

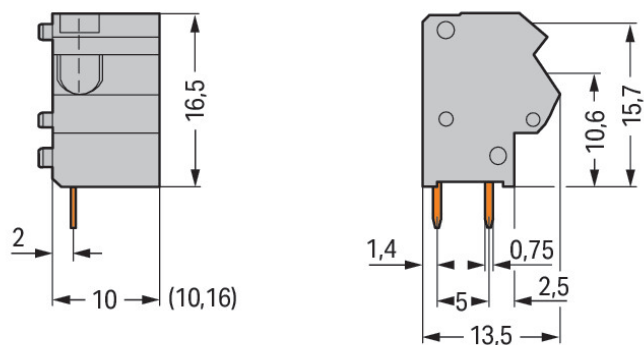
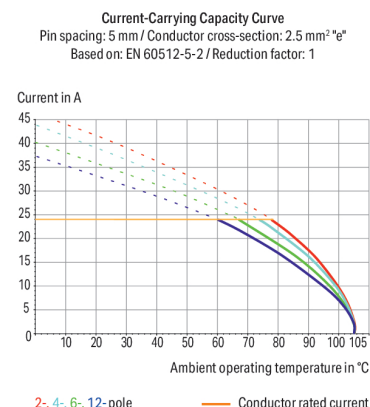
Data Sheet | Item Number: 254-651

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

<https://www.wago.com/254-651>



Color: ■ gray



Dimensions in mm

PCB terminal block, 254 Series, with 10 mm pin spacing

This PCB terminal block (item number 254-651) is designed for easy and secure connections. You can count on proven safety with these PCB terminal blocks, perfect for a wide variety of applications when designing your devices. Conductors should only be connected to this PCB terminal block if their strip length is between 10 and 12 mm. This product features one conductor terminal and utilizes PUSH WIRE®. Our PUSH WIRE® connection is the quick and easy method for connecting solid conductors. The dimensions are (11.7 x 19.7 x 13.5) mm (width x height x depth). Depending on the conductor type, this PCB terminal block is ideal for conductor cross sections ranging from 0.5 mm² to 2.5 mm².

Tin is used for coating the contact surfaces. An operating tool is used to operate this PCB terminal block. THT is used to assemble the PCB terminal block. The conductor is designed to be inserted at an angle of 45°.



Notes	
Variants:	Other colors Versions for Ex i 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	630 V	1000 V	1000 V
Rated impulse withstand voltage	8 kV	8 kV	8 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	10 A	-	10 A

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

Connection Data

Clamping units	1
Total number of potentials	1
Number of connection types	1
Number of levels	1

Connection 1	
Connection technology	PUSH WIRE®
Actuation type	Operating tool
Solid conductor	0.5 ... 2.5 mm² / 20 ... 12 AWG
Fine-stranded conductor; with insulated ferrule	0.5 ... 1.5 mm²
Fine-stranded conductor; with uninsulated ferrule	0.5 ... 1.5 mm²
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
!	1.1 (+0.1) mm



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
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	0.03 MJ
Weight	1.5 g

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

Commercial data	
Product Group	4 (Printed Circuit Connectors)
PU (SPU)	300 (100) pcs
Packaging type	Box
Country of origin	PL
GTIN	4044918941013
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
		UR Underwriters Laboratories Inc.
		UL 1059
		E45172
Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60947	NTR NL 7375
CSA CSA Group	C22.2	70154033



Approvals for marine applications

		
Approval	Standard	Certificate Name
ABS American Bureau of Ship- ping	-	24-0095975-PDA
BV Bureau Veritas S.A.	IEC 60998	11915/E0 BV
DNV DNV GL SE	-	TAE000016Z

Downloads

Environmental Product Compliance	
Compliance Search	
Environmental Product Compliance 254-651	

Documentation

Additional Information			
Technical Section	03.04.2019	pdf 2027.26 KB	

CAD/CAE-Data

CAD data		CAE data	
2D/3D Models 254-651		EPLAN Data Portal 254-651	
		ZUKEN Portal 254-651	

PCB Design	
Symbol and Footprint via SamacSys 254-651	
Symbol and Footprint via Ultra Librarian 254-651	



1 Compatible Products			
1.1 Required Accessories			
1.1.1 End plate			
1.1.1.1 End plate			
			
Item No.: 254-400 End plate; 1 mm thick; snap-fit type; blue	Item No.: 254-200 End plate; 1 mm thick; snap-fit type; dark gray	Item No.: 254-100 End plate; 1 mm thick; snap-fit type; gray	Item No.: 254-300 End plate; 1 mm thick; snap-fit type; light gray
			
Item No.: 254-700 End plate; 1 mm thick; snap-fit type; light green	Item No.: 254-600 End plate; 1 mm thick; snap-fit type; orange		
1.2 Optional Accessories			
1.2.1 Ferrule			
1.2.1.1 Ferrule			
			
Item No.: 216-241 Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white	Item No.: 216-141 Ferrule; Sleeve for 0.5 mm² / 20 AWG; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	Item No.: 216-242 Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray	Item No.: 216-262 Ferrule; Sleeve for 0.75 mm² / 18 AWG; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray
			
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	Item No.: 216-243 Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red	Item No.: 216-263 Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red	Item No.: 216-143 Ferrule; Sleeve for 1 mm² / AWG 18; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92
			
Item No.: 216-244 Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black	Item No.: 216-264 Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black	Item No.: 216-284 Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black	Item No.: 216-144 Ferrule; Sleeve for 1.5 mm² / AWG 16; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92; silver-colored
1.2.2 Marking			
1.2.2.1 Marking strip			
			
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	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	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	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
			
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	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		

1.2.3 Test and measurement

1.2.3.1 Testing accessories



Item No.: 210-136
Test plug; 2 mm Ø; with 500 mm cable; red

1.2.4 Tool

1.2.4.1 Operating tool



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



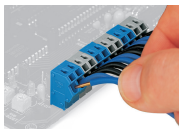
Item No.: 210-720
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured



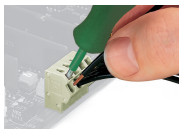
Item No.: 210-657
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short; multicoloured

Installation Notes

Conductor termination



Insert solid conductors via push-in termination.



Inserting a tip-bonded conductor via screwdriver.

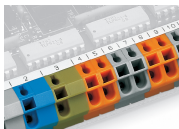


Removing a solid conductor.

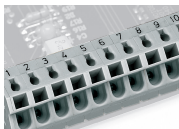


Inserting/removing a ferruled conductor.

Marking



Labeling via self-adhesive marking strips.



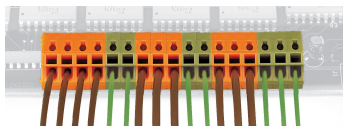
Labeling via factory direct marking.

Testing

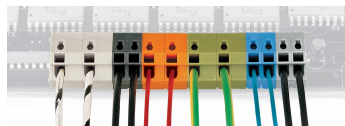


Testing with 2 mm Ø test plug.

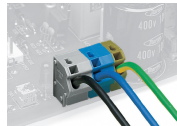
Application



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