

Data sheet | Item number: 235-770

Stackable PCB terminal block; push-button; 1.5 mm²; Pin spacing 3.81 mm;
1-pole; Push-in CAGE CLAMP®; 1,50 mm²; red

www.wago.com/235-770



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

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We are always happy to take your call at +49 (571) 887-44222.



Item description

- Push-in termination of solid and ferruled conductors
- Convenient termination/removal of fine-stranded conductors via push-buttons

Data

Notes

Variants:

Other colors

Other versions (or variants) can be requested from WAGO Sales or configured at <https://configurator.wago.com/>.

Electrical data

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

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Ratings per IEC/EN

Ratings per	IEC/EN 60664-1
Nominal voltage (III/3)	200 V
Rated impulse voltage (III/3)	4 kV
Rated voltage (III/2)	320 V
Rated impulse voltage (III/2)	4 kV
Nominal voltage (II/2)	500 V
Rated surge voltage (II/2)	4 kV
Rated current	17.5 A
Legend (ratings)	(III / 2) $\hat{=}$ Overvoltage category III / Pollution degree 2

Ratings per UL

Approvals per	UL 1059
Rated voltage UL (Use Group B)	300 V
Rated current UL (Use Group B)	10 A
Rated voltage UL (Use Group D)	300 V
Rated current UL (Use Group D)	10 A

Ratings per CSA

Approvals per	CSA
Rated voltage CSA (Use Group B)	300 V
Rated current CSA (Use Group B)	10 A

Connection data

Connection points	1
Total number of potentials	1
Number of connection types	1
Number of levels	1

Connection 1

Connection technology	Push-in CAGE CLAMP®
Actuation type	Push-button
Solid conductor	0.5 ... 1.5 mm ² / 20 ... 16 AWG
Fine-stranded conductor	0.75 ... 1.5 mm ² / 20 ... 16 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 1 mm ²

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



Fine-stranded conductor; with uninsulated ferrule	0.25 ... 1 mm ²
Note (conductor cross-section)	Fine-stranded conductor 0.75 ... 1.5 mm ² / 18 ... 16 AWG (I max. 4 A)
Strip length	9 ... 10 mm / 0.35 ... 0.39 inches
Conductor connection direction to PCB	0°
Pole number	1

Physical data

Pin spacing	3.81 mm / 0.15 inches
Width	5.3 mm / 0.209 inches
Height	19.1 mm / 0.752 inches
Height from the surface	15.5 mm / 0.61 inches
Depth	12.5 mm / 0.492 inches
Solder pin length	3.6 mm
Solder pin dimensions	0.4 x 0.8 mm
Drilled hole diameter with tolerance	1 ^(+0.1) mm

Plug-in connection

Plugging without loss of pin spacing	No
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PCB contact

PCB contact	THT
Solder pin arrangement	within the terminal block (in-line)
Number of solder pins per potential	2

Material Data

Note (material data)	Information on material specifications can be found here
Color	red
Material group	I
Insulation material	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	0.01 MJ

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



Weight	0.6 g
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Environmental requirements

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

Product Group	4 (Printed Circuit Connectors)
eCl@ss 10.0	27-44-04-01
eCl@ss 9.0	27-44-04-01
ETIM 8.0	EC002643
ETIM 7.0	EC002643
PU (SPU)	800 (100) pcs
Packaging type	box
Country of origin	CH
GTIN	4044918907453
Customs tariff number	85369010000

Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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Approvals / Certificates**General approvals**

Logo	Approval	Additional Approval Text	Certificate name
	CCA DEKRA Certification B.V.	EN 60947	NTR NL-7144
	CCA DEKRA Certification B.V.	EN 60998	NTR NL-6919
	CCA DEKRA Certification B.V.	EN 60947-7-4	NTR NL-7774
	KEMA/KEUR DEKRA Certification B.V.	EN 60947	2160584.38

Declarations of conformity and manufacturer's declarations

Logo	Approval	Additional Approval Text	Certificate name
	EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
	UK-Declaration of Conformity	-	-

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Approvals for marine applications

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

Required accessories

End plate

End plate	
Item no.: 235-850 End plate; snap-fit type; 1 mm thick; white	www.wago.com/235-850
Item no.: 235-800 End plate; snap-fit type; 1 mm thick; red	www.wago.com/235-800
Item no.: 235-100 End plate; snap-fit type; 1 mm thick; gray	www.wago.com/235-100
Item no.: 235-500 End plate; snap-fit type; 1 mm thick; black	www.wago.com/235-500
Item no.: 235-600 End plate; snap-fit type; 1 mm thick; orange	www.wago.com/235-600
Item no.: 235-700 End plate; snap-fit type; 1 mm thick; light green	www.wago.com/235-700
Item no.: 235-550 End plate; snap-fit type; 1 mm thick; yellow	www.wago.com/235-550
Item no.: 235-200 End plate; snap-fit type; 1 mm thick; dark gray	www.wago.com/235-200
Item no.: 235-400 End plate; snap-fit type; 1 mm thick; blue	www.wago.com/235-400

Optional accessories

Marking accessories

Marking strip
Item no.: 210-332/381-202

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

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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

www.wago.com/210-332/381-202

Item no.: 210-332/381-206

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

www.wago.com/210-332/381-206

Item no.: 210-332/381-205

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

www.wago.com/210-332/381-205

Item no.: 210-332/381-204

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

www.wago.com/210-332/381-204

Mounting

Intermediate plate

Item no.: 235-316

Spacer; for doubling the pin spacing; orange

www.wago.com/235-316

Tool

Operating tool

Item no.: 210-657

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short; multicoloured

www.wago.com/210-657

Item no.: 210-720

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

www.wago.com/210-720

Ferrule

Ferrule

Item no.: 216-101

Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated; silver-colored

www.wago.com/216-101

Item no.: 216-102

Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated; silver-colored

www.wago.com/216-102

Item no.: 216-103

Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated

www.wago.com/216-103

Item no.: 216-123

Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated; silver-colored

www.wago.com/216-123

Item no.: 216-122

Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated; silver-colored

www.wago.com/216-122

Item no.: 216-142

Ferrule; Sleeve for 0.75 mm² / 18 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92

www.wago.com/216-142

Item no.: 216-132

Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated

www.wago.com/216-132

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Item no.: 216-121 Ferrule; Sleeve for 0.5 mm ² / AWG 22; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-121
Item no.: 216-143 Ferrule; Sleeve for 1 mm ² / AWG 18; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	www.wago.com/216-143
Item no.: 216-131 Ferrule; Sleeve for 0.25 mm ² / AWG 24; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-131
Item no.: 216-141 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	www.wago.com/216-141
Item no.: 216-152 Ferrule; Sleeve for 0.34 mm ² / AWG 24; uninsulated; electro-tin plated	www.wago.com/216-152
Item no.: 216-203 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; red	www.wago.com/216-203
Item no.: 216-202 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; gray	www.wago.com/216-202
Item no.: 216-151 Ferrule; Sleeve for 0.25 mm ² / AWG 24; uninsulated; electro-tin plated	www.wago.com/216-151
Item no.: 216-201 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; white	www.wago.com/216-201
Item no.: 216-223 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; red	www.wago.com/216-223
Item no.: 216-241 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white	www.wago.com/216-241
Item no.: 216-242 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray	www.wago.com/216-242
Item no.: 216-222 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; gray	www.wago.com/216-222
Item no.: 216-221 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; white	www.wago.com/216-221
Item no.: 216-243 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red	www.wago.com/216-243
Item no.: 216-263 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red	www.wago.com/216-263
Item no.: 216-262 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray	www.wago.com/216-262

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



Item no.: 216-301

Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow

www.wago.com/216-301

Item no.: 216-321

Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow

www.wago.com/216-321

Item no.: 216-322

Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise

www.wago.com/216-322

Item no.: 216-302

Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise

www.wago.com/216-302

Downloads

Documentation

Additional Information

2019 年4月3日

pdf
2.0 MB

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CAD/CAE-Data

CAD data

2D/3D Models 235-770

URL

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PCB Design

Symbol and Footprint 235-770

URL

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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

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

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

CAE data

ZUKEN Portal 235-770	URL	Download
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Environmental Product Compliance

Compliance Search

Environmental Product Compliance 235-770	URL	Download
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Stackable PCB terminal block; push-button; 1.5 mm²; Pin spacing 3.81 mm; 1-pole;
Push-in CAGE CLAMP®; 1,50 mm²; red

Installation Notes

Conductor termination



Inserting/removing fine-stranded conductors via push-button.



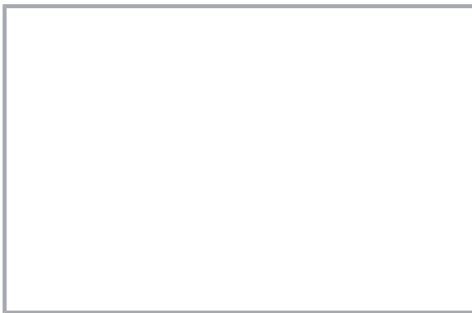
Insert/remove fine-stranded conductors with ferrules via push-button.

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



Insert solid conductors via push-in termination.

Installation



Combining 1- and 2-conductor terminal blocks with different pin spacing.

Testing



Application example: field-wiring terminal strip

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