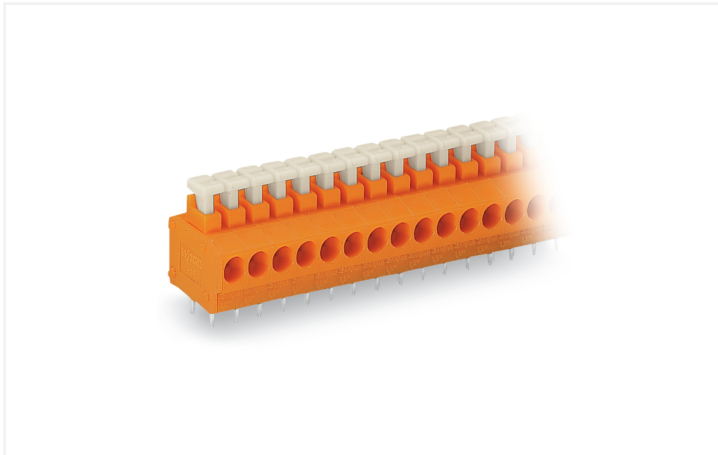


## Data Sheet | Item Number: 235-104

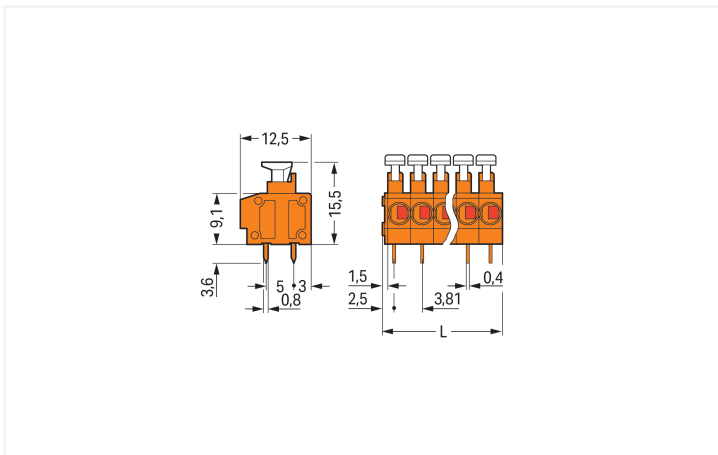
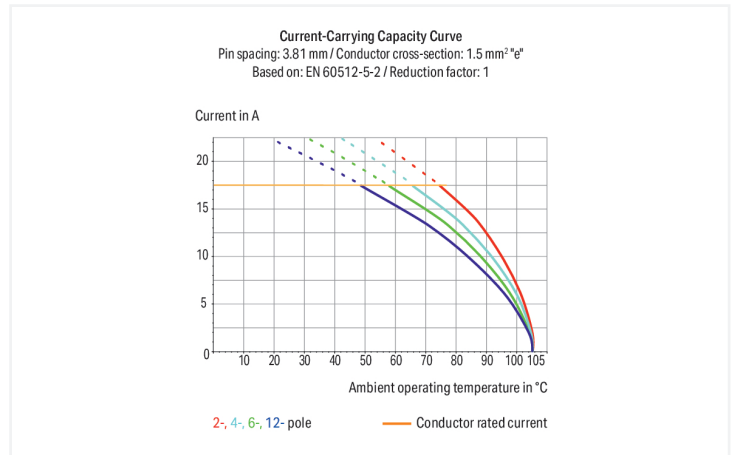
PCB terminal block; push-button; 1.5 mm<sup>2</sup>; Pin spacing 3.81 mm; 4-pole; Push-in CAGE CLAMP®; orange

<https://www.wago.com/235-104>



Color: ■ orange

Similar to illustration



Dimensions in mm

L = (pole no. x pin spacing) + 1.5 mm

PCB terminal block, 235 Series, solder pin dimensions 0.4 x 0.8 mm

This PCB terminal block (item number 235-104) is designed for quick and simple connections. It is a universal connector that can be used almost 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. Conductors should only be connected to this PCB terminal block if their strip length is between 9 and 10 mm. This product features one conductor terminal and utilizes Push-in CAGE CLAMP®. Our Push-in CAGE CLAMP® is a universal, maintenance-free connection solution for all conductor types, boasting a key feature: both solid and fine-stranded conductors with ferrules can be directly inserted without the need for tools or any preparation, such as crimping the ferrule. The dimensions are (16.74 x 19.1 x 12.5) mm (width x height x depth). This PCB terminal block is suitable for conductor cross sections ranging from 0.5 mm<sup>2</sup> to 1.5 mm<sup>2</sup>. Tin is used for coating the contact surfaces. This PCB terminal block is operated with a push-button. THT is used to assemble the PCB terminal block. Insert the conductor at an angle of 0°.

## Notes

Variants:	Other pole numbers Other colors Mixed-color PCB connector strips Direct marking Other versions (or variants) can be requested from WAGO Sales or configured at <a href="https://configurator.wago.com/">https://configurator.wago.com/</a> .
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## 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	200 V	320 V	500 V	Rated current	10 A	-	10 A
Rated impulse withstand voltage	4 kV	4 kV	4 kV				
Rated current	17.5 A	17.5 A	17.5 A				

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

## Connection Data

Clamping units	4	<b>Connection 1</b>	
Total number of potentials	4	Connection technology	Push-in CAGE CLAMP®
Number of connection types	1	Actuation type	Push-button
Number of levels	1	Solid conductor	0.5 ... 1.5 mm <sup>2</sup> / 20 ... 16 AWG
		Fine-stranded conductor	0.75 ... 1.5 mm <sup>2</sup> / 20 ... 16 AWG
		Fine-stranded conductor; with insulated ferrule	0.25 ... 1 mm <sup>2</sup>
		Fine-stranded conductor; with un-insulated ferrule	0.25 ... 1 mm <sup>2</sup>
		Note (conductor cross-section)	Fine-stranded conductor 0.75 ... 1.5 mm <sup>2</sup> / 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	4

## Physical data

Pin spacing	3.81 mm / 0.15 inches
Width	16.74 mm / 0.659 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
!	1 (+0.1) mm

### PCB contact

PCB contact	THT
Solder pin arrangement	over the entire terminal strip (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	orange
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	0.044 MJ
Weight	2.4 g

### Environmental requirements

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

Product Group	4 (Printed Circuit Connectors)
PU (SPU)	280 (70) pcs
Packaging type	Box
Country of origin	CH
GTIN	4044918828475
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



#### General approvals

KEMA/KEUR DEKRA Certification B.V.	EN 60947	2160584.38
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Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60947	NTR NL-7144
CCA DEKRA Certification B.V.	EN 60998	NTR NL 6919
CSA DEKRA Certification B.V.	C22.2	1673956

Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Approvals for marine applications



Approval	Standard	Certificate Name
ABS American Bureau of Shipping	-	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 235-104 <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 235-104 <a href="#">↓</a>

CAE data
EPLAN Data Portal 235-104 <a href="#">↓</a>
ZUKEN Portal 235-104 <a href="#">↓</a>

PCB Design

Symbol and Footprint via SamacSys 235-104 <a href="#">↓</a>
Symbol and Footprint via Ultra Librarian 235-104 <a href="#">↓</a>

## 1 Compatible Products

### 1.1 Optional Accessories

#### 1.1.1 Ferrule

##### 1.1.1.1 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; 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 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; un-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

### 1.1.2 Marking

#### 1.1.2.1 Marking strip



**Item No.: 210-332/381-202**

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

**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

**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

**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

### 1.1.3 Tool

#### 1.1.3.1 Operating tool



**Item No.: 210-720**

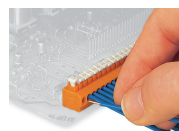
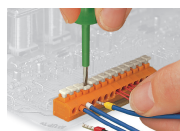
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

**Item No.: 210-657**

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

## Installation Notes

### Conductor termination

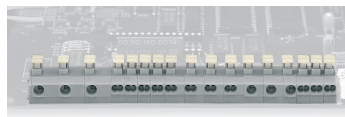
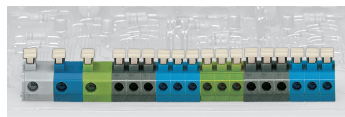


Inserting/removing fine-stranded conductors via push-button.

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

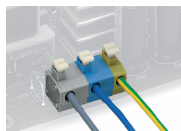
Insert solid conductors via push-in termination.

## Installation



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

## Testing



Application example: field-wiring terminal strip