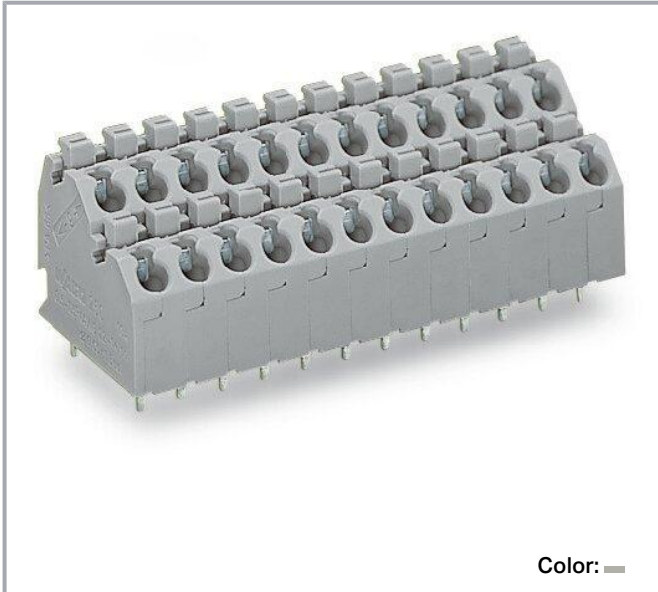


## Data sheet | Item number: 250-712

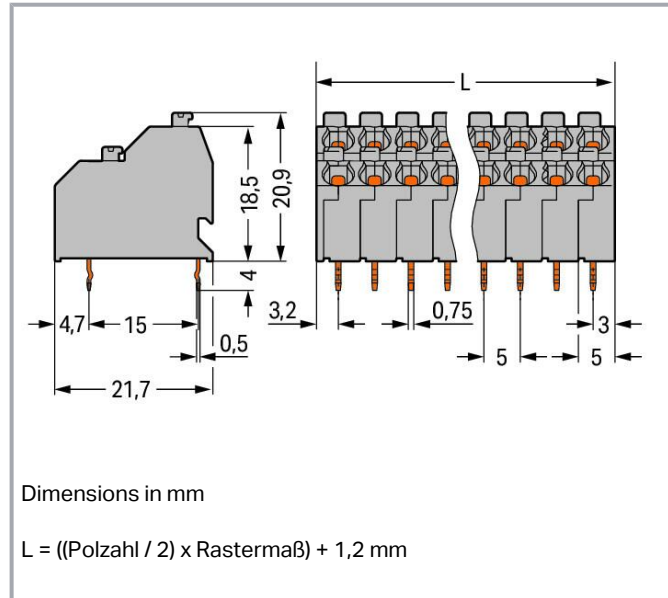
Double-deck PCB terminal block; push-button; 1.5 mm<sup>2</sup>; Pin spacing 5 mm;  
24-pole; Push-in CAGE CLAMP®; 1,50 mm<sup>2</sup>; agate gray



[www.wago.com/250-712](http://www.wago.com/250-712)



Color:



## Item description

- Space-saving, double-deck terminal strips with push-buttons
- Push-in termination of solid and ferruled conductors
- Termination/removal of fine-stranded conductors via push-buttons
- 45° conductor entry angle provides easy, space-saving wiring

## Data

### Notes

Variants:

Other pole numbers

Other colors

Direct marking

Other versions (or variants) can be requested from WAGO Sales or configured at <https://configurator.wago.com/>.

## Electrical data

Subject to changes. Please also observe the further product documentation!

WAGO GmbH & Co. KG

Hansastr. 27

32423 Minden

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.



### Ratings per IEC/EN

| Ratings per                   | IEC/EN 60664-1                                                       |
|-------------------------------|----------------------------------------------------------------------|
| Nominal voltage (III/3)       | 320 V                                                                |
| Rated impulse voltage (III/3) | 4 kV                                                                 |
| Rated voltage (III/2)         | 320 V                                                                |
| Rated impulse voltage (III/2) | 4 kV                                                                 |
| Nominal voltage (II/2)        | 630 V                                                                |
| Rated surge voltage (II/2)    | 4 kV                                                                 |
| Rated current                 | 10 A                                                                 |
| Legend (ratings)              | (III / 2) $\triangleq$ Overvoltage category III / Pollution degree 2 |

### Ratings per UL 1059

| Approvals per                  | UL 1059 |
|--------------------------------|---------|
| Rated voltage UL (Use Group B) | 300 V   |
| Rated current UL (Use Group B) | 10 A    |
| Rated voltage UL (Use Group D) | 300 V   |
| Rated current UL (Use Group D) | 10 A    |

### Ratings per CSA

| 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 points          | 24 |
| Total number of potentials | 24 |
| Number of connection types | 1  |
| Number of levels           | 2  |

### Connection 1

|                       |                                             |
|-----------------------|---------------------------------------------|
| Connection technology | Push-in CAGE CLAMP®                         |
| Actuation type        | Push-button                                 |
| Solid conductor       | 0.5 ... 1.5 mm <sup>2</sup> / 20 ... 16 AWG |

Subject to changes. Please also observe the further product documentation!



|                                                   |                                                                                                                               |
|---------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Fine-stranded conductor                           | 0.75 ... 1.5 mm <sup>2</sup>                                                                                                  |
| Fine-stranded conductor; with insulated ferrule   | 0.5 ... 1 mm <sup>2</sup>                                                                                                     |
| Fine-stranded conductor; with uninsulated ferrule | 0.5 ... 1 mm <sup>2</sup>                                                                                                     |
| Note (conductor cross-section)                    | Fine-stranded conductor 0,75 ... 1,5 mm <sup>2</sup> (I max. 4 A)<br>Fine-stranded conductor 0,5 mm <sup>2</sup> (I max. 2 A) |
| Strip length                                      | 9 ... 10 mm / 0.35 ... 0.39 inches                                                                                            |
| Conductor connection direction to PCB             | 45 °                                                                                                                          |
| Pole number                                       | 24                                                                                                                            |

### Physical data

|                                      |                                   |
|--------------------------------------|-----------------------------------|
| Pin spacing                          | 5 mm / 0.197 inches               |
| Width                                | 61.2 mm / 2.409 inches            |
| Height                               | 24.9 mm / 0.98 inches             |
| Height from the surface              | 20.9 mm / 0.823 inches            |
| Depth                                | 21.7 mm / 0.854 inches            |
| Solder pin length                    | 4 mm                              |
| Solder pin dimensions                | 0.5 x 0.75 mm                     |
| Drilled hole diameter with tolerance | 1.2 <sup>(-0.1 ... +0.1)</sup> mm |

### Plug-in connection

|                                      |    |
|--------------------------------------|----|
| Plugging without loss of pin spacing | No |
|--------------------------------------|----|

### PCB contact

|                                     |                                          |
|-------------------------------------|------------------------------------------|
| PCB contact                         | THT                                      |
| Solder pin arrangement              | over the entire terminal strip (in-line) |
| Number of solder pins per potential | 1                                        |

### Material Data

|                             |                                                          |
|-----------------------------|----------------------------------------------------------|
| Note (material data)        | Information on material specifications can be found here |
| Color                       | agate gray                                               |
| Material group              | I                                                        |
| Insulation material         | Polyamide (PA66)                                         |
| Flammability class per UL94 | V0                                                       |
| Clamping spring material    | Chrome-nickel spring steel (CrNi)                        |
| Contact material            |                                                          |

Subject to changes. Please also observe the further product documentation!



|                 |                                        |
|-----------------|----------------------------------------|
|                 | Electrolytic copper (E <sub>Cu</sub> ) |
| Contact plating | Tin                                    |
| Fire load       | 0.899 MJ                               |
| Weight          | 23 g                                   |

### Environmental requirements

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

### Commercial data

|                       |                                |
|-----------------------|--------------------------------|
| Product Group         | 4 (Printed Circuit Connectors) |
| eCl@ss 10.0           | 27-44-04-01                    |
| eCl@ss 9.0            | 27-44-04-01                    |
| ETIM 8.0              | EC002643                       |
| ETIM 7.0              | EC002643                       |
| PU (SPU)              | 48 (12) pcs                    |
| Packaging type        | box                            |
| Country of origin     | CH                             |
| GTIN                  | 4044918304559                  |
| Customs tariff number | 85369010000                    |

### Environmental Product Compliance

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

### Approvals / Certificates

#### General approvals

| Logo | Approval                        | Additional Approval Text | Certificate name  |
|------|---------------------------------|--------------------------|-------------------|
|      | CCA<br>DEKRA Certification B.V. | EN 60947                 | NTR NL<br>7833/2  |
|      | CCA<br>DEKRA Certification B.V. | EN 60998                 | NTR NL-<br>7705/1 |
|      | CSA<br>DEKRA Certification B.V. | C22.2                    | 1132097           |

Subject to changes. Please also observe the further product documentation!



|  |                                       |          |            |
|--|---------------------------------------|----------|------------|
|  | KEMA/KEUR<br>DEKRA Certification B.V. | EN 60947 | 2160584.18 |
|--|---------------------------------------|----------|------------|





|  |                                       |          |           |
|--|---------------------------------------|----------|-----------|
|  | KEMA/KEUR<br>DEKRA Certification B.V. | EN 60998 | 71-124629 |
|--|---------------------------------------|----------|-----------|





|  |                                     |         |        |
|--|-------------------------------------|---------|--------|
|  | UL<br>UL International Germany GmbH | UL 1059 | E45172 |
|--|-------------------------------------|---------|--------|



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

| Logo                                                                               | Approval                                           | Additional Approval Text | Certificate name |
|------------------------------------------------------------------------------------|----------------------------------------------------|--------------------------|------------------|
|   | EU-Declaration of Conformity<br>WAGO GmbH & Co. KG | -                        | -                |
|  | UK-Declaration of Conformity<br>WAGO GmbH & Co. KG | -                        | -                |

**Approvals for marine applications**

| Logo                                                                               | Approval                                         | Additional Approval Text | Certificate name         |
|------------------------------------------------------------------------------------|--------------------------------------------------|--------------------------|--------------------------|
|  | ABS<br>American Bureau of Shipping               | -                        | 19-<br>HG1869876-<br>PDA |
|  | DNV GL<br>Det Norske Veritas, Germanischer Lloyd | -                        | TAE000016Z               |















**Optional accessories**

Tool

Subject to changes. Please also observe the further product documentation!

WAGO GmbH & Co. KG  
 Hansastr. 27  
 32423 Minden  
 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.

| Operating tool                                                                    |                                                                                                                                                                                          |                                                                                |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
|    | <b>Item no.: 210-647</b><br>Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; multicoloured                                                                         | <a href="http://www.wago.com/210-647">www.wago.com/210-647</a>                 |
|   | <b>Item no.: 210-719</b><br>Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft                                                                                        | <a href="http://www.wago.com/210-719">www.wago.com/210-719</a>                 |
| Marking accessories                                                               |                                                                                                                                                                                          |                                                                                |
| Marking strip                                                                     |                                                                                                                                                                                          |                                                                                |
|   | <b>Item no.: 210-332/500-202</b><br>Marking strips; as a DIN A4 sheet; MARKED; 1-16 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white  | <a href="http://www.wago.com/210-332/500-202">www.wago.com/210-332/500-202</a> |
|   | <b>Item no.: 210-332/500-206</b><br>Marking strips; as a DIN A4 sheet; MARKED; 33-48 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white | <a href="http://www.wago.com/210-332/500-206">www.wago.com/210-332/500-206</a> |
|   | <b>Item no.: 210-332/500-205</b><br>Marking strips; as a DIN A4 sheet; MARKED; 1-32 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white   | <a href="http://www.wago.com/210-332/500-205">www.wago.com/210-332/500-205</a> |
|  | <b>Item no.: 210-332/500-204</b><br>Marking strips; as a DIN A4 sheet; MARKED; 17-32 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white | <a href="http://www.wago.com/210-332/500-204">www.wago.com/210-332/500-204</a> |
| Ferrule                                                                           |                                                                                                                                                                                          |                                                                                |
| Ferrule                                                                           |                                                                                                                                                                                          |                                                                                |
|  | <b>Item no.: 216-101</b><br>Ferrule; Sleeve for 0.5 mm <sup>2</sup> / AWG 22; uninsulated; electro-tin plated; silver-colored                                                            | <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; silver-colored                                                           | <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.: 216-123</b><br>Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; uninsulated; electro-tin plated; silver-colored                                                              | <a href="http://www.wago.com/216-123">www.wago.com/216-123</a>                 |
|  | <b>Item no.: 216-122</b><br>Ferrule; Sleeve for 0.75 mm <sup>2</sup> / AWG 20; uninsulated; electro-tin plated; silver-colored                                                           | <a href="http://www.wago.com/216-122">www.wago.com/216-122</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.: 216-121</b><br>Ferrule; Sleeve for 0.5 mm <sup>2</sup> / AWG 22; uninsulated; electro-tin plated; silver-colored                                                            | <a href="http://www.wago.com/216-121">www.wago.com/216-121</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                                               | <a href="http://www.wago.com/216-143">www.wago.com/216-143</a>                 |

Subject to changes. Please also observe the further product documentation!

crimped; acc. to DIN 46228, Part 1/08.92

|                                                                                   |                                                                                                                                                                                            |                                                                |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|
|    | <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.: 216-203</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.: 216-202</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.: 216-201</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.: 216-223</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.: 216-241</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 | <a href="http://www.wago.com/216-241">www.wago.com/216-241</a> |
|    | <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 | <a href="http://www.wago.com/216-242">www.wago.com/216-242</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.: 216-221</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.: 216-243</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     | <a href="http://www.wago.com/216-243">www.wago.com/216-243</a> |
|  | <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     | <a href="http://www.wago.com/216-263">www.wago.com/216-263</a> |
|  | <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 | <a href="http://www.wago.com/216-262">www.wago.com/216-262</a> |

### Testing and measuring

#### Testing accessories



**Item no.: 210-136**  
Test plug; 2 mm Ø; with 500 mm cable; red

[www.wago.com/210-136](http://www.wago.com/210-136)

### Downloads

### Documentation

### Additional Information

#### Technical Section

Subject to changes. Please also observe the further product documentation!

WAGO GmbH & Co. KG  
Hansastr. 27  
32423 Minden  
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.



Technical section

Technical explanations

2019 Apr 3

pdf  
2.0 MB

Download

## CAD/CAE-Data

### CAD data

2D/3D Models 250-712

URL

Download

### PCB Design

Symbol and Footprint 250-712

URL

Download

CAD 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
- 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

Subject to changes. Please also observe the further product documentation!

WAGO GmbH & Co. KG

Hansastr. 27

32423 Minden

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.



#### CAE data

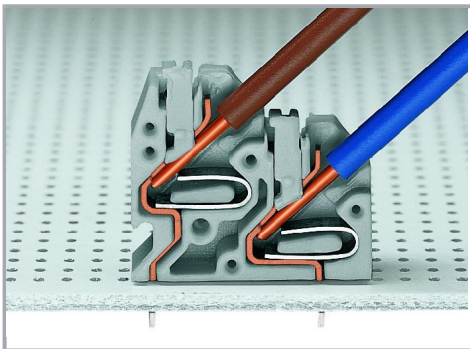
|                           |     |          |
|---------------------------|-----|----------|
| ZUKEN Portal 250-712      | URL | Download |
| EPLAN Data Portal 250-712 | URL | Download |

### Environmental Product Compliance

#### Compliance Search

|                                                                                                                                                      |     |          |
|------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----------|
| Environmental Product Compliance 250-712                                                                                                             | URL | Download |
| Double-deck PCB terminal block; push-button; 1.5 mm <sup>2</sup> ; Pin spacing 5 mm; 24-pole; Push-in CAGE CLAMP®; 1,50 mm <sup>2</sup> ; agate gray |     |          |

### Installation Notes



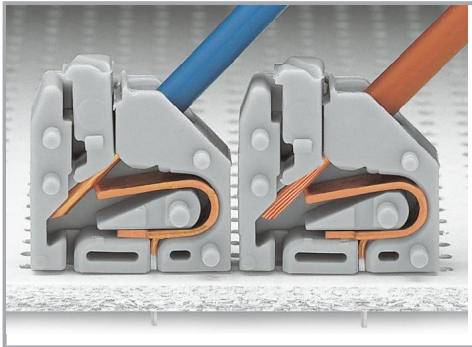
Space-saving wiring – push-in termination of solid conductors.



Testing with 2 mm Ø test plug – touch contact.

Subject to changes. Please also observe the further product documentation!

#### Conductor termination



Inserting solid conductors via push-in termination.

Inserting fine-stranded conductors via push-buttons, 250 Series – 3.5 mm pin spacing.

#### Conductor termination



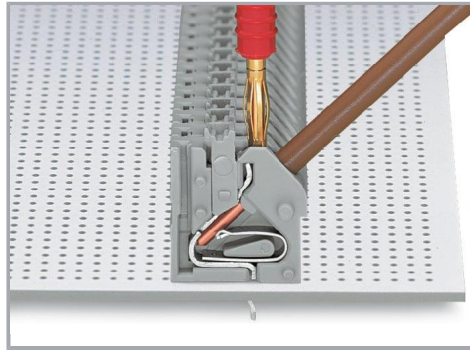
Space-saving wiring, 250 Series – 5 mm pin spacing.

#### Testing

Subject to changes. Please also observe the further product documentation!

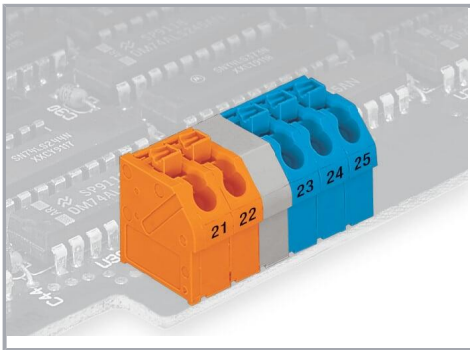


Testing with 11 mm Ø test pin, on the conductor, 250 Series – 2.5 ... 3.5 mm pin spacing.

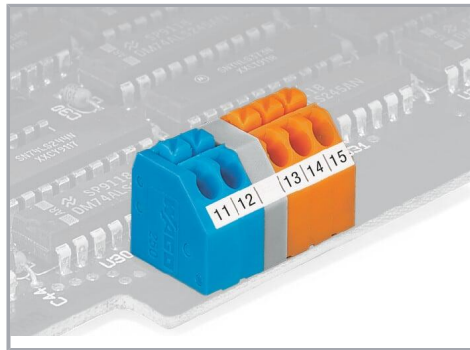


Testing with 2 mm Ø test plug, touch contact, 250 Series – 5 mm pin spacing.

### Marking



Labeling via self-adhesive strips or direct marking. Mixed-color terminal strips (with or without spacer) are available upon request.



Labeling via self-adhesive strips or direct marking. Mixed-color terminal strips (with or without spacer) are available upon request.

Subject to changes. Please also observe the further product documentation!