

Data Sheet | Item Number: 218-104

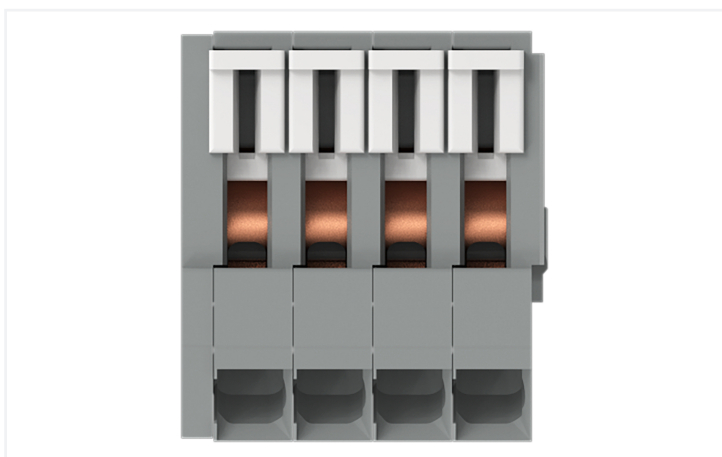
PCB terminal block; Locking slides; 0.5 mm²; Pin spacing 2.5 mm; 4-pole; CAGE

CLAMP®; gray

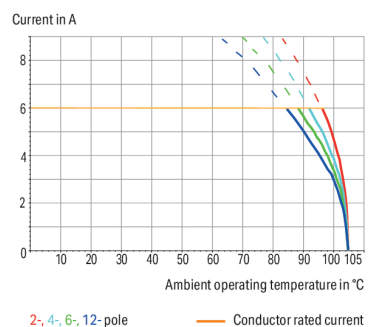
<https://www.wago.com/218-104>

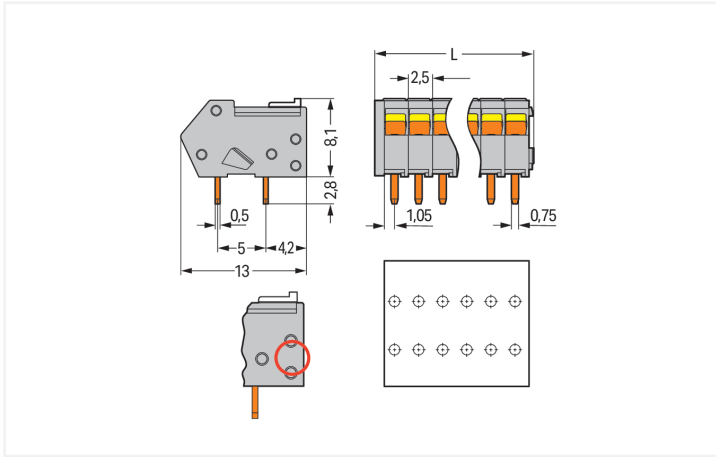


Color: ■ gray



Current-Carrying Capacity Curve
Pin spacing: 2.5 mm / Conductor cross-section: 0.5 mm² "f-st"
Based on: EN 60512-5-2 / Reduction factor: 1





Dimensions in mm

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

PCB terminal block, 218 Series, 40 °conductor entry to board

Connecting conductors is quick and easy with this PCB terminal block (item number 218-104). 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. Ensure that the strip lengths are between 5 and 6 mm when connecting conductors to this PCB terminal block. This product features one conductor terminal and utilizes CAGE CLAMP®. Our proven universal connection known as CAGE CLAMP® is the industry standard when it comes to connection technology and electrical interconnections. The item's dimensions are (11.5 x 10.9 x 13) mm (width x height x depth). Depending on the conductor type, this PCB terminal block is suitable for conductor cross sections ranging from 0.08 mm² to 0.5 mm². The contact surface is coated with tin. This PCB terminal block is operated with a slider. The PCB terminal block is designed for THT soldering. The conductor is designed to be inserted into the board at a 40° angle.

| 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 | | |
|---------------------------------|----------------|--------|--------|---------------|---------|---|---|
| | III | III | II | | B | C | D |
| Overvoltage category | III | III | II | Use group | B | C | D |
| Pollution degree | 3 | 2 | 2 | Rated voltage | 150 V | - | - |
| Nominal voltage | 80 V | 160 V | 320 V | Rated current | 4 A | - | - |
| Rated impulse withstand voltage | 2.5 kV | 2.5 kV | 2.5 kV | | | | |
| Rated current | 6 A | 6 A | 6 A | | | | |

| Approvals per | CSA | | |
|---------------|-------|---|---|
| Use group | B | C | D |
| Rated voltage | 150 V | - | - |
| Rated current | 4 A | - | - |

Connection Data

| | | | |
|----------------------------|---|---|----------------------------------|
| Clamping units | 4 | Connection 1 | |
| Total number of potentials | 4 | Connection technology | CAGE CLAMP® |
| Number of connection types | 1 | Actuation type | Slider |
| Number of levels | 1 | Solid conductor | 0.08 ... 0.5 mm² / 28 ... 20 AWG |
| | | Fine-stranded conductor | 0.08 ... 0.5 mm² / 28 ... 20 AWG |
| | | Fine-stranded conductor; with insulated ferrule | 0.25 mm² |

Connection 1

| | |
|---|---|
| Fine-stranded conductor; with insulated ferrule | 0.25 mm ² |
| Note (conductor cross-section) | Terminating 0.75 mm ² /18 AWG conductors is possible; however insulation diameter allows only every other clamping unit to be terminated with this conductor size. |
| Strip length | 5 ... 6 mm / 0.2 ... 0.24 inches |
| Conductor connection direction to PCB | 40 ° |
| Pole number | 4 |

Physical data

| | |
|-------------------------|--------------------------|
| Pin spacing | 2.5 mm / 0.098 inches |
| Width | 11.5 mm / 0.453 inches |
| Height | 10.9 mm / 0.429 inches |
| Height from the surface | 8.1 mm / 0.319 inches |
| Depth | 13 mm / 0.512 inches |
| Solder pin length | 2.8 mm |
| Solder pin dimensions | 0.5 x 0.75 mm |
| ! | 1.1 ^(+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) | 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 | 0.067 MJ |
| Weight | 1.3 g |

Environmental requirements

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

Commercial data

| | |
|-----------------------|--------------------------------|
| Product Group | 4 (Printed Circuit Connectors) |
| PU (SPU) | 420 (105) pcs |
| Packaging type | Box |
| Country of origin | CH |
| GTIN | 4066966607444 |
| 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 **Declarations of conformity and manufacturer's declarations**



| Approval | Standard | Certificate Name |
|-------------------------------------|---------------|------------------|
| CCA DEKRA Certification B.V. | EN 60947 | NTR NL-7076 |
| CCA DEKRA Certification B.V. | EN 60947-7-4 | NTR NL-7785 |
| CCA DEKRA Certification B.V. | EN 60947-7-4 | 77-111038 |
| CSA DEKRA Certification B.V. | C22.2 No. 158 | 1565656 |
| ENEC DEKRA Certification B.V. | EN 60947 | 2160584.01 |
| UL UL International Germany GmbH | UL 1059 | E45172 |

| 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 218-104 | ↓ |

Documentation

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

CAD/CAE-Data

| CAD data | CAE data |
|----------------------|---------------------------|
| 2D/3D Models 218-104 | EPLAN Data Portal 218-104 |
| | ZUKEN Portal 218-104 |

PCB Design

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|--|
| Symbol and Footprint via SamacSys 218-104 |
| Symbol and Footprint via Ultra Librarian 218-104 |

1 Compatible Products

1.1 Optional Accessories

1.1.1 Ferrule

1.1.1.1 Ferrule



Item No.: 216-301

Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow

Item No.: 216-321

Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow

Item No.: 216-151

Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated

Item No.: 216-131

Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated; silver-colored

1.1.2 Marking

1.1.2.1 Marking strip



Item No.: 210-331/250-202

Marking strips; as a DIN A4 sheet; MARKED; 1-16 (400x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white

Item No.: 210-331/250-207

Marking strips; as a DIN A4 sheet; MARKED; 1-48 (100x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white

Item No.: 210-331/250-204

Marking strips; as a DIN A4 sheet; MARKED; 17-32 (400x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white

Item No.: 210-331/250-206

Marking strips; as a DIN A4 sheet; MARKED; 33-48 (400x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white

1.1.3 Test and measurement

1.1.3.1 Testing accessories



Item No.: 735-500

WAGO Test pin; 1 mm Ø; 30 V AC / 60 V DC; CAT0; 1 A; 6 mm uninsulated; Test lead for soldering up to 0,5mm²

1.1.4 Tool

1.1.4.1 Operating tool



Item No.: 210-719

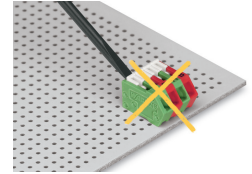
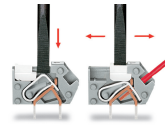
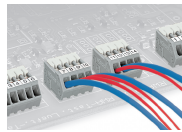
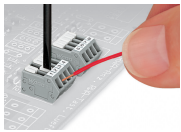
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

Item No.: 210-647

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

Installation Notes

Conductor termination



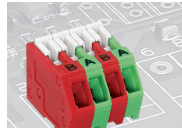
Terminating stranded conductors in confined spaces requires a great deal of patience, unless you use the new 218 Series PCB Terminal Strips. The clamping units of these strips can be held open during termination process via integrated locking slide.

Terminating 0.75 mm²/18 AWG conductors is possible; however insulation diameter allows only every other clamping unit to be terminated with this conductor size.

Conductor termination: To momentarily open the clamping unit, use screwdriver and then insert a stripped conductor. To open clamping unit for an extended period, move locking slide toward conductor entry hole. Then fully insert stripped conductor and move locking slide back to original position (also possible to perform with fingernail).

Incorrect – do not operate the locking slides from the back.

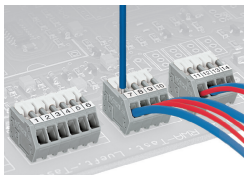
Marking



Labeling with self-adhesive marking strips.

Labeling via factory direct marking.

Testing



Testing directly on the clamping spring.