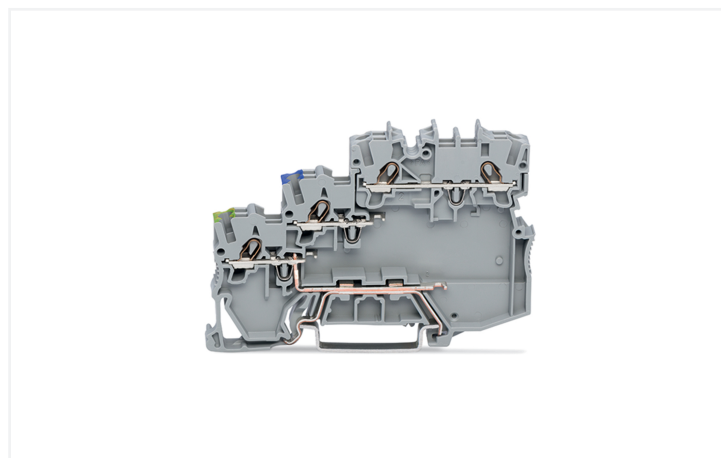
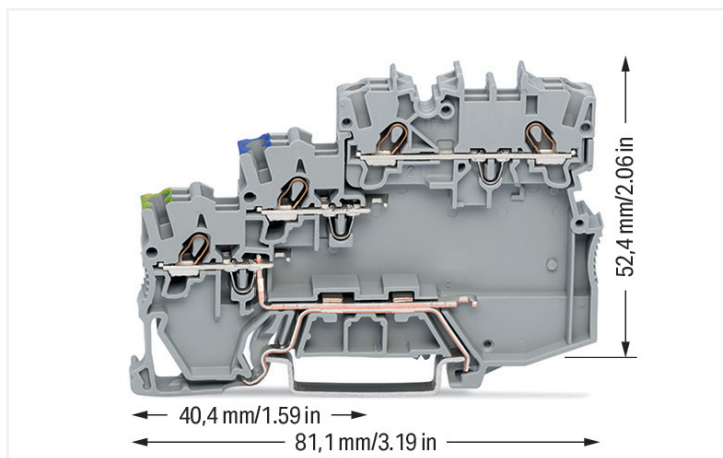


Data Sheet | Item Number: 2000-5317/102-000

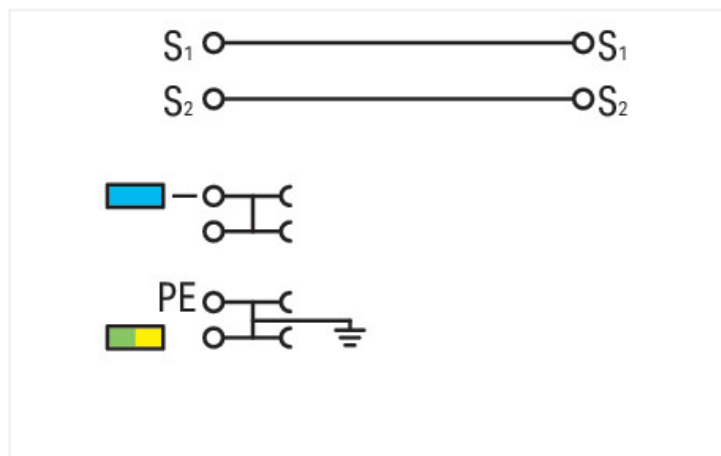
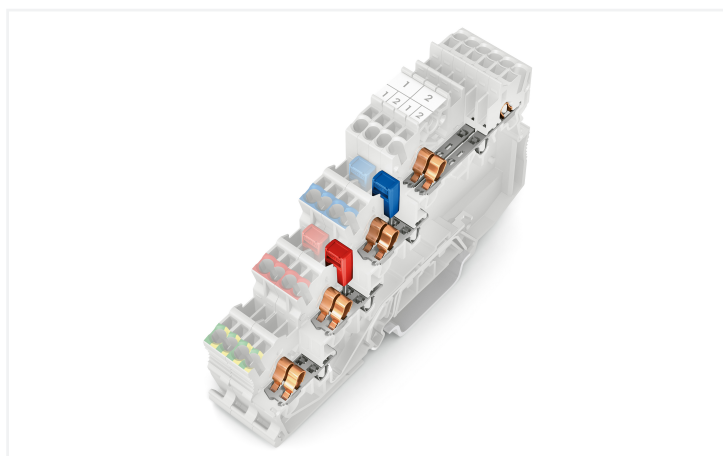
3-conductor actuator supply terminal block; for PNP-(high-side) switching actuators; with ground contact; with colored conductor entries; 1 mm²; Push-in CAGE CLAMP®; 1,00 mm²; gray



<https://www.wago.com/2000-5317/102-000>



Color: ■ gray



Similar to illustration

Actuator terminal block, 2000 Series, operating tool

Enjoy effortless electrical installations with this actuator terminal block (item number 2000-5317/102-000). Ensure that the strip lengths are between 9 and 11 mm when connecting conductors to this actuator terminal block. 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. Depending on the type of conductor, this actuator terminal block is ideal for conductor cross sections ranging from 0.14 mm² to 1.5 mm².

Electrical data

| Ratings per | IEC/EN 60947-7-1 | | |
|---------------------------------|------------------|-----|----|
| Overvoltage category | III | III | II |
| Pollution degree | 3 | 2 | 2 |
| Nominal voltage | 250 V | - | - |
| Rated impulse withstand voltage | 4 kV | - | - |
| Rated current | 13.5 A | - | - |

| Approvals per | UL 1059 | | |
|---------------|---------|---|-------|
| Use group | B | C | D |
| Rated voltage | 300 V | - | 300 V |
| Rated current | 15 A | - | 15 A |

| Approvals per | CSA 22.2 No 158 | | |
|---------------|-----------------|-------|---|
| Use group | B | C | D |
| Rated voltage | - | 300 V | - |
| Rated current | - | 10 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 | |
|---------------------|--------------------|
| LED (switching) for | PNP |
| Wiring direction | Front-entry wiring |

| Connection Data | | Connection 1 | |
|----------------------------|---|--|---|
| Clamping units | 8 | Connection technology | Push-in CAGE CLAMP® |
| Total number of potentials | 4 | Actuation type | Operating tool |
| Number of levels | 3 | Connectable conductor materials | Copper |
| Number of jumper slots | 4 | 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 ... 0.75 mm ² / 24 ... 18 AWG |
| | | Fine-stranded conductor; with ferrule; push-in termination | 0.5 ... 0.75 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 | 7 mm / 0.276 inches |
| Height | 81.1 mm / 3.193 inches |
| Depth from upper-edge of DIN-rail | 52.4 mm / 2.063 inches |

| Mechanical data | |
|-----------------|---------------------|
| Mounting type | DIN-35 rail |
| Marking level | Center/side marking |

| Material data | |
|------------------------------------|--|
| Note (material data) | Information on material specifications can be found here |
| Color | gray |
| Material group | I |
| Insulation material (main housing) | Polyamide (PA66) |
| Flammability class per UL94 | V0 |
| Fire load | 0.284 MJ |
| Weight | 17.4 g |

Environmental requirements

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

Environmental Testing

| | |
|---|---|
| Test specification: Railway applications – Rolling stock – Electronic equipment | DIN EN 50155 (VDE 0115-200):2022-06 |
| Test procedure: Railway applications – Rolling stock equipment – Vibration and shock tests | DIN EN 61373 (VDE 0115-0106):2011-04 |
| Spectrum/Mounting location | Service life test, Category 1, Class A/B |
| Functional test with noise-like oscillations | Test passed according to Section 8 of the standard |
| Frequency | $f_1 = 5 \text{ Hz}$ to $f_2 = 150 \text{ Hz}$ |
| Acceleration | 0.101g (highest test level used for all axes) |
| Test duration per axis | 10 min. |
| Test directions | X, Y and Z axes |
| Monitoring of contact faults and interruptions | Passed |
| Voltage drop measurement before and after each axis | Passed |
| Simulated service life test through increased levels of noise-like oscillations | Test passed according to Section 9 of the standard |
| Frequency | $f_1 = 5 \text{ Hz}$ to $f_2 = 150 \text{ Hz}$ |
| Acceleration | 0.572g (highest test level used for all axes) |
| Test duration per axis | 5 h |
| Test directions | X, Y and Z axes |
| Extended testing: Monitoring of contact faults and interruptions | Passed |
| Extended testing: Voltage drop measurement before and after each axis | Passed |
| Shock test | Test passed according to Section 10 of the standard |
| Shock pulse form | Half sine |
| Acceleration | 5g (highest test level used for all axes) |
| Shock duration | 30 ms |
| Number of shocks (per axis) | 3 pos. und 3 neg. |
| Test directions | X, Y and Z axes |
| Extended testing: Monitoring of contact faults and interruptions | Passed |
| Extended testing: Voltage drop measurement before and after each axis | Passed |
| Vibration and shock stress for rolling stock equipment | Passed |

Commercial data

| | |
|-----------------------|---------------|
| PU (SPU) | 50 pcs |
| Packaging type | Box |
| Country of origin | DE |
| GTIN | 4055143408165 |
| Customs tariff number | 85369010000 |

Product Classification

| | |
|-------------|----------------------|
| UNSPSC | 39121410 |
| eCl@ss 10.0 | 27-14-11-28 |
| eCl@ss 9.0 | 27-14-11-28 |
| ETIM 9.0 | EC000900 |
| ETIM 10.0 | EC000900 |
| ECCN | NO US CLASSIFICATION |

Environmental Product Compliance

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

Approvals / Certificates

General approvals **Declarations of conformity and manufacturer's declarations**



| Approval | Standard | Certificate Name |
|---------------------------------------|----------|------------------|
| CCA DEKRA Certification B.V. | EN 60947 | NTR NL 7962 |
| CSA DEKRA Certification B.V. | C22.2 | 2130762 |
| KEMA/KEUR DEKRA Certification B.V. | EN 60947 | 71-125928 |
| UL Underwriters Laboratories Inc. | UL 1059 | E45172 |

| Approval | Standard | Certificate Name |
|--|----------|------------------|
| EU-Declaration of Conformity WAGO GmbH & Co. KG | - | - |
| Railway WAGO GmbH & Co. KG | - | Railway Ready |
| UK-Declaration of Conformity WAGO GmbH & Co. KG | - | - |

Downloads

Environmental Product Compliance

| Compliance Search |
|---|
| Environmental Product Compliance 2000-5317/102-000 |

Documentation

| Bid Text | | | |
|-------------------|------------|------------------|--|
| 2000-5317/102-000 | 07.08.2018 | docx 15.06 KB | |
| 2000-5317/102-000 | 19.02.2019 | xml 3.98 KB | |

CAD/CAE-Data

CAD data

2D/3D Models
2000-5317/102-000

CAE data

EPLAN Data Portal
2000-5317/102-000

ZUKEN Portal
2000-5317/102-000

1 Compatible Products

1.1 Required Accessories

1.1.1 End plate

1.1.1.1 End plate



Item No.: 2000-5391
End and intermediate plate; 1 mm thick; for 3-conductor terminal blocks; gray

1.2 Optional Accessories

1.2.1 DIN-rail

1.2.1.1 Mounting accessories



Item No.: 210-196
Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored



Item No.: 210-198
Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; copper-colored



Item No.: 210-197
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715; silver-colored



Item No.: 210-114
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored



Item No.: 210-118
Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored



Item No.: 210-115
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 18 mm; silver-colored



Item No.: 210-112
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 25 mm; silver-colored



Item No.: 210-113
Steel carrier rail; 35 x 7.5 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

1.2.4 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



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

1.2.4.1 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



Item No.: 210-103
Wire commoning chain; 0.5 mm²; 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 Marker carrier



Item No.: 2000-121
Adaptor; gray

1.2.5.4 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 Screwless end stop

1.2.8.1 Mounting accessories



Item No.: 249-117

Screwless end stop; 10 mm wide; for DIN-rail 35 x 15 and 35 x 7.5; gray



Item No.: 249-116

Screwless end stop; 6 mm wide; for DIN-rail 35 x 15 and 35 x 7.5; gray

1.2.9 Test and measurement

1.2.9.1 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.: 2009-182

Testing tap; for max. 2.5 mm²; tool-free connection for individual test wires 0.08 - 2.5 mm; gray

1.2.10 Tool

1.2.10.1 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

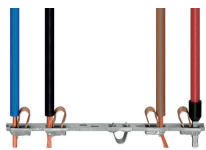


Item No.: 210-647

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

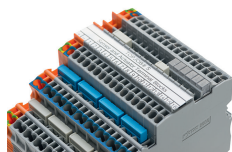
Installation Notes

Conductor termination



All conductor types at a glance

Commoning



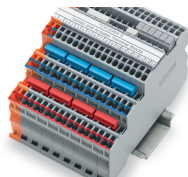
Commoning (signal level):

Commoning the signal level with push-in type jumper bars (2000 Series). Models with an LED can only be commoned in one jumper slot! TOPJOB® S Test Plug Adapters can be used in all jumper slots.



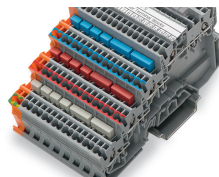
Upper level: Two independent signal pathways

Commoning



Commoning (potential level):

Commoning potential levels via push-in type jumper bars (2000 Series).



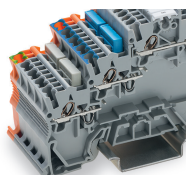
Commoning (potential level):

Continuous commoning in the potential levels via push-in type jumper bars for even pole numbers (2000 Series)



Potential levels: Two adjacent commoning options on a current bar

Commoning

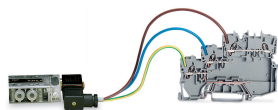


Ground commoning:

For sensor and actuator terminal blocks without ground connection to the DIN-rail, the ground connection can be performed by commoning to the terminal block with a ground foot.

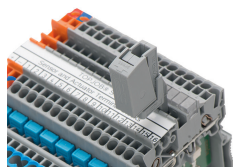


For example, colored push-in type jumper bars are used with sensor terminal blocks.

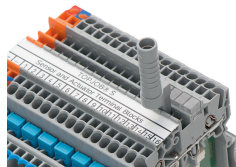


3-conductor sensor LED terminal block with a connected sensor

Testing

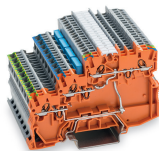


Testing via testing tap (2009-182) (up to max. 42 V).

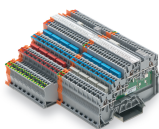


Testing via testing tap (2009-174) (up to max. 42 V).

Application

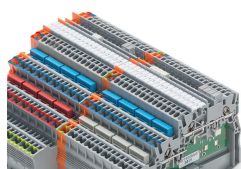


Supply:
Orange supply terminal block of same profile with a power supply option from both the cabinet and sensor sides

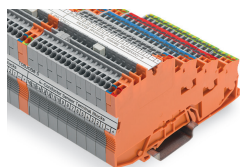


Terminal block assembly with 4-conductor sensor terminal blocks and 3-conductor actuator terminal blocks

Marking



Marking:
3.5 mm WMB markers (793-35xx) from the top or the side – additional marking option via marker carrier



Marking:
Labeling via marking strips (2009-110) – from the top or the side.

Subject to changes. Please also observe the further product documentation!

Current addresses can be found at: www.wago.com