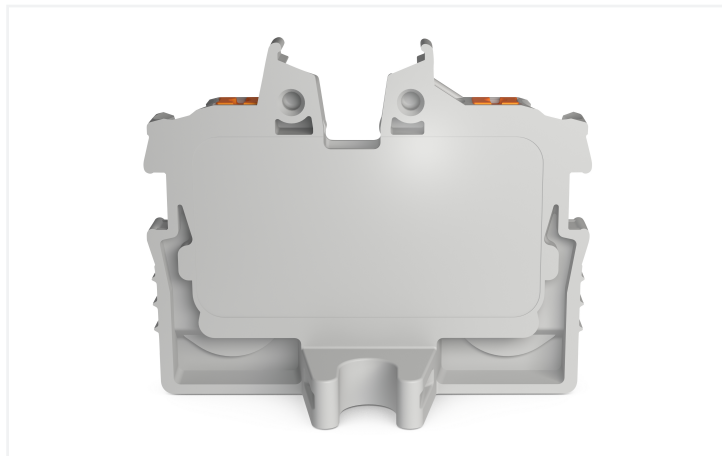
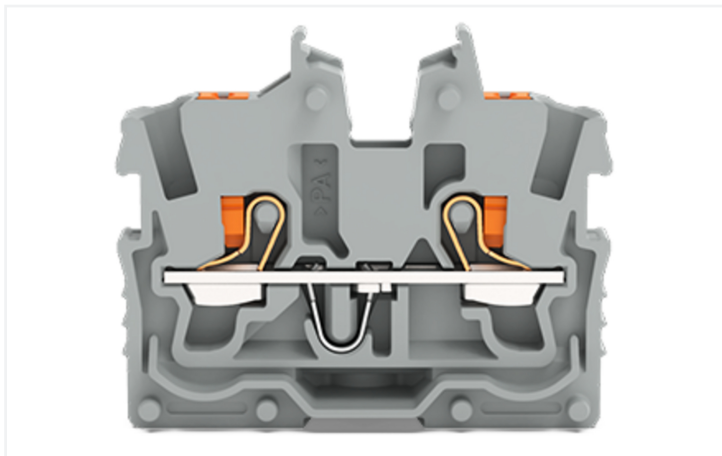


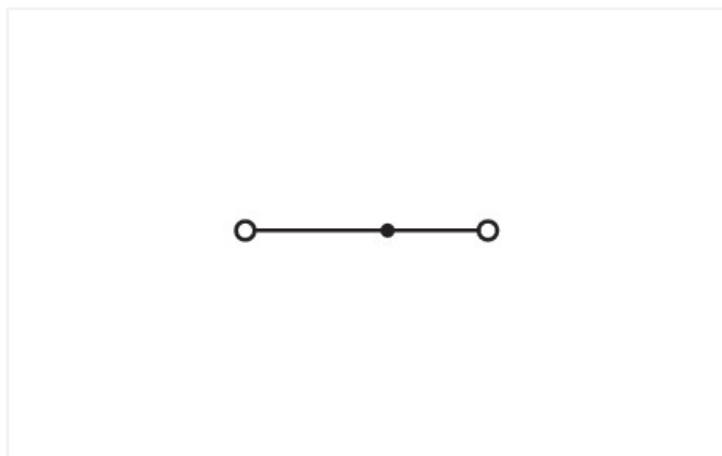
# Data Sheet | Item Number: 2250-301

2-conductor miniature through terminal block; with push-button; 1 mm<sup>2</sup>; End terminal block with mounting flange; side and center marking; with test port; Push-in CAGE CLAMP®; 1,00 mm<sup>2</sup>; gray

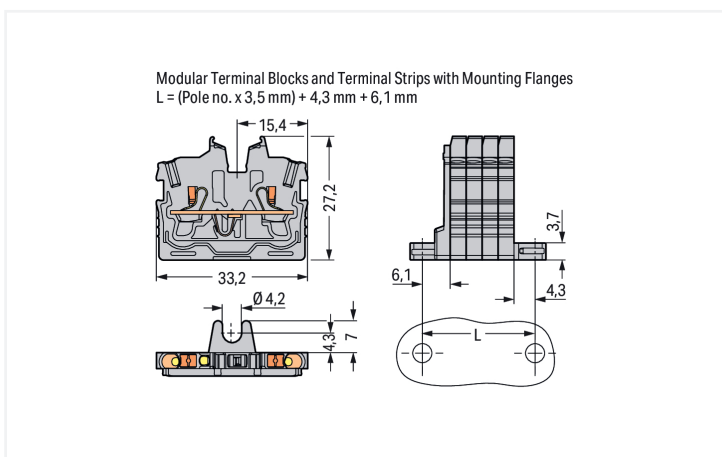
<https://www.wago.com/2250-301>



Color: ■ gray



Similar to illustration



Through terminal block, 2250 Series, Push-in CAGE CLAMP®

Our through terminal block (item number 2250-301) is the perfect way to connect conductors quickly and securely. Ensure that the strip lengths are between 9 and 11 mm when connecting conductors to this through terminal block. Whether for use in industry or building installations, our rail-mount

through terminal blocks make it easy to quickly and securely connect electrical conductors. They're perfect for either classic through-wiring or distributing potential, depending on the variant. This product features conductor terminals and utilizes Push-in CAGE CLAMP®. Push-in CAGE CLAMP® technology provides a universal connection solution for any type of conductor. It allows both solid and fine-stranded conductors with ferrules to be inserted directly into the clamping point without the need for tools. This through terminal block is suitable for conductor cross sections ranging from 0.14 mm<sup>2</sup> to 1.5 mm<sup>2</sup>.

A push-button is used to operate this mini rail-mount terminal block. Our TOPJOB® S rail-mount terminal blocks are perfect for a wide range of industrial applications and modern building installations thanks to the secure electrical connections they provide. You can work anywhere in the world and on any application with just a single rail-mount terminal block system. This product is designed for specific Ex applications (please refer to the product datasheet).

## Electrical data

| Ratings per   | IEC/EN 60998-2-2 |     |    | Approvals per | UL 1059 |       |   |
|---|------------------|-----|----|---------------|---------|-------|---|
| Overvoltage category                                      | III              | III | II | Use group     | B       | C     | D |
| Pollution degree  | 3                | 2   | 2  | Rated voltage | 300 V   | 300 V | - |
| Nominal voltage   | 500 V            | -   | -  | Rated current | 10 A    | 10 A  | - |
| Rated impulse withstand voltage                           | 6 kV             | -   | -  |               |         |       |   |
| Rated current   | 13.5 A           | -   | -  |               |         |       |   |
| Current at conductor cross-section (max.) mm <sup>2</sup> | 17.5 A           | -   | -  |               |         |       |   |

| Approvals per | CSA 22.2 No 158 |       |   |
|---------------|-----------------|-------|---|
| Use group     | B               | C     | D |
| Rated voltage | 300 V           | 300 V | - |
| Rated current | 10 A            | 10 A  | - |

| Ex information                      |   |
|-------------------------------------|---|
| Reference to hazardous areas        | See "Downloads – Documentation – Additional Information: Technical Section; Technical Explanations" |
| Ratings per                         | ATEX: PTB 19 ATEX 1019 U / IECEx: PTB 19.0050U (Ex eb IIC Gb)                                       |
| Rated voltage EN (Ex e II)          | 352 V   |
| Rated current (Ex e II)             | 13.5 A  |
| Rated current (Ex e II) with jumper | 12 A  |

## Power Loss

|  |           |
|--|-----------|
| Power loss, per pole (potential)                             | 0.4338 W  |
| Rated current I <sub>N</sub> for power loss specification    | 13.5 A    |
| Resistance value for specified, current-dependent power loss | 0.00238 Ω |

## General information

|                  |                    |
|------------------|--------------------|
| Wiring direction | Front-entry wiring |
|------------------|--------------------|

## Connection Data

|                            |   |
|----------------------------|---|
| Clamping units             | 2 |
| Total number of potentials | 1 |
| Number of levels           | 1 |
| Number of jumper slots     | 1 |

| Connection 1   |   |
|--|---|
| Connection technology                                      | Push-in CAGE CLAMP®   |
| Actuation type   | Push-button   |
| Connectable conductor materials                            | Copper  |
| Nominal cross-section                                      | 1 mm <sup>2</sup>   |
| Solid conductor  | 0.14 ... 1.5 mm <sup>2</sup> / 24 ... 16 AWG  |
| Solid conductor; push-in termination                       | 0.5 ... 1.5 mm <sup>2</sup> / 20 ... 16 AWG   |
| Fine-stranded conductor                                    | 0.14 ... 1.5 mm <sup>2</sup> / 24 ... 16 AWG  |
| Fine-stranded conductor; with insulated ferrule            | 0.14 ... 1 mm <sup>2</sup> / 24 ... 18 AWG  |
| Fine-stranded conductor; with uninsulated ferrule          | 0.14 ... 1 mm <sup>2</sup> / 24 ... 18 AWG  |
| Fine-stranded conductor; with ferrule; push-in termination | 0.5 ... 1 mm <sup>2</sup> / 20 ... 18 AWG   |
| Note (conductor cross-section)                             | Depending on the conductor characteristic, a conductor with a smaller cross-section can also be inserted via push-in termination. |

### Connection 1

|                  |                                    |
|------------------|------------------------------------|
| Strip length     | 9 ... 11 mm / 0.35 ... 0.43 inches |
| Wiring direction | Front-entry wiring                 |

### Physical data

|                         |                        |
|-------------------------|------------------------|
| Width                   | 3.5 mm / 0.138 inches  |
| Height from the surface | 27.2 mm / 1.071 inches |
| Depth                   | 33.2 mm / 1.307 inches |

### Mechanical data

|               |                     |
|---------------|---------------------|
| Mounting type | Mounting flange     |
| Marking level | Center/side marking |

### 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   |
| Fire load                          | 0.069 MJ   |
| Weight                             | 2.5 g  |

### Environmental requirements

|                                  |                 |
|----------------------------------|-----------------|
| Processing temperature           | -35 ... +85 °C  |
| Continuous operating temperature | -60 ... +105 °C |

### Commercial data

|                       |               |
|-----------------------|---------------|
| PU (SPU)              | 100 pcs       |
| Packaging type        | Box           |
| Country of origin     | IN            |
| GTIN                  | 4055143965613 |
| Customs tariff number | 85369010000   |

### Product Classification

|           |                      |
|-----------|----------------------|
| UNSPSC    | 39121410             |
| ETIM 9.0  | EC001284             |
| ETIM 10.0 | EC001284             |
| 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 60998      | NTR NL 7840      |
| CSA<br>CSA                                 | C22.2 No. 158 | 80034182         |
| cURus<br>Underwriters Laboratories<br>Inc. | UL 1059       | E45172           |
| KEMA/KEUR<br>DEKRA Certification B.V.      | EN 60998      | 71-113957        |

### Declarations of conformity and manufacturer's declarations

| Approval  | Standard | Certificate Name |
|---|----------|------------------|
| ATEX-Attestation of Con-<br>formity<br>WAGO GmbH & Co. KG | -        | -                |
| 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 |
|------------------|----------|------------------|
| DNV<br>DNV GL SE | -        | TAE00003JT       |

### Approvals for hazardous areas



| Approval  | Standard       | Certificate Name  |
|---|----------------|---|
| AEx<br>Underwriters Laboratories<br>Inc.          | UL 60079       | E185892 (AEx eb IIC resp.<br>Ex eb IIC)                           |
| ATEX<br>Physikalisch Technische<br>Bundesanstalt  | EN IEC 60079-0 | PTB 19 ATEX 1019 U (II 2G<br>Ex eb IIC Gb or I M 2 Ex eb<br>I Mb) |
| CCC<br>CNEX                                       | GB/T 3836.3    | 2020312313000289 (Ex<br>eb IIC Gb, Ex eb I Mb)                    |
| IECEx<br>Physikalisch Technische<br>Bundesanstalt | IEC 60079      | IECEx PTB 19.0050U (Ex<br>eb IIC Gb or EX eb I Mb)                |
| INMETRO<br>TÜV Rheinland do Brasil<br>Ltda.       | IEC 60079      | TÜV 22.0014 U   |

## Downloads

### Environmental Product Compliance

#### Compliance Search

Environmental Product  
Compliance 2250-301



### CAD/CAE-Data

#### CAD data

2D/3D Models  
2250-301



#### CAE data

EPLAN Data Portal  
2250-301



WSCAD Universe  
2250-301



ZUKEN Portal  
2250-301



## 1 Compatible Products

### 1.1 System counterpart

#### 1.1.1 Through terminal block



**Item No.: 2250-321**

2-conductor miniature through terminal block; with push-button; 1 mm<sup>2</sup>; Center terminal block without snap-in mounting foot, without mounting flange; side and center marking; with test port; Push-in CAGE CLAMP®; 1,00 mm<sup>2</sup>; gray

## 1.2 Required Accessories

### 1.2.1 End plate

#### 1.2.1.1 End plate



**Item No.: 2050-381**

End plate; with fixing flange; 1.3 mm thick; gray

## 1.3 Optional Accessories

### 1.3.1 Ferrule

#### 1.3.1.1 Ferrule



**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.: 216-242**

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.: 216-243**

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

### 1.3.2 Installation

#### 1.3.2.1 Mounting accessories



**Item No.: 209-137**

Mounting adapter; can be used as end stop; 6.5 mm wide; gray

1.3.3 Jumper

1.3.3.1 Jumper



[Item No.: 2000-406/020-000](#)  
Delta jumper; insulated; light gray



[Item No.: 2000-410/000-006](#)  
Jumper; 10-way; insulated; blue



[Item No.: 2000-410](#)  
Jumper; 10-way; insulated; light gray



[Item No.: 2000-410/000-005](#)  
Jumper; 10-way; insulated; red



[Item No.: 2000-402/000-006](#)  
Jumper; 2-way; insulated; blue



[Item No.: 2000-402](#)  
Jumper; 2-way; insulated; light gray



[Item No.: 2000-402/000-005](#)  
Jumper; 2-way; insulated; red



[Item No.: 2000-402/000-018](#)  
Jumper; 2-way; insulated; yellow-green



[Item No.: 2000-403/000-006](#)  
Jumper; 3-way; insulated; blue



[Item No.: 2000-403](#)  
Jumper; 3-way; insulated; light gray



[Item No.: 2000-403/000-005](#)  
Jumper; 3-way; insulated; red



[Item No.: 2000-404/000-006](#)  
Jumper; 4-way; insulated; blue



[Item No.: 2000-404](#)  
Jumper; 4-way; insulated; light gray



[Item No.: 2000-404/000-005](#)  
Jumper; 4-way; insulated; red



[Item No.: 2000-405/000-006](#)  
Jumper; 5-way; insulated; blue



[Item No.: 2000-405](#)  
Jumper; 5-way; insulated; light gray



[Item No.: 2000-405/000-005](#)  
Jumper; 5-way; insulated; red



[Item No.: 2000-406/000-006](#)  
Jumper; 6-way; insulated; blue



[Item No.: 2000-406](#)  
Jumper; 6-way; insulated; light gray



[Item No.: 2000-406/000-005](#)  
Jumper; 6-way; insulated; red



[Item No.: 2000-407/000-006](#)  
Jumper; 7-way; insulated; blue



[Item No.: 2000-407](#)  
Jumper; 7-way; insulated; light gray



[Item No.: 2000-407/000-005](#)  
Jumper; 7-way; insulated; red



[Item No.: 2000-408/000-006](#)  
Jumper; 8-way; insulated; blue



[Item No.: 2000-408](#)  
Jumper; 8-way; insulated; light gray



[Item No.: 2000-408/000-005](#)  
Jumper; 8-way; insulated; red



[Item No.: 2000-409/000-006](#)  
Jumper; 9-way; insulated; blue



[Item No.: 2000-409](#)  
Jumper; 9-way; insulated; light gray



[Item No.: 2000-409/000-005](#)  
Jumper; 9-way; insulated; red



[Item No.: 2000-440](#)  
Jumper; from 1 to 10; insulated; light gray



[Item No.: 2000-433/000-006](#)  
Jumper; from 1 to 3; insulated; blue



[Item No.: 2000-433](#)  
Jumper; from 1 to 3; insulated; light gray



[Item No.: 2000-433/000-005](#)  
Jumper; from 1 to 3; insulated; red



[Item No.: 2000-434](#)  
Jumper; from 1 to 4; insulated; light gray



[Item No.: 2000-435](#)  
Jumper; from 1 to 5; insulated; light gray



[Item No.: 2000-436](#)  
Jumper; from 1 to 6; insulated; light gray



[Item No.: 2000-437](#)  
Jumper; from 1 to 7; insulated; light gray



[Item No.: 2000-438](#)  
Jumper; from 1 to 8; insulated; light gray



[Item No.: 2000-439](#)  
Jumper; from 1 to 9; insulated; light gray



[Item No.: 2000-405/011-000](#)  
Star point jumper; 3-way; insulated; light gray

1.3.4 Marking

1.3.4.1 Group marker carrier



[Item No.: 2009-191](#)  
Group marker carrier; gray

1.3.4.2 Marker



**Item No.: 793-3501**  
WMB marking card; as card; plain; snap-on type; white

**Item No.: 2009-113/000-006**  
WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; blue

**Item No.: 2009-113/000-007**  
WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; gray

**Item No.: 2009-113/000-023**  
WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; green



**Item No.: 2009-113/000-017**  
WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; light green

**Item No.: 2009-113/000-012**  
WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; orange

**Item No.: 2009-113/000-005**  
WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; red

**Item No.: 2009-113/000-024**  
WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; violet



**Item No.: 2009-113**  
WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; white

**Item No.: 2009-113/000-002**  
WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; yellow

1.3.4.3 Marking strip



**Item No.: 2009-110**  
Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white

1.3.5 Push-in type wire jumper

1.3.5.1 Jumper



**Item No.: 2009-404**  
Push-in type wire jumper; 0.75 mm<sup>2</sup>; insulated; 110 mm long; gray

**Item No.: 2009-406**  
Push-in type wire jumper; 0.75 mm<sup>2</sup>; insulated; 250 mm long; gray

**Item No.: 2009-402**  
Push-in type wire jumper; 0.75 mm<sup>2</sup>; insulated; 60 mm long; gray

1.3.6 Test and measurement

1.3.6.1 Testing accessories



**Item No.: 2009-174**  
Test plug adapter; for 4 mm Ø test plugs; for testing TOPJOB®S rail-mounted terminal blocks; gray

**Item No.: 210-136**  
Test plug; 2 mm Ø; with 500 mm cable; red

**Item No.: 2009-182**  
Testing tap; for max. 2.5 mm<sup>2</sup>; tool-free connection for individual test wires 0.08 - 2.5 mm; gray

1.3.7 Tool

1.3.7.1 Operating tool



**Item No.: 210-719**  
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

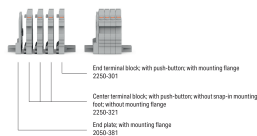
**Item No.: 210-648**  
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; angled; short

**Item No.: 210-647**  
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; multicoloured

## Installation Notes

### Installation

Example of a 4-pole terminal strip with push-buttons with mounting flange



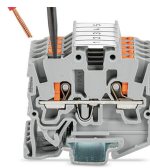
### Conductor termination



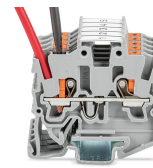
Insert solid conductors via push-in termination.



Insert ferruled conductors via push-in termination.

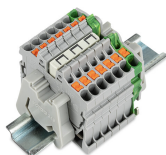


Insert fine-stranded conductors via operating tool.

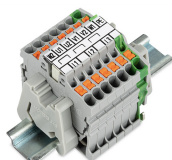


Remove all conductors via operating tool.

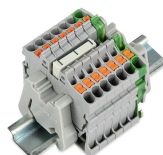
### Commoning



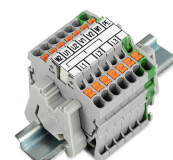
Insert a delta jumper and push down until it hits the backstop (example shows terminal blocks with push-buttons).



Marking strip (Item No. 2009-110) inserted in the marking slot with jumper symbols of the inserted jumper (delta jumper) (example shows terminal blocks with push-buttons)



Insert a star point jumper and push down until it hits the backstop (example shows terminal blocks with push-buttons).



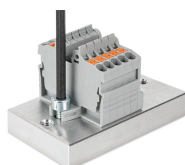
Marking strip (Item No. 2009-110) inserted in the marking slot with jumper symbols of the inserted jumper (2000-405/011-000 Delta Jumper) (example shows terminal blocks with push-buttons)

### Testing

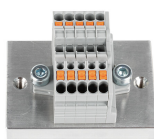


Testing with a 2 mm Ø 210-136 Test Plug (max. 42 V).

### Installation



Mounting and securing a terminal strip directly to the plate via screw-type flanges (example shows terminal blocks with push-buttons).



Terminal strip; with mounting flanges; screw mounting (example shows terminal blocks with push-buttons)

Marking



Snapping a marking strip into the marker slot.



Snapping a marking strip (Item No. 2009-110) into a marker slot.