

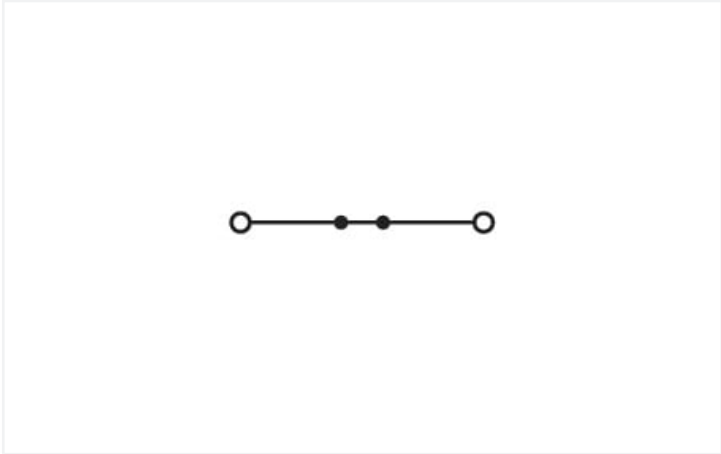
Data Sheet | Item Number: 2216-1205

2-conductor through terminal block; with push-button; 16 mm²; with test port; side and center marking; for DIN-rail 35 x 15 and 35 x 7.5; Push-in CAGE CLAMP®; 16,00 mm²; black

<https://www.wago.com/2216-1205>



Color: ■ black



Similar to illustration

Through terminal block, 2216 Series, push-button

This through terminal block (item number 2216-1205) is designed to connect conductors quickly and easily. Whether for industrial or building applications, you can use our through terminal blocks to connect electrical conductors quickly and safely. We offer variants for both classic through-wiring and potential distribution. This through rail-mount terminal block has a rated voltage of 800 V and can handle currents up to 76 A. Conductors should only be connected to this through terminal block if their strip length is between 18 mm and 20 mm. Featuring conductor terminals along with Push-in CAGE CLAMP®, this product delivers reliable performance. Push-in CAGE CLAMP® connection technology is ideal for connecting all conductor types. Both solid and fine-stranded conductors with ferrules can be pushed in without the need for tools—all thanks to its pluggable design. The dimensions are 12 x 69.8 x 43.7 mm (width x height x depth). Depending on the conductor type, this through terminal block is suitable for conductor cross sections ranging from 0.5 mm² to 16 mm². It features one level and two clamping points that you can use to connect a single potential. The black housing is made of polyamide (PA66) for insulation. A push-button is used to operate this through rail-mount terminal block. Our TOPJOB® S rail-mount terminal blocks guarantee secure electrical connections in various 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. These through rail-mount terminal blocks are mounted using DIN-35 rails.. Conductors made of copper can be connected thanks to front-entry wiring. The two jumper slots enable potential distribution to other clamping points. 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      |  | 800 V            | -   | -  |
| Rated surge voltage  |  | 8 kV             | -   | -  |
| Rated current        |  | 76 A             | -   | -  |

| Ratings per                                   |  | IEC/EN 60947-7-1 |   |   |
|---|--|------------------|---|---|
| Current at conductor cross-section (max.) mm² |  | 90 A             | - | - |



| Ratings per IEC/EN – Notes |  |
|----------------------------|--|
| Rated current (note)       | 15 mm high DIN-35 rails shall be used for a current load higher than 76 A! |

| Approvals per |  | CSA 22.2 No 158 |       |   |
|---------------|--|-----------------|-------|---|
| Use group     |  | B               | C     | D |
| Rated voltage |  | 600 V           | 600 V | - |
| Rated current |  | 85 A            | 85 A  | - |

| Power Loss   |           |
|--|-----------|
| Power loss, per pole (potential)                             | 2.4259 W  |
| Rated current I <sub>N</sub> for specified power loss        | 76 A      |
| Resistance value for specified, current-dependent power loss | 0.00042 Ω |

Connection data

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

| Approvals per |  | UL 1059 |       |   |
|---------------|--|---------|-------|---|
| Use group     |  | B       | C     | D |
| Rated voltage |  | 600 V   | 600 V | - |
| Rated current |  | 85 A    | 85 A  | - |

| Ex information                      |   |
|-------------------------------------|---|
| Reference hazardous areas           | See “Downloads – Documentation – Additional Information: Technical Section; Technical Explications” |
| Ratings per                         | ATEX: PTB 18 ATEX 1009 U / IECEx: PTB 18.0016U (Ex eb IIC Gb)                                       |
| Rated voltage EN (Ex e II)          | 550 V   |
| Rated current (Ex e II)             | 76 A  |
| Rated current (Ex e II) with jumper | 65 A  |

| Connection 1   |   |
|--|---|
| Connection technology                                      | Push-in CAGE CLAMP®   |
| Actuation type   | Push-button   |
| Connectable conductor materials                            | Copper  |
| Nominal cross-section                                      | 16 mm²  |
| Solid conductor  | 0.5 ... 16 mm² / 20 ... 6 AWG   |
| Solid conductor; push-in termination                       | 2.5 ... 16 mm² / 14 ... 6 AWG   |
| Fine-stranded conductor                                    | 0.5 ... 25 mm² / 20 ... 4 AWG   |
| Fine-stranded conductor; with insulated ferrule            | 0.5 ... 16 mm² / 20 ... 6 AWG   |
| Fine-stranded conductor; with ferrule; push-in termination | 6 ... 16 mm² / 10 ... 6 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. AWG specifications were converted according to IEC. |
| Strip length   | 18 ... 20 mm / 0.71 ... 0.79 inches   |
| Wiring direction   | Front-entry wiring  |

| Physical data                     |                        |
|-----------------------------------|------------------------|
| Width                             | 12 mm / 0.472 inches   |
| Height                            | 69.8 mm / 2.748 inches |
| Depth from upper-edge of DIN-rail | 37.1 mm / 1.461 inches |
| Depth                             | 43.7 mm / 1.72 inches  |



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

| Material data  |                  |
|--|------------------|
| Note (material data)   |                  |
| <a href="#">Information on material specifications can be found here</a> |                  |
| Color  | black            |
| Material group   | I                |
| Insulation material (main housing)                                       | Polyamide (PA66) |
| Flammability class per UL94  | V0               |
| Fire load  | 0.492 MJ         |
| Actuator color   | orange           |
| Weight   | 23.7 g           |

| Environmental requirements   |   |
|--|---|
| Processing temperature   | -35 ... +85 °C  |
| Continuous operating temperature   | -60 ... +105 °C   |
| Environmental Testing (Environmental Conditions)   |   |
| Test specification<br>Railway applications –<br>Rolling stock –<br>Electronic equipment            | DIN EN 50155 (VDE 0115-200):2022-06   |
| Test procedure<br>Railway applications –<br>Rolling stock equipment –<br>Shock and vibration tests | DIN EN 61373 (VDE 0115-0106):2011-04  |
| Spectrum/Installation location   | Service life test, Category 1, Class A/B  |
| Function test with noise-like vibration  | Test passed according to Section 8 of the standard  |
| Frequency  | f <sub>1</sub> = 5 Hz to f <sub>2</sub> = 150 Hz<br>f <sub>1</sub> = 5 Hz to f <sub>2</sub> = 150 Hz  |
| Acceleration   | 0.101g (highest test level used for all axes)<br>0.572g (highest test level used for all axes)<br>5g (highest test level used for all axes) |
| Test duration per axis   | 10 min.<br>5 h  |
| Test directions  | X, Y and Z axes<br>X, Y and Z axes<br>X, Y and Z axes   |
| Monitoring for contact faults/interruptions  | Passed  |
| Voltage drop measurement before and after each axis  | Passed  |
| Simulated service life test through increased levels of noise-like vibration                       | Test passed according to Section 9 of the standard  |
| Extended test scope: Monitoring for contact faults/interruptions                                   | Passed<br>Passed  |
| Extended test scope: Voltage drop measurement before and after each axis                           | Passed<br>Passed  |
| Shock test   | Test passed according to Section 10 of the standard   |
| Shock form   | Half sine   |
| Shock duration   | 30 ms   |
| Number of shocks per axis  | 3 pos. und 3 neg.   |
| Vibration and shock stress for rolling stock equipment   | Passed  |



| Commercial data       |               |
|-----------------------|---------------|
| ETIM 9.0              | EC000897      |
| ETIM 8.0              | EC000897      |
| PU (SPU)              | 20 pcs        |
| Packaging type        | Box           |
| Country of origin     | DE            |
| GTIN                  | 4066966335514 |
| Customs tariff number | 85369010000   |

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

Approvals / Certificates

| General approvals                          |               |                  | Declarations of conformity and manufacturer's declarations |          |                  |
|--|---------------|------------------|--|----------|------------------|
|  |               |                  |  |          |                  |
| Approval                                   | Standard      | Certificate Name | Approval   | Standard | Certificate Name |
| CCA<br>DEKRA Certification B.V.            | EN 60947      | NTR NL-7947      | ATEX-Attestation of Con-<br>formity<br>WAGO GmbH & Co. KG  | -        | -                |
| cURus<br>Underwriters Laboratories<br>Inc. | C22.2 No. 158 | E 45172          | EU-Declaration of Confor-<br>mity<br>WAGO GmbH & Co. KG    | -        | -                |
| KEMA/KEUR<br>DEKRA Certification B.V.      | EN 60947      | 71-124545        | Railway<br>WAGO GmbH & Co. KG                              | -        | Z00004408.000    |
|  |               |                  | UK-Declaration of Confor-<br>mity<br>WAGO GmbH & Co. KG    | -        | -                |

| Approvals for marine applications                     |           |                  | Approvals for hazardous areas                     |             |  |
|---|-----------|------------------|---|-------------|--|
|   |           |                  |   |             |  |
| Approval  | Standard  | Certificate Name | Approval  | Standard    | Certificate Name   |
| ABS<br>American Bureau of Ship-<br>ping               | -         | 19-HG1866350-PDA | AEx<br>Underwriters Laboratories<br>Inc.          | UL 60079    | E185892 (AEx eb IIC resp.<br>Ex eb IIC)                              |
| BV<br>Bureau Veritas S.A.                             | IEC 60947 | 58186/A0 BV      | ATEX<br>Physikalisch Technische<br>Bundesanstalt  | EN 60079-0  | PTB 18 ATEX 1009 U (II 2<br>G Ex eb IIC Gb bzw. I M 2<br>Ex eb I Mb) |
| DNV GL<br>Det Norske Veritas, Ger-<br>manischer Lloyd | -         | TAE00003JT       | CCCEX<br>CQST/CNEX                                | GB/T 3836.3 | 2020312313000175   |
| LR<br>Lloyds Register                                 | -         | 19/20050         | IECEX<br>Physikalisch Technische<br>Bundesanstalt | IEC 60079   | IECEX PTB 18.0016U (Ex<br>eb IIC Gb and Ex eb I Mb)                  |
|   |           |                  | INMETRO<br>TÜV Rheinland do Brasil<br>Ltda.       | IEC 60079   | TÜV 19.0822 U  |



Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 2216-1205

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Documentation

Additional Information

Technical Section

pdf

2246.92 KB

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CAD/CAE-Data

CAD data

2D/3D Models 2216-1205

Download icon

1 Compatible Products

1.1 Required Accessories

1.1.1 End plate

1.1.1.1 End plate

Item No.: 2016-1291  
End and intermediate plate; 1 mm thick; gray

Item No.: 2016-1292  
End and intermediate plate; 1 mm thick; orange

Item No.: 209-191  
Separator for Ex e/Ex i applications; 3 mm thick; 120 mm wide; orange

1.2 Optional Accessories

1.2.1 Cover

1.2.1.1 Cover

Item No.: 2016-100  
Finger guard; touchproof cover protects unused conductor entries; yellow



1.2.2 DIN-rail

1.2.2.1 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

1.2.3 Ferrule

1.2.3.1 Ferrule



**Item No.: 216-284**  
Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black



**Item No.: 216-289**  
Ferrule; Sleeve for 10 mm² / AWG 8; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red



**Item No.: 216-210**  
Ferrule; Sleeve for 16 mm² / AWG 6; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue



**Item No.: 216-286**  
Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue



**Item No.: 216-287**  
Ferrule; Sleeve for 4 mm² / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray



**Item No.: 216-288**  
Ferrule; Sleeve for 6 mm² / AWG 10; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; yellow

1.2.4 Installation

1.2.4.1 Cover



**Item No.: 709-156**  
Cover; Type 3; suitable for cover carrier, type 3; 1 m long; transparent

1.2.4.2 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

## 1.2.5 Jumper

### 1.2.5.1 Jumper



**Item No.: 2016-402**

Jumper; 2-way; insulated; light gray



**Item No.: 2016-403**

Jumper; 3-way; insulated; light gray



**Item No.: 2016-404**

Jumper; 4-way; insulated; light gray



**Item No.: 2016-405**

Jumper; 5-way; insulated; light gray



**Item No.: 2016-433**

Jumper; from 1 to 3; insulated; light gray



**Item No.: 2016-434**

Jumper; from 1 to 4; insulated; light gray



**Item No.: 2016-435**

Jumper; from 1 to 5; insulated; light gray



**Item No.: 2016-405/011-000**

Star point jumper; 3-way; insulated; light gray



**Item No.: 2016-499**

Step-down jumper; from 2016/2010 to 2010/2006/2004/2002 series; from 2216/2210 to 2210/2206/2204/2202 series; insulated; light gray



**Item No.: 285-430**

Step-down jumper; from 285 (35mm<sup>2</sup>) to 2016/2010 series; insulated; gray

## 1.2.6 Marking

### 1.2.6.1 Group marker carrier



**Item No.: 2009-191**

Group marker carrier; gray



**Item No.: 2009-192**

Group marker carrier; gray



**Item No.: 2009-193**

Group marker carrier; gray

### 1.2.6.2 Marker



**Item No.: 2009-145/000-006**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue



**Item No.: 2009-145/000-007**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray



**Item No.: 2009-145/000-023**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green



**Item No.: 2009-145/000-012**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange



**Item No.: 2009-145/000-005**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; red



**Item No.: 2009-145/000-024**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet



**Item No.: 2009-145**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white



**Item No.: 2009-145/000-002**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow



**Item No.: 248-501/000-006**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; blue



**Item No.: 248-501/000-007**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; gray



**Item No.: 248-501/000-023**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; green



**Item No.: 248-501/000-017**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; light green



**Item No.: 248-501/000-012**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; orange



**Item No.: 248-501/000-005**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; red



**Item No.: 248-501/000-024**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; violet



**Item No.: 248-501**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white



**Item No.: 248-501/000-002**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; yellow



**Item No.: 793-5501/000-006**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; blue



**Item No.: 793-5501/000-007**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; gray



**Item No.: 793-5501/000-023**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; green



**Item No.: 793-5501/000-017**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; light green



**Item No.: 793-5501/000-012**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; orange



**Item No.: 793-5501/000-005**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; red



**Item No.: 793-5501/000-024**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; violet



1.2.6.2 Marker



**Item No.: 793-5501**  
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; white



**Item No.: 793-5501/000-002**  
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; yellow



**Item No.: 793-501/000-006**  
WMB marking card; as card; not stretchable; plain; snap-on type; blue



**Item No.: 793-501/000-007**  
WMB marking card; as card; not stretchable; plain; snap-on type; gray



**Item No.: 793-501/000-023**  
WMB marking card; as card; not stretchable; plain; snap-on type; green



**Item No.: 793-501/000-017**  
WMB marking card; as card; not stretchable; plain; snap-on type; light green



**Item No.: 793-501/000-012**  
WMB marking card; as card; not stretchable; plain; snap-on type; orange



**Item No.: 793-501/000-005**  
WMB marking card; as card; not stretchable; plain; snap-on type; red



**Item No.: 793-501/000-024**  
WMB marking card; as card; not stretchable; plain; snap-on type; violet



**Item No.: 793-501**  
WMB marking card; as card; not stretchable; plain; snap-on type; white



**Item No.: 793-501/000-002**  
WMB marking card; as card; not stretchable; plain; snap-on type; yellow



**Item No.: 2009-115/000-006**  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue



**Item No.: 2009-115/000-007**  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray



**Item No.: 2009-115/000-023**  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green



**Item No.: 2009-115/000-017**  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; light green



**Item No.: 2009-115/000-012**  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange



**Item No.: 2009-115/000-024**  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet



**Item No.: 2009-115**  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white



**Item No.: 2009-115/000-002**  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow

1.2.6.3 Marker carrier



**Item No.: 2009-198**  
Adaptor; gray

1.2.6.4 Marking strip



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

1.2.7 Screwless end stop

1.2.7.1 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



1.2.8 Test and measurement

1.2.8.1 Testing accessories



**Item No.: 2016-511**  
Modular TOPJOB®S connector; modular; for jumper contact slot; 1-pole; 4,00 mm²; gray



**Item No.: 2016-549**  
Spacer module; modular; e.g., for bridging commoned terminal blocks; gray



**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

1.2.9 Tool

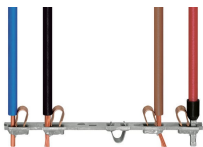
1.2.9.1 Operating tool



**Item No.: 210-721**  
Operating tool; Blade: 5.5 x 0.8 mm; with a partially insulated shaft; multicoloured

Installation Notes

Conductor termination



All conductor types at a glance



Push-in termination of solid and ferruled conductors



Push-in termination of solid and ferruled conductors

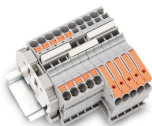


Insert fine-stranded conductors via operating tool.



Removing all conductors via operating tool.

Commoning



Insert a push-in type jumper bar and push down until it hits the backstop.



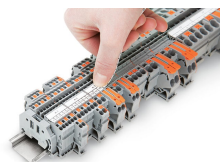
Commoning with step-down jumpers.

## Testing

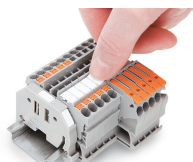


Testing with a 2 mm Ø test plug (max. 42 V).

## Marking



Snapping a marking strip into a marker slot.



Snapping a marking strip into the marker slot.