

## Data Sheet | Item Number: 255-750

Stackable PCB terminal block; push-button; 2.5 mm<sup>2</sup>; Pin spacing 7.5/7.62 mm; 1-pole; CAGE CLAMP®; commoning option; red

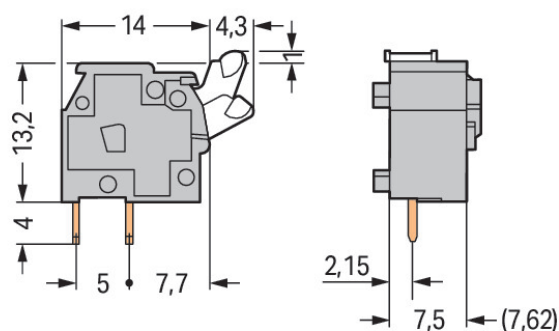
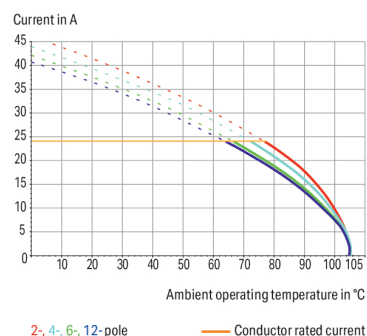
<https://www.wago.com/255-750>



Color: ■ red

Similar to illustration

Current-Carrying Capacity Curve  
Pin spacing: 5 mm / Conductor cross-section: 2.5 mm<sup>2</sup> "f-st"  
Based on: EN 60512-5-2 / Reduction factor: 1



Dimensions in mm

### PCB terminal block, 255 Series, red

This PCB terminal block (item number 255-750) is designed to connect conductors quickly and easily. It offers the flexibility needed for different mounting types. 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 types of conductors without having to prepare the conductor. For example, you don't need to crimp ferrules. The item's dimensions are (10.3 x 18.2 x 18.3) 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. This PCB terminal block is operated with a push-button. THT is used to solder the PCB terminal block. The conductor is designed to be inserted into the board at an angle of 90°.



| Notes     |                                                                                                                                                                                                               |
|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Variants: | Other colors<br>Versions for Ex e II and Ex i<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                   |       | CSA            |        |  |
| Use group                       | B     | C              | D      |  |
| Rated voltage                   | 300 V | -              | 300 V  |  |
| Rated current                   | 15 A  | -              | 10 A   |  |

| Approvals per |  | UL 1059 |   |       |
|---------------|--|---------|---|-------|
| 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                      |
| 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             | 90 °                             |
| Pole number                                       | 1                                |

| Physical data                        |                                |
|--------------------------------------|--------------------------------|
| Pin spacing                          | 7.5/7.62 mm / 0.295/0.3 inches |
| Width                                | 10.3 mm / 0.406 inches         |
| Height                               | 18.2 mm / 0.717 inches         |
| Height from the surface              | 14.2 mm / 0.559 inches         |
| Depth                                | 18.3 mm / 0.72 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                              |  | red                                                                      |
| 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                          |  | 0.029 MJ                                                                 |
| Weight                             |  | 1.4 g                                                                    |

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

| Commercial data       |  |                                |
|-----------------------|--|--------------------------------|
| Product Group         |  | 4 (Printed Circuit Connectors) |
| PU (SPU)              |  | 400 (100) pcs                  |
| Packaging type        |  | Box                            |
| Country of origin     |  | CH                             |
| GTIN                  |  | 4044918663182                  |
| 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                                                                  |  | General approvals                                         |
|  |  | CCA IEC 60947-7-4 NTR NL-7822<br>DEKRA Certification B.V. |

| Approval                        | Standard     | Certificate Name |
|---------------------------------|--------------|------------------|
| CCA<br>DEKRA Certification B.V. | EN 60947     | 2160584.40       |
| CCA<br>DEKRA Certification B.V. | EN 60947     | NTR NL-7146      |
| CCA<br>DEKRA Certification B.V. | EN 60947-7-4 | 71-113038        |



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 255-750 |



Documentation

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



CAD/CAE-Data

| CAD data             |
|----------------------|
| 2D/3D Models 255-750 |



| CAE data                     |
|------------------------------|
| EPLAN Data Portal<br>255-750 |
| ZUKEN Portal 255-750         |



PCB Design

|                                                        |
|--------------------------------------------------------|
| Symbol and Footprint<br>via SamacSys 255-750           |
| Symbol and Footprint<br>via Ultra Librarian<br>255-750 |



## 1 Compatible Products

### 1.1 Required Accessories

#### 1.1.1 End plate

##### 1.1.1.1 End plate



**Item No.: 255-400**

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



**Item No.: 255-200**

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



**Item No.: 255-100**

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



**Item No.: 255-300**

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



**Item No.: 255-700**

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



**Item No.: 255-600**

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



**Item No.: 255-500**

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

### 1.1.2 Installation

#### 1.1.2.1 Intermediate plate



**Item No.: 255-821**

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



**Item No.: 255-801**

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



**Item No.: 255-811**

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.: 216-301**

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; uninsulated; 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



1.2.1.1 Ferrule

|                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <br><b>Item No.: 216-122</b><br>Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated; silver-colored                                                              | <br><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      | <br><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                | <br><b>Item No.: 216-203</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red                                                                              |
| <br><b>Item No.: 216-223</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red                                                                              | <br><b>Item No.: 216-103</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated                                                                                 | <br><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                   | <br><b>Item No.: 216-123</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated; silver-colored                                                                 |
| <br><b>Item No.: 216-204</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black                                                                          | <br><b>Item No.: 216-224</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black                                                                          | <br><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            | <br><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  |
| <br><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  | <br><b>Item No.: 216-124</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin plated                                                                               | <br><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 | <br><b>Item No.: 216-104</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin plated; silver-colored                                                               |
| <br><b>Item No.: 216-289</b><br>Ferrule; Sleeve for 10 mm² / AWG 8; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red     | <br><b>Item No.: 216-209</b><br>Ferrule; Sleeve for 10 mm² / AWG 8; insulated; electro-tin plated; red                                                                             | <br><b>Item No.: 216-109</b><br>Ferrule; Sleeve for 10 mm² / AWG 8; uninsulated; electro-tin plated                                                                                          | <br><b>Item No.: 216-210</b><br>Ferrule; Sleeve for 16 mm² / AWG 6; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue    |
| <br><b>Item No.: 216-110</b><br>Ferrule; Sleeve for 16 mm² / AWG 6; uninsulated; electro-tin plated; brown metallic                                                               | <br><b>Item No.: 216-205</b><br>Ferrule; Sleeve for 2.08 mm² / AWG 14; insulated; electro-tin plated; yellow                                                                      | <br><b>Item No.: 216-206</b><br>Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; blue                                                                                   | <br><b>Item No.: 216-246</b><br>Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue |
| <br><b>Item No.: 216-266</b><br>Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue | <br><b>Item No.: 216-286</b><br>Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue | <br><b>Item No.: 216-106</b><br>Ferrule; Sleeve for 2.5 mm² / AWG 14; uninsulated; electro-tin plated; silver-colored                                                                       | <br><b>Item No.: 216-267</b><br>Ferrule; Sleeve for 4 mm² / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray   |
| <br><b>Item No.: 216-287</b><br>Ferrule; Sleeve for 4 mm² / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray   | <br><b>Item No.: 216-207</b><br>Ferrule; Sleeve for 4 mm² / AWG 12; insulated; electro-tin plated; gray                                                                           | <br><b>Item No.: 216-107</b><br>Ferrule; Sleeve for 4 mm² / AWG 12; uninsulated; electro-tin plated                                                                                         | <br><b>Item No.: 216-208</b><br>Ferrule; Sleeve for 6 mm² / AWG 10; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; yellow |
| <br><b>Item No.: 216-288</b><br>Ferrule; Sleeve for 6 mm² / AWG 10; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; yellow | <br><b>Item No.: 216-108</b><br>Ferrule; Sleeve for 6 mm² / AWG 10; uninsulated; electro-tin plated; silver-colored                                                               |                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                        |

1.2.2 Marking

1.2.2.1 Marking strip



**Item No.: 210-833**  
Marking strips; 25 m on roll; 6 mm wide;  
plain; Self-adhesive; white

1.2.3 Test and measurement

1.2.3.1 Testing accessories



**Item No.: 249-112**  
Test plug adapter; suitable for 255, 256,  
257 Series PCB terminal blocks; 1-pole;  
Pin spacing 7.5 mm / 0.295 in; gray



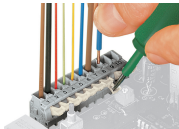
**Item No.: 249-113**  
Test plug adapter; suitable for 255, 256,  
257 Series PCB terminal blocks; 1-pole;  
Pin spacing 7.62 mm / 0.3 in; orange

Installation Notes

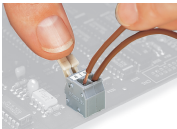
Conductor termination



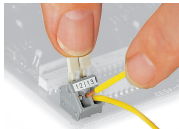
Inserting/removing a conductor – 256 Series.



Inserting/removing a conductor (255 Series)



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



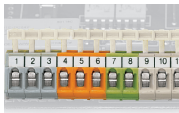
Inserting/removing a conductor via finger-operated lever – 256 Series.

Installation



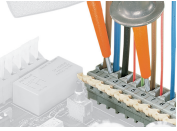
Possible conductor arrangement with terminal strips staggered (for 256 Series only).

Marking



Formation of groups using housings of different colors

Testing



Testing with test probes.

Testing with test plug modules.