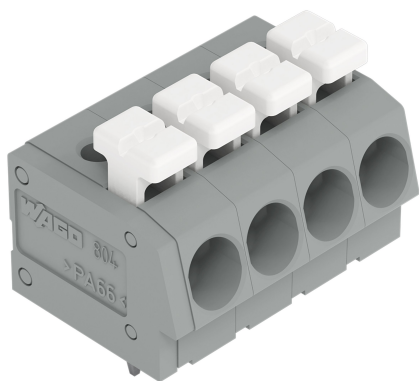


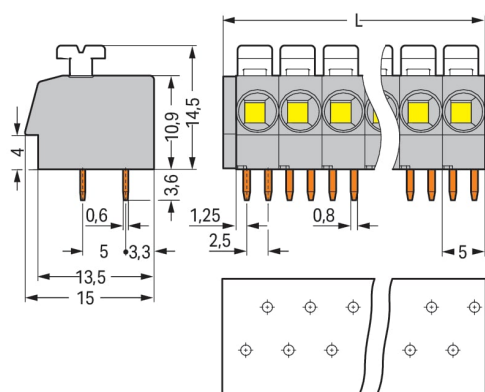
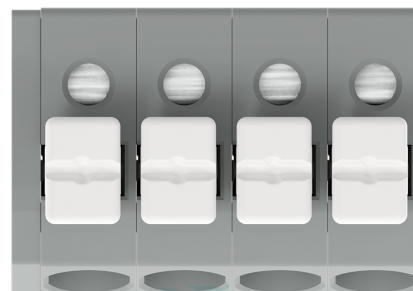
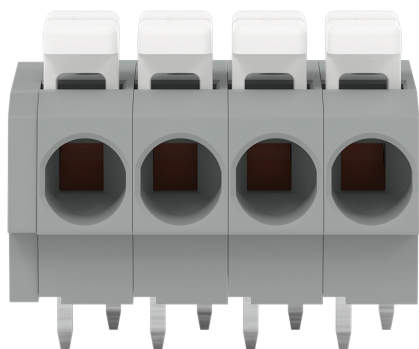
Data Sheet | Item Number: 804-104

PCB terminal block; push-button; 2.5 mm²; Pin spacing 5 mm; 4-pole; Push-in CAGE CLAMP®; 2,50 mm²; gray

<https://www.wago.com/804-104>



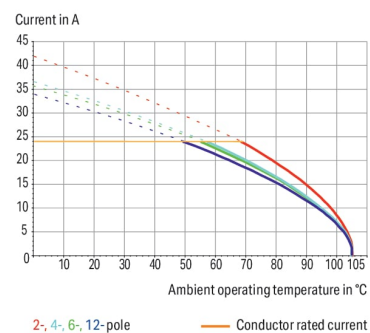
Color: ■ gray



Dimensions in mm

$L = (\text{pole no.} \times \text{pin spacing}) + 1.5 \text{ mm}$

Current-Carrying Capacity Curve
Pin spacing: 5 mm / Conductor cross-section: 2.5 mm² "f-st"
Based on: EN 60512-5-2 / Reduction factor: 1





PCB terminal block, 804 Series, with 5 mm pin spacing

Our PCB terminal block (item number 804-104) ensures effortless electrical installations. It is perfect for custom installations with different mounting types. Rated current and voltage are key factors to consider when selecting a PCB terminal block, as they determine the product's suitability for different applications. This product has a rated voltage of 320 V and a rated current of 24 A, making it suitable for high-load applications. Strip lengths must be between 10 mm and 11 mm when connecting conductors to this PCB terminal block. Featuring one conductor terminal along with Push-in CAGE CLAMP®, this product delivers reliable performance. Our Push-in CAGE CLAMP® is a universal, maintenance-free connection solution for all conductor types, featuring a winning design: 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. Dimensions: 21.5 x 18.1 x 15 mm (width x height x depth). This PCB terminal block is suitable for conductor cross sections ranging from 0.25 mm² to 2.5 mm². Up to four potentials / four poles can be connected to this terminal strip using four clamping points on one level. The contacts are made of electrolytic copper (ECu), the gray housing is made of polyamide (PA66) for insulation, and the clamping spring is made of chrome-nickel spring steel (CrNi). Tin is used for coating the contact surfaces. This PCB terminal block is operated with a push-button. The PCB terminal block is designed for THT soldering. Insert the conductor at an angle of 0°.. The solder pins are organized over the entire terminal strip (staggered). They are 0.8 x 0.6 mm and 3.6 mm in length. Each potential has two solder pins.

Notes	
Variants:	Other pole numbers Other colors Mixed-color PCB connector strips 10 mm pin spacing version with spacers Direct marking 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	250 V	320 V	630 V	Rated current	10 A	-	10 A
Rated surge voltage	4 kV	4 kV	4 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	4	Connection 1	
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	0.25 ... 2.5 mm² / 20 ... 12 AWG
		Fine-stranded conductor	0.25 ... 2.5 mm² / 22 ... 12 AWG
		Fine-stranded conductor; with insulated ferrule	0.25 ... 1.5 mm²
		Fine-stranded conductor; with uninsulated ferrule	0.25 ... 2.5 mm²
		Strip length	10 ... 11 mm / 0.39 ... 0.43 inches
		Conductor connection direction to PCB	0°
		Pole number	4



Physical data		
Pin spacing		5 mm / 0.197 inches
Width		21.5 mm / 0.846 inches
Height		18.1 mm / 0.713 inches
Height from the surface		14.5 mm / 0.571 inches
Depth		15 mm / 0.591 inches
Solder pin length		3.6 mm
Solder pin dimensions		0.8 x 0.6 mm
Drilled hole diameter with tolerance		1.1 ^(+0.1) mm

PCB contact		
PCB contact		THT
Solder pin arrangement		over the entire terminal strip (staggered)
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		0.094 MJ
Weight		4.2 g

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

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 9.0		EC002643
ETIM 8.0		EC002643
PU (SPU)		220 (55) pcs
Packaging type		Box
Country of origin		CH
GTIN		4044918515009
Customs tariff number		85369010000

Environmental Product Compliance	
RoHS Compliance Status	Compliant,No Exemption

Approvals / Certificates

General approvals			Declarations of conformity and manufacturer's declarations		
					
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60947-7-4	NTR NL 7781	EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
CCA DEKRA Certification B.V.	EN 60947-7-4	71-110710	UK-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
ENEC 15 UL International Germany GmbH	EN 60998	ENEC-00096			
UL UL International Germany GmbH	UL 1977	E45171			
UL UL International Germany GmbH	UL 1059	E45172			

Downloads

Environmental Product Compliance	
Compliance Search	
Environmental Product Compliance 804-104	

Documentation

Additional Information			
Technical Section	03.04.2019	pdf 2027.26 KB	

CAD/CAE-Data

CAD data		CAE data	
2D/3D Models 804-104		EPLAN Data Portal 804-104	
		ZUKEN Portal 804-104	



PCB Design	
Symbol and Footprint via SamacSys 804-104	
Symbol and Footprint via Ultra Librarian 804-104	

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 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; 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; uninsulated; 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
Item No.: 216-106 Ferrule; Sleeve for 2.5 mm² / AWG 14; un-insulated; electro-tin plated; silver-colored			

1.1.2 Marking

1.1.2.1 Marking strip

Item No.: 210-332/500-202 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.: 210-332/500-205 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.: 210-332/500-204 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.: 210-332/500-206 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



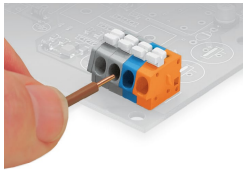
Item No.: 210-720
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured



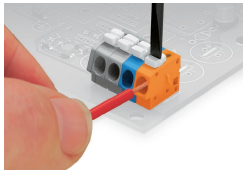
Item No.: 210-657
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short; multicoloured

Installation Notes

Conductor termination



Terminating solid conductors: Simply push in stripped conductor until it hits the backstop.



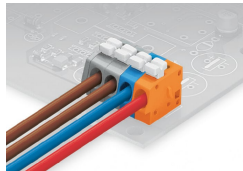
Inserting/removing fine-stranded conductors: Open the clamping unit via push-button and insert a stripped conductor until it hits the backstop.

Application



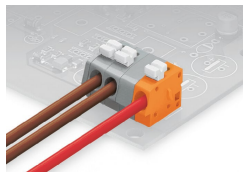
WAGO's 804 Series Terminal Strips provide "internal commoning" to meet requirements than ban routing the ground conductor over the board. This enables custom terminal strips to be commoned and marked at the factory upon request.

Installation



Mixed-color terminal strips are available upon request.

Installation



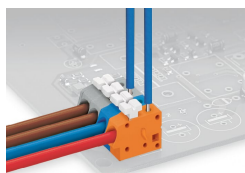
Terminal strips with spacer are available upon request.

Marking



Labeling via self-adhesive marking strips
or factory direct marking.

Testing



Testing via 1 mm Ø test pin.
Touch contact with current bar.