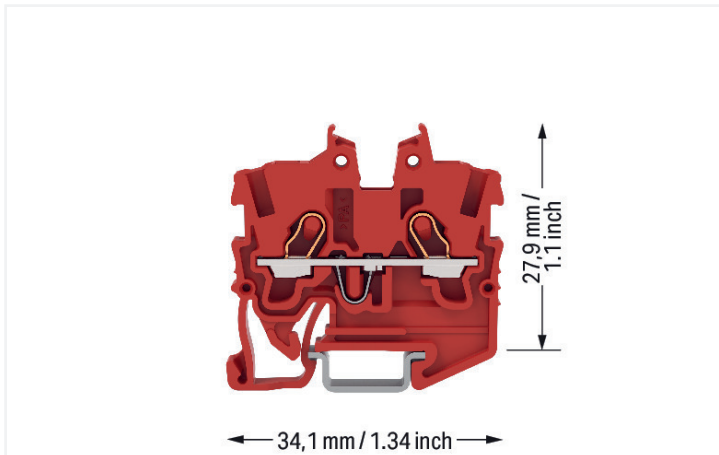


Data Sheet | Item Number: 2050-1203

2-conductor miniature through terminal block; with operating slots; 1 mm²; with test port; side and center marking; for DIN-15 rail; Push-in CAGE CLAMP®; 1,00 mm²; red

<https://www.wago.com/2050-1203>



Color: ■ red



Similar to illustration

Through terminal block, 2050 Series, red

This through terminal block (item number 2050-1203) is designed for simple and secure connections. Strip lengths must be between 9 and 11 mm when connecting conductors to this through terminal block. Our mini rail-mount terminal blocks are perfect for working in confined spaces thanks to their compact design. With various mounting and actuation options, they offer complete flexibility. This product features conductor terminals and utilizes Push-in CAGE CLAMP®. Push-in CAGE CLAMP® connection technology is ideal for connecting all conductor types. Solid and fine-stranded conductors with ferrules can be pushed in without the need for tools—all thanks to its pluggable design. Depending on the conductor type, this through terminal block is ideal 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 are perfect for many different industrial applications and modern building installations as they provide secure electrical connections. 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 60947-7-1 | | |
|-----------------------------------------------------------|------------------|-----|----|
| 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 | 34.1 mm / 1.343 inches |
| Depth from upper-edge of DIN-rail | 27.9 mm / 1.098 inches |

Mechanical data

| | |
|---------------|---------------------|
| Mounting type | DIN-15 rail |
| Marking level | Center/side marking |

Material data

| | |
|------------------------------------|--------------------------------------------------------------------------|
| Note (material data) | Information on material specifications can be found here |
| Color | red |
| Material group | I |
| Insulation material (main housing) | Polyamide (PA66) |
| Flammability class per UL94 | V0 |
| Fire load | 0.049 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 | 4066966312812 |
| Customs tariff number | 85369010000 |

Product Classification

| | |
|-----------|----------------------|
| UNSPSC | 39121402 |
| ETIM 9.0 | EC000897 |
| ETIM 10.0 | EC000897 |
| ECCN | NO US CLASSIFICATION |

Environmental Product Compliance

| | |
|------------------------|-------------------------|
| RoHS Compliance Status | Compliant, No Exemption |
|------------------------|-------------------------|

Approvals / Certificates

Approvals for marine applications



| Approval | Standard | Certificate Name |
|------------------|----------|------------------|
| DNV DNV GL SE | - | TAE00003JT |

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 IEC 60079 TÜV 22.0014 U
TÜV Rheinland do Brasil
Ltda.

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 2050-1203

CAD/CAE-Data

CAD data

2D/3D Models 2050-1203

1 Compatible Products

1.1 Required Accessories

1.1.1 End plate

1.1.1.1 End plate



[Item No.: 2050-1291](#)
End and intermediate plate; 1.1 mm thick; gray

1.2 Optional Accessories

1.2.1 DIN-rail

1.2.1.1 Mounting accessories



[Item No.: 210-111](#)
Steel carrier rail; 15 x 5.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; silver-colored



[Item No.: 210-295](#)
Steel carrier rail; 15 x 5.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored

1.2.2 Ferrule

1.2.2.1 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

1.2.3 Installation

1.2.3.1 Cover



Item No.: 709-156

Cover; Type 3; suitable for cover carrier, type 3; 1 m long; transparent

1.2.3.2 Cover carrier



Item No.: 709-169

Cover carrier; Type 3; incl. fixing/retaining screws and knurled nut; suitable for 279 to 282 and 880 Series rail-mounted terminal blocks; suitable for 264 Series miniature rail-mounted terminal blocks; suitable for 270 Series sensor and actuator terminal blocks; gray

1.2.3.3 Mounting accessories



Item No.: 249-101

Screwless end stop; 6 mm wide; for WMB markers; gray

1.2.4 Jumper

1.2.4.1 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

1.2.4.1 Jumper











| | | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  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 |
|  Item No.: 210-103 Wire commoning chain; insulated; black |  Item No.: 210-123 Wire commoning chain; insulated; blue | | |

1.2.5 Marking

1.2.5.1 Group marker carrier

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

1.2.5.2 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 | | |

1.2.5.3 Marking strip



Item No.: 2009-110

Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white

1.2.6 Protective warning marker

1.2.6.1 Cover



Item No.: 2000-115

Protective warning marker; for 5 terminal blocks; with high-voltage symbol, black; yellow

1.2.7 Push-in type wire jumper

1.2.7.1 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

1.2.8 Test and measurement

1.2.8.1 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

1.2.9 Tool

1.2.9.1 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

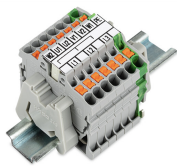


Item No.: 210-647

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

Installation Notes

Installation



Conductor termination



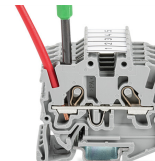
Insert solid conductors via push-in termination.



Insert ferruled conductors via push-in termination.

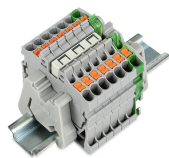


Insert fine-stranded conductors via operating tool.

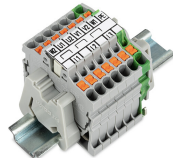


Remove all conductors via operating tool.

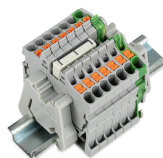
Commoning



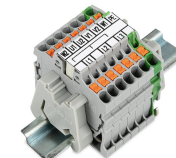
Insert a delta jumper and push down until it hits the backstop (example shows terminal blocks with push-buttons).



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).

Marking



Snapping a marking strip into the marker slot.



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