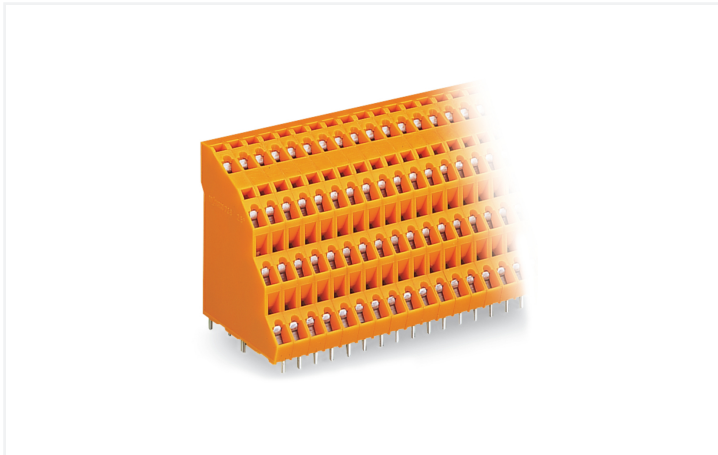


## Data Sheet | Item Number: 738-406

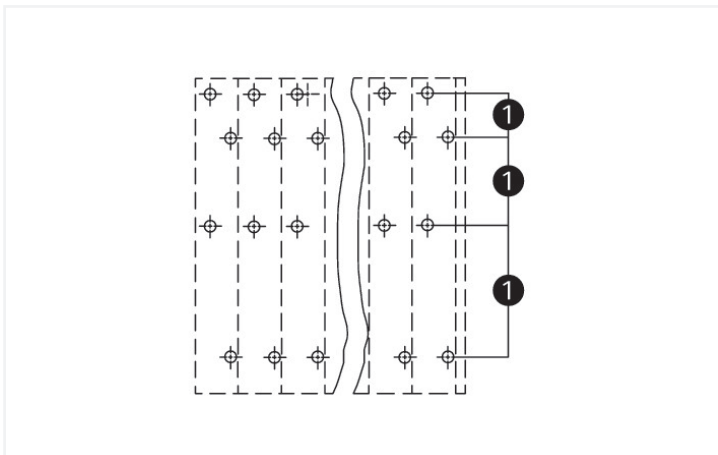
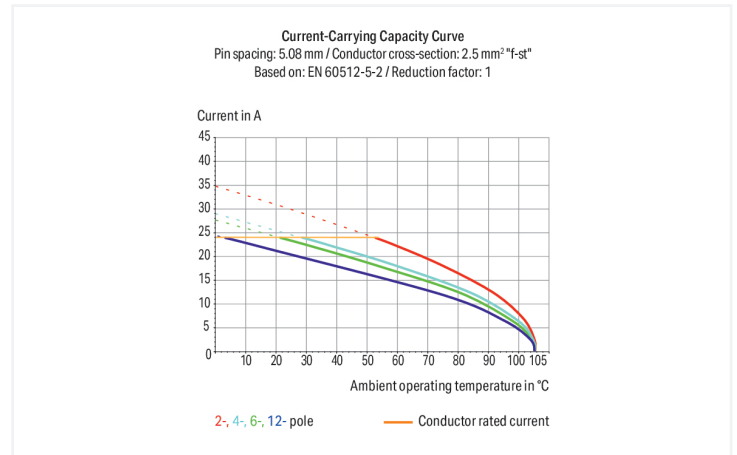
Quadruple-deck PCB terminal block; 2.5 mm<sup>2</sup>; Pin spacing 5.08 mm; 24-pole; CAGE CLAMP®; orange

<https://www.wago.com/738-406>



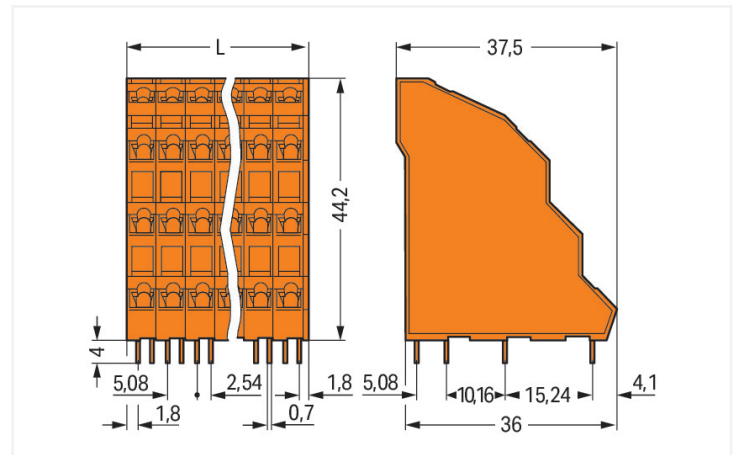
Color: ■ orange

Similar to illustration



Dimensions in mm

(1) Solder pins for deck 2 and 4 staggered by half the pin spacing



### PCB terminal block, 738 Series, CAGE CLAMP®

Our PCB terminal block (item number 738-406) simplifies electrical installations. It is a universal connector that can be used almost anywhere, for example, as a pluggable PCB connector, panel feedthrough header, connector for rail-mount terminal blocks, or a floating connector for different mounting methods. Ensure that the strip lengths are between 5 and 6 mm when connecting conductors to this PCB terminal block. Featuring one conductor terminal along with CAGE CLAMP®, this product outperforms the competition. Our CAGE CLAMP® connection provides a dependable and maintenance-free way to connect all types of conductors. You do not need to prepare the conductor in any way, such as crimping ferrules. Dimensions: (31.48 x 48.2 x 37.5) mm (width x height x depth). Depending on the conductor type, this PCB terminal block is ideal for conductor cross sections ranging from 0.08 mm<sup>2</sup> to 2.5 mm<sup>2</sup>.

Tin is used for coating the contact surfaces. This PCB terminal block is operated with an operating tool. The PCB terminal block is designed for THT soldering. Insert the conductor at an angle of 45°.

## Notes

|           |  |
|-----------|--|
| Variants: | Other pole numbers<br>Other colors<br>Mixed-color PCB connector strips<br>Direct marking<br>Other versions (or variants) can be requested from WAGO Sales or configured at <a href="https://configurator.wago.com/">https://configurator.wago.com/</a> . |
|-----------|--|

## Electrical data

| Ratings                         | between the modules |                |                | Ratings                         | between the decks |                |                |
|---------------------------------|---------------------|----------------|----------------|---------------------------------|-------------------|----------------|----------------|
| Ratings per                     | IEC/EN 60664-1      | IEC/EN 60664-1 | IEC/EN 60664-1 | Ratings per                     | IEC/EN 60664-1    | IEC/EN 60664-1 | IEC/EN 60664-1 |
| Overvoltage category            | III                 | III            | II             | Overvoltage category            | III               | III            | II             |
| Pollution degree                | 3                   | 2              | 2              | Pollution degree                | 3                 | 2              | 2              |
| Nominal voltage                 | 250 V               | 320 V          | 630 V          | Nominal voltage                 | 320 V             | 320 V          | 630 V          |
| Rated impulse withstand voltage | 4 kV                | 4 kV           | 4 kV           | Rated impulse withstand voltage | 4 kV              | 4 kV           | 4 kV           |
| Rated current                   | 18 A                | 18 A           | 18 A           | Rated current                   | 18 A              | 18 A           | 18 A           |

| Approvals per | UL 1059 |   |       |
|---------------|---------|---|-------|
| Use group     | B       | C | D     |
| Rated voltage | 300 V   | - | 300 V |
| Rated current | 10 A    | - | 10 A  |

| Approvals per | CSA   |   |       |
|---------------|-------|---|-------|
| Use group     | B     | C | D     |
| Rated voltage | 300 V | - | 300 V |
| Rated current | 10 A  | - | 10 A  |

## Connection data

|                            |    |
|----------------------------|----|
| Clamping units             | 24 |
| Total number of potentials | 24 |
| Number of connection types | 1  |
| Number of levels           | 4  |

## Connection 1

|   |  |
|---|--|
| Connection technology                             | CAGE CLAMP®                                  |
| Actuation type                                    | Operating tool                               |
| Solid conductor                                   | 0.08 ... 2.5 mm <sup>2</sup> / 28 ... 12 AWG |
| Fine-stranded conductor                           | 0.08 ... 2.5 mm <sup>2</sup> / 28 ... 12 AWG |
| Fine-stranded conductor; with insulated ferrule   | 0.25 ... 1.5 mm <sup>2</sup>                 |
| Fine-stranded conductor; with uninsulated ferrule | 0.25 ... 2.5 mm <sup>2</sup>                 |
| Note (conductor cross-section)                    | 12 AWG: THHN, THWN                           |
| Strip length                                      | 5 ... 6 mm / 0.2 ... 0.24 inches             |
| Conductor connection direction to PCB             | 45°  |
| Pole number                                       | 24   |

## Physical data

|                                      |                         |
|--------------------------------------|-------------------------|
| Pin spacing                          | 5.08 mm / 0.2 inches    |
| Width                                | 31.48 mm / 1.239 inches |
| Height                               | 48.2 mm / 1.898 inches  |
| Height from the surface              | 44.2 mm / 1.74 inches   |
| Depth                                | 37.5 mm / 1.476 inches  |
| Solder pin length                    | 4 mm                    |
| Solder pin dimensions                | 0.7 x 0.7 mm            |
| Drilled hole diameter with tolerance | 1.3 (+0.1) mm           |

### PCB contact

|                                     |                                       |
|-------------------------------------|---------------------------------------|
| PCB contact                         | THT                                   |
| Solder pin arrangement              | within the terminal block (staggered) |
| Number of solder pins per potential | 1                                     |

### Material data

|                                    |  |
|------------------------------------|--|
| Note (material data)               | <a href="#">Information on material specifications can be found here</a> |
| Color                              | orange   |
| Material group                     | I  |
| Insulation material (main housing) | Polyamide (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  |
| Fire load                          | 0.513 MJ   |
| Weight                             | 36.9 g   |

### Environmental requirements

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

### Commercial data

|                       |                                |
|-----------------------|--------------------------------|
| Product Group         | 4 (Printed Circuit Connectors) |
| PU (SPU)              | 24 pcs                         |
| Packaging type        | Box                            |
| Country of origin     | PL                             |
| GTIN                  | 4045454159924                  |
| Customs tariff number | 85369010000                    |

### Product Classification

|             |                      |
|-------------|----------------------|
| UNSPSC      | 39121409             |
| eCl@ss 10.0 | 27-44-04-01          |
| eCl@ss 9.0  | 27-44-04-01          |
| ETIM 9.0    | EC002643             |
| ETIM 10.0   | EC002643             |
| ECCN        | NO US CLASSIFICATION |

### Environmental Product Compliance

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

### Approvals / Certificates

#### General approvals



| Approval                        | Standard     | Certificate Name |
|---------------------------------|--------------|------------------|
| CCA<br>DEKRA Certification B.V. | EN 60947     | 2160584.20       |
| CCA<br>DEKRA Certification B.V. | EN 60947     | NTR NL-7103      |
| CCA<br>DEKRA Certification B.V. | EN 60947-7-4 | NTR NL 7817      |

#### General approvals

|   |               |           |
|---|---------------|-----------|
| CCA<br>DEKRA Certification B.V.         | EN 60947-7-4  | 71-112779 |
| CSA<br>DEKRA Certification B.V.         | C22.2 No. 158 | 1711139   |
| UR<br>Underwriters Laboratories<br>Inc. | UL 1059       | E45172    |

Declarations of conformity and manufacturer's declarations

| Approval   | Standard | Certificate Name |
|--|----------|------------------|
| EU-Declaration of Conformity<br>WAGO GmbH & Co. KG | -        | -                |
| UK-Declaration of Conformity<br>WAGO GmbH & Co. KG | -        | -                |

Approvals for marine applications



| Approval                           | Standard  | Certificate Name |
|------------------------------------|-----------|------------------|
| ABS<br>American Bureau of Shipping | -         | 24-0095975-PDA   |
| BV<br>Bureau Veritas S.A.          | IEC 60998 | 11915/D0 BV      |
| DNV<br>DNV GL SE                   | -         | TAE000016Z       |

Downloads

Environmental Product Compliance

| Compliance Search                        |                   |
|--|-------------------|
| Environmental Product Compliance 738-406 | <a href="#">↓</a> |

Documentation

| Additional Information                     |            |                   |                   |
|--|------------|-------------------|-------------------|
| Technical Section                          | 03.04.2019 | pdf<br>2027.26 KB | <a href="#">↓</a> |
| Gebrückte Klemmenleisten für Leiterplatten |            | pdf<br>303.71 KB  | <a href="#">↓</a> |

CAD/CAE-Data

| CAD data             |                   |
|----------------------|-------------------|
| 2D/3D Models 738-406 | <a href="#">↓</a> |

| CAE data                  |                   |
|---------------------------|-------------------|
| EPLAN Data Portal 738-406 | <a href="#">↓</a> |
| ZUKEN Portal 738-406      | <a href="#">↓</a> |

PCB Design

|  |                   |
|--|-------------------|
| Symbol and Footprint via SamacSys 738-406        | <a href="#">↓</a> |
| Symbol and Footprint via Ultra Librarian 738-406 | <a href="#">↓</a> |

1 Compatible Products

1.1 Optional Accessories

1.1.1 Ferrule

1.1.1.1 Ferrule



**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



**Item No.: 216-151**

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



**Item No.: 216-131**

Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated; silver-colored



**Item No.: 216-302**

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



**Item No.: 216-322**

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



**Item No.: 216-132**

Ferrule; Sleeve for 0.34 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated



**Item No.: 216-152**

Ferrule; Sleeve for 0.34 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated



**Item No.: 216-201**

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; electrolytic copper; acc. to DIN 46228, Part 4/09.90; white



**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



**Item No.: 216-221**

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; white



**Item No.: 216-141**

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92



**Item No.: 216-101**

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / AWG 22; uninsulated; electro-tin plated; silver-colored



**Item No.: 216-121**

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / AWG 22; uninsulated; electro-tin plated; silver-colored



**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



**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



**Item No.: 216-202**

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray



**Item No.: 216-222**

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray



**Item No.: 216-142**

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



**Item No.: 216-102**

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / AWG 20; uninsulated; electro-tin plated; silver-colored



**Item No.: 216-122**

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / AWG 20; uninsulated; electro-tin plated; silver-colored



**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



**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



**Item No.: 216-203**

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; red



**Item No.: 216-223**

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; red



**Item No.: 216-103**

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; uninsulated; electro-tin plated



**Item No.: 216-143**

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



**Item No.: 216-123**

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; uninsulated; electro-tin plated; silver-colored



**Item No.: 216-204**

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; black



**Item No.: 216-224**

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; black



**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



**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



**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



**Item No.: 216-124**

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; uninsulated; electro-tin plated



**Item No.: 216-144**

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; silver-colored



**Item No.: 216-104**

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; uninsulated; electro-tin plated; silver-colored

### 1.1.1.1 Ferrule



**Item No.: 216-106**

Ferrule; Sleeve for 2.5 mm<sup>2</sup> / AWG 14; un-insulated; electro-tin plated; silver-colored

### 1.1.2 Marking

#### 1.1.2.1 Marking strip



**Item No.: 210-332/508-202**

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



**Item No.: 210-332/508-205**

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



**Item No.: 210-332/508-204**

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



**Item No.: 210-332/508-206**

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

### 1.1.3 Test and measurement

#### 1.1.3.1 Testing accessories



**Item No.: 231-426**

Testing plug module with contact stud; orange



**Item No.: 231-455**

Testing plug module with contact stud; Pin spacing 5.08 mm / 0.2 in; 2,50 mm<sup>2</sup>; orange

### 1.1.4 Tool

#### 1.1.4.1 Operating tool



**Item No.: 210-658**

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; angled; short; multicoloured



**Item No.: 210-720**

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured



**Item No.: 210-657**

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short; multicoloured

### Installation Notes

#### Conductor termination



Inserting a conductor via 3.5 mm screwdriver.  
Screwdriver actuation parallel to conductor entry

## Installation



Low space requirements due to high-density design  
Double-deck PCB terminal strip – 736 Series

**Possible combination:**  
Double- (736 Series) and triple-deck PCB terminal strips (737 Series) upon request

**Possible combination:**  
Double- (736 Series) and triple-deck PCB terminal strips (737 Series) upon request

**Possible combination:**  
Double- (737 Series) and quadruple-deck PCB terminal strips (738 Series) upon request



**Possible combination:**  
Double- (737 Series) and quadruple-deck PCB terminal strips (738 Series) upon request

## Marking



## Testing



Testing via contact area above the conductors.