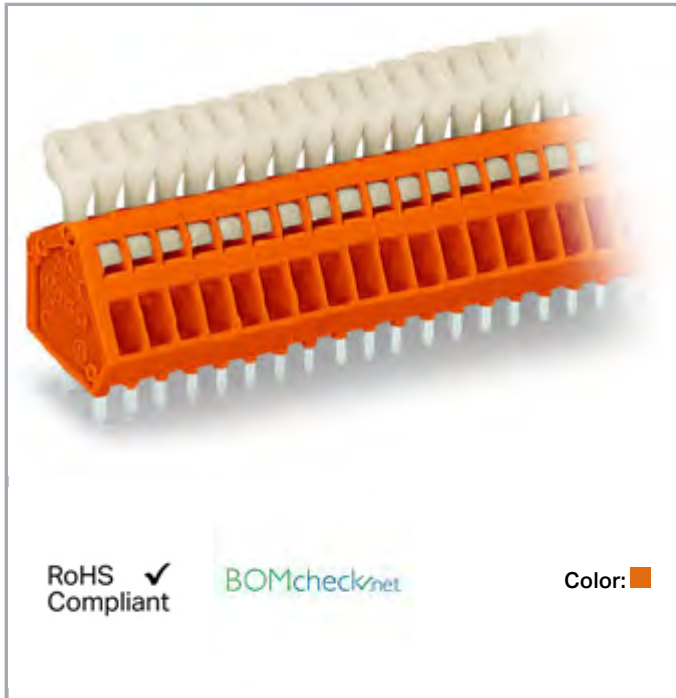


## Data sheet | Item number: 233-504

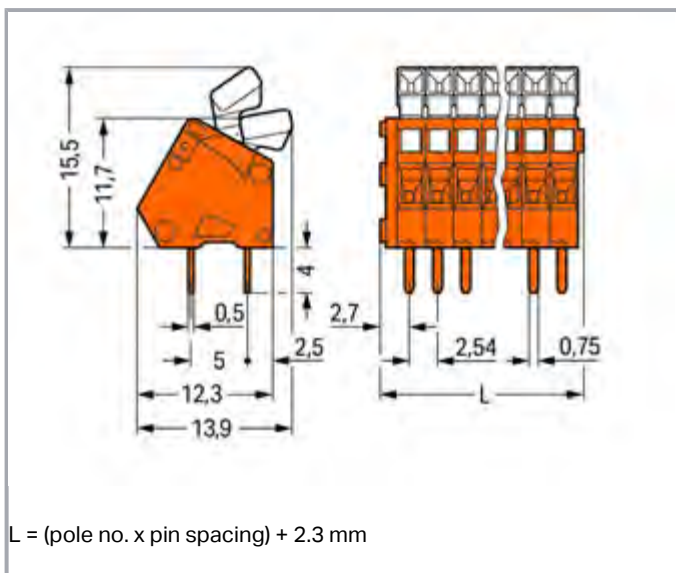
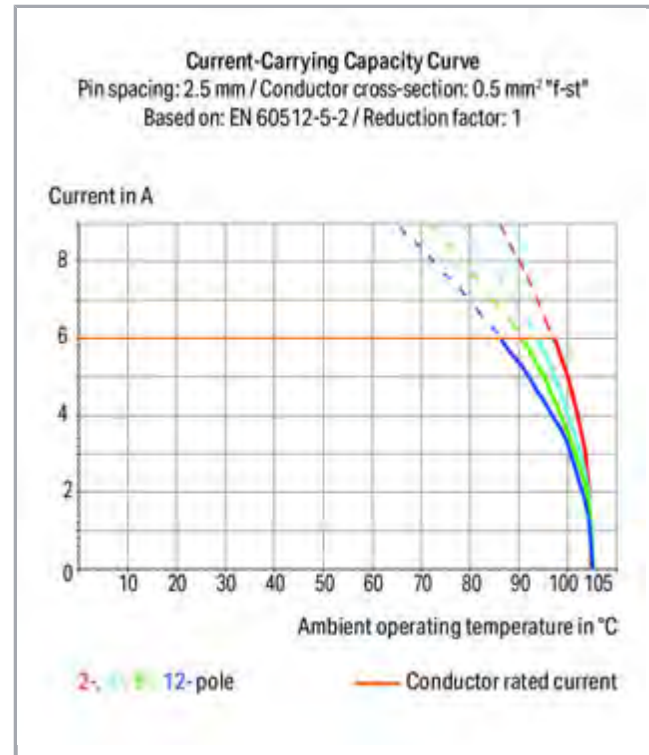
PCB terminal block; push-button; 0.5 mm<sup>2</sup>; Pin spacing 2.54 mm; 4-pole;  
CAGE CLAMP®; 0,50 mm<sup>2</sup>; orange



RoHS Compliant

BOMcheck.net

Color:



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



## Item description

- Compact PCB terminal strips with CAGE CLAMP® connection and screwdriver actuation parallel or perpendicular to conductor entry
- Double solder pins for high mechanical
- Custom color combinations

## Data

### Electrical data

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

| Ratings per                 | IEC/EN 60664-1                                                       |
|-----------------------------|----------------------------------------------------------------------|
| Nominal voltage (III/3)     | 63 V                                                                 |
| Rated surge voltage (III/3) | 2.5 kV                                                               |
| Rated voltage (III/2)       | 160 V                                                                |
| Rated surge voltage (III/2) | 2.5 kV                                                               |
| Nominal voltage (II/2)      | 320 V                                                                |
| Rated surge voltage (II/2)  | 2.5 kV                                                               |
| Rated current               | 6 A                                                                  |
| Legend (ratings)            | (III / 2) $\triangleq$ Overvoltage category III / Pollution degree 2 |

#### Approvals per UL 1059

|                                |       |
|--------------------------------|-------|
| Rated voltage UL (Use Group B) | 150 V |
| Rated current UL (Use Group B) | 4 A   |

#### Approvals per CSA

|                                 |       |
|---------------------------------|-------|
| Rated voltage CSA (Use Group B) | 150 V |
| Rated current CSA (Use Group B) | 4 A   |

## Connection data

|                                                   |                                              |
|---------------------------------------------------|----------------------------------------------|
| Connection technology                             | CAGE CLAMP®                                  |
| Actuation type                                    | Push-button                                  |
| 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>                         |

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



|                                       |                                                                                                                                                                               |
|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Strip length                          | 5 ... 6 mm / 0.2 ... 0.24 inch                                                                                                                                                |
| Conductor connection direction to PCB | 30°                                                                                                                                                                           |
| Pole No.                              | 4                                                                                                                                                                             |
| Total number of connection points     | 4                                                                                                                                                                             |
| Total number of potentials            | 4                                                                                                                                                                             |
| Number of connection types            | 1                                                                                                                                                                             |
| Number of levels                      | 1                                                                                                                                                                             |
| 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. |

### Geometrical Data

|                                      |                          |
|--------------------------------------|--------------------------|
| Pin spacing                          | 2.54 mm / 0.1 inch       |
| Width                                | 12.46 mm / 0.491 inch    |
| Height                               | 19.5 mm / 0.768 inch     |
| Height from the surface              | 15.5 mm / 0.61 inch      |
| Depth                                | 13.9 mm / 0.547 inch     |
| Solder pin length                    | 4 mm                     |
| Solder pin dimensions                | 0.5 x 0.75 mm            |
| Drilled hole diameter with 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                       | orange                                 |
| Material group              | I                                      |
| Insulation material         | Polyamide 66 (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-plated                             |
| Fire load                   | 0.032 MJ                               |
| Weight                      | 1.7 g                                  |

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

## Environmental Requirements

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

## Commercial data

|                       |                     |
|-----------------------|---------------------|
| Product Group         | 4 (Printed Circuit) |
| Packaging type        | BOX                 |
| Country of origin     | CH                  |
| GTIN                  | 4045454050283       |
| Customs tariff number | 85369010000         |

## Approvals / Certificates

### Country specific Approvals

| Logo                                                                               | Approval                              | Additional Approval Text | Certificate name |
|------------------------------------------------------------------------------------|---------------------------------------|--------------------------|------------------|
|    | CCA<br>DEKRA Certification B.V.       | EN 60998                 | NTR NL<br>6946   |
|  | CCA<br>DEKRA Certification B.V.       | EN 60998                 | 2153951.01       |
|  | CCA<br>DEKRA Certification B.V.       | EN 60947-7-4             | NTR NL<br>7786   |
|  | CSA<br>DEKRA Certification B.V.       | C22.2                    | 1465035          |
|  | KEMA/KEUR<br>DEKRA Certification B.V. | EN 60947-7-4             | 71-111040        |

### Ship Approvals

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

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

**DNV GL**

Det Norske Veritas, Germanischer Lloyd

TAE000016Z

**UL-Approvals**

| Logo                                                                             | Approval                            | Additional Approval Text | Certificate name |
|----------------------------------------------------------------------------------|-------------------------------------|--------------------------|------------------|
|  | UL<br>UL International Germany GmbH | UL 1059                  | 20190731-E45172  |

**Compatible products****ferrule****Item no.: 216-131**Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated**Item no.: 216-151**Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated**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**tools****Item no.: 210-648**

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

**Item no.: 210-719**

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

**Marking accessories****Item no.: 210-331/250-202**

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.: 210-331/250-204**



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

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**Item no.: 210-331/250-206**

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

---

**Item no.: 210-331/250-207**

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.: 210-331/254-202**

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.: 210-331/254-204**

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

---

**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

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## Downloads

### Documentation

#### Additional Information

Technical explanations

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## CAD/CAE-Data

### CAD data

2D/3D Models 233-504

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### CAE data

EPLAN Data Portal 233-504

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ZUKEN Portal 233-504

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### PCB Design

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

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#### Symbol and Footprint 233-504

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
- 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

##### Conductor termination

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

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Inserting/removing a conductor.



Nominal cross-section: 0.5 mm<sup>2</sup> (20 AWG);

0.75 mm<sup>2</sup> (18 AWG) only in every other position

#### Marking



Labeling via factory direct marking or self-adhesive marking strips.

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