

Data sheet | Item number: 254-651

Stackable PCB terminal block; 2.5 mm²; Pin spacing 10/10.16 mm; 1-pole;
PUSH WIRE®; 2,50 mm²; gray



www.wago.com/254-651



Color:

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

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Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.



Item description

- Modular terminal blocks with screwdriver-actuated PUSH WIRE[®] for custom terminal strip assemblies
- Push-in termination of solid and ferruled, fine-stranded conductors
- Test socket for 2 mm Ø test plug
- Save space on the PCB, just 8.9 mm deep

Data

Notes

Variants:

Other colors

Versions for Ex i

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

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

Electrical data

Ratings per IEC/EN

Ratings per	IEC/EN 60664-1
Nominal voltage (III/3)	630 V
Rated impulse voltage (III/3)	8 kV
Rated voltage (III/2)	1000 V
Rated impulse voltage (III/2)	8 kV
Nominal voltage (II/2)	1000 V
Rated surge voltage (II/2)	8 kV
Rated current	24 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
Rated voltage CSA (Use Group D)	300 V
Rated current CSA (Use Group D)	10 A

Connection data

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

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



Connection 1

Connection technology	PUSH WIRE®
Actuation type	Operating tool
Solid conductor	0.5 ... 2.5 mm ² / 20 ... 12 AWG
Fine-stranded conductor; with insulated ferrule	0.5 ... 1.5 mm ²
Fine-stranded conductor; with uninsulated ferrule	0.5 ... 1.5 mm ²
Note (conductor cross-section)	12 AWG: THHN, THWN
Strip length	10 ... 12 mm / 0.39 ... 0.47 inches
Conductor connection direction to PCB	45 °
Pole number	1

Physical data

Pin spacing	10/10.16 mm / 0.394/0.4 inches
Width	11.7 mm / 0.461 inches
Height	19.7 mm / 0.776 inches
Height from the surface	15.7 mm / 0.618 inches
Depth	13.5 mm / 0.531 inches
Solder pin length	4 mm
Solder pin dimensions	0.5 x 0.75 mm
Drilled hole diameter with tolerance	1.1 ^(+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	gray
Material group	I

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



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	0.03 MJ
Weight	1.5 g

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)	300 (100) pcs
Packaging type	box
Country of origin	PL
GTIN	4044918941013
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 7375
	CSA DEKRA Certification B.V.	C22.2	70154033
	UR Underwriters Laboratories Inc.	UL 1059	E45172

Approvals for marine applications

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Logo	Approval	Additional Approval Text	Certificate name
	ABS American Bureau of Shipping	-	14- HG1241537- PDA
	BV Bureau Veritas S.A.	IEC 60998	11915/D0 BV
	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE000016Z

Required accessories

End plate

End plate		
Item no.: 254-700 End plate; 1 mm thick; snap-fit type; light green		www.wago.com/254-700
Item no.: 254-200 End plate; 1 mm thick; snap-fit type; dark gray		www.wago.com/254-200
Item no.: 254-300 End plate; 1 mm thick; snap-fit type; light gray		www.wago.com/254-300
Item no.: 254-100 End plate; 1 mm thick; snap-fit type; gray		www.wago.com/254-100
Item no.: 254-400 End plate; 1 mm thick; snap-fit type; blue		www.wago.com/254-400
Item no.: 254-600 End plate; 1 mm thick; snap-fit type; orange		www.wago.com/254-600

Optional accessories

Marking accessories

Marking strip		
Item no.: 210-332/1016-202 Marking strips; as a DIN A4 sheet; MARKED; 1-16 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white		www.wago.com/210-332/1016-202
Item no.: 210-332/1016-204 Marking strips; as a DIN A4 sheet; MARKED; 17-31 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white		www.wago.com/210-332/1016-204
Item no.: 210-332/1000-202 Marking strips; as a DIN A4 sheet; MARKED; 1-16 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white		www.wago.com/210-332/1000-202

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**Item no.: 210-332/1000-204**

Marking strips; as a DIN A4 sheet; MARKED; 17-31 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white

www.wago.com/210-332/1000-204**Item no.: 210-332/1016-206**

Marking strips; as a DIN A4 sheet; MARKED; 33-48 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white

www.wago.com/210-332/1016-206**Item no.: 210-332/1000-206**

Marking strips; as a DIN A4 sheet; MARKED; 33-48 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white

www.wago.com/210-332/1000-206**Ferrule**

Ferrule

Item no.: 216-101Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated; silver-coloredwww.wago.com/216-101**Item no.: 216-104**Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin plated; silver-coloredwww.wago.com/216-104**Item no.: 216-102**Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated; silver-coloredwww.wago.com/216-102**Item no.: 216-103**Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin platedwww.wago.com/216-103**Item no.: 216-123**Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated; silver-coloredwww.wago.com/216-123**Item no.: 216-122**Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated; silver-coloredwww.wago.com/216-122**Item no.: 216-124**Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin platedwww.wago.com/216-124**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 1/08.92www.wago.com/216-142**Item no.: 216-121**Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated; silver-coloredwww.wago.com/216-121**Item no.: 216-143**Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92www.wago.com/216-143**Item no.: 216-141**Ferrule; Sleeve for 0.5 mm² / 20 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92www.wago.com/216-141**Item no.: 216-203**Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; redwww.wago.com/216-203**Item no.: 216-202**Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; graywww.wago.com/216-202

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Item no.: 216-204 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; black	www.wago.com/216-204
Item no.: 216-144 Ferrule; Sleeve for 1.5 mm ² / AWG 16; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92; silver-colored	www.wago.com/216-144
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.: 216-224 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; black	www.wago.com/216-224
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.: 216-244 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black	www.wago.com/216-244
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.: 216-264 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black	www.wago.com/216-264
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

Testing and measuring

Testing accessories

Item no.: 210-136 Test plug; 2 mm Ø; with 500 mm cable; red	www.wago.com/210-136
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Tool

Operating tool

Item no.: 210-657

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



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

www.wago.com/210-657

Item no.: 210-658

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

www.wago.com/210-658

Item no.: 210-720

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

www.wago.com/210-720

Downloads

Documentation

Additional Information

2019 年4月3日

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2.0 MB

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CAD/CAE-Data

CAD data

2D/3D Models 254-651

URL

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PCB Design

Symbol and Footprint 254-651

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

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- 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
- 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 254-651	URL	Download
Stackable PCB terminal block; 2.5 mm ² ; Pin spacing 10/10.16 mm; 1-pole; PUSH WIRE®; 2,50 mm ² ; gray		

Installation Notes

Conductor termination



Insert solid conductors via push-in termination.



Inserting a tip-bonded conductor via screwdriver.

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



Removing a solid conductor.



Inserting/removing a ferruled conductor.

Marking



Labeling via self-adhesive marking strips.



Labeling via factory direct marking.

Testing



Testing with 2 mm Ø test plug.

Application

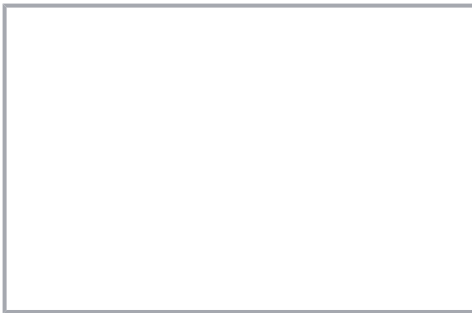
Subject to changes. Please also observe the further product documentation!



Mixed terminal strips can be assembled using different housing colors for the formation of groups.



Mixed terminal strips can be assembled using different pin spacing and housing colors for the formation of groups.



Application example: field-wiring terminal strip

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