

Data Sheet | Item Number: 804-312

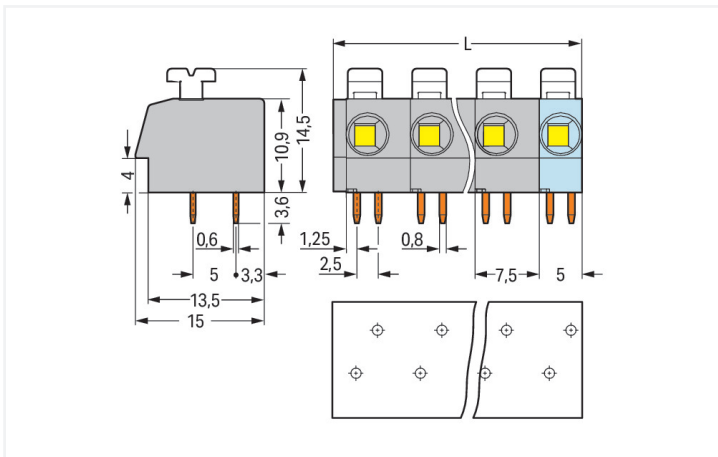
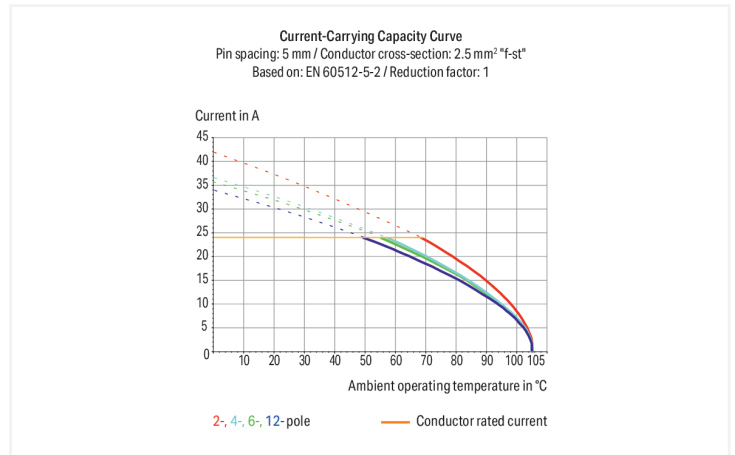
PCB terminal block; push-button; 2.5 mm²; Pin spacing 7.5 mm; 12-pole; Push-in CAGE CLAMP®; gray

<https://www.wago.com/804-312>



Color: ■ gray

Similar to illustration



Dimensions in mm

$L = (\text{pole no.} - 1) \times \text{pin spacing} + 5 \text{ mm} + 1.5 \text{ mm}$

PCB terminal block, 804 Series, Push-in CAGE CLAMP®

Easily, quickly and safely connect conductors with this PCB terminal block (item number 804-312). It is a universal connector that can be used almost anywhere, e.g., as a pluggable PCB connector, panel feedthrough header, connector for rail-mount terminal blocks, or a floating connector for different mounting methods. Strip lengths must be between 10 and 11 mm when connecting conductors to this PCB terminal block. Featuring one conductor terminal along with Push-in CAGE CLAMP®, this connector outperforms the competition. Push-in CAGE CLAMP® technology provides a universal connection solution for all conductor types. It allows both solid and fine-stranded conductors with ferrules to be inserted directly into the clamping point without the need for tools. The item's dimensions are (89 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.

The contact surface is coated with tin. This PCB terminal block is operated with a push-button. THT is used to solder the PCB terminal block. Insert the conductor at an angle of 0°.

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	
Overvoltage category	III	III	II
Pollution degree	3	2	2
Nominal voltage	320 V	320 V	630 V
Rated impulse withstand voltage	4 kV	4 kV	4 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	12
Total number of potentials	12
Number of connection types	1
Number of levels	1

Connection 1	
Connection technology	Push-in CAGE CLAMP®
Actuation type	Push-button
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	12

Physical data

Pin spacing	7.5 mm / 0.295 inches
Width	89 mm / 3.504 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
!	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	0.349 MJ
Weight	14.5 g

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

Commercial data	
Product Group	4 (Printed Circuit Connectors)
PU (SPU)	40 (10) pcs
Packaging type	Box
Country of origin	CH
GTIN	4044918515498
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	
		ENEC 15 UL International Germany GmbH	EN 60998 ENEC-00096
Approval	Standard	Certificate Name	
CCA DEKRA Certification B.V.	EN 60947-7-4	NTR NL 7781	
CCA DEKRA Certification B.V.	EN 60947-7-4	71-110710	
		UL UL International Germany GmbH	UL 1977 E45171
		UL UL International Germany GmbH	UL 1059 E45172



Declarations of conformity and manufacturer's declarations

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

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 804-312



Documentation

Additional Information
Technical Section
03.04.2019
pdf 2027.26 KB



CAD/CAE-Data

CAD data
2D/3D Models 804-312



CAE data
EPLAN Data Portal 804-312
ZUKEN Portal 804-312



PCB Design
Symbol and Footprint via SamacSys 804-312
Symbol and Footprint via Ultra Librarian 804-312





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; 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
			
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.: 210-332/750-020 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

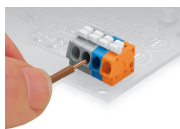
1.1.3 Tool

1.1.3.1 Operating tool

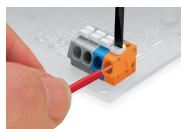
	
Item No.: 210-720 Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured	Item No.: 210-657 Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short; multicoloured

Installation Notes

Conductor termination



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



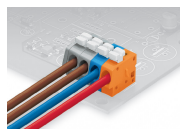
Inserting/removing fine-stranded conductors:
Open the clamping unit via push-button and insert a stripped conductor until it hits the backstop.

Application



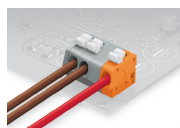
WAGO's 804 Series Terminal Strips provide "internal commoning" to meet requirements than ban routing the ground conductor over the board. This enables custom terminal strips to be commoned and marked at the factory upon request.

Installation



Mixed-color terminal strips are available upon request.

Installation



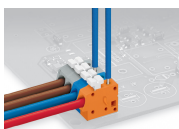
Terminal strips with spacer are available upon request.

Marking



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

Testing



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