

## Data Sheet | Item Number: 254-863

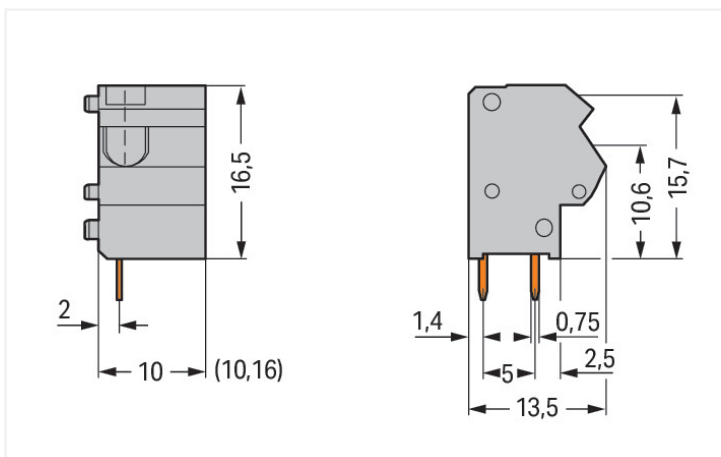
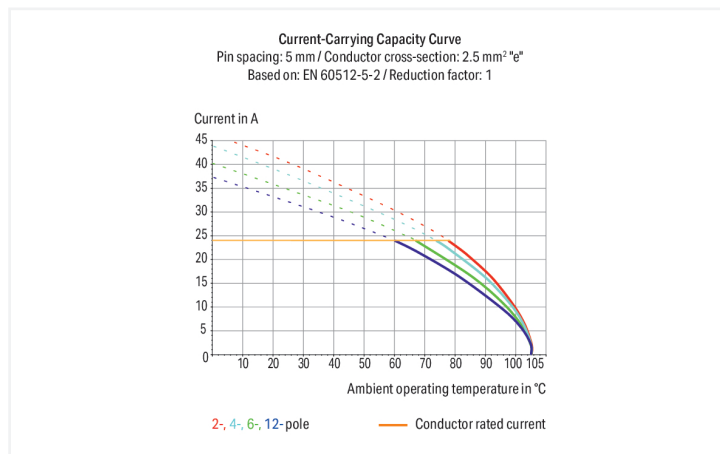
Stackable PCB terminal block; 2.5 mm<sup>2</sup>; Pin spacing 10/10.16 mm; 1-pole; PUSH WIRE®; light gray

<https://www.wago.com/254-863>



Color: ■ light gray

Similar to illustration



Dimensions in mm

PCB terminal block, 254 Series, 45 °conductor entry to board

Our PCB terminal block (item number 254-863) makes connections quick and easy. It is ideal for custom installations with different mounting types. Conductors can 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 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 (11.7 x 19.7 x 13.5) mm (width x height x depth). Depending on the conductor type, this PCB terminal block is suitable for conductor cross sections ranging from 0.5 mm<sup>2</sup> to 2.5 mm<sup>2</sup>.

The contact surface is coated with tin. An operating tool is used to operate this PCB terminal block. The PCB terminal block is designed for THT soldering. The conductor is designed to be inserted into the board 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			Approvals per	UL 1059		
Overvoltage category	III	III	II	Use group	B	C	D
Pollution degree	3	2	2	Rated voltage	300 V	-	300 V
Nominal voltage	630 V	1000 V	1000 V	Rated current	10 A	-	10 A
Rated impulse withstand voltage	8 kV	8 kV	8 kV				
Rated current	24 A	24 A	24 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 mm <sup>2</sup> / 20 ... 12 AWG
Fine-stranded conductor; with insulated ferrule	0.5 ... 1.5 mm <sup>2</sup>
Fine-stranded conductor; with uninsulated ferrule	0.5 ... 1.5 mm <sup>2</sup>
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	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)	<a href="#">Information on material specifications can be found here</a>
Color	light 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 <sub>Cu</sub> )
Contact Plating	Tin
Fire load	0.028 MJ
Weight	1.6 g

### Environmental requirements

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

Product Group	4 (Printed Circuit Connectors)
PU (SPU)	300 (100) pcs
Packaging type	Box
Country of origin	PL
GTIN	4044918943161
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
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### Approvals / Certificates

#### General approvals



Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60947	NTR NL 7375
CSA CSA Group	C22.2	70154033

#### General approvals

UR Underwriters Laboratories Inc.	UL 1059	E45172
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**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 254-863 <a href="#">↓</a>

**Documentation**

Additional Information			
Technical Section	03.04.2019	pdf 2027.26 KB	<a href="#">↓</a>

**CAD/CAE-Data**

CAD data
2D/3D Models 254-863 <a href="#">↓</a>

CAE data
EPLAN Data Portal 254-863 <a href="#">↓</a>
ZUKEN Portal 254-863 <a href="#">↓</a>

**PCB Design**

Symbol and Footprint via SamacSys 254-863 <a href="#">↓</a>
Symbol and Footprint via Ultra Librarian 254-863 <a href="#">↓</a>

## 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 18 AWG; 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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; multi-coloured



**Item No.: 210-720**

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

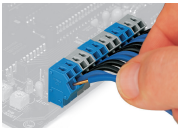


**Item No.: 210-657**

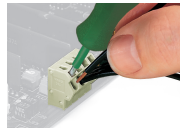
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short; multicoloured

### Installation Notes

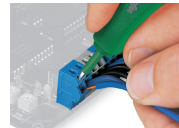
#### Conductor termination



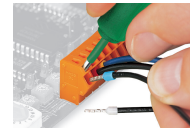
Insert solid conductors via push-in termination.



Inserting a tip-bonded conductor via screwdriver.

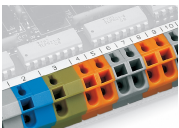


Removing a solid conductor.

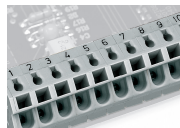


Inserting/removing a ferruled conductor.

#### Marking



Labeling via self-adhesive marking strips.



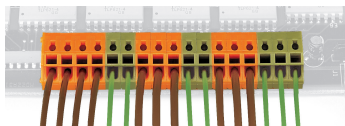
Labeling via factory direct marking.

#### Testing

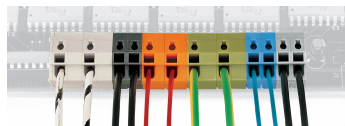


Testing with 2 mm Ø test plug.

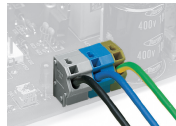
## Application



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