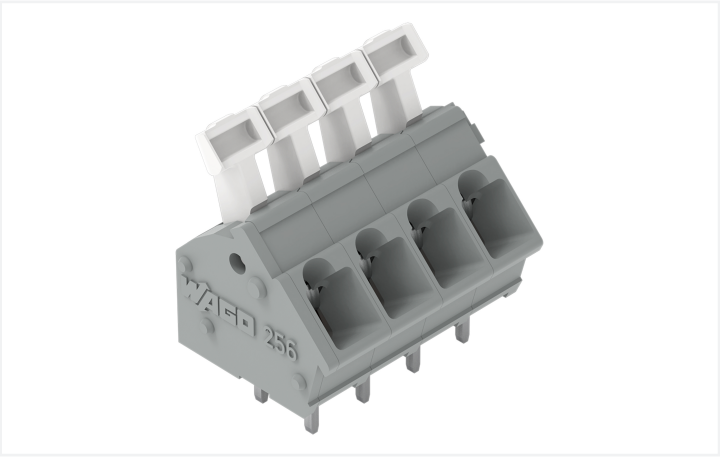
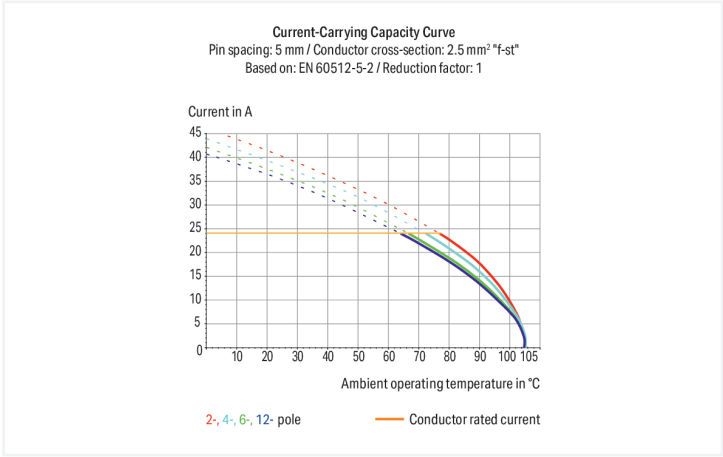
# Data Sheet | Item Number: 256-403/000-009/999-950

PCB terminal block; push-button; 2.5 mm²; Pin spacing 5/5.08 mm; 3-pole; suitable for Ex-e applications; CAGE CLAMP®; commoning option; 2,50 mm²; light gray

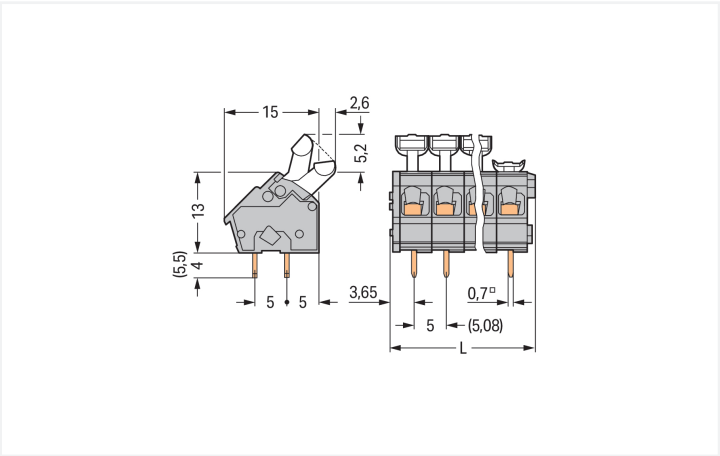
https://www.wago.com/256-403/000-009/999-950






Color: light gray

Similar to illustration




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

PCB terminal block, 256 Series, CAGE CLAMP®

Our PCB terminal block (item number 256-403/000-009/999-950) is the perfect way to connect conductors quickly and easily. It is a universal connector that can be used practically anywhere, e.g., as a pluggable PCB connector, panel feedthrough header, connector for rail-mount terminal blocks, or a floating connector for different mounting methods. Conductors can only be connected to this PCB terminal block if their strip length is between 5 and 6 mm . This product features one conductor terminal and utilizes CAGE CLAMP®. Our CAGE CLAMP® connection provides 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 item's dimensions are (17.9 x 22.2 x 17.6) mm (width x height x depth). This PCB terminal block is suitable for conductor cross sections ranging from 0.08 mm² to 2.5 mm².

Tin is used for coating the contact surfaces. A push-button is used to operate this PCB terminal block. THT is used to assemble the PCB terminal block. The conductor is designed to be inserted into the board at a 45° angle..



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## Electrical data

### Ex information

| | |
|---|---|
| Ratings per | ATEX: PTB 06 ATEX 1061 U / IECEx: PTB 06.0042 U |
| Rated voltage EN (Ex e II) | 176 V |
| Rated current (Ex e II) | 16 A |

## Connection Data

| | |
|---|---|
| Clamping units | 3 |
| Total number of potentials | 3 |
| 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 | 45 ° |
| Number of poles | 3 |

## Physical data

| | |
|---|---|
| Pin spacing | 5/5.08 mm / 0.197/0.2 inches |
| Width | 17.9 mm / 0.705 inches |
| Height | 22.2 mm / 0.874 inches |
| Height from the surface | 18.2 mm / 0.717 inches |
| Depth | 17.6 mm / 0.693 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 | over the entire terminal strip (in-line) |
| Number of solder pins per potential | 2 |

## Material data

| | |
|---|---|
| Note (material data) | Information on material specifications can be found here |
| 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 ($E_{Cu}$) |
| Contact Plating | Tin |
| Fire load | 0.043 MJ |
| Weight | 3 g |


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## Environmental requirements

| | |
|---|---|
| Limit temperature range | -60 … +105 °C |
| Ambient temperature (installation) | -35 … +60 °C |

## Commercial data

| | |
|---|---|
| Product Group | 4 (Printed Circuit Connectors) |
| PU (SPU) | 280 (70) pcs |
| Packaging type | Box |
| Country of origin | CH |
| GTIN | 4044918756129 |
| 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

### Declarations of conformity and manufacturer's declarations

| Approval | Standard | Certificate Name |
|---|---|---|
| ATEX-Attestation of Conformity<br>WAGO GmbH & Co. KG | - | - |

### Approvals for hazardous areas

| Approval | Standard | Certificate Name |
|---|---|---|
| AEx<br>UL International Germany GmbH c/o Physikalisch Technische Bundesanstalt | UL 60079 | E185892 (AEx eb IIC resp. Ex eb IIC) |
| CCC<br>CNEX | GB/T 3836.3 | 2020312313000274 (Ex eb IIC Gb, Ex eb I Mb) |
| IECEx<br>Physikalisch Technische Bundesanstalt | IEC 60079 | IECEx PTB 06.0042U (Ex eb IIC GB or Ex eb I Mb) |


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## Downloads

### Environmental Product Compliance

#### Compliance Search

### Documentation

#### Additional Information

| | | | |
|---|---|---|---|
| Technical Section | 03.04.2019 | pdf<br>2027.26 KB | |
| Gebrückte Klemmenleisten für Leiterplatten | | pdf<br>303.71 KB | |

### CAD/CAE-Data

#### CAD data

#### CAE data

#### PCB Design

## 1 Compatible Products

### 1.1 Optional Accessories

#### 1.1.1 Ferrule

##### 1.1.1.1 Ferrule



Item No.: 216-321
Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow



Item No.: 216-151
Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated; silver-colored



Item No.: 216-322
Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise



Item No.: 216-152
Ferrule; Sleeve for 0.34 mm² / 22 AWG; uninsulated; electro-tin plated; silver-colored



Item No.: 216-221
Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white



Item No.: 216-121
Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated; silver-colored



Item No.: 216-222
Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray



Item No.: 216-122
Ferrule; Sleeve for 0.75 mm² / 18 AWG; uninsulated; electro-tin plated; silver-colored



Item No.: 216-223
Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red



Item No.: 216-123
Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated; silver-colored



Item No.: 216-224
Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black



Item No.: 216-124
Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin plated


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## 1.1.2 Tool

### 1.1.2.1 Operating tool



Item No.: 210-658
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; angled; short; multicoloured



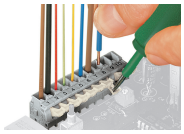
Item No.: 210-720
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

## Installation Notes

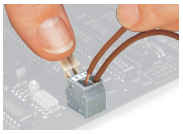
### Conductor termination



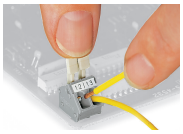
Inserting/removing a conductor – 256 Series.



Inserting/removing a conductor (255 Series)



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



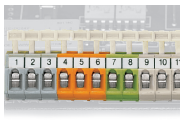
Inserting/removing a conductor via finger-operated lever – 256 Series.

### Installation



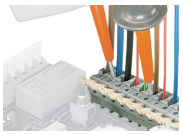
Possible conductor arrangement with terminal strips staggered (for 256 Series only).

### Marking



Formation of groups using housings of different colors

### Testing



Testing with test probes.



Testing with test plug modules.


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