

## Data Sheet | Item Number: 218-522

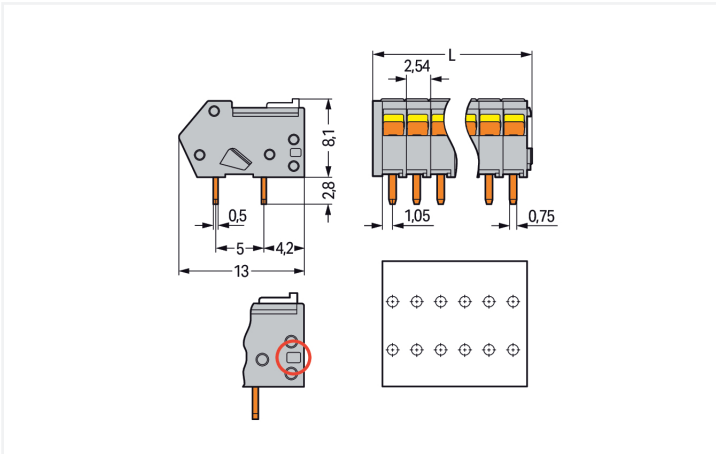
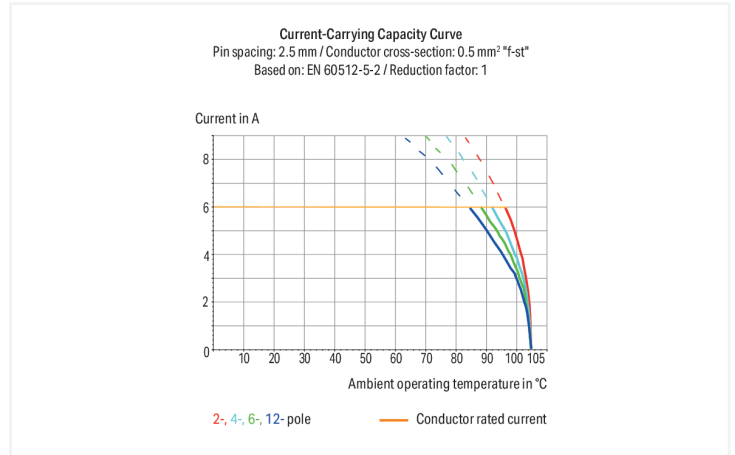
PCB terminal block; Locking slides; 0.5 mm<sup>2</sup>; Pin spacing 2.54 mm; 22-pole; CAGE CLAMP®; gray

<https://www.wago.com/218-522>



Color: ■ gray

Similar to illustration



Dimensions in mm

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

### PCB terminal block, 218 Series, slider

Our PCB terminal block (item number 218-522) is the perfect way to connect conductors quickly and securely. It is perfect for custom installations with different mounting types. Conductors should only be connected to this PCB terminal block if their strip length is between 5 and 6 mm. This product features one conductor terminal and utilizes CAGE CLAMP®. Our CAGE CLAMP® connection provides 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. Dimensions: (57.38 x 10.9 x 13) mm (width x height x depth). Depending on the type of conductor, this PCB terminal block is designed for conductor cross sections ranging from 0.08 mm<sup>2</sup> to 0.5 mm<sup>2</sup>.

The contact surface is coated with tin. A slider is used to operate this PCB terminal block. The PCB terminal block is designed for THT soldering. Insert the conductor into the board at a 40° angle.

## Notes

|           |  |
|-----------|--|
| Variants: | Other pole numbers<br>Other colors<br>Mixed-color PCB connector strips<br>Direct marking<br>Other versions (or variants) can be requested from WAGO Sales or configured at <a href="https://configurator.wago.com/">https://configurator.wago.com/</a> . |
|-----------|--|

## 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 | 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             | 22 | <b>Connection 1</b>                               |   |
| Total number of potentials | 22 | Connection technology                             | CAGE CLAMP®   |
| Number of connection types | 1  | Actuation type                                    | Slider  |
| Number of levels           | 1  | Solid conductor                                   | 0.08 ... 0.5 mm <sup>2</sup> / 28 ... 20 AWG  |
|                            |    | Fine-stranded conductor                           | 0.08 ... 0.5 mm <sup>2</sup> / 28 ... 20 AWG  |
|                            |    | Fine-stranded conductor; with insulated ferrule   | 0.25 mm <sup>2</sup>  |
|                            |    | Fine-stranded conductor; with uninsulated ferrule | 0.25 mm <sup>2</sup>  |
|                            |    | Note (conductor cross-section)                    | Terminating 0.75 mm <sup>2</sup> /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                                       | 22  |

## Physical data

|                         |                          |
|-------------------------|--------------------------|
| Pin spacing             | 2.54 mm / 0.1 inches     |
| Width                   | 57.38 mm / 2.259 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            |
| !                       | 1.1 <sup>(±0.1)</sup> 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)               | <a href="#">Information on material specifications can be found here</a> |
| 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 <sub>cu</sub> )                                   |
| Contact Plating                    | Tin  |
| Fire load                          | 0.377 MJ   |
| Weight                             | 7.2 g  |

### Environmental requirements

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

### Commercial data

|                       |                                |
|-----------------------|--------------------------------|
| Product Group         | 4 (Printed Circuit Connectors) |
| PU (SPU)              | 80 (20) pcs                    |
| Packaging type        | Box                            |
| Country of origin     | PL                             |
| GTIN                  | 4044918936019                  |
| 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<br>DEKRA Certification B.V. | EN 60947     | NTR NL-7076      |
| CCA<br>DEKRA Certification B.V. | EN 60947-7-4 | NTR NL-7785      |
| CCA<br>DEKRA Certification B.V. | EN 60947-7-4 | 77-111038        |

#### General approvals

|                                     |               |            |
|-------------------------------------|---------------|------------|
| CSA<br>DEKRA Certification B.V.     | C22.2 No. 158 | 1565656    |
| ENEC<br>DEKRA Certification B.V.    | EN 60947      | 2160584.01 |
| UL<br>UL International Germany GmbH | UL 1059       | E45172     |

Declarations of conformity and manufacturer's declarations

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

Downloads

Environmental Product Compliance

| Compliance Search   |
|---|
| Environmental Product<br>Compliance 218-522 <a href="#">↓</a> |

Documentation

| Additional Information  |
|---|
| Technical Section<br>03.04.2019 pdf<br>2027.26 KB <a href="#">↓</a> |

CAD/CAE-Data

| CAD data                               |
|--|
| 2D/3D Models 218-522 <a href="#">↓</a> |

| CAE data                                       |
|--|
| EPLAN Data Portal<br>218-522 <a href="#">↓</a> |
| ZUKEN Portal 218-522 <a href="#">↓</a>         |

PCB Design

|  |
|--|
| Symbol and Footprint<br>via SamacSys 218-522 <a href="#">↓</a>           |
| Symbol and Footprint<br>via Ultra Librarian<br>218-522 <a href="#">↓</a> |

## 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 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow

**Item No.: 216-321**

Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow

**Item No.: 216-151**

Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated

**Item No.: 216-131**

Ferrule; Sleeve for 0.25 mm<sup>2</sup> / 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 0,5mm<sup>2</sup>

#### 1.1.4 Tool

##### 1.1.4.1 Operating tool



**Item No.: 210-719**

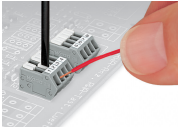
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

**Item No.: 210-648**

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

## 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 mm<sup>2</sup>/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.