

## Data Sheet | Item Number: 256-866

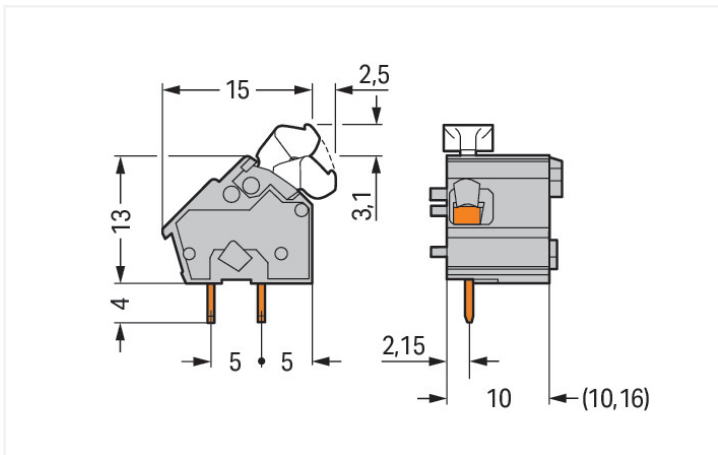
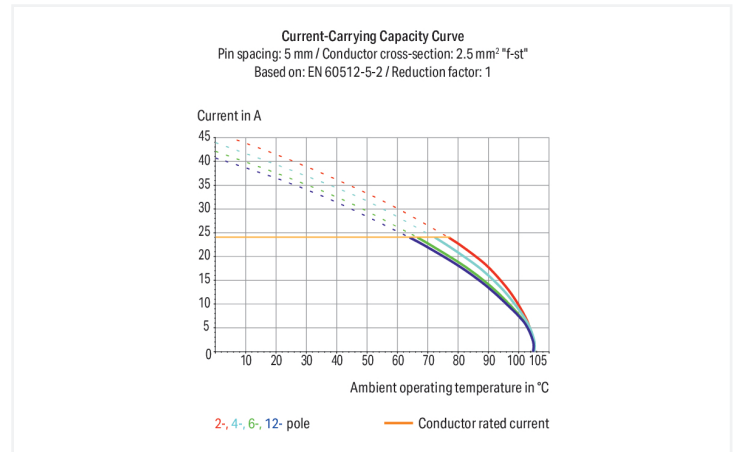
Stackable PCB terminal block; push-button; 2.5 mm<sup>2</sup>; Pin spacing 10/10.16 mm; 1-pole; CAGE CLAMP®; commoning option; orange

<https://www.wago.com/256-866>



Color: ■ orange

Similar to illustration



Dimensions in mm

### PCB terminal block, 256 Series, orange

Easily, quickly and safely connect conductors with this PCB terminal block (item number 256-866). 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. Strip lengths must be between 5 and 6 mm when connecting conductors to this PCB terminal block. This product features one conductor terminal and utilizes CAGE CLAMP®. Our reliable and maintenance-free CAGE CLAMP® connection makes it easy to connect all conductor types without having to prepare the conductor. For example, you don't need to crimp ferrules. The item's dimensions are (12.8 x 20.1 x 17.2) mm (width x height x depth). Depending on the conductor type, this PCB terminal block is suitable 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. This PCB terminal block is operated with push-button (angled). The PCB terminal block is designed for THT soldering. Insert the conductor into the board at an angle of 45°.



| Notes     |                                                                                                                                                                                                                                            |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Variants: | Other colors<br>Versions for Ex e II and Ex i<br>Solder pin length: 5.5 mm<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 per                     |  | IEC/EN 60664-1 |       |        |
| Overvoltage category            |  | III            | III   | II     |
| Pollution degree                |  | 3              | 2     | 2      |
| Nominal voltage                 |  | 500 V          | 630 V | 1000 V |
| Rated impulse withstand voltage |  | 6 kV           | 6 kV  | 6 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 mm² / 28 ... 12 AWG |
| Fine-stranded conductor                           | 0.08 ... 2.5 mm² / 28 ... 12 AWG |
| Fine-stranded conductor; with insulated ferrule   | 0.25 ... 1.5 mm²                 |
| Fine-stranded conductor; with uninsulated ferrule | 0.25 ... 1.5 mm²                 |
| 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                                       | 1                                |

| Physical data                        |                                |
|--------------------------------------|--------------------------------|
| Pin spacing                          | 10/10.16 mm / 0.394/0.4 inches |
| Width                                | 12.8 mm / 0.504 inches         |
| Height                               | 20.1 mm / 0.791 inches         |
| Height from the surface              | 16.1 mm / 0.634 inches         |
| Depth                                | 17.2 mm / 0.677 inches         |
| Solder pin length                    | 4 mm                           |
| Solder pin dimensions                | 0.7 x 0.7 mm                   |
| Drilled hole diameter with tolerance | 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                              |  | 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                          |  | 0.033 MJ                                                                 |
| Weight                             |  | 1.4 g                                                                    |

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

| Commercial data       |  |               |
|-----------------------|--|---------------|
| PU (SPU)              |  | 300 (100) pcs |
| Packaging type        |  | Box           |
| Country of origin     |  | CH            |
| GTIN                  |  | 4055143659956 |
| 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 8.0               |  | EC002643             |
| ECCN                   |  | NO US CLASSIFICATION |

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

Approvals / Certificates

| General approvals                                                                                                                                                                                                                                          |               |                  | Approvals for marine applications                                                                                                                                        |          |                   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------------------|
|    |               |                  |   |          |                   |
| Approval                                                                                                                                                                                                                                                   | Standard      | Certificate Name | Approval                                                                                                                                                                 | Standard | Certificate Name  |
| CCA<br>DEKRA Certification B.V.                                                                                                                                                                                                                            | IEC 60947-7-4 | 71-113042        | DNV<br>DNV GL SE                                                                                                                                                         | -        | TAE000016Z        |
| CSA<br>DEKRA Certification B.V.                                                                                                                                                                                                                            | C22.2 No. 158 | 70049157         | PRS<br>Polski Rejestr Statków                                                                                                                                            | -        | TE/1095/880590/23 |
| UL<br>Underwriters Laboratories Inc.                                                                                                                                                                                                                       | UL 1059       | 20190731-E45172  |                                                                                                                                                                          |          |                   |



Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 256-866

Download icon

Documentation

Additional Information

|                                                 |            |                   |               |
|-------------------------------------------------|------------|-------------------|---------------|
| Technical Section                               | 03.04.2019 | pdf<br>2027.26 KB | Download icon |
| Gebrückte Klemmen-<br>leisten für Leiterplatten |            | pdf<br>303.71 KB  | Download icon |

CAD/CAE-Data

CAD data

2D/3D Models 256-866

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CAE data

ZUKEN Portal 256-866

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PCB Design

Symbol and Footprint  
via SamacSys 256-866

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Symbol and Footprint  
via Ultra Librarian  
256-866

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1 Compatible Products

1.1 Required Accessories

1.1.1 End plate

1.1.1.1 End plate

|                                                                                                                                                                              |                                                                                                                                                                               |                                                                                                                                                                              |                                                                                                                                                                          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <br><a href="#">Item No.: 256-800</a><br>End plate; snap-fit type; 1 mm thick; black      | <br><a href="#">Item No.: 256-400</a><br>End plate; snap-fit type; 1 mm thick; blue        | <br><a href="#">Item No.: 256-200</a><br>End plate; snap-fit type; 1 mm thick; dark gray | <br><a href="#">Item No.: 256-100</a><br>End plate; snap-fit type; 1 mm thick; gray |
| <br><a href="#">Item No.: 256-300</a><br>End plate; snap-fit type; 1 mm thick; light gray | <br><a href="#">Item No.: 256-700</a><br>End plate; snap-fit type; 1 mm thick; light green | <br><a href="#">Item No.: 256-600</a><br>End plate; snap-fit type; 1 mm thick; orange    | <br><a href="#">Item No.: 256-500</a><br>End plate; snap-fit type; 1 mm thick; red  |



| 1.2 Optional Accessories                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.2.1 Ferrule                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                     |
| 1.2.1.1 Ferrule                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                     |
| <br><b>Item No.: 216-301</b><br>Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow                                                                         | <br><b>Item No.: 216-321</b><br>Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow                                                                       | <br><b>Item No.: 216-151</b><br>Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated                                                                                          | <br><b>Item No.: 216-131</b><br>Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated; silver-colored                                                               |
| <br><b>Item No.: 216-302</b><br>Ferrule; Sleeve for 0.34 mm <sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise                                                                | <br><b>Item No.: 216-322</b><br>Ferrule; Sleeve for 0.34 mm <sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise                                                              | <br><b>Item No.: 216-132</b><br>Ferrule; Sleeve for 0.34 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated                                                                                          | <br><b>Item No.: 216-152</b><br>Ferrule; Sleeve for 0.34 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated                                                                               |
| <br><b>Item No.: 216-201</b><br>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                     | <br><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 | <br><b>Item No.: 216-221</b><br>Ferrule; Sleeve for 0.5 mm <sup>2</sup> / 20 AWG; insulated; electro-tin plated; white                                                                                      | <br><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        |
| <br><b>Item No.: 216-101</b><br>Ferrule; Sleeve for 0.5 mm <sup>2</sup> / AWG 22; uninsulated; electro-tin plated; silver-colored                                                                | <br><b>Item No.: 216-121</b><br>Ferrule; Sleeve for 0.5 mm <sup>2</sup> / AWG 22; uninsulated; electro-tin plated; silver-colored                                                              | <br><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              | <br><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   |
| <br><b>Item No.: 216-202</b><br>Ferrule; Sleeve for 0.75 mm <sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray                                                                         | <br><b>Item No.: 216-222</b><br>Ferrule; Sleeve for 0.75 mm <sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray                                                                       | <br><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                | <br><b>Item No.: 216-102</b><br>Ferrule; Sleeve for 0.75 mm <sup>2</sup> / AWG 20; uninsulated; electro-tin plated; silver-colored                                                             |
| <br><b>Item No.: 216-122</b><br>Ferrule; Sleeve for 0.75 mm <sup>2</sup> / AWG 20; uninsulated; electro-tin plated; silver-colored                                                             | <br><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   | <br><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                | <br><b>Item No.: 216-203</b><br>Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; insulated; electro-tin plated; red                                                                             |
| <br><b>Item No.: 216-223</b><br>Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; insulated; electro-tin plated; red                                                                             | <br><b>Item No.: 216-103</b><br>Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; uninsulated; electro-tin plated                                                                              | <br><b>Item No.: 216-143</b><br>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                   | <br><b>Item No.: 216-123</b><br>Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; uninsulated; electro-tin plated; silver-colored                                                                |
| <br><b>Item No.: 216-204</b><br>Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated; black                                                                         | <br><b>Item No.: 216-224</b><br>Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated; black                                                                       | <br><b>Item No.: 216-244</b><br>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            | <br><b>Item No.: 216-264</b><br>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 |
| <br><b>Item No.: 216-284</b><br>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 | <br><b>Item No.: 216-124</b><br>Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; uninsulated; electro-tin plated                                                                            | <br><b>Item No.: 216-144</b><br>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 | <br><b>Item No.: 216-104</b><br>Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; uninsulated; electro-tin plated; silver-colored                                                              |

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.: 249-110**  
Test plug adapter; suitable for 255, 256, 257 Series PCB terminal blocks; 1-pole; Pin spacing 5 mm / 0.197 in; gray



**Item No.: 249-111**  
Test plug adapter; suitable for 255, 256, 257 Series PCB terminal blocks; 1-pole; Pin spacing 5.08 mm / 0.2 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

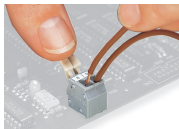
Conductor termination



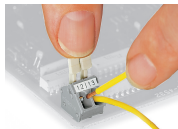
Inserting/removing a conductor – 256 Series.



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.