

## Data Sheet | Item Number: 257-458

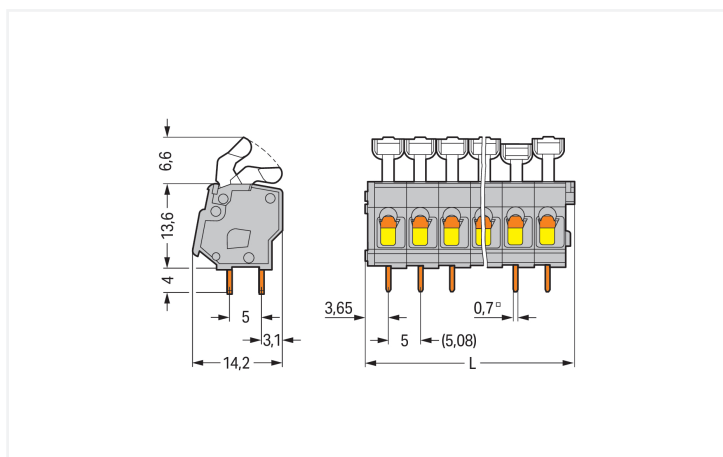
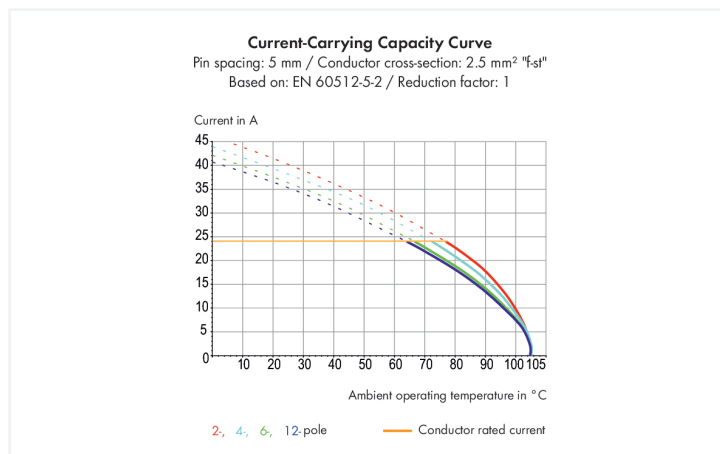
PCB terminal block; push-button; 2.5 mm<sup>2</sup>; Pin spacing 5/5.08 mm; 8-pole; CAGE CLAMP®; commoning option; gray

<https://www.wago.com/257-458>



Color: ■ gray

Similar to illustration



Dimensions in mm

L = (pole no. x pin spacing) + 2.9 mm

### PCB terminal block, 257 Series, gray

Quick and easy connections are guaranteed with this PCB terminal block (item number 257-458). It is ideal for custom installations with different mounting types. Conductors can only be connected to this PCB terminal block if their strip length is between 5 and 6 mm. Featuring one conductor terminal along with CAGE CLAMP®, this connector delivers reliable performance. Our CAGE CLAMP® connection offers a safe 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 item's dimensions are (42.9 x 24.2 x 14.2) mm (width x height x depth). 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. Push-button (angled) is used to operate this PCB terminal block. THT is used to solder the PCB terminal block. Insert the conductor into the board at an angle of 0°.



| Notes     |                                                                                                                                                                                                                                                                                           |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Variants: | Other pole numbers<br>Versions for Ex e II and Ex i<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 per                     |  | IEC/EN 60664-1 |       |
| Overvoltage category            |  | III            | II    |
| Pollution degree                |  | 3              | 2     |
| Nominal voltage                 |  | 250 V          | 630 V |
| Rated impulse withstand voltage |  | 4 kV           | 4 kV  |
| Rated current                   |  | 24 A           | 24 A  |

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

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

| Connection Data            |   |
|----------------------------|---|
| Clamping units             | 8 |
| Total number of potentials | 8 |
| 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             | 0°                               |
| Pole number                                       | 8                                |

| Physical data           |                              |
|-------------------------|------------------------------|
| Pin spacing             | 5/5.08 mm / 0.197/0.2 inches |
| Width                   | 42.9 mm / 1.689 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                 |
| !                       | 1.1 (+0.1) 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                      |                                                                          |
|------------------------------------|--------------------------------------------------------------------------|
| Note (material data)               | <a href="#">Information on material specifications can be found here</a> |
| Color                              | 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                          | 0.165 MJ                                                                 |
| Weight                             | 9.3 g                                                                    |

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

| Commercial data       |                                |
|-----------------------|--------------------------------|
| Product Group         | 4 (Printed Circuit Connectors) |
| PU (SPU)              | 100 (25) pcs                   |
| Packaging type        | Box                            |
| Country of origin     | PL                             |
| GTIN                  | 4044918676564                  |
| 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 Inc.                                                                                                                                                                                                                                                                                                           | UL 1059       | E45172           |



Declarations of conformity and manufacturer's declarations

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

Approvals for marine applications

|     |           |                   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-------------------|
| Approval                                                                                                                                                                                                                                                                                                                                     | Standard  | Certificate Name  |
| ABS<br>American Bureau of Ship-<br>ping                                                                                                                                                                                                                                                                                                      | -         | 24-0095975-PDA    |
| BV<br>Bureau Veritas S.A.                                                                                                                                                                                                                                                                                                                    | IEC 60998 | 11915/E0 BV       |
| DNV<br>DNV GL SE                                                                                                                                                                                                                                                                                                                             | -         | TAE000016Z        |
| PRS<br>Polski Rejestr Statków                                                                                                                                                                                                                                                                                                                | -         | TE/1095/880590/23 |

Downloads

Environmental Product Compliance

| Compliance Search                           |
|---------------------------------------------|
| Environmental Product<br>Compliance 257-458 |

Documentation

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

CAD/CAE-Data

| CAD data             |
|----------------------|
| 2D/3D Models 257-458 |

| CAE data                     |
|------------------------------|
| EPLAN Data Portal<br>257-458 |
| ZUKEN Portal 257-458         |

| PCB Design                                             |
|--------------------------------------------------------|
| Symbol and Footprint<br>via SamacSys 257-458           |
| Symbol and Footprint<br>via Ultra Librarian<br>257-458 |



| 1 Compatible Products                                                                                                                                                          |                                                                                                                                                                                |                                                                                                                                                                                           |                                                                                                                                                                                |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.1 Optional Accessories                                                                                                                                                       |                                                                                                                                                                                |                                                                                                                                                                                           |                                                                                                                                                                                |
| 1.1.1 Ferrule                                                                                                                                                                  |                                                                                                                                                                                |                                                                                                                                                                                           |                                                                                                                                                                                |
| 1.1.1.1 Ferrule                                                                                                                                                                |                                                                                                                                                                                |                                                                                                                                                                                           |                                                                                                                                                                                |
|                                                                                               |                                                                                               |                                                                                                          |                                                                                             |
| <b>Item No.: 216-301</b><br>Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow                                                                       | <b>Item No.: 216-321</b><br>Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow                                                                       | <b>Item No.: 216-151</b><br>Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated                                                                                        | <b>Item No.: 216-131</b><br>Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated; silver-colored                                                             |
|                                                                                               |                                                                                               |                                                                                                          |                                                                                             |
| <b>Item No.: 216-302</b><br>Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise                                                              | <b>Item No.: 216-322</b><br>Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise                                                              | <b>Item No.: 216-132</b><br>Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated                                                                                        | <b>Item No.: 216-152</b><br>Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated                                                                             |
|                                                                                               |                                                                                               |                                                                                                          |                                                                                             |
| <b>Item No.: 216-201</b><br>Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; electrolytic copper; acc. to DIN 46228, Part 4/09.90; white                   | <b>Item No.: 216-241</b><br>Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white | <b>Item No.: 216-221</b><br>Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white                                                                                    | <b>Item No.: 216-141</b><br>Ferrule; Sleeve for 0.5 mm² / 20 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92      |
|                                                                                               |                                                                                               |                                                                                                          |                                                                                             |
| <b>Item No.: 216-101</b><br>Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated; silver-colored                                                              | <b>Item No.: 216-121</b><br>Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated; silver-colored                                                              | <b>Item No.: 216-242</b><br>Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray            | <b>Item No.: 216-262</b><br>Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray |
|                                                                                             |                                                                                             |                                                                                                        |                                                                                           |
| <b>Item No.: 216-202</b><br>Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray                                                                         | <b>Item No.: 216-222</b><br>Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray                                                                         | <b>Item No.: 216-142</b><br>Ferrule; Sleeve for 0.75 mm² / 18 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92                | <b>Item No.: 216-102</b><br>Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated; silver-colored                                                             |
|                                                                                             |                                                                                             |                                                                                                        |                                                                                           |
| <b>Item No.: 216-122</b><br>Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated; silver-colored                                                             | <b>Item No.: 216-243</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red     | <b>Item No.: 216-263</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red                | <b>Item No.: 216-203</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red                                                                             |
|                                                                                             |                                                                                             |                                                                                                        |                                                                                           |
| <b>Item No.: 216-223</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red                                                                             | <b>Item No.: 216-103</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated                                                                                | <b>Item No.: 216-143</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92                   | <b>Item No.: 216-123</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated; silver-colored                                                                |
|                                                                                             |                                                                                             |                                                                                                        |                                                                                           |
| <b>Item No.: 216-204</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black                                                                         | <b>Item No.: 216-224</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black                                                                         | <b>Item No.: 216-244</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black            | <b>Item No.: 216-264</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black |
|                                                                                             |                                                                                             |                                                                                                        |                                                                                           |
| <b>Item No.: 216-284</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black | <b>Item No.: 216-124</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin plated                                                                              | <b>Item No.: 216-144</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92; silver-colored | <b>Item No.: 216-104</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin plated; silver-colored                                                              |

1.1.2 Marking

1.1.2.1 Marking strip



**Item No.: 210-332/500-202**  
Marking strips; as a DIN A4 sheet; MAR-KED; 1-16 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



**Item No.: 210-332/508-202**  
Marking strips; as a DIN A4 sheet; MAR-KED; 1-16 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



**Item No.: 210-332/500-205**  
Marking strips; as a DIN A4 sheet; MAR-KED; 1-32 (80x); 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; MAR-KED; 1-32 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



**Item No.: 210-332/500-204**  
Marking strips; as a DIN A4 sheet; MAR-KED; 17-32 (160x); 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; MAR-KED; 17-32 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



**Item No.: 210-332/500-206**  
Marking strips; as a DIN A4 sheet; MAR-KED; 33-48 (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; MAR-KED; 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.: 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

1.1.4 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



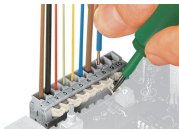
**Item No.: 210-720**  
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

Installation Notes

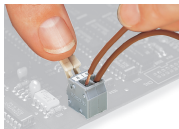
Conductor termination



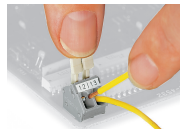
Inserting/removing a conductor – 256 Series.



Inserting/removing a conductor (255 Series)



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



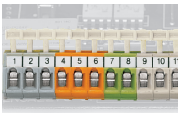
Inserting/removing a conductor via finger-operated lever – 256 Series.

Installation



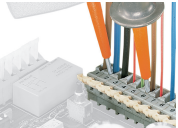
Possible conductor arrangement with terminal strips staggered (for 256 Series only).

Marking



Formation of groups using housings of different colors

Testing



Testing with test probes.

Testing with test plug modules.