

## Data Sheet | Item Number: 256-403/000-009/999-950

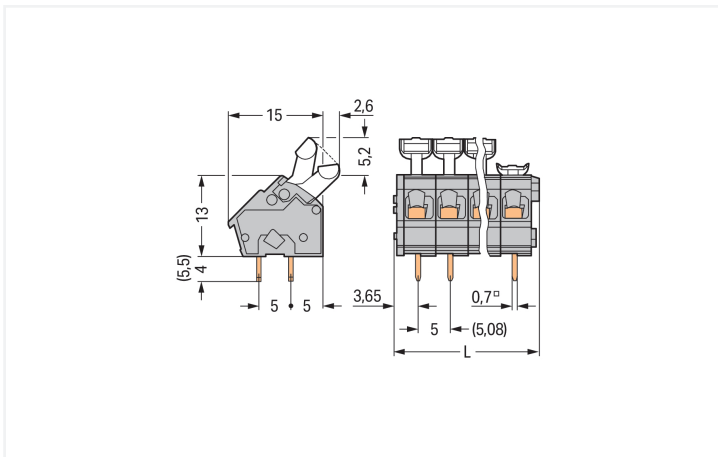
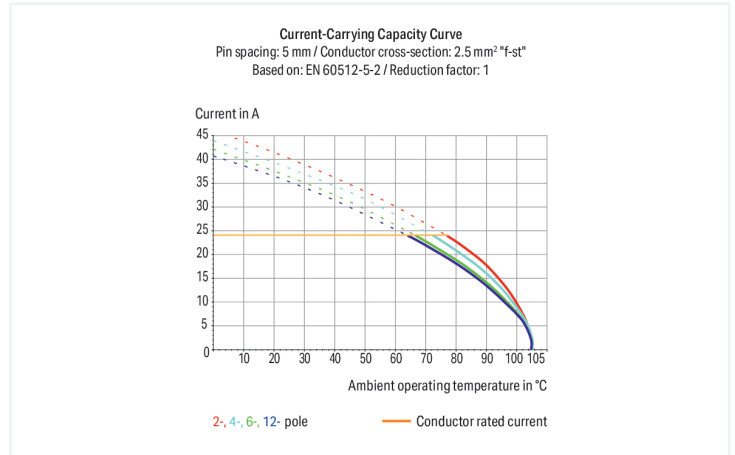
PCB terminal block; push-button; 2.5 mm<sup>2</sup>; Pin spacing 5/5.08 mm; 3-pole; suitable for Ex-e applications; CAGE CLAMP®; commoning option; 2,50 mm<sup>2</sup>; light gray

<https://www.wago.com/256-403/000-009/999-950>



Color: ■ light gray

Similar to illustration



Dimensions in mm

L = (pole no. x pin spacing) + 2.9 mm

### PCB terminal block, 256 Series, CAGE CLAMP®

Our PCB terminal block (item number 256-403/000-009/999-950) is the perfect way to connect conductors quickly and easily. It is a universal connector that can be used practically anywhere, e.g., 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 5 and 6 mm. This product features one conductor terminal and utilizes CAGE CLAMP®. Our CAGE CLAMP® connection provides a convenient 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 (17.9 x 22.2 x 17.6) mm (width x height x depth). This PCB terminal block is suitable for conductor cross sections ranging from 0.08 mm<sup>2</sup> to 2.5 mm<sup>2</sup>.

Tin is used for coating the contact surfaces. A push-button is used to operate this PCB terminal block. THT is used to assemble the PCB terminal block. The conductor is designed to be inserted into the board at a 45° angle.

## Electrical data

### Ex information

|                            |   |
|----------------------------|---|
| Ratings per                | ATEX: PTB 06 ATEX 1061 U / IECEx: PTB 06.0042 U |
| Rated voltage EN (Ex e II) | 176 V   |
| Rated current (Ex e II)    | 16 A  |

## Connection data

|                            |   |
|----------------------------|---|
| Clamping units             | 3 |
| Total number of potentials | 3 |
| Number of connection types | 1 |
| Number of levels           | 1 |

### Connection 1

|   |  |
|---|--|
| Connection technology                             | CAGE CLAMP®                                  |
| Actuation type                                    | Push-button                                  |
| Solid conductor                                   | 0.08 ... 2.5 mm <sup>2</sup> / 28 ... 12 AWG |
| Fine-stranded conductor                           | 0.08 ... 2.5 mm <sup>2</sup> / 28 ... 12 AWG |
| Fine-stranded conductor; with insulated ferrule   | 0.25 ... 1.5 mm <sup>2</sup>                 |
| Fine-stranded conductor; with uninsulated ferrule | 0.25 ... 1.5 mm <sup>2</sup>                 |
| Note (conductor cross-section)                    | 12 AWG: THHN, THWN                           |
| Strip length                                      | 5 ... 6 mm / 0.2 ... 0.24 inches             |
| Conductor connection direction to PCB             | 45 °   |
| Pole number                                       | 3  |

## Physical data

|                                      |                              |
|--------------------------------------|------------------------------|
| Pin spacing                          | 5/5.08 mm / 0.197/0.2 inches |
| Width                                | 17.9 mm / 0.705 inches       |
| Height                               | 22.2 mm / 0.874 inches       |
| Height from the surface              | 18.2 mm / 0.717 inches       |
| Depth                                | 17.6 mm / 0.693 inches       |
| Solder pin length                    | 4 mm                         |
| Solder pin dimensions                | 0.7 x 0.7 mm                 |
| Drilled hole diameter with tolerance | 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)               | <a href="#">Information on material specifications can be found here</a> |
| Color                              | light 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                          | 0.053 MJ   |
| Weight                             | 3 g  |

**Environmental requirements**

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

**Commercial data**

|                       |                                |
|-----------------------|--------------------------------|
| Product Group         | 4 (Printed Circuit Connectors) |
| PU (SPU)              | 280 (70) pcs                   |
| Packaging type        | Box                            |
| Country of origin     | CH                             |
| GTIN                  | 4044918756129                  |
| 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 8.0    | EC002643             |
| ECCN        | NO US CLASSIFICATION |

**Environmental Product Compliance**

|                        |                         |
|------------------------|-------------------------|
| RoHS Compliance Status | Compliant, No Exemption |
|------------------------|-------------------------|

**Approvals / Certificates**

**Declarations of conformity and manufacturer's declarations**

| Approval   | Standard | Certificate Name |
|--|----------|------------------|
| ATEX-Attestation of Conformity<br>WAGO GmbH & Co. KG | -        | -                |

**Approvals for hazardous areas**



| Approval   | Standard    | Certificate Name                                   |
|--|-------------|--|
| AEx<br>UL International Germany<br>GmbH c/o Physikalisch<br>Technische Bundesanstalt | UL 60079    | E185892 (AEx eb IIC resp.<br>Ex eb IIC)            |
| CCC<br>CNEX  | GB/T 3836.3 | 2020312313000274 (Ex<br>eb IIC Gb, Ex eb I Mb)     |
| IECEx<br>Physikalisch Technische<br>Bundesanstalt                                    | IEC 60079   | IECEx PTB 06.0042U (Ex<br>eb IIC GB or Ex eb I Mb) |

**Downloads**

**Environmental Product Compliance**

|                   |
|-------------------|
| Compliance Search |
| ↓                 |

Documentation

| Additional Information                     |            |                   |  |
|--|------------|-------------------|--|
| Technical Section                          | 03.04.2019 | pdf<br>2027.26 KB |  |
| Gebrückte Klemmenleisten für Leiterplatten |            | pdf<br>303.71 KB  |  |

CAD/CAE-Data

| CAD data |
|----------|
|          |

| CAE data |
|----------|
|          |
|          |

| PCB Design |
|------------|
|            |
|            |

1 Compatible Products

1.1 Optional Accessories

1.1.1 Ferrule

1.1.1.1 Ferrule



|  |  |  |  |
|--|--|--|--|
| <br><b>Item No.: 216-301</b><br>Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow   | <br><b>Item No.: 216-321</b><br>Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow   | <br><b>Item No.: 216-151</b><br>Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated   | <br><b>Item No.: 216-131</b><br>Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated; silver-colored   |
| <br><b>Item No.: 216-302</b><br>Ferrule; Sleeve for 0.34 mm <sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise  | <br><b>Item No.: 216-322</b><br>Ferrule; Sleeve for 0.34 mm <sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise  | <br><b>Item No.: 216-132</b><br>Ferrule; Sleeve for 0.34 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated   | <br><b>Item No.: 216-152</b><br>Ferrule; Sleeve for 0.34 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated   |
| <br><b>Item No.: 216-201</b><br>Ferrule; Sleeve for 0.5 mm <sup>2</sup> / 20 AWG; insulated; electro-tin plated; electrolytic copper; acc. to DIN 46228, Part 4/09.90; white | <br><b>Item No.: 216-241</b><br>Ferrule; Sleeve for 0.5 mm <sup>2</sup> / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white | <br><b>Item No.: 216-221</b><br>Ferrule; Sleeve for 0.5 mm <sup>2</sup> / 20 AWG; insulated; electro-tin plated; white   | <br><b>Item No.: 216-141</b><br>Ferrule; Sleeve for 0.5 mm <sup>2</sup> / 20 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92      |
| <br><b>Item No.: 216-101</b><br>Ferrule; Sleeve for 0.5 mm <sup>2</sup> / AWG 22; uninsulated; electro-tin plated; silver-colored  | <br><b>Item No.: 216-121</b><br>Ferrule; Sleeve for 0.5 mm <sup>2</sup> / AWG 22; uninsulated; electro-tin plated; silver-colored  | <br><b>Item No.: 216-242</b><br>Ferrule; Sleeve for 0.75 mm <sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray | <br><b>Item No.: 216-262</b><br>Ferrule; Sleeve for 0.75 mm <sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray |

1.1.1.1 Ferrule

|  |   |   |   |
|--|---|---|---|
|  <p><b>Item No.: 216-202</b><br/>Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray</p>  |  <p><b>Item No.: 216-222</b><br/>Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray</p>   |  <p><b>Item No.: 216-142</b><br/>Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92</p>                 |  <p><b>Item No.: 216-102</b><br/>Ferrule; Sleeve for 0.75 mm<sup>2</sup> / AWG 20; uninsulated; electro-tin plated; silver-colored</p>   |
|  <p><b>Item No.: 216-122</b><br/>Ferrule; Sleeve for 0.75 mm<sup>2</sup> / AWG 20; uninsulated; electro-tin plated; silver-colored</p>  |  <p><b>Item No.: 216-243</b><br/>Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red</p> |  <p><b>Item No.: 216-263</b><br/>Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red</p>                 |  <p><b>Item No.: 216-203</b><br/>Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; red</p>   |
|  <p><b>Item No.: 216-223</b><br/>Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; red</p>  |  <p><b>Item No.: 216-103</b><br/>Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; uninsulated; electro-tin plated</p>  |  <p><b>Item No.: 216-143</b><br/>Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92</p>                    |  <p><b>Item No.: 216-123</b><br/>Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; uninsulated; electro-tin plated; silver-colored</p>  |
|  <p><b>Item No.: 216-204</b><br/>Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; black</p>  |  <p><b>Item No.: 216-224</b><br/>Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; black</p>   |  <p><b>Item No.: 216-244</b><br/>Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black</p>             |  <p><b>Item No.: 216-264</b><br/>Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black</p> |
|  <p><b>Item No.: 216-284</b><br/>Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black</p> |  <p><b>Item No.: 216-124</b><br/>Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; uninsulated; electro-tin plated</p>   |  <p><b>Item No.: 216-144</b><br/>Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92; silver-colored</p> |  <p><b>Item No.: 216-104</b><br/>Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; uninsulated; electro-tin plated; silver-colored</p>   |

1.1.2 Tool

1.1.2.1 Operating tool

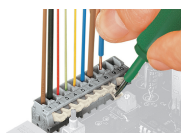
|   |  |
|---|--|
|  <p><b>Item No.: 210-658</b><br/>Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; angled; short; multicoloured</p> |  <p><b>Item No.: 210-720</b><br/>Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured</p> |
|---|--|

Installation Notes

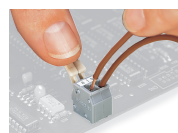
Conductor termination



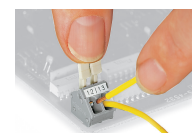
Inserting/removing a conductor – 256 Series.



Inserting/removing a conductor (255 Series)



Inserting/removing a conductor via finger-operated lever – 255 Series.



Inserting/removing a conductor via finger-operated lever – 256 Series.

## Installation



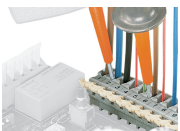
Possible conductor arrangement with terminal strips staggered (for 256 Series only).

## Marking



Formation of groups using housings of different colors

## Testing



Testing with test probes.



Testing with test plug modules.