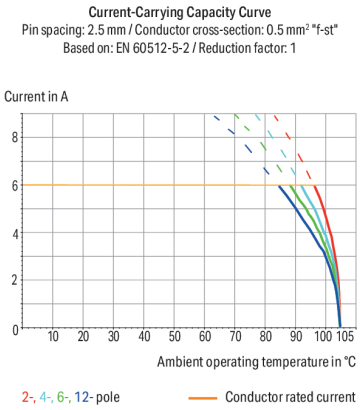
# Data Sheet | Item Number: 218-502/000-604

THR PCB terminal block; Locking slides; 0.5 mm²; Pin spacing 2.54 mm; 2-pole; CAGE CLAMP®; black

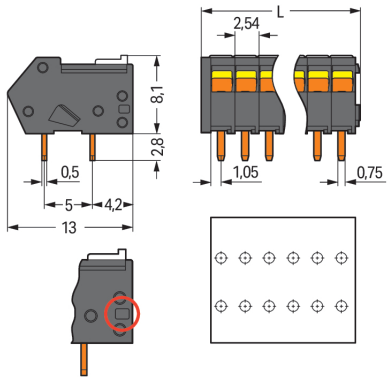
https://www.wago.com/218-502/000-604






Color: ■ black

Similar to illustration




Dimensions in mm
L = (pole no. x pin spacing) + 1.5 mmA groove at the back of the terminal strip indicates the 2.54 mm pin spacing (red circle).

PCB terminal block, 218 Series, solder pin dimensions 0.5 x 0.75 mm

This PCB terminal block (item number 218-502/000-604) is designed for quick and simple connections. 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. Strip lengths must be between 5 and 6 mm when connecting conductors to this PCB terminal block. This product incorporates one conductor terminal and utilizes CAGE CLAMP®. Our CAGE CLAMP® connection offers a reliable and maintenance-free way to connect all types of conductors. You do not need to prepare the conductor in any way, such as crimping ferrules. The item's dimensions are (6.58 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. THR is used to solder the PCB terminal block. The conductor is designed to be inserted into the board at an angle of 40°..

## Notes

| | |
|---|---|
| Note | Application notes:<br>Suitable for lead-free, reflow-soldering profiles per DIN EN 61760-1 and IEC 60068-2-58 up to max. 260°C peak temperature. Due to application-specific variables (component configuration and orientation, type of soldering machine, solder paste), trial runs are recommended to ensure product and process compatibility under actual manufacturing conditions. |
| Variants: | Other pole numbers<br>Direct marking<br>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 | 32 V | 160 V | 320 V |
| Rated impulse withstand voltage | 2.5 kV | 2.5 kV | 2.5 kV |
| Rated current | 6 A | 6 A | 6 A |

## Connection Data

| | |
|---|---|
| Clamping units | 2 |
| Total number of potentials | 2 |
| Number of connection types | 1 |
| Number of levels | 1 |

### Connection 1

| | |
|---|---|
| Connection technology | CAGE CLAMP® |
| Actuation type | Slider |
| 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 |
| Fine-stranded conductor; with uninsulated ferrule | 0.25 mm² |
| Note (conductor cross-section) | 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. |
| Strip length | 5 … 6 mm / 0.2 … 0.24 inches |
| Conductor connection direction to PCB | 40 ° |
| Pole number | 2 |

## Physical data

| | |
|---|---|
| Pin spacing | 2.54 mm / 0.1 inches |
| Width | 6.58 mm / 0.259 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 |
| Plated through-hole diameter (THR) | 1.1 $^{(+0.1)}$ mm |


Continued on next page

## PCB contact

| | |
|---|---|
| PCB contact | THR |
| 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 | black |
| Material group | IIIa |
| Insulation material (main housing) | Polyamide (PA46) |
| Flammability class per UL94 | V2 |
| Clamping spring material | Chrome-nickel spring steel (CrNi) |
| Contact material | Electrolytic copper ($E_{Cu}$) |
| Contact Plating | Tin |
| Fire load | 0.013 MJ |
| Weight | 0.7 g |
| MSL per J-STD 020D | 1 |

## Environmental requirements

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

## Commercial data

| | |
|---|---|
| Product Group | 4 (Printed Circuit Connectors) |
| PU (SPU) | 1000 (100) pcs |
| Packaging type | Box |
| Country of origin | PL |
| GTIN | 4045454341916 |
| 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 |


Continued on next page

## Approvals / Certificates

### General approvals

| Approval | Standard | Certificate Name |
|---|---|---|
| CSA<br>DEKRA Certification B.V. | C22.2 No. 158 | 1565656 |

## Downloads

### Environmental Product Compliance

**Compliance Search**

Environmental Product Compliance
218-502/000-604

### Documentation

**Additional Information**

| | | |
|---|---|---|
| Technical Section | 03.04.2019 | pdf<br>2027.26 KB |
| | | pdf<br>535.32 KB |

### CAD/CAE-Data

**CAD data**

2D/3D Models
218-502/000-604

**CAE data**

EPLAN Data Portal
218-502/000-604

ZUKEN Portal
218-502/000-604

**PCB Design**

Symbol and Footprint via SamacSys
218-502/000-604

Symbol and Footprint via Ultra Librarian
218-502/000-604


Continued on next page

# 1 Compatible Products

## 1.1 Optional Accessories

### 1.1.1 Ferrule

#### 1.1.1.1 Ferrule



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; silver-colored

### 1.1.2 Marking

#### 1.1.2.1 Marking strip



Item No.: 210-331/254-202
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.: 210-331/254-207
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.: 210-331/254-204
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.: 210-331/254-206
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.: 210-648
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; angled; short