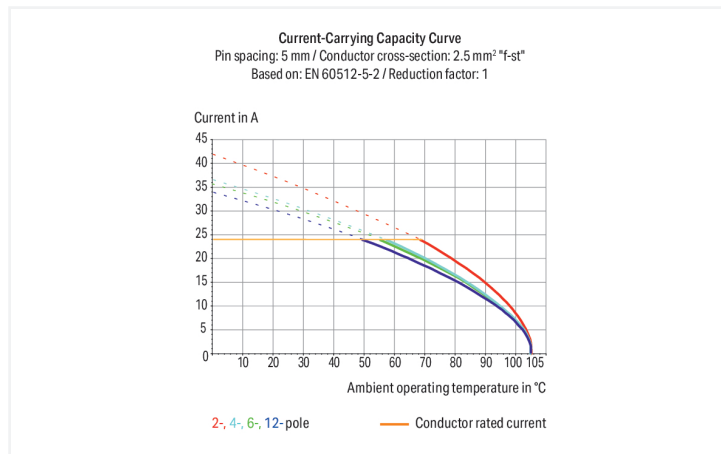


Data Sheet | Item Number: 804-309

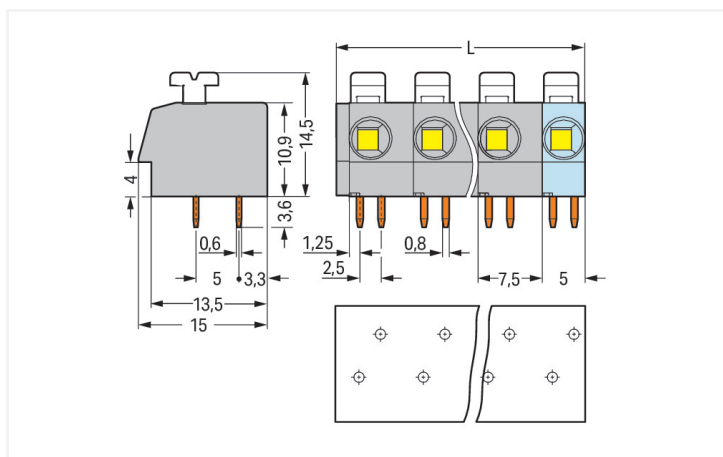
PCB terminal block; push-button; 2.5 mm²; Pin spacing 7.5 mm; 9-pole; Push-in CAGE CLAMP®; gray

<https://www.wago.com/804-309>



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®

Connect conductors quickly and securely with this PCB terminal block (item number 804-309). You can count on tried and tested safety with these PCB terminal blocks, perfect for a wide variety of applications when designing your devices. Conductors should only be connected to this PCB terminal block if their strip length is between 10 and 11 mm. This product features one conductor terminal and utilizes Push-in CAGE CLAMP®. Push-in CAGE CLAMP® connection technology is ideal for connecting all conductor types. It allows direct insertion of both solid and fine-stranded conductors with ferrules without the need for tools—all thanks to its pluggable design. The dimensions are (66.5 x 18.1 x 15) mm (width x height x depth). Depending on the type of conductor, 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. The PCB terminal block is designed for THT soldering. The conductor is designed to be inserted into the board at a 0° angle.

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 | 9 |
| Total number of potentials | 9 |
| 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 mm ² / 20 ... 12 AWG |
| Fine-stranded conductor | 0.25 ... 2.5 mm ² / 22 ... 12 AWG |
| Fine-stranded conductor; with insulated ferrule | 0.25 ... 1.5 mm ² |
| Fine-stranded conductor; with uninsulated ferrule | 0.25 ... 2.5 mm ² |
| Strip length | 10 ... 11 mm / 0.39 ... 0.43 inches |
| Conductor connection direction to PCB | 0° |
| Pole number | 9 |

Physical data

| | |
|-------------------------|------------------------|
| Pin spacing | 7.5 mm / 0.295 inches |
| Width | 66.5 mm / 2.618 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 | 0.262 MJ |
| Weight | 10.8 g |

Environmental requirements

| | |
|-------------------------|-----------------|
| Limit temperature range | -60 ... +105 °C |
|-------------------------|-----------------|

Commercial data

| | |
|-----------------------|--------------------------------|
| Product Group | 4 (Printed Circuit Connectors) |
| PU (SPU) | 60 (15) pcs |
| Packaging type | Box |
| Country of origin | CH |
| GTIN | 4044918515467 |
| 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



| 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 |

General approvals


| | | |
|---|----------|------------|
| 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 |

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 804-309  |

Documentation



| Additional Information |
|---|
| Technical Section 03.04.2019 pdf 2027.26 KB  |

CAD/CAE-Data

| CAD data |
|--|
| 2D/3D Models 804-309  |

| CAE data |
|--|
| EPLAN Data Portal 804-309  |
| ZUKEN Portal 804-309  |

PCB Design

| |
|--|
| Symbol and Footprint via SamacSys 804-309  |
| Symbol and Footprint via Ultra Librarian 804-309  |

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; 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 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; un-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; un-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; un-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

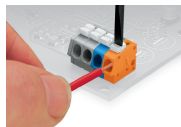
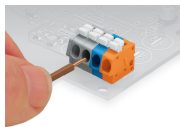


Item No.: 210-657

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.

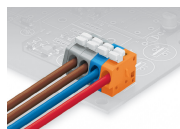
Inserting/removing fine-stranded conductors: Open the clamping unit via push-button and insert a stripped conductor until it hits the backstop.

Application



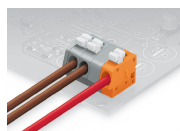
WAGO's 804 Series Terminal Strips provide "internal commoning" to meet requirements that ban routing the ground conductor over the board. This enables custom terminal strips to be commoned and marked at the factory upon request.

Installation



Mixed-color terminal strips are available upon request.

Installation



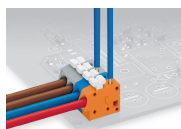
Terminal strips with spacer are available upon request.

Marking



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

Testing



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