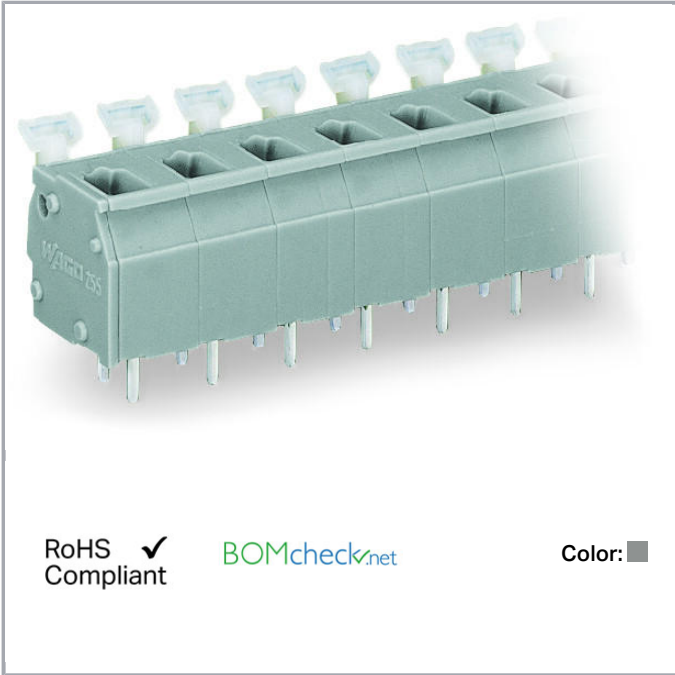


# Data sheet | Item number: 255-502

PCB terminal block; push-button; 2.5 mm<sup>2</sup>; Pin spacing 7.5/7.62 mm; 2-pole; CAGE CLAMP®; commoning option; 2,50 mm<sup>2</sup>; gray



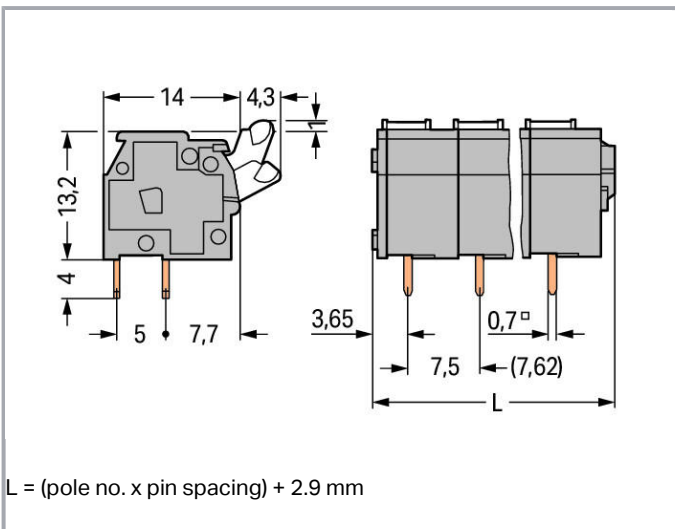
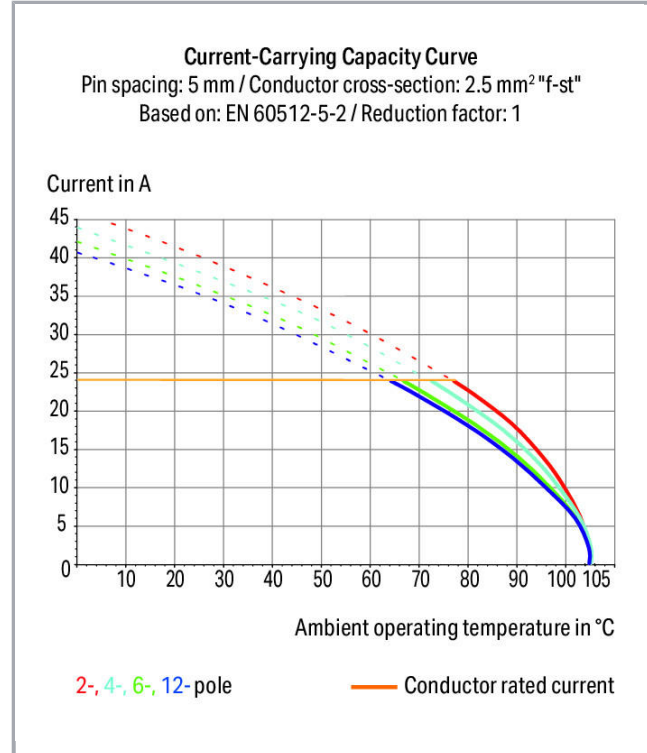
[www.wago.com/255-502](http://www.wago.com/255-502)



RoHS Compliant ✓

BOMcheck.net

Color: ■



## Item description

Subject to changes.

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Phone: +49571 887-0 | Fax: +49571 887-169  
Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

Do you have any questions about our products?  
We are always happy to take your call at +49 (571) 887-44222.



- PCB terminal strips with push-buttons and CAGE CLAMP® connection
- Versions with Ex approval
- Set to metric or inch pin spacing by compressing PCB terminal strips or pulling them apart
- Ideal for in-the-field wiring thanks to simplified push-button actuation
- Convenient, tool-free operation

## Data

### Electrical data

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

|                                 |   |
|---------------------------------|---|
| Rated voltage (III / 3)         | 500 V   |
| Rated impulse voltage (III / 3) | 6 kV  |
| Rated voltage (III / 2)         | 630 V   |
| Rated impulse voltage (III / 2) | 6 kV  |
| Rated voltage (II / 2)          | 1000 V  |
| Rated impulse voltage (II / 2)  | 6 kV  |
| Rated current                   | 24 A  |
| Legend (ratings)                | (III / 2) ≙ Overvoltage category III / Pollution degree 2 |

#### Approvals per UL 1059

|                                |       |
|--------------------------------|-------|
| Rated voltage UL (Use Group B) | 300 V |
| Rated current UL (Use Group B) | 15 A  |
| Rated voltage UL (Use Group D) | 300 V |
| Rated current UL (Use Group D) | 10 A  |

#### Approvals per CSA

|                                 |       |
|---------------------------------|-------|
| Rated voltage CSA (Use Group B) | 300 V |
| Rated current CSA (Use Group B) | 15 A  |
| Rated voltage CSA (Use Group D) | 300 V |
| Rated current CSA (Use Group D) | 10 A  |

### Connection data

|                       |             |
|-----------------------|-------------|
| Connection technology | CAGE CLAMP® |
|-----------------------|-------------|

Subject to changes.



|   |  |
|---|--|
| Actuation type  | Push-button                                  |
| Solid conductor   | 0.08 ... 2.5 mm <sup>2</sup> / 25 ... 12 AWG |
| Fine-stranded conductor                                     | 0.08 ... 2.5 mm <sup>2</sup> / 28 ... 12 AWG |
| Fine-stranded conductor with ferrule with plastic collar    | 0.25 ... 1.5 mm <sup>2</sup>                 |
| Fine-stranded conductor with ferrule without plastic collar | 0.25 ... 1.5 mm <sup>2</sup>                 |
| Strip length  | 5 ... 6 mm / 0.2 ... 0.24 inch               |
| Conductor entry angle to the PCB                            | 90°  |
| No. of poles  | 2  |
| Total number of connection points                           | 2  |
| Total number of potentials                                  | 2  |
| Number of connection types                                  | 1  |
| Number of levels  | 1  |
| Note (conductor cross-section)                              | 12 AWG: THHN, THWN                           |

### Geometrical Data

|                                   |                                |
|-----------------------------------|--------------------------------|
| Pin spacing                       | 7.5/7.62 mm / 0.295/0.3 inch   |
| Width                             | 17.9 mm / 0.705 inch           |
| Height                            | 18.2 mm / 0.717 inch           |
| Height from the surface           | 14.2 mm / 0.559 inch           |
| Depth                             | 18.3 mm / 0.72 inch            |
| Solder pin length                 | 4 mm                           |
| Solder pin dimensions             | 0.7 x 0.7 mm                   |
| Drilled hole diameter (tolerance) | 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

|                             |  |
|-----------------------------|--|
| Color                       | gray                                   |
| 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> ) |

Subject to changes.

|                 |            |
|-----------------|------------|
| Contact plating | tin-plated |
| Fire load       | 0.054 MJ   |
| Weight          | 3.1 g      |

### Environmental Requirements





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

### Commercial data

|                    |                     |
|--------------------|---------------------|
| Product Group      | 4 (Printed Circuit) |
| Packaging type     | BOX                 |
| Country of origin  | CH                  |
| GTIN               | 4044918661232       |
| Customs Tariff No. | 85369010000         |

### Approvals / Certificates

#### Country specific Approvals

| Logo   | Approval                        | Additional Approval Text | Certificate name |
|--|---------------------------------|--------------------------|------------------|
|  | CCA<br>DEKRA Certification B.V. | EN 60947                 | NTR NL-7146      |
|  | CCA<br>DEKRA Certification B.V. | EN 60947                 | 2160584.40       |
|  | CCA<br>DEKRA Certification B.V. | EN 60947-7-4             | 2169331.04       |
|  | CCA<br>DEKRA Certification B.V. | IEC 60947-7-4            | NTR NL-7283      |

#### Ship Approvals

| Logo | Approval                           | Additional Approval Text | Certificate name |
|------|------------------------------------|--------------------------|------------------|
|      | ABS<br>American Bureau of Shipping | -                        | 19-HG1869876-    |

Subject to changes.




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## UL-Approvals







| Logo   | Approval                             | Additional Approval Text | Certificate name  |
|--|--------------------------------------|--------------------------|-------------------|
|  | UR<br>Underwriters Laboratories Inc. | UL 1059                  | E45172,<br>sec. 6 |

## Compatible products

## tools

|  |  |  |
|--|--|--|
|  | <b>Item no.: 210-658</b><br>Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; angled; short | <a href="http://www.wago.com/210-658">www.wago.com/210-658</a> |
|  | <b>Item no.: 210-720</b><br>Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft                | <a href="http://www.wago.com/210-720">www.wago.com/210-720</a> |



















## ferrule

|  |  |  |
|--|--|--|
|  | <b>Item no.: 216-101</b><br>Ferrule; Sleeve for 0.5 mm <sup>2</sup> / AWG 22; uninsulated; electro-tin plated  | <a href="http://www.wago.com/216-101">www.wago.com/216-101</a> |
|  | <b>Item no.: 216-102</b><br>Ferrule; Sleeve for 0.75 mm <sup>2</sup> / AWG 20; uninsulated; electro-tin plated | <a href="http://www.wago.com/216-102">www.wago.com/216-102</a> |
|  | <b>Item no.: 216-103</b><br>Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; uninsulated; electro-tin plated    | <a href="http://www.wago.com/216-103">www.wago.com/216-103</a> |
|  | <b>Item no.: 216-104</b><br>Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; uninsulated; electro-tin plated  | <a href="http://www.wago.com/216-104">www.wago.com/216-104</a> |
|  | <b>Item no.: 216-121</b><br>Ferrule; Sleeve for 0.5 mm <sup>2</sup> / AWG 22; uninsulated; electro-tin plated  | <a href="http://www.wago.com/216-121">www.wago.com/216-121</a> |
|  | <b>Item no.: 216-122</b><br>Ferrule; Sleeve for 0.75 mm <sup>2</sup> / AWG 20; uninsulated; electro-tin plated | <a href="http://www.wago.com/216-122">www.wago.com/216-122</a> |

Subject to changes.

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|  |  |  |
|--|--|--|
|    | <b>Item no.: 216-123</b><br>Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; uninsulated; electro-tin plated  | <a href="http://www.wago.com/216-123">www.wago.com/216-123</a> |
|    | <b>Item no.: 216-124</b><br>Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; uninsulated; electro-tin plated  | <a href="http://www.wago.com/216-124">www.wago.com/216-124</a> |
|    | <b>Item no.: 216-131</b><br>Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated   | <a href="http://www.wago.com/216-131">www.wago.com/216-131</a> |
|    | <b>Item no.: 216-132</b><br>Ferrule; Sleeve for 0.34 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated   | <a href="http://www.wago.com/216-132">www.wago.com/216-132</a> |
|    | <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  | <a href="http://www.wago.com/216-141">www.wago.com/216-141</a> |
|    | <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 | <a href="http://www.wago.com/216-142">www.wago.com/216-142</a> |
|    | <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    | <a href="http://www.wago.com/216-143">www.wago.com/216-143</a> |
|    | <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  | <a href="http://www.wago.com/216-144">www.wago.com/216-144</a> |
|    | <b>Item no.: 216-151</b><br>Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated   | <a href="http://www.wago.com/216-151">www.wago.com/216-151</a> |
|   | <b>Item no.: 216-152</b><br>Ferrule; Sleeve for 0.34 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated   | <a href="http://www.wago.com/216-152">www.wago.com/216-152</a> |
|  | <b>Item no.: 216-201</b><br>Ferrule; Sleeve for 0.5 mm <sup>2</sup> / 20 AWG; insulated; electro-tin plated; white   | <a href="http://www.wago.com/216-201">www.wago.com/216-201</a> |
|  | <b>Item no.: 216-202</b><br>Ferrule; Sleeve for 0.75 mm <sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray   | <a href="http://www.wago.com/216-202">www.wago.com/216-202</a> |
|  | <b>Item no.: 216-203</b><br>Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; insulated; electro-tin plated; red   | <a href="http://www.wago.com/216-203">www.wago.com/216-203</a> |
|  | <b>Item no.: 216-204</b><br>Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated; black   | <a href="http://www.wago.com/216-204">www.wago.com/216-204</a> |
|  | <b>Item no.: 216-221</b><br>Ferrule; Sleeve for 0.5 mm <sup>2</sup> / 20 AWG; insulated; electro-tin plated; white   | <a href="http://www.wago.com/216-221">www.wago.com/216-221</a> |
|  | <b>Item no.: 216-222</b><br>Ferrule; Sleeve for 0.75 mm <sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray   | <a href="http://www.wago.com/216-222">www.wago.com/216-222</a> |
|  | <b>Item no.: 216-223</b><br>Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; insulated; electro-tin plated; red   | <a href="http://www.wago.com/216-223">www.wago.com/216-223</a> |
|  | <b>Item no.: 216-224</b><br>Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated; black   | <a href="http://www.wago.com/216-224">www.wago.com/216-224</a> |

Subject to changes.

**Item no.: 216-241**

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

[www.wago.com/216-241](http://www.wago.com/216-241)**Item no.: 216-242**

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

[www.wago.com/216-242](http://www.wago.com/216-242)**Item no.: 216-243**

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

[www.wago.com/216-243](http://www.wago.com/216-243)**Item no.: 216-244**

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

[www.wago.com/216-244](http://www.wago.com/216-244)**Item no.: 216-262**

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

[www.wago.com/216-262](http://www.wago.com/216-262)**Item no.: 216-263**

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

[www.wago.com/216-263](http://www.wago.com/216-263)**Item no.: 216-264**

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

[www.wago.com/216-264](http://www.wago.com/216-264)**Item no.: 216-284**

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

[www.wago.com/216-284](http://www.wago.com/216-284)**Item no.: 216-301**

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

[www.wago.com/216-301](http://www.wago.com/216-301)**Item no.: 216-302**

Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated; green

[www.wago.com/216-302](http://www.wago.com/216-302)**Item no.: 216-321**

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

[www.wago.com/216-321](http://www.wago.com/216-321)**Item no.: 216-322**

Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated; green

[www.wago.com/216-322](http://www.wago.com/216-322)**Marking accessories****Item no.: 210-332/750-020**

Marking strips; as a DIN A4 sheet; MARKED; 1-20 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white

[www.wago.com/210-332/750-020](http://www.wago.com/210-332/750-020)**Item no.: 210-332/762-020**

Marking strips; as a DIN A4 sheet; MARKED; 1-20 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white

[www.wago.com/210-332/762-020](http://www.wago.com/210-332/762-020)**Item no.: 210-833**

Marking strips; on reel; 6 mm wide; plain; Self-adhesive; white

[www.wago.com/210-833](http://www.wago.com/210-833)

Subject to changes.

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check



**Item no.: 249-112**

Test plug adapter; suitable for 255, 256, 257 Series PCB terminal blocks; 1-pole; Pin spacing 7.5 mm / [www.wago.com/249-112](http://www.wago.com/249-112)  
0.295 in; gray



**Item no.: 249-113**

Test plug adapter; suitable for 255, 256, 257 Series PCB terminal blocks; 1-pole; Pin spacing 7.62 mm / [www.wago.com/249-113](http://www.wago.com/249-113)  
0.3 in; orange

**Downloads**

**Documentation**

**Additional Information**

|                        |             |               |          |
|------------------------|-------------|---------------|----------|
| Technical explanations | Apr 3, 2019 | pdf<br>3.6 MB | Download |
|------------------------|-------------|---------------|----------|

**CAD/CAE-Data**

**CAD data**

|                      |     |          |
|----------------------|-----|----------|
| 2D/3D Models 255-502 | URL | Download |
|----------------------|-----|----------|

**CAE data**

|                           |          |
|---------------------------|----------|
| EPLAN Data Portal 255-502 | Download |
|---------------------------|----------|

**PCB Design**

|                              |     |          |
|------------------------------|-----|----------|
| Symbol and Footprint 255-502 | URL | Download |
|------------------------------|-----|----------|

CAX data for your PCB design, consisting of "schematic symbols and PCB footprints", allow easy integration of the WAGO component into your development environment.

**Supported formats:**

- Accel EDA 14 & 15
- Altium 6 to current version
- Cadence Allegro
- DesignSpark
- Eagle Libraries
- KiCad
- Mentor Graphics BoardStation
- Mentor Graphics Design Architect
- Mentor Graphics Design Expedition 99 and 2000
- OrCAD 9.X PCB and Capture

Subject to changes.



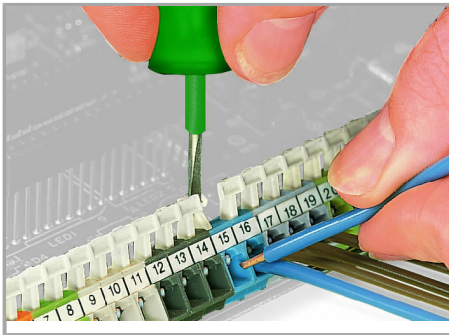
- PADS PowerPCB 3, 3.5, 4.X, and 5.X
- PADS PowerPCB and PowerLogic 3.0
- PCAD 2000, 2001, 2002, 2004, and 2006
- Pulsonix 8.5 or newer
- STL
- 3D STEP
- TARGET 3001!
- View Logic ViewDraw
- Quadcept
- Zuken CadStar 3 and 4
- Zuken CR-5000 and CR-8000

PCB Component Libraries (EDA), PCB CAD Library Ultra Librarian

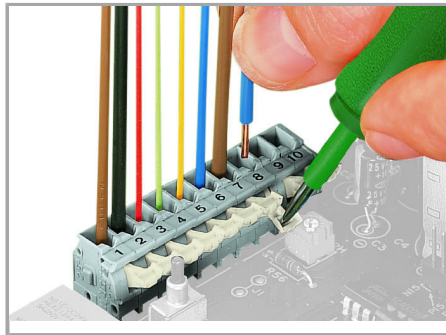
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## Installation Notes

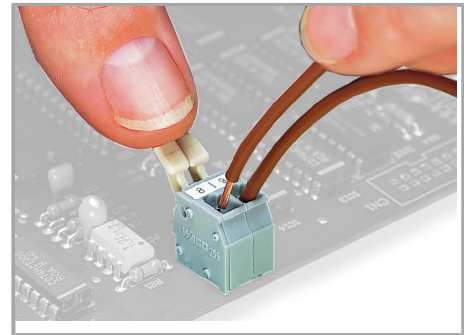
### Inserting a conductor



Inserting/removing a conductor – 256 Series.

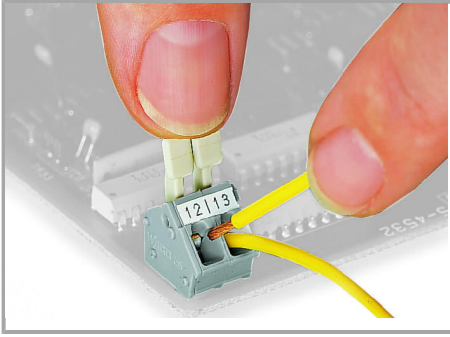


Inserting/removing a conductor – 255 Series.



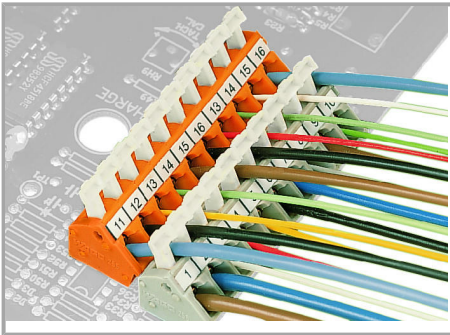
Inserting/removing a conductor via finger-operated lever – 255 Series.

Subject to changes.



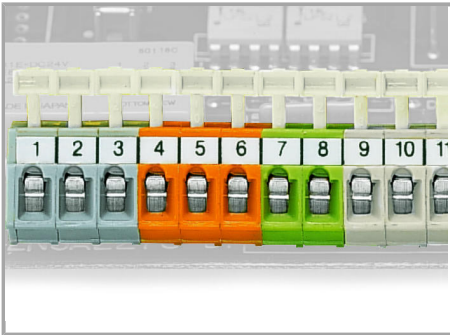
Inserting/removing a conductor via finger-operated lever – 256 Series.

### Assembly



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

### Marking



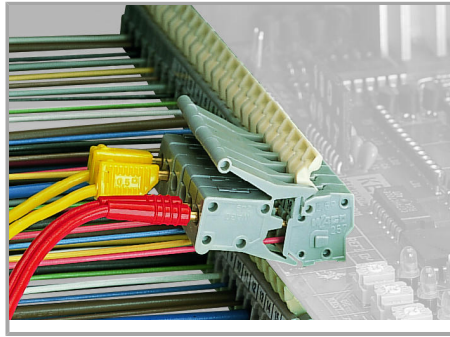
Formation of groups using housings of different colors.

### Testing

Subject to changes.



Testing with test probes.



Testing with test plug modules.

Subject to changes.