeve for 0.25 mm ² / AWG 24; uninsulated; electro-tin plated	www.wago.com/216-151
	Item no.: 216-301 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated	www.wago.com/216-301
	Item no.: 216-321 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated	www.wago.com/216-321

Marking accessories

	Item no.: 210-331/250-202 Marking strips; as a DIN A4 sheet; MARKED; 1-16 (400x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive	www.wago.com/210-331/250-202
	Item no.: 210-331/250-204 Marking strips; as a DIN A4 sheet; MARKED; 17-32 (400x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive	www.wago.com/210-331/250-204
	Item no.: 210-331/250-206 Marking strips; as a DIN A4 sheet; MARKED; 33-48 (400x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive	www.wago.com/210-331/250-206
	Item no.: 210-331/250-207 Marking strips; as a DIN A4 sheet; MARKED; 1-48 (100x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive	www.wago.com/210-331/250-207
	Item no.: 210-331/254-202 Marking strips; as a DIN A4 sheet; MARKED; 1-16 (400x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive	www.wago.com/210-331/254-202
	Item no.: 210-331/254-204 Marking strips; as a DIN A4 sheet; MARKED; 17-32 (400x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive	www.wago.com/210-331/254-204



Item no.: 210-331/254-206

Marking strips; as a DIN A4 sheet; MARKED; 33-48 (400x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive

www.wago.com/210-331/254-206



Item no.: 210-331/254-207

Marking strips; as a DIN A4 sheet; MARKED; 1-48 (100x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive

www.wago.com/210-331/254-207

tools



Item no.: 210-648

Operating tool with partially insulated shaft; Blade (2.5 x 0.4) mm; short; angled

www.wago.com/210-648



Item no.: 210-719

Operating tool with partially insulated shaft; Type 1, blade (2.5 x 0.4) mm

www.wago.com/210-719

**Downloads
smartDATA**

CAD data

	URL	Download
3D Download 233-248		

PCB libraries

DesignSpark Library for WAGO PCB Terminal Blocks Compatible with DesignSpark PCB Version 4.x or higher	2.1 Oct 6, 2014	ZIP 22.5 MB	Download
TARGET Library for WAGO PCB Terminal Blocks Compatible with TARGET PCB Design Software Version 17.x	1.1.0 Oct 6, 2014	ZIP 27.1 MB	Download
EAGLE Library for WAGO PCB Terminal Blocks Compatible with EAGLE PCB Design Software Version 6.x or higher	2.1 Nov 17, 2017	ZIP 23.9 MB	Download

Subject to changes.