

Data Sheet | Item Number: 805-109

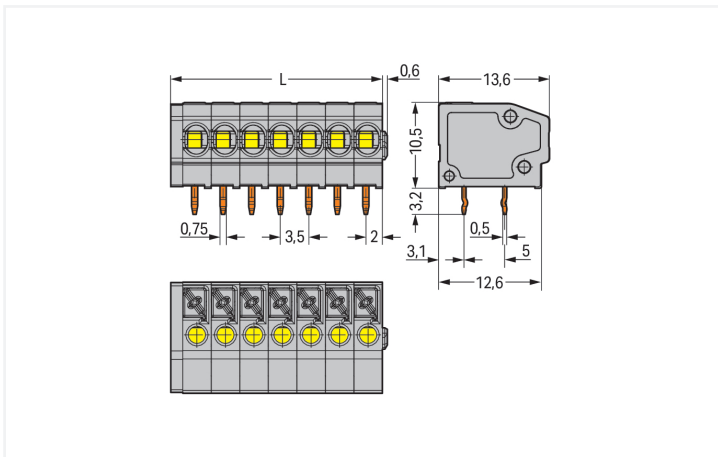
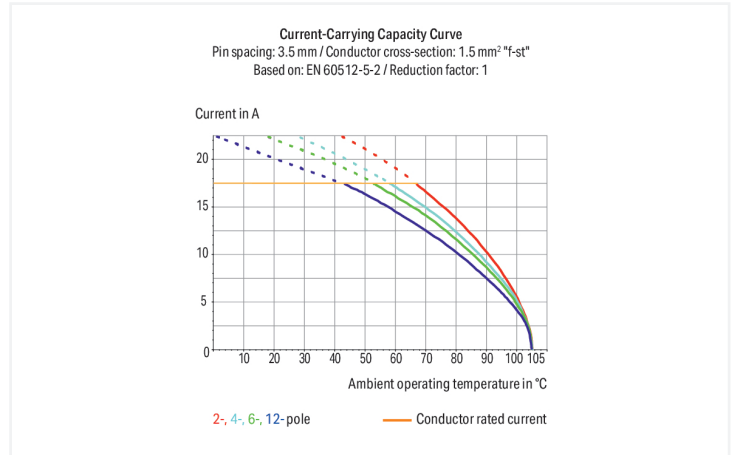
PCB terminal block; push-button; 1.5 mm²; Pin spacing 3.5 mm; 9-pole; Push-in CAGE CLAMP®; with test port; gray

<https://www.wago.com/805-109>

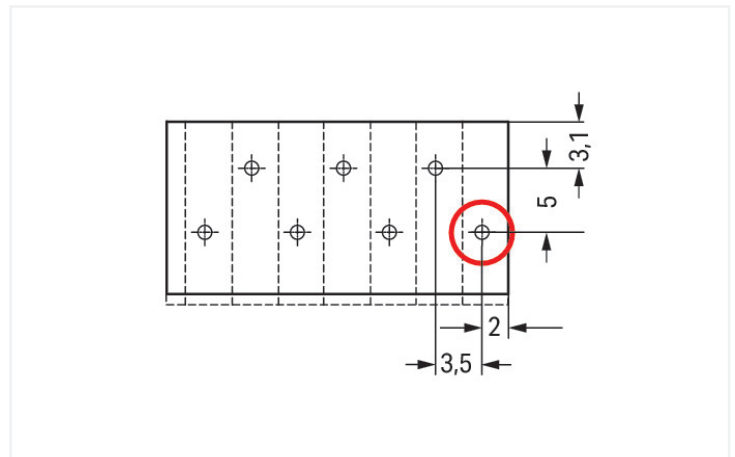


Color: ■ gray

Similar to illustration



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



Dimensions in mm
First solder pin, front right (red circle)

PCB terminal block, 805 Series, gray

Easily, quickly and safely connect conductors with this PCB terminal block (item number 805-109). It is a universal connector that can be used practically 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 can 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: It allows direct insertion of both solid and fine-stranded conductors with ferrules without needing tools. No preparation is required; for example, crimping the conductor's ferrule is not necessary. The item's dimensions are (33 x 13.7 x 13.6) mm (width x height x depth). Depending on the conductor type, this PCB terminal block is suitable for conductor cross sections ranging from 0.2 mm² to 1.5 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. Insert the conductor into the board 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 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 | 150 V | 300 V |
| Nominal voltage | 250 V | 320 V | 630 V | Rated current | 10 A | 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 | | | | |

Connection Data

| | | | |
|----------------------------|---|---|---|
| Clamping units | 9 | Connection 1 | |
| Total number of potentials | 9 | Connection technology | Push-in CAGE CLAMP® |
| Number of connection types | 1 | Actuation type | Push-button |
| Number of levels | 1 | Solid conductor | 0.2 ... 1.5 mm ² / 24 ... 16 AWG |
| Number of test slots | 1 | Fine-stranded conductor | 0.2 ... 1.5 mm ² / 24 ... 16 AWG |
| | | Fine-stranded conductor; with insulated ferrule | 0.25 ... 1 mm ² |
| | | Fine-stranded conductor; with uninsulated ferrule | 0.25 ... 1 mm ² |
| | | Strip length | 9 ... 10 mm / 0.35 ... 0.39 inches |
| | | Conductor connection direction to PCB | 0° |
| | | Pole number | 9 |

Physical data

| | |
|-------------------------|--------------------------|
| Pin spacing | 3.5 mm / 0.138 inches |
| Width | 33 mm / 1.299 inches |
| Height | 13.7 mm / 0.539 inches |
| Height from the surface | 10.5 mm / 0.413 inches |
| Depth | 13.6 mm / 0.535 inches |
| Solder pin length | 3.2 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 | over the entire terminal strip (staggered) |
| Number of solder pins per potential | 1 |

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 | 0.068 MJ |
| Weight | 4.1 g |

Environmental requirements

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

Commercial data

| | |
|-----------------------|--------------------------------|
| Product Group | 4 (Printed Circuit Connectors) |
| PU (SPU) | 140 (35) pcs |
| Packaging type | Box |
| Country of origin | PL |
| GTIN | 4045454731571 |
| 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 | 71-115456 |
| CCA DEKRA Certification B.V. | EN 60947 | NTR NL-7851 |
| CCA DEKRA Certification B.V. | EN 60947-7-4 | NTR NL-7782 |
| CSA DEKRA Certification B.V. | C22.2 | 1132097 |
| KEMA/KEUR DEKRA Certification B.V. | EN 60947-7-4 | 71-110757 |
| UR Underwriters Laboratories Inc. | UL 1059 | E45172 |

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 | - | - |

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 805-109



Documentation

Additional Information

Technical Section

03.04.2019

pdf

2027.26 KB



CAD/CAE-Data

CAD data

2D/3D Models 805-109



CAE data

ZUKEN Portal 805-109



PCB Design

Symbol and Footprint via SamacSys 805-109



Symbol and Footprint via Ultra Librarian 805-109



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.: 216-142

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.: 216-143

Ferrule; Sleeve for 1 mm² / AWG 18; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92

1.1.2 Marking

1.1.2.1 Marking strip



Item No.: 210-332/350-202

Marking strips; as a DIN A4 sheet; MARKED; 1-16 (240x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-332/350-204

Marking strips; as a DIN A4 sheet; MARKED; 17-32 (240x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-332/350-206

Marking strips; as a DIN A4 sheet; MARKED; 33-48 (240x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white

1.1.3 Test and measurement

1.1.3.1 Testing accessories



Item No.: 210-136

Test plug; 2 mm Ø; with 500 mm cable; red

1.1.4 Tool

1.1.4.1 Operating tool



Item No.: 210-719

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

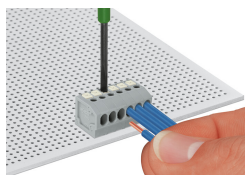


Item No.: 210-647

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; multicoloured

Installation Notes

Conductor termination



Inserting solid conductor via push-in termination.
Inserting and removing fine-stranded conductors via push-buttons.

Installation



Terminal strips with spacers and enlarged conductor entry (5 mm pin spacing) are available upon request.

Commoning



WAGO's 805 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.