

## Data Sheet | Item Number: 257-863

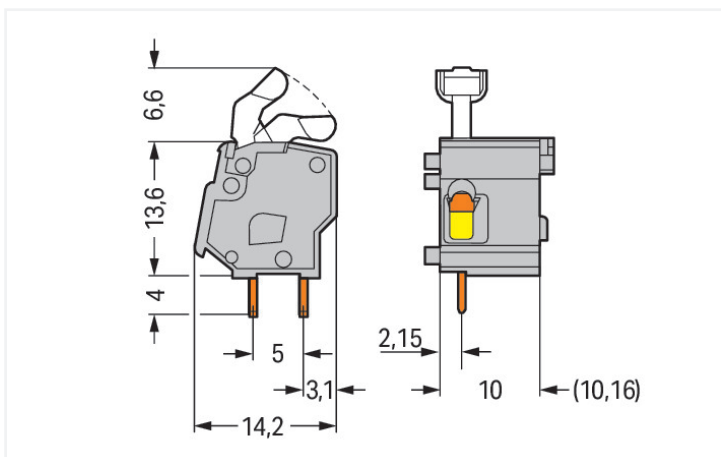
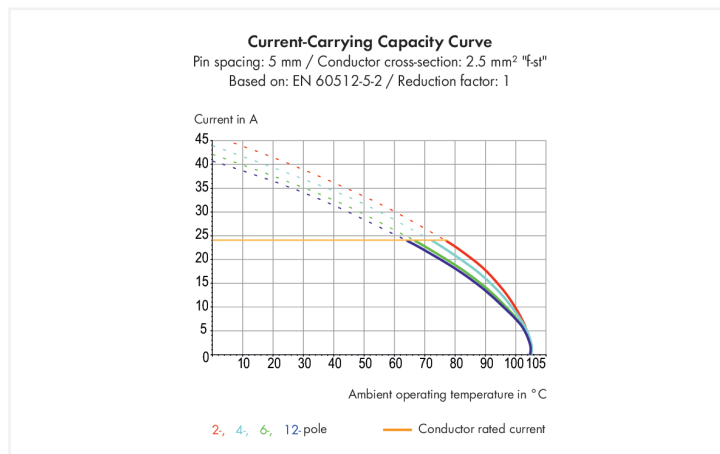
Stackable PCB terminal block; push-button; 2.5 mm<sup>2</sup>; Pin spacing 10/10.16 mm; 1-pole; CAGE CLAMP®; commoning option; light gray

<https://www.wago.com/257-863>



Color: ■ light gray

Similar to illustration



Dimensions in mm

### PCB terminal block, 257 Series, CAGE CLAMP®

Quick and easy connections are guaranteed with this PCB terminal block (item number 257-863). You can rely on proven safety with these PCB terminal blocks, perfect for a wide range of applications when designing your devices. Ensure that the strip lengths are between 5 and 6 mm when connecting conductors to this PCB terminal block. This product features one conductor terminal and utilizes CAGE CLAMP®. Our CAGE CLAMP® connection offers a convenient 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. The dimensions are (12.8 x 24.2 x 14.2) mm (width x height x depth). Depending on the type of conductor, this PCB terminal block is designed for conductor cross sections ranging from 0.08 mm<sup>2</sup> to 2.5 mm<sup>2</sup>.

The contact surface is coated with tin. Push-button (angled) is used to operate this PCB terminal block. THT is used to solder the PCB terminal block. The conductor is designed to be inserted at a 0° angle..

## Notes

Variants:

Other colors

Versions for Ex e II and Ex i

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

## Electrical data

| Ratings per                     | IEC/EN 60664-1 |        |        |
|---------------------------------|----------------|--------|--------|
| Overvoltage category            | III            | III    | II     |
| Pollution degree                | 3              | 2      | 2      |
| Nominal voltage                 | 630 V          | 1000 V | 1000 V |
| Rated impulse withstand voltage | 8 kV           | 8 kV   | 8 kV   |
| Rated current                   | 24 A           | 24 A   | 24 A   |

| Approvals per | UL 1059 |   |       |
|---------------|---------|---|-------|
| Use group     | B       | C | D     |
| Rated voltage | 300 V   | - | 300 V |
| Rated current | 15 A    | - | 10 A  |

| Approvals per | CSA   |   |       |
|---------------|-------|---|-------|
| Use group     | B     | C | D     |
| Rated voltage | 300 V | - | 300 V |
| Rated current | 15 A  | - | 10 A  |

## Connection Data

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

| Connection 1                                      |  |
|---|--|
| Connection technology                             | CAGE CLAMP®                                  |
| Actuation type                                    | Push-button (angled)                         |
| 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 ... 1.5 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             | 0°   |
| Pole number                                       | 1  |

## Physical data

|                         |                                |
|-------------------------|--------------------------------|
| Pin spacing             | 10/10.16 mm / 0.394/0.4 inches |
| Width                   | 12.8 mm / 0.504 inches         |
| Height                  | 24.2 mm / 0.953 inches         |
| Height from the surface | 20.2 mm / 0.795 inches         |
| Depth                   | 14.2 mm / 0.559 inches         |
| Solder pin length       | 4 mm                           |
| Solder pin dimensions   | 0.7 x 0.7 mm                   |
| Drilled hole diameter   | 1.1 (+0.1) mm                  |

### PCB contact

|                                     |                                     |
|-------------------------------------|-------------------------------------|
| PCB contact                         | THT                                 |
| Solder pin arrangement              | within the terminal block (in-line) |
| Number of solder pins per potential | 2                                   |

### Material data

|                                    |  |
|------------------------------------|--|
| Note (material data)               | <a href="#">Information on material specifications can be found here</a> |
| Color                              | light gray   |
| 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                          | 0.028 MJ   |
| Weight                             | 1.6 g  |

### Environmental requirements

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

### Commercial data

|                       |                                |
|-----------------------|--------------------------------|
| Product Group         | 4 (Printed Circuit Connectors) |
| PU (SPU)              | 300 (100) pcs                  |
| Packaging type        | Box                            |
| Country of origin     | PL                             |
| GTIN                  | 4044918414289                  |
| 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     | 2160584.28       |
| CCA<br>DEKRA Certification B.V. | EN 60947     | NTR NL-7128      |
| CCA<br>DEKRA Certification B.V. | EN 60947-7-4 | 71-113014        |

#### General approvals

|   |               |             |
|---|---------------|-------------|
| CCA<br>DEKRA Certification B.V.         | EN 60947-7-4  | NTR NL-7821 |
| CSA<br>DEKRA Certification B.V.         | C22.2 No. 158 | 70049157    |
| 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   |
| DNV<br>DNV GL SE                   | -        | TAE000016Z       |

**Downloads**

**Environmental Product Compliance**

| Compliance Search  |
|--|
| Environmental Product Compliance 257-863 <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 257-863 <a href="#">↓</a> |

| CAE data                                    |
|---|
| EPLAN Data Portal 257-863 <a href="#">↓</a> |
| ZUKEN Portal 257-863 <a href="#">↓</a>      |

**PCB Design**

|  |
|--|
| Symbol and Footprint via SamacSys 257-863 <a href="#">↓</a>        |
| Symbol and Footprint via Ultra Librarian 257-863 <a href="#">↓</a> |

## 1 Compatible Products

### 1.1 Required Accessories

#### 1.1.1 End plate

##### 1.1.1.1 End plate



**Item No.: 257-400**

End plate; snap-fit type; 1 mm thick; blue

**Item No.: 257-200**

End plate; snap-fit type; 1 mm thick; dark gray

**Item No.: 257-100**

End plate; snap-fit type; 1 mm thick; gray

**Item No.: 257-300**

End plate; snap-fit type; 1 mm thick; light gray



**Item No.: 257-700**

End plate; snap-fit type; 1 mm thick; light green

**Item No.: 257-600**

End plate; snap-fit type; 1 mm thick; orange

**Item No.: 257-500**

End plate; snap-fit type; 1 mm thick; red

### 1.1.2 Installation

#### 1.1.2.1 Intermediate plate



**Item No.: 257-821**

Spacer; for doubling the pin spacing; 10/10.16 mm thick; gray

**Item No.: 257-801**

Spacer; for doubling the pin spacing; 5/5.08 mm thick; gray

**Item No.: 257-811**

Spacer; for doubling the pin spacing; 7.5/7.62 mm thick; gray

## 1.2 Optional Accessories

### 1.2.1 Ferrule

#### 1.2.1.1 Ferrule



**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; silver-colored

**Item No.: 216-322**

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

**Item No.: 216-152**

Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; uninsulated; electro-tin plated; silver-colored



**Item No.: 216-221**

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

**Item No.: 216-121**

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

**Item No.: 216-222**

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

**Item No.: 216-122**

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; uninsulated; electro-tin plated; silver-colored



**Item No.: 216-223**

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

**Item No.: 216-123**

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

**Item No.: 216-224**

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

**Item No.: 216-124**

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

## 1.2.2 Marking

### 1.2.2.1 Marking strip



**Item No.: 210-332/1000-202**

Marking strips; as a DIN A4 sheet; MARKED; 1-16 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



**Item No.: 210-332/1016-202**

Marking strips; as a DIN A4 sheet; MARKED; 1-16 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



**Item No.: 210-332/1000-204**

Marking strips; as a DIN A4 sheet; MARKED; 17-31 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



**Item No.: 210-332/1016-204**

Marking strips; as a DIN A4 sheet; MARKED; 17-31 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



**Item No.: 210-332/1000-206**

Marking strips; as a DIN A4 sheet; MARKED; 33-48 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



**Item No.: 210-332/1016-206**

Marking strips; as a DIN A4 sheet; MARKED; 33-48 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white

## 1.2.3 Test and measurement

### 1.2.3.1 Testing accessories



**Item No.: 249-114**

Test plug adapter; suitable for 255, 256, 257 Series PCB terminal blocks; 1-pole; Pin spacing 10 mm / 0.394 in; gray



**Item No.: 249-115**

Test plug adapter; suitable for 255, 256, 257 Series PCB terminal blocks; 1-pole; Pin spacing 10.16 mm / 0.4 in; orange

## 1.2.4 Tool

### 1.2.4.1 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**

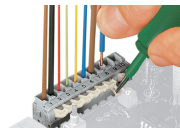
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

## Installation Notes

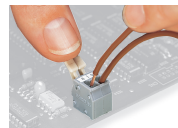
### Conductor termination



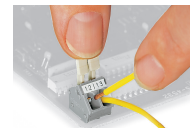
Inserting/removing a conductor – 256 Series.



Inserting/removing a conductor (255 Series)



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



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

## Installation



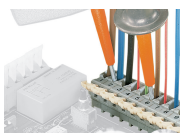
Possible conductor arrangement with terminal strips staggered (for 256 Series only).

## Marking



Formation of groups using housings of different colors

## Testing



Testing with test probes.



Testing with test plug modules.