

# Data sheet | Item number: 250-109/000-012

PCB terminal block; push-button; 1.5 mm<sup>2</sup>; Pin spacing 3.5 mm; 9-pole; Push-  
in CAGE CLAMP®



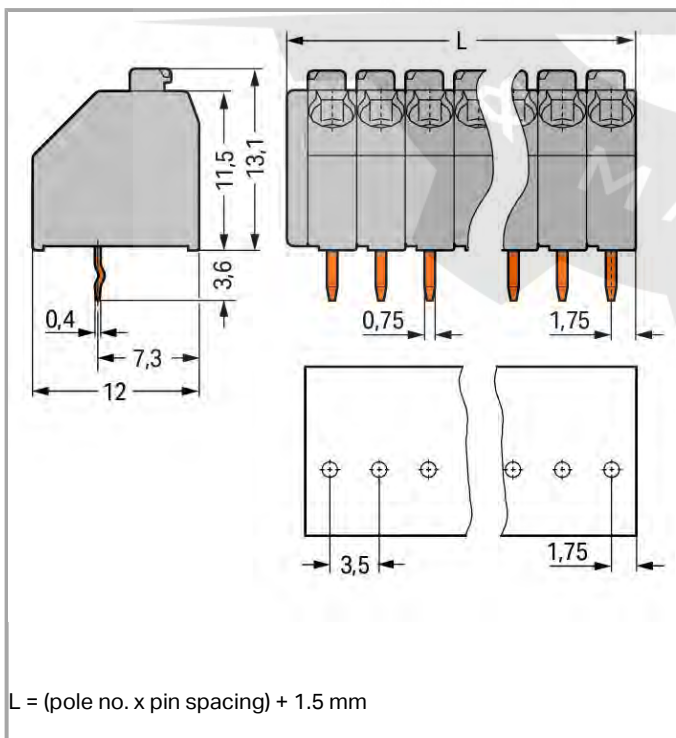
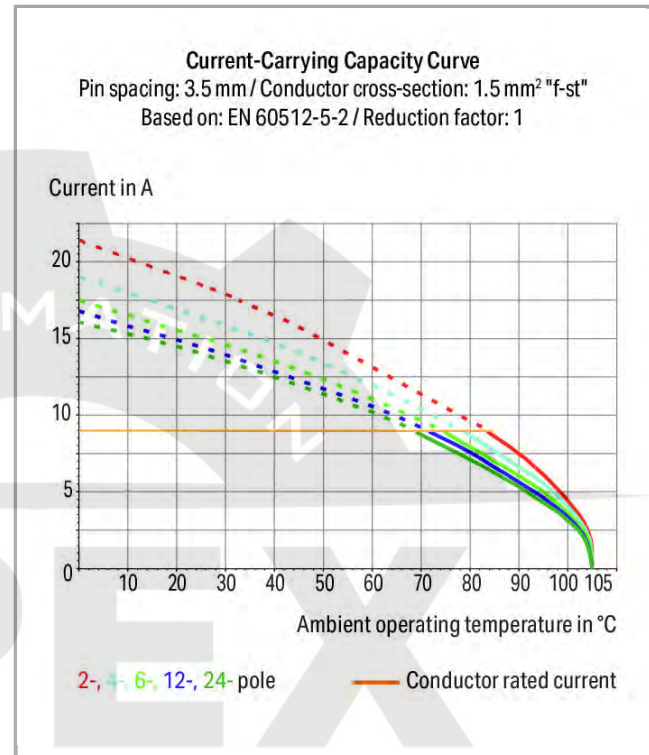
250-109/000-012



RoHS   
Compliant

[BOMcheck.net](https://www.bomcheck.net)

Color:



## Item description

- Compact terminal strips with push-buttons
- Push-in terminations of solid and ferruled conductors
- Termination/removal of fine-stranded conductors via push-buttons
- 45° conductor entry angle provides easy, space-saving wiring
- Custom color combinations
- Terminal strips also available with spacers upon request

## Data

### Electrical data

#### Ratings per IEC/EN 60664-1

|                                 |        |
|---------------------------------|--------|
| Rated voltage (III / 3)         | 160 V  |
| Rated impulse voltage (III / 3) | 2.5 kV |
| Rated voltage (III / 2)         | 160 V  |
| Rated impulse voltage (III / 2) | 2.5 kV |
| Rated voltage (II / 2)          | 320 V  |
| Rated impulse voltage (II / 2)  | 2.5 kV |
| Rated current                   | 8 A    |

#### Approvals per UL 1059

|                                |       |
|--------------------------------|-------|
| Rated voltage UL (Use Group B) | 300 V |
| Rated current UL (Use Group B) | 5 A   |
| Rated voltage UL (Use Group D) | 300 V |
| Rated current UL (Use Group D) | 5 A   |

#### Approvals per CSA

|                                 |       |
|---------------------------------|-------|
| Rated voltage CSA (Use Group B) | 300 V |
| Rated current CSA (Use Group B) | 10 A  |
| Rated voltage CSA (Use Group D) | 300 V |
| Rated current CSA (Use Group D) | 10 A  |

## Connection data

|                                                          |                                             |
|----------------------------------------------------------|---------------------------------------------|
| Connection technology                                    | Push-in CAGE CLAMP®                         |
| Actuation type                                           | Push-button                                 |
| Solid conductor                                          | 0.2 ... 1.5 mm <sup>2</sup> / 24 ... 16 AWG |
| Fine-stranded conductor                                  | 0.2 ... 1.5 mm <sup>2</sup> / 24 ... 16 AWG |
| Fine-stranded conductor with ferrule with plastic collar | 0.25 ... 1 mm <sup>2</sup>                  |



|                                                             |                                     |
|-------------------------------------------------------------|-------------------------------------|
| Fine-stranded conductor with ferrule without plastic collar | 0.25 ... 1 mm <sup>2</sup>          |
| Strip length                                                | 8.5 ... 9.5 mm / 0.33 ... 0.37 inch |
| Conductor entry angle to the PCB                            | 45°                                 |
| No. of poles                                                | 9                                   |
| Total number of connection points                           | 9                                   |
| Total number of potentials                                  | 9                                   |
| Number of connection types                                  | 1                                   |
| Number of levels                                            | 1                                   |

### Geometrical Data

|                                   |                              |
|-----------------------------------|------------------------------|
| Pin spacing                       | 3.5 mm / 0.138 inch          |
| Width                             | 33 mm / 1.299 inch           |
| Height                            | 16.7 mm / 0.657 inch         |
| Height from the surface           | 13.1 mm / 0.516 inch         |
| Depth                             | 12 mm / 0.472 inch           |
| Solder pin length                 | 3.6 mm                       |
| Solder pin dimensions             | 0.4 x 0.75 mm                |
| Drilled hole diameter (tolerance) | 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 | 1                                       |

### Material Data

|                             |                                        |
|-----------------------------|----------------------------------------|
| Color                       | orange                                 |
| Material group              | I                                      |
| Insulating material         | Polyamide 66 (PA 66)                   |
| Flammability class per UL94 | V0                                     |
| Clamping spring material    | Chrome nickel spring steel (CrNi)      |
| Contact material            | Electrolytic copper (E <sub>Cu</sub> ) |
| Contact plating             | tin-plated                             |
| Fire load                   | 0.087 MJ                               |
| Weight                      | 4.232 g                                |

### Environmental Requirements

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

## Commercial data

|                    |                     |
|--------------------|---------------------|
| Product Group      | 4 (Printed Circuit) |
| Country of origin  | CH                  |
| GTIN               | 4044918647694       |
| Customs Tariff No. | 85369010000         |

## Approvals / Certificates

### Country specific Approvals

| Logo                                                                             | Approval                        | Additional Approval Text | Certificate name |
|----------------------------------------------------------------------------------|---------------------------------|--------------------------|------------------|
|  | CSA<br>DEKRA Certification B.V. | C22.2                    | 1132097          |

### UL-Approvals

| Logo                                                                               | Approval                            | Additional Approval Text | Certificate name |
|------------------------------------------------------------------------------------|-------------------------------------|--------------------------|------------------|
|  | UL<br>UL International Germany GmbH | UL 1059                  | E45172<br>sec. 6 |
|  | UL<br>UL International Germany GmbH | UL 1059                  | E45172<br>sec. 6 |

## Compatible products

### check

|                                                                                    |                                                                             |         |
|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|---------|
|  | Item no.: 735-500<br>Test pin; 1 mm Ø; with solder connection for test wire | 735-500 |
|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|---------|

### tools

|                                                                                    |                                                                                                  |         |
|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|---------|
|  | Item no.: 210-657<br>Operating tool with partially insulated shaft; Blade (3.5 x 0.5) mm; short  | 210-657 |
|  | Item no.: 210-720<br>Operating tool with partially insulated shaft; Type 2, blade (3.5 x 0.5) mm | 210-720 |

### ferrule

|                                                                                    |                                                                                                                                                                            |         |
|------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
|    | <b>Item no.: 216-101</b><br>Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated                                                                          | 216-101 |
|    | <b>Item no.: 216-102</b><br>Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated                                                                         | 216-102 |
|    | <b>Item no.: 216-103</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated                                                                            | 216-103 |
|    | <b>Item no.: 216-121</b><br>Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated                                                                          | 216-121 |
|    | <b>Item no.: 216-122</b><br>Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated                                                                         | 216-122 |
|    | <b>Item no.: 216-123</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated                                                                            | 216-123 |
|    | <b>Item no.: 216-131</b><br>Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated                                                                         | 216-131 |
|    | <b>Item no.: 216-132</b><br>Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated                                                                         | 216-132 |
|    | <b>Item no.: 216-141</b><br>Ferrule; Sleeve for 0.5 mm² / 20 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92  | 216-141 |
|   | <b>Item no.: 216-142</b><br>Ferrule; Sleeve for 0.75 mm² / 18 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92 | 216-142 |
|  | <b>Item no.: 216-143</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92    | 216-143 |
|  | <b>Item no.: 216-151</b><br>Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated                                                                         | 216-151 |
|  | <b>Item no.: 216-152</b><br>Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated                                                                         | 216-152 |
|  | <b>Item no.: 216-201</b><br>Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated                                                                            | 216-201 |
|  | <b>Item no.: 216-202</b><br>Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated                                                                           | 216-202 |
|  | <b>Item no.: 216-203</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated                                                                              | 216-203 |
|  | <b>Item no.: 216-221</b><br>Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated                                                                            | 216-221 |
|  | <b>Item no.: 216-222</b><br>Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated                                                                           | 216-222 |
|  | <b>Item no.: 216-223</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated                                                                              | 216-223 |
|                                                                                    | <b>Item no.: 216-241</b>                                                                                                                                                   |         |

|                                                                                  |                                                                                                                                                                                   |                   |
|----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
|   | Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90                                       | 216-241           |
|   | <b>Item no.: 216-242</b><br>Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90          | 216-242           |
|   | <b>Item no.: 216-243</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90             | 216-243           |
|   | <b>Item no.: 216-262</b><br>Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90          | 216-262           |
|   | <b>Item no.: 216-263</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90             | 216-263           |
|                                                                                  | <b>Item no.: 216-301</b><br>Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated                                                                                  | 216-301           |
|   | <b>Item no.: 216-302</b><br>Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated                                                                                  | 216-302           |
|                                                                                  | <b>Item no.: 216-321</b><br>Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated                                                                                  | 216-321           |
|  | <b>Item no.: 216-322</b><br>Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated                                                                                  | 216-322           |
| <b>Marking accessories</b>                                                       |                                                                                                                                                                                   |                   |
|                                                                                  | <b>Item no.: 210-332/350-202</b><br>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  | 210-332 / 350-202 |
|                                                                                  | <b>Item no.: 210-332/350-204</b><br>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 | 210-332 / 350-204 |
|                                                                                  | <b>Item no.: 210-332/350-206</b><br>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 | 210-332 / 350-206 |

## Downloads

## CAD/CAE - Smart Data

## PCB libraries

|                                                                                                               |                      |                |          |
|---------------------------------------------------------------------------------------------------------------|----------------------|----------------|----------|
| DesignSpark Library for WAGO PCB Terminal Blocks<br>Compatible with DesignSpark PCB Version 4.x or higher     | 2.1<br>Oct 6, 2014   | zip<br>22.5 MB | Download |
| TARGET Library for WAGO PCB Terminal Blocks<br>Compatible with TARGET PCB Design Software Version 17.x        | 1.1.0<br>Oct 6, 2014 | zip<br>27.1 MB | Download |
| EAGLE Library for WAGO PCB Terminal Blocks<br>Compatible with EAGLE PCB Design Software Version 6.x or higher | 2.1<br>Oct 6, 2014   | zip<br>23.9 MB | Download |



CAD data

|                             |     |          |
|-----------------------------|-----|----------|
| 3D Download 250-109/000-012 | URL | Download |
|-----------------------------|-----|----------|



Subject to changes.