

# Data sheet | Item number: 250-1424

PCB terminal block; Push-button; 0.5 mm<sup>2</sup>; Pin spacing 2.54 mm; 24-pole;  
Push-in CAGE CLAMP®



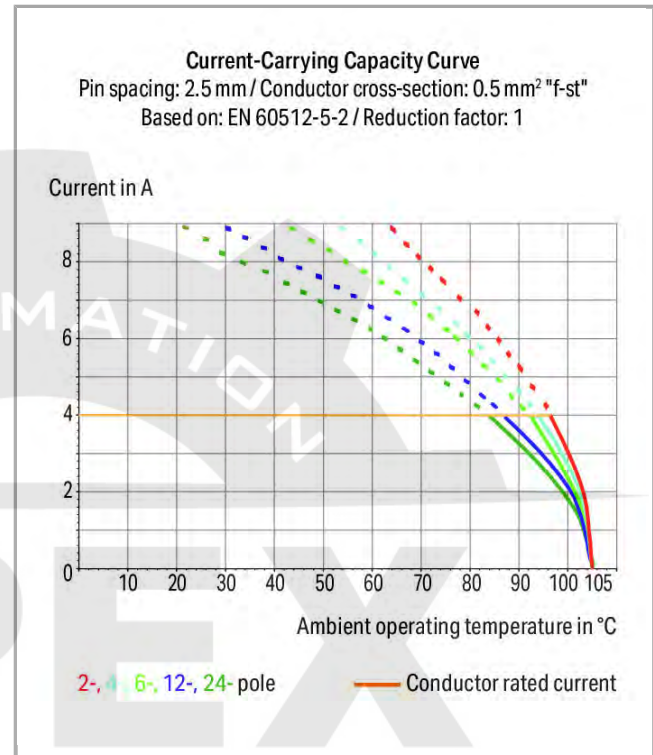
250-1424

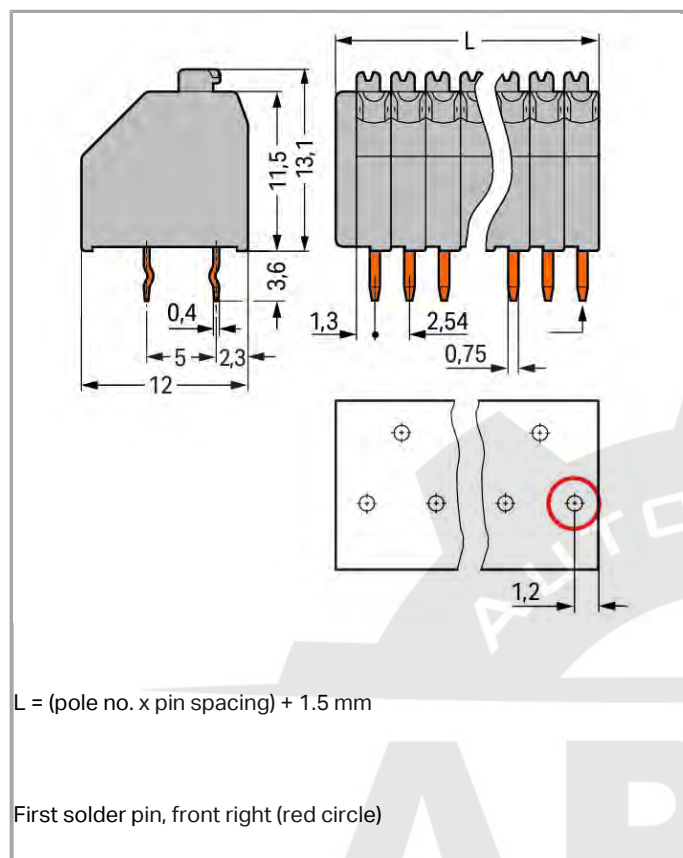


RoHS  
Compliant ✓

BOMcheck.net

Color: ■





### Item description

- Compact terminal strips with push-buttons
- Push-in termination for solid 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                   | 4 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) | 5 A   |
| Rated voltage CSA (Use Group D) | 300 V |
| Rated current CSA (Use Group D) | 5 A   |

## Connection data

|                                   |                                              |
|-----------------------------------|----------------------------------------------|
| Connection technology             | Push-in CAGE CLAMP®                          |
| Actuation type                    | Push-button                                  |
| Solid conductor                   | 0.14 ... 0.5 mm <sup>2</sup> / 24 ... 20 AWG |
| Fine-stranded conductor           | 0.2 ... 0.5 mm <sup>2</sup> / 24 ... 20 AWG  |
| Conductor diameter                | 0.4 ... 0.8 mm                               |
| Strip length                      | 8.5 ... 9.5 mm / 0.33 ... 0.37 inch          |
| Conductor entry angle to the PCB  | 45°                                          |
| No. of poles                      | 24                                           |
| Total number of connection points | 24                                           |
| Total number of potentials        | 24                                           |
| Number of connection types        | 1                                            |
| Number of levels                  | 1                                            |

## Geometrical Data

|                                   |                              |
|-----------------------------------|------------------------------|
| Pin spacing                       | 2.54 mm / 0.1 inch           |
| Width                             | 62.46 mm / 2.459 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, staggered |
| Number of solder pins per potential | 1                                         |

## Material Data

|                             |                                        |
|-----------------------------|----------------------------------------|
| Color                       | gray                                   |
| Material group              | I                                      |
| Insulating material         | Polyamide 66 (PA 66)                   |
| Flammability class per UL94 | V0                                     |
| Clamping spring material    | Copper alloy                           |
| Contact material            | Electrolytic copper (E <sub>Cu</sub> ) |
| Contact plating             | tin-plated                             |
| Fire load                   | 0.174 MJ                               |
| Weight                      | 8.541 g                                |

## Environmental Requirements

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

## Commercial data

|                    |                     |
|--------------------|---------------------|
| Product Group      | 4 (Printed Circuit) |
| Country of origin  | CH                  |
| GTIN               | 4017332749954       |
| 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-7100      |
|  | CCA<br>DEKRA Certification B.V. | EN 60998                 | NTR NL-7449      |
|  | CCA<br>DEKRA Certification B.V. | EN 60998                 | 2188127.01       |
|  | CSA<br>DEKRA Certification B.V. | C22.2                    | 1132097          |

|                                                                                  |                                              |          |            |
|----------------------------------------------------------------------------------|----------------------------------------------|----------|------------|
|  | CSA<br>DEKRA Certification B.V.              | C22.2    | 1132097    |
|  | KEMA/KEUR<br>DEKRA Certification B.V.        | EN 60998 | 71-105258  |
|  | KEMA/KEUR<br>DEKRA Certification B.V.        | EN 60947 | 2160584.18 |
|  | VDE<br>VDE Prüf- und Zertifizierungsinstitut | EN 60998 | 40028888   |

#### Ship Approvals

| Logo                                                                               | Approval                                         | Additional Approval Text | Certificate name         |
|------------------------------------------------------------------------------------|--------------------------------------------------|--------------------------|--------------------------|
|   | ABS<br>American Bureau of Shipping               | -                        | 14-<br>HG1241537-<br>PDA |
|  | DNV GL<br>Det Norske Veritas, Germanischer Lloyd | -                        | TAE000016Z               |

#### 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

#### Marking accessories



|                                                                                  |                                                                                                                                                                                              |         |
|----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
|                                                                                  | <b>Item no.: 210-331/254-202</b><br>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  | 210-331 |
|                                                                                  | <b>Item no.: 210-331/254-204</b><br>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 | 210-331 |
|                                                                                  | <b>Item no.: 210-331/254-206</b><br>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 | 210-331 |
|                                                                                  | <b>Item no.: 210-331/254-207</b><br>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  | 210-331 |
| check                                                                            |                                                                                                                                                                                              |         |
|  | <b>Item no.: 735-500</b><br>Test pin; 1 mm Ø; with solder connection for test wire                                                                                                           | 735-500 |
| tools                                                                            |                                                                                                                                                                                              |         |
|  | <b>Item no.: 210-647</b><br>Operating tool with partially insulated shaft; Blade (2.5 x 0.4) mm; short                                                                                       | 210-647 |
|  | <b>Item no.: 210-719</b><br>Operating tool with partially insulated shaft; Type 1, blade (2.5 x 0.4) mm                                                                                      | 210-719 |

## Downloads

## CAD/CAE - Smart Data

## CAD data

|                                                                 |             |                |
|-----------------------------------------------------------------|-------------|----------------|
| 3D Download 250-1424                                            | URL         | Download       |
| <b>PCB libraries</b>                                            |             |                |
| EAGLE Library for WAGO PCB Terminal Blocks                      | 2.1         | Download       |
| Compatible with EAGLE PCB Design Software Version 6.x or higher | Oct 6, 2014 | zip<br>23.9 MB |
| TARGET Library for WAGO PCB Terminal Blocks                     | 1.1.0       | Download       |
| Compatible with TARGET PCB Design Software Version 17.x         | Oct 6, 2014 | zip<br>27.1 MB |
| DesignSpark Library for WAGO PCB Terminal Blocks                | 2.1         | Download       |
| Compatible with DesignSpark PCB Version 4.x or higher           | Oct 6, 2014 | zip<br>22.5 MB |

Subject to changes.