

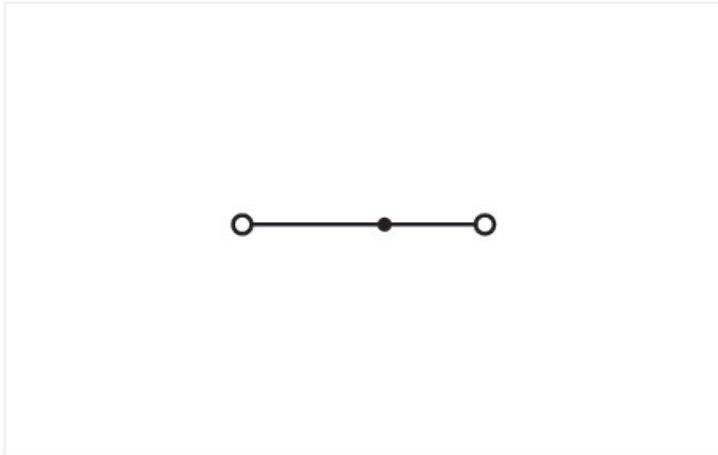
Data Sheet | Item Number: 2050-311/000-014

2-conductor miniature through terminal block; with operating slots; 1 mm²; with snap-in mounting foot; side and center marking; with test port; Push-in CAGE CLAMP®; 1,00 mm²; brown

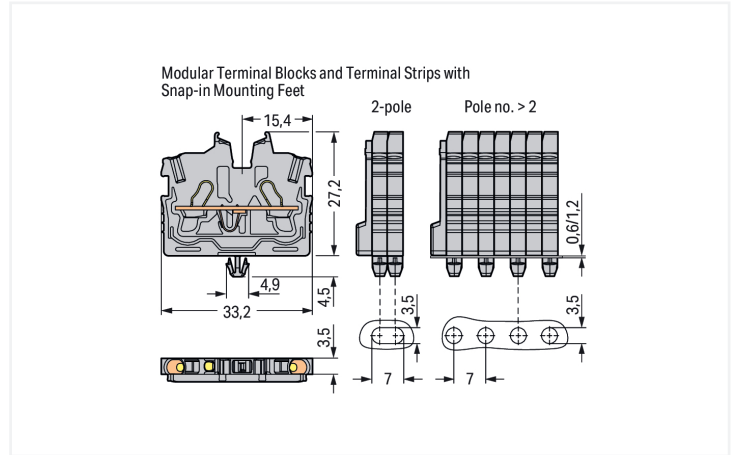
<https://www.wago.com/2050-311/000-014>



Color: ■ brown



Similar to illustration



Through terminal block, 2050 Series, brown

This through terminal block (item number 2050-311/000-014) streamlines wire connections, making them both quick and easy. Strip lengths must be between 9 and 11 mm when connecting conductors to this through terminal block. Our mini rail-mount terminal blocks are the perfect choice for working in confined spaces. A large selection of mounting and actuation variants means you can find a suitable mini terminal block for every purpose. This also means you can adapt the terminal blocks to your unique requirements. This product features conductor terminals and utilizes Push-in CAGE CLAMP®. Our Push-in CAGE CLAMP® is a universal, maintenance-free connection solution for all conductor types, boasting a key feature: It allows direct insertion of both solid and fine-stranded conductors with ferrules without needing tools. No preparation is required; for example, crimping the conductor's ferrule is not necessary. This through terminal block is suitable for conductor cross sections ranging from 0.14 mm² to 1.5 mm².

This mini rail-mount terminal block is operated with an operating tool. Our TOPJOB® S rail-mount terminal blocks guarantee reliable electrical connections across many industrial applications and modern building installations. They make wiring work easier as you can quickly plug in solid, stranded, and fine-stranded conductors with ferrules. This product is designed for specific Ex applications (please refer to the product datasheet).

Electrical data

| Ratings per | IEC/EN 60998-2-2 | | |
|---|------------------|-----|----|
| Overvoltage category | III | III | II |
| Pollution degree | 3 | 2 | 2 |
| Nominal voltage | 500 V | - | - |
| Rated impulse withstand voltage | 6 kV | - | - |
| Rated current | 13.5 A | - | - |
| Current at conductor cross-section (max.) mm ² | 17.5 A | - | - |

| Approvals per | UL 1059 | | |
|---------------|---------|-------|---|
| Use group | B | C | D |
| Rated voltage | 300 V | 300 V | - |
| Rated current | 10 A | 10 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_N 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 | Operating tool |
| Connectable conductor materials | Copper |
| Nominal cross-section | 1 mm ² |
| Solid conductor | 0.14 ... 1.5 mm ² / 24 ... 16 AWG |
| Solid conductor; push-in termination | 0.5 ... 1.5 mm ² / 20 ... 16 AWG |
| Fine-stranded conductor | 0.14 ... 1.5 mm ² / 24 ... 16 AWG |
| Fine-stranded conductor; with insulated ferrule | 0.14 ... 1 mm ² / 24 ... 18 AWG |
| Fine-stranded conductor; with uninsulated ferrule | 0.14 ... 1 mm ² / 24 ... 18 AWG |
| Fine-stranded conductor; with ferrule; push-in termination | 0.5 ... 1 mm ² / 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. |
| 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 | Snap-in foot |
| Marking level | Center/side marking |

Material data

| | |
|------------------------------------|--|
| Note (material data) | Information on material specifications can be found here |
| Color | brown |
| Material group | I |
| Insulation material (main housing) | Polyamide (PA66) |
| Flammability class per UL94 | V0 |
| Fire load | 0.047 MJ |
| Weight | 2.4 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 | 4066966312904 |
| 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

Approvals for hazardous areas



| Approval | Standard | Certificate Name |
|---|-----------|--------------------|
| ATEX Physikalisch Technische Bundesanstalt | EN 60079 | PTB 19 ATEX 1019 U |
| IECEX Physikalisch Technische Bundesanstalt | IEC 60079 | IECEX PTB 19.0050U |

Approvals for hazardous areas

| | | |
|---|-----------|---------------|
| INMETRO TÜV Rheinland do Brasil Ltda. | IEC 60079 | TÜV 22.0014 U |
|---|-----------|---------------|

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product
Compliance
2050-311/000-014



CAD/CAE-Data

CAD data

2D/3D Models
2050-311/000-014



1 Compatible Products

1.1 System counterpart

1.1.1 Through terminal block



[Item No.: 2050-321](#)

2-conductor miniature through terminal block; with operating slots; 1 mm²; Center terminal block without snap-in mounting foot, without mounting flange; side and center marking; with test port; Push-in CA-GE CLAMP®; 1,00 mm²; gray

1.2 Required Accessories

1.2.1 End plate

1.2.1.1 End plate



[Item No.: 2050-391](#)

End plate; for terminal blocks with snap-in mounting foot; 3.4 mm thick; gray

1.3 Optional Accessories

1.3.1 DIN-rail

1.3.1.1 Mounting accessories



[Item No.: 210-154](#)

Aluminum carrier rail; 1000 mm long; 18 mm wide; 7 mm high; silver-colored

1.3.2 Ferrule

1.3.2.1 Ferrule



Item No.: 216-241

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



Item No.: 216-242

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



Item No.: 216-243

Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red

1.3.3 Installation

1.3.3.1 Mounting accessories



Item No.: 209-137

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



Item No.: 209-120

Mounting foot; can be snapped on terminal blocks with snap-in mounting foot; for mounting on relay-modules; 6.4 mm wide; gray

1.3.4 Jumper

1.3.4.1 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

1.3.4.1 Jumper



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

1.3.5 Marking

1.3.5.1 Group marker carrier



Item No.: 2009-191
Group marker carrier; gray

1.3.5.2 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

1.3.5.3 Marking strip



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

1.3.6 Protective warning marker

1.3.6.1 Cover



Item No.: 2000-115
Protective warning marker; for 5 terminal blocks; with high-voltage symbol, black; yellow

1.3.7 Push-in type wire jumper

1.3.7.1 Jumper



Item No.: 2009-404

Push-in type wire jumper; 0.75 mm²; insulated; 110 mm long; gray



Item No.: 2009-406

Push-in type wire jumper; 0.75 mm²; insulated; 250 mm long; gray



Item No.: 2009-402

Push-in type wire jumper; 0.75 mm²; insulated; 60 mm long; gray

1.3.8 Test and measurement

1.3.8.1 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 mm²; tool-free connection for individual test wires 0.08 - 2.5 mm; gray

1.3.9 Tool

1.3.9.1 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



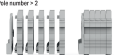
Item No.: 210-647

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; multicoloured

Installation Notes

Installation

Example of a 5-pole terminal strip, with operating slots, with snap-in mounting feet
Rail number: 2



Center terminal block, with operating slot, without snap-in mounting feet, without mounting flange
2050-311

Terminal block, with operating slot, with snap-in mounting feet
2050-311

End plate, for terminal blocks with snap-in mounting feet
2050-391

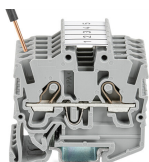
Example of a 2-pole terminal strip, with operating slots, with snap-in mounting feet



Terminal block, with operating slot, with snap-in mounting feet
2050-311

End plate, for terminal blocks with snap-in mounting feet
2050-391

Conductor termination



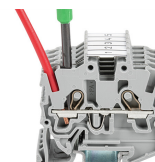
Insert solid conductors via push-in termination.



Insert ferruled conductors via push-in termination.

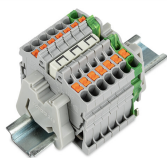


Insert fine-stranded conductors via operating tool.

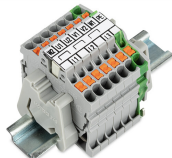


Remove all conductors via operating tool.

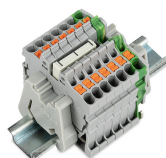
Commoning



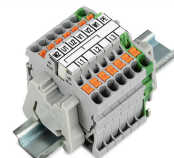
Insert a delta jumper and push down until it hits the backstop (example shows terminal blocks with push-buttons).



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).

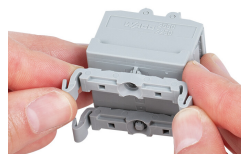
Installation



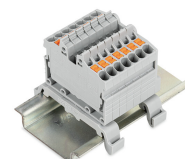
Mounting a terminal strip with snap-in feet into holes.



Mounting a terminal strip with snap-in feet onto aluminum rail.



Snapping a mounting foot (209-120) to a terminal strip with snap-in mounting feet. (Distance between mounting feet: approx. 20 ... 25 mm)



Terminal strip; with snap-in mounting feet; for DIN-35 rail (209-120 Mounting Foot) (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.