

Data Sheet | Item Number: 254-854

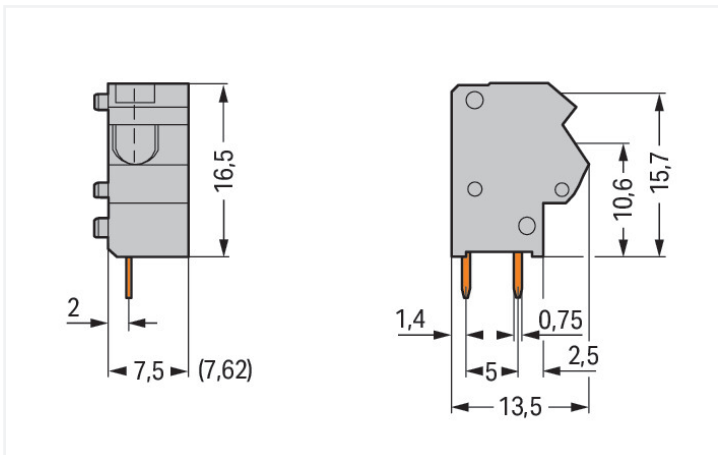
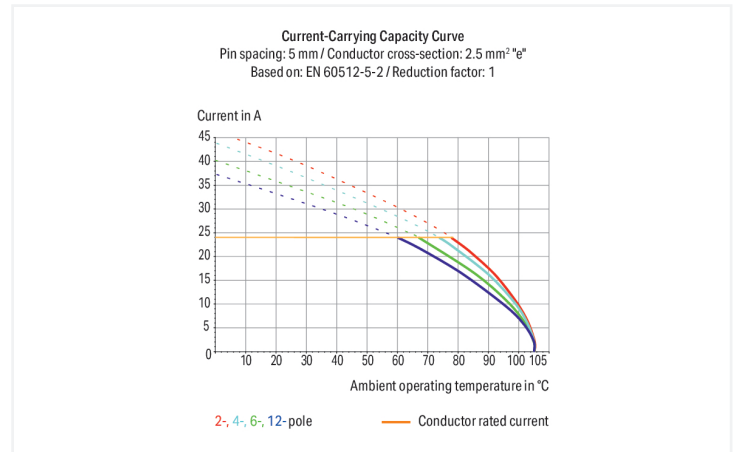
Stackable PCB terminal block; 2.5 mm²; Pin spacing 7.5/7.62 mm; 1-pole; suitable for Ex-i applications; PUSH WIRE®; 2,50 mm²; blue

<https://www.wago.com/254-854>



Color: ■ blue

Similar to illustration



Dimensions in mm

PCB terminal block, 254 Series, PUSH WIRE®

This PCB terminal block (item number 254-854) is designed to connect conductors quickly and easily. It is a universal connector that can be used practically anywhere, for example, as a pluggable PCB connector, panel feedthrough header, connector for rail-mount terminal blocks, or a floating connector for different mounting methods. Ensure that the strip lengths are between 10 and 12 mm when connecting conductors to this PCB terminal block. This product features one conductor terminal and utilizes PUSH WIRE®. Our proven PUSH WIRE® connection offers the fastest method for clamping conductors. It utilizes the conductor's stiffness to overcome the clamping spring's contact force. The dimensions are (9.2 x 19.7 x 13.5) mm (width x height x depth). Depending on the type of conductor, this PCB terminal block is ideal for conductor cross sections ranging from 0.5 mm² to 2.5 mm².

The contact surface is coated with tin. This PCB terminal block is operated with an operating tool. The PCB terminal block is designed for THT soldering. Insert the conductor into the board at a 45° angle..



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	500 V	630 V	1000 V	
Rated impulse withstand voltage	6 kV	6 kV	6 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	7.5/7.62 mm / 0.295/0.3 inches
Width	9.2 mm / 0.362 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



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		blue
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		0.014 MJ
Weight		1.4 g

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

Commercial data		
Product Group		4 (Printed Circuit Connectors)
PU (SPU)		400 (100) pcs
Packaging type		Box
Country of origin		PL
GTIN		4044918942997
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
DNV DNV GL SE	-	TAE000016Z
PRS Polski Rejestr Statków	-	TE/1095/880590/23

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 254-854

Documentation

Additional Information
Technical Section
03.04.2019
pdf 2027.26 KB

CAD/CAE-Data

CAD data
2D/3D Models 254-854

CAE data
EPLAN Data Portal 254-854
ZUKEN Portal 254-854

PCB Design
Symbol and Footprint via SamacSys 254-854
Symbol and Footprint via Ultra Librarian 254-854



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; un-insulated; 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.: 210-332/750-020
Marking strips; as a DIN A4 sheet; MARKED; 1-20 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-332/762-020
Marking strips; as a DIN A4 sheet; MARKED; 1-20 (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



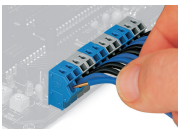
Item No.: 210-720
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured



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

Installation Notes

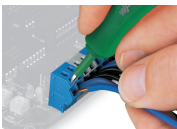
Conductor termination



Insert solid conductors via push-in termination.



Inserting a tip-bonded conductor via screwdriver.

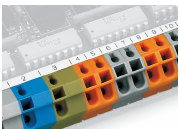


Removing a solid conductor.

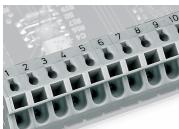


Inserting/removing a ferruled conductor.

Marking



Labeling via self-adhesive marking strips.



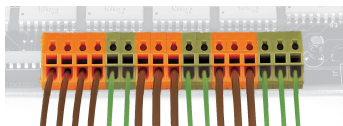
Labeling via factory direct marking.

Testing

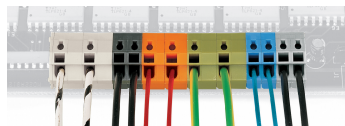


Testing with 2 mm Ø test plug.

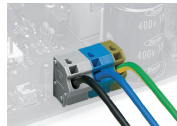
Application



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