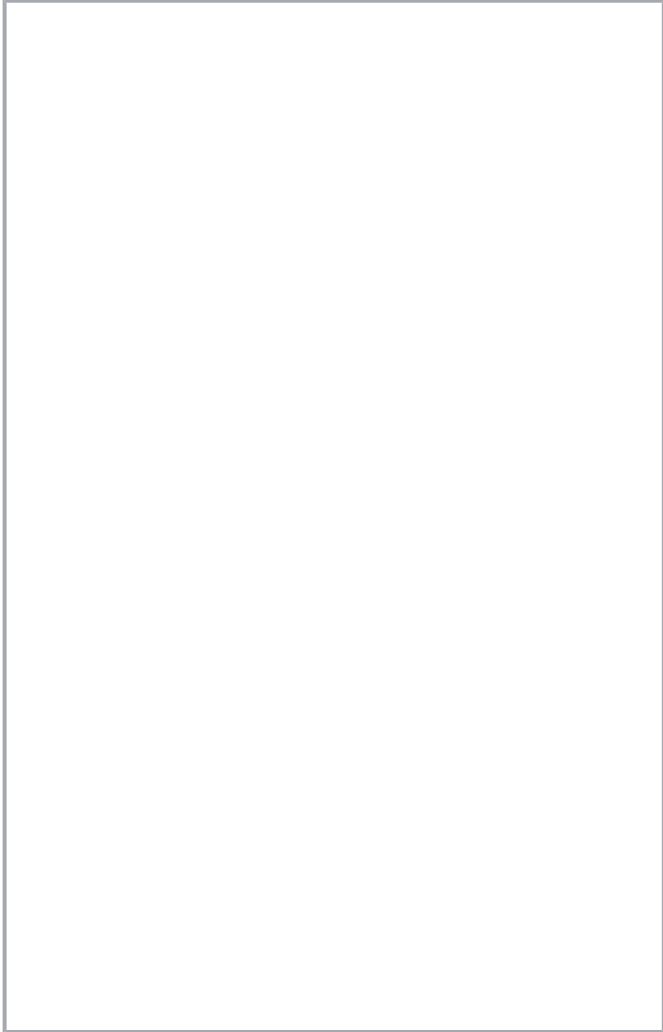
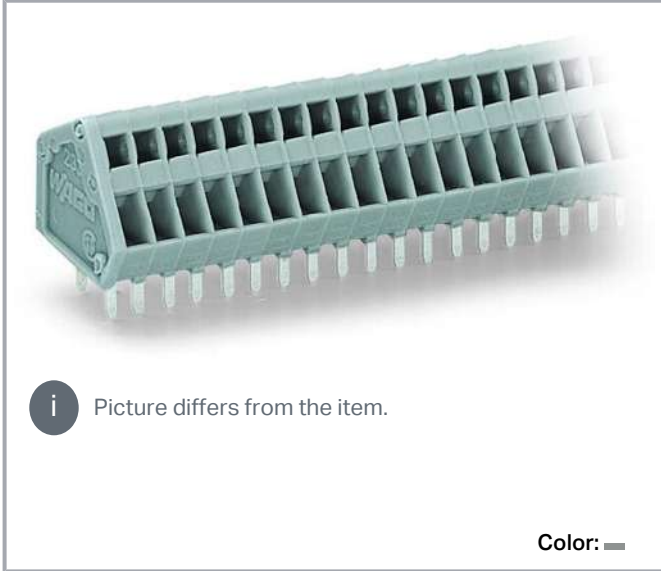


Data sheet | Item number: 233-105

PCB terminal block; 0.5 mm²; Pin spacing 2.5 mm; 5-pole; CAGE CLAMP®;
0,50 mm²; gray

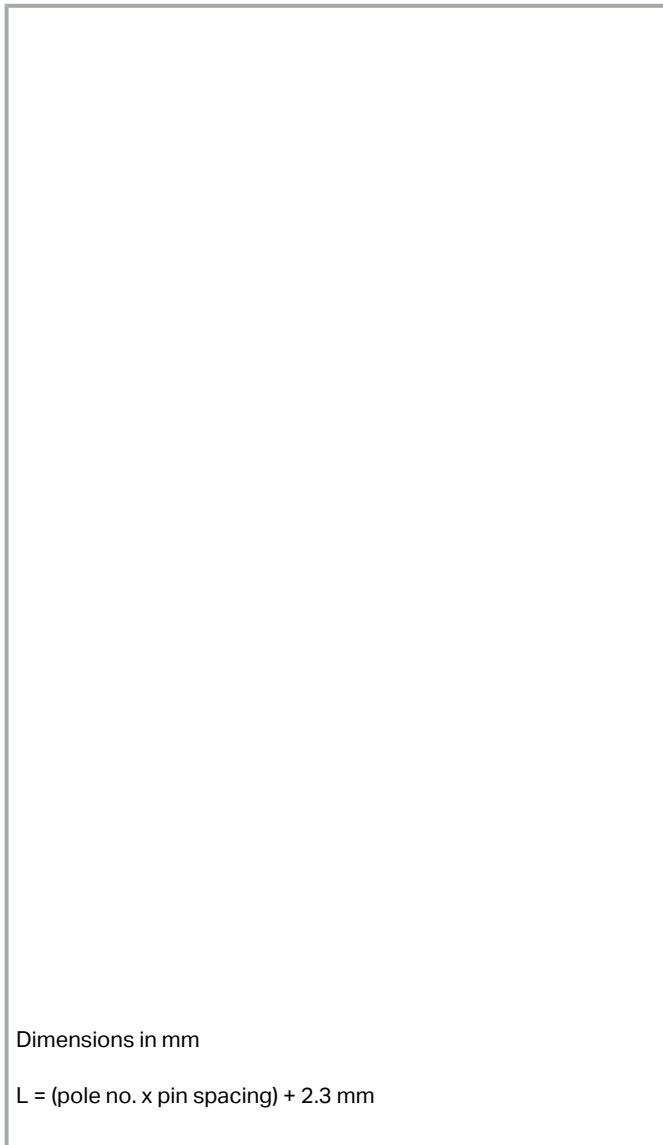
www.wago.com/233-105



Subject to changes. Please also observe the further product documentation!

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Germantown, WI 53022
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Dimensions in mm

$L = (\text{pole no.} \times \text{pin spacing}) + 2.3 \text{ mm}$

Item description

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

Subject to changes. Please also observe the further product documentation!

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Data Notes

Variants:	Other pole numbers 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/
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Electrical data

IEC Approvals

Ratings per	IEC/EN 60664-1
Rated voltage (III / 3)	63 V
Rated surge voltage (III/3)	2.5 kV
Rated voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV
Nominal voltage (II/2)	320 V
Rated surge voltage (II/2)	2.5 kV
Rated current	6 A
Legend (ratings)	(III / 2) $\hat{=}$ Overvoltage category III / Pollution degree 2

UL Approvals

Approvals per	UL 1059
Rated voltage UL (Use Group B)	150 V
Rated current UL (Use Group B)	4 A

CSA Approvals

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

Connection data

Total number of connection points	5
Total number of potentials	5
Number of connection types	1

Subject to changes. Please also observe the further product documentation!

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Number of levels	1
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Connection 1

Connection technology	CAGE CLAMP®
Actuation type	Operating tool
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 insulated ferrule	0.25 mm ²
Fine-stranded conductor; with uninsulated ferrule	0.25 mm ²
Note (conductor cross-section)	Terminating 0.75 mm ² /18 AWG conductors is possible; however insulation diameter allows only every other clamping unit to be terminated with this conductor size.
Strip length	5 ... 6 mm / 0.2 ... 0.24 inch
Conductor connection direction to PCB	30°
Number of poles	5

Physical data

Pin spacing	2.5 mm / 0.098 inch
Width	14.8 mm / 0.583 inch
Height	15.7 mm / 0.618 inch
Height from the surface	11.7 mm / 0.461 inch
Depth	12.1 mm / 0.476 inch
Solder pin length	4 mm
Solder pin dimensions	0.5 x 0.75 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

Material data

Color	gray
Material group	I
Insulation material	Polyamide (PA66)
Flammability class per UL94	V0

Subject to changes. Please also observe the further product documentation!

Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Electrolytic copper (E _{Cu})
Contact plating	tin-plated
Fire load	0.024 MJ
Weight	1.8 g

Environmental requirements





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

Product Group	4 (Printed Circuit)
PU (SPU)	340 (85) Stück
Packaging type	box
Country of origin	CH
GTIN	4045454049171
Customs tariff number	8536904000

Approvals / Certificates


Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate name
	CCA DEKRA Certification B.V.	EN 60998	NTR NL 6946
	CCA DEKRA Certification B.V.	EN 60998	2153951.01
	CCA DEKRA Certification B.V.	EN 60947-7-4	NTR NL 7786
	CSA DEKRA Certification B.V.	C22.2	1465035
	KEMA/KEUR DEKRA Certification B.V.	EN 60947-7-4	71-111040


Subject to changes. Please also observe the further product documentation!



Ship Approvals

Logo	Approval	Additional Approval Text	Certificate name
	ABS American Bureau of Shipping	-	19- HG1869876- PDA
	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE000016Z

UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	UL UL International Germany GmbH	UL 1059	E45172

Optional accessories

Marking accessories

Marking strip			
	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; white		www.wago.com/210-331/250-207
	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; white		www.wago.com/210-331/250-202
	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; white		www.wago.com/210-331/254-204
	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; white		www.wago.com/210-331/250-204
	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; white		www.wago.com/210-331/254-206

Subject to changes. Please also observe the further product documentation!

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Item no.: 210-331/250-206	www.wago.com/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; white	

Item no.: 210-331/254-202	www.wago.com/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; white	

Item no.: 210-331/254-207	www.wago.com/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; white	

Ferrules

Ferrule

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

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

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

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

Tools

Operating tool

Item no.: 210-648	www.wago.com/210-648
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; angled; short	

Item no.: 210-647	www.wago.com/210-647
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; multicoloured	

Item no.: 210-719	www.wago.com/210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft	

Item no.: 233-332	www.wago.com/233-332
Operating tool; made of insulating material; white	

Item no.: 233-331	www.wago.com/233-331
Operating tool; insulated; yellow	

Item no.: 233-335	www.wago.com/233-335
Operating tool; yellow	

Downloads**Documentation****Additional Information**

Technical explanations	2019 Apr 3	pdf	Download
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2.0 MB

CAD files**CAD data**

2D/3D Models 233-105	URL	Download
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CAE data

EPLAN Data Portal 233-105	URL	Download
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ZUKEN Portal 233-105	URL	Download
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PCB Design

Symbol and Footprint 233-105	URL	Download
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CAx data for your PCB design, consisting of "schematic symbols and PCB footprints", allow easy integration of the WAGO component into your development environment.

Supported formats:

- Accel EDA 14 & 15
- Altium 6 to current version
- Cadence Allegro
- DesignSpark
- Eagle Libraries
- KiCad
- Mentor Graphics BoardStation
- Mentor Graphics Design Architect
- Mentor Graphics Design Expedition 99 and 2000
- OrCAD 9.X PCB and Capture
- PADS PowerPCB 3, 3.5, 4.X, and 5.X
- PADS PowerPCB and PowerLogic 3.0
- PCAD 2000, 2001, 2002, 2004, and 2006
- Pulsonix 8.5 or newer
- STL
- 3D STEP
- TARGET 3001!
- View Logic ViewDraw
- Quadcept

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Subject to changes. Please also observe the further product documentation!

- Zuken CadStar 3 and 4
- Zuken CR-5000 and CR-8000

PCB Component Libraries (EDA), PCB CAD Library Ultra Librarian

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 233-105

URL

Download

PCB terminal block; 0.5 mm²; Pin spacing 2.5 mm; 5-pole; CAGE CLAMP®; 0,50 mm²; gray

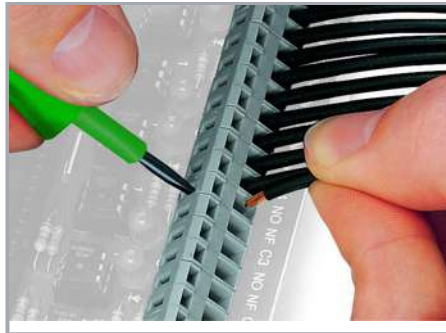
Installation Notes

Conductor termination



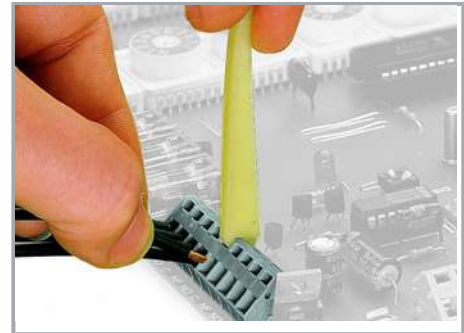
Inserting a conductor via 3.5 mm screwdriver.

Screwdriver actuation parallel to conductor entry



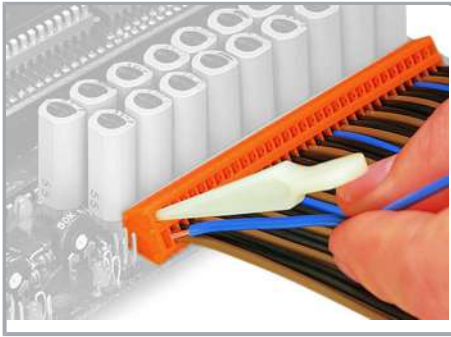
Inserting a conductor via 3.5 mm screwdriver.

Screwdriver actuation perpendicular to conductor entry



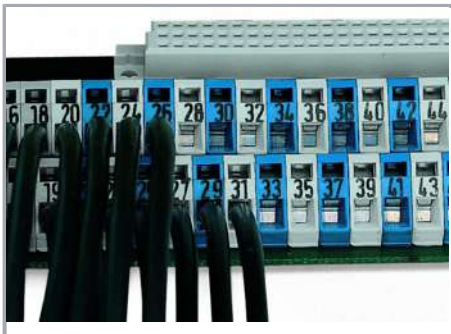
Inserting a conductor via operating tool.

Subject to changes. Please also observe the further product documentation!



Compared to standard screwdrivers, these operating tools are far more convenient for wiring PCB terminal strips at factory.

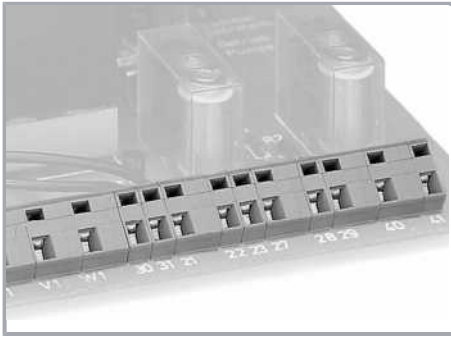
Installation



PCB Terminal Strips placed behind each other save space – staggering them by half the pin spacing simplifies subsequent wiring of the first row.

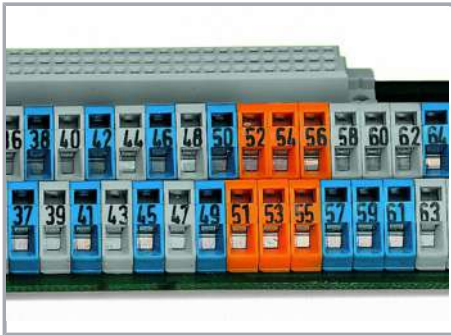
Installation

Subject to changes. Please also observe the further product documentation!

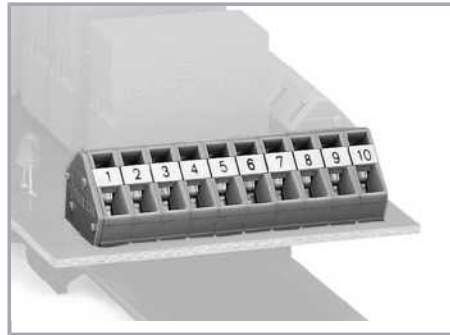


Combining PCB terminal blocks with different pin spacing.

Marking



Labeling via factory direct marking.



Optional: Labeling with self-adhesive marking strips possible

Subject to changes. Please also observe the further product documentation!