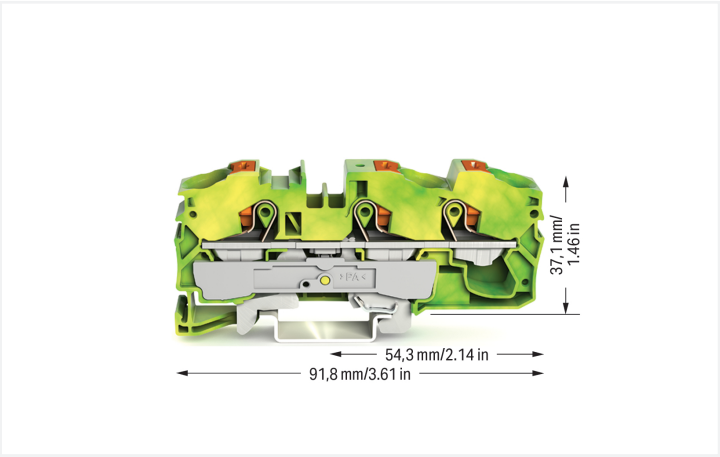
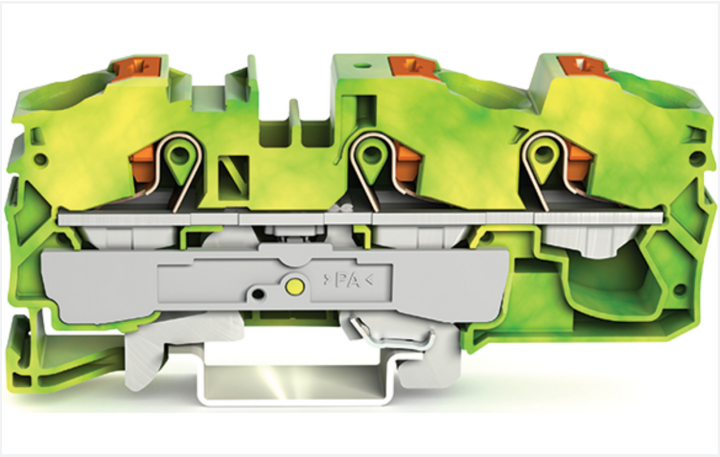
# Data Sheet | Item Number: 2216-1307

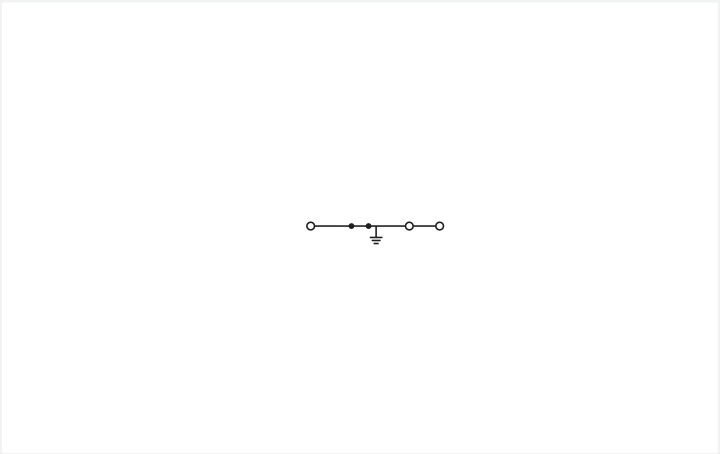
3-conductor ground terminal block; with push-button; 16 mm²; with test port; side and center marking; for DIN-rail 35 x 15 and 35 x 7.5; Push-in CAGE CLAMP®; 16,00 mm²; green-yellow

https://www.wago.com/2216-1307



Color: green-yellow



Similar to illustration

Ground terminal block, 2216 Series, green-yellow

This ground terminal block (item number 2216-1307) is designed to connect conductors quickly and easily. Conductors can only be connected to this ground terminal block if their strip length is between 18 and 20 mm . Our ground terminal blocks directly connect the mounting rail and the electrical conductors thanks to an integrated mounting foot. This connection ensures both electrical and mechanical stability between the conductors and the mounting adapter. Featuring conductor terminals along with Push-in CAGE CLAMP®, this connector outperforms the competition. Push-in CAGE CLAMP® connection technology is ideal for connecting all conductor types. It allows direct insertion of both solid and fine-stranded conductors with ferrules without the need for tools—all thanks to its pluggable design. The item's dimensions are (12 x 91.8 x 43.7) mm (width x height x depth). Depending on the conductor type, this ground terminal block is designed for conductor cross sections ranging from 0.5 mm² to 16 mm².

Perfect termination for all conductor types thanks to Push-in CAGE CLAMP®

This through rail-mount terminal block is operated with a push-button. Our TOPJOB® S rail-mount terminal blocks are perfect for many different 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).

- Actuation via push-button
- The right solution for every wiring task
- Suitable for specific Ex applications



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- Ready to install, immediately usable

## Electrical data

### 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! |

### Ex information

| | |
|---|---|
| Reference to hazardous areas | See "Downloads – Documentation – Additional Information: Technical Section; Technical Explications" |

### General information

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

## Connection Data

| | |
|---|---|
| Clamping units | 3 |
| Total number of potentials | 1 |
| Number of levels | 1 |
| Number of jumper slots | 2 |

### 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 |
| Stranded conductor | 0.5 … 25 mm² / 20 … 4 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.<br>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 | 91.8 mm / 3.622 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 |


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## Material data

| | |
|---|---|
| Note (material data) | Information on material specifications can be found here |
| Color | green-yellow |
| Material group | I |
| Insulation material (main housing) | Polyamide (PA66) |
| Flammability class per UL94 | V0 |
| Fire load | 0.431 MJ |
| Actuator color | orange |
| Weight | 48 g |

## Environmental requirements

| | |
|---|---|
| Continuous operating temperature | -60 … +105 °C |

### Environmental Testing

| | |
|---|---|
| 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>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 Hz to $f_2$ = 150 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 Hz to $f_2$ = 150 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 |


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## Commercial data

| | |
|---|---|
| PU (SPU) | 20 pcs |
| Packaging type | Box |
| Country of origin | DE |
| GTIN | 4055143732802 |
| Customs tariff number | 85369010000 |

## Product Classification

| | |
|---|---|
| UNSPSC | 39121410 |
| eCl@ss 10.0 | 27-14-11-41 |
| eCl@ss 9.0 | 27-14-11-41 |
| ETIM 9.0 | EC000901 |
| ETIM 10.0 | EC000901 |
| 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 60947 | NTR NL-7947 |
| CSA<br>CSA Group | C22.2 | 70175032 |
| KEMA/KEUR<br>DEKRA Certification B.V. | EN 60947 | 71-152838 |
| UL<br>Underwriters Laboratories Inc. | C22.2 No. 158 | UL-US-L45172-6187181-72608102-1 |

### Declarations of conformity and manufacturer's declarations

| Approval | Standard | Certificate Name |
|---|---|---|
| ATEX-Attestation of Conformity<br>WAGO GmbH & Co. KG | - | - |
| EU-Declaration of Conformity<br>WAGO GmbH & Co. KG | - | - |
| Railway<br>WAGO GmbH & Co. KG | - | Z00004408.000 |
| UK-Declaration of Conformity<br>WAGO GmbH & Co. KG | - | - |

### Approvals for marine applications

| Approval | Standard | Certificate Name |
|---|---|---|
| ABS<br>American Bureau of Shipping | - | 24-0095985-PDA |
| BV<br>Bureau Veritas S.A. | IEC 60947 | 58186/A0 BV |
| DNV GL<br>Det Norske Veritas, Germanischer Lloyd | - | TAE00003JT |
| LR<br>Lloyds Register | - | 19/20050 |

### Approvals for hazardous areas

| Approval | Standard | Certificate Name |
|---|---|---|
| AEx<br>Underwriters Laboratories Inc. | UL 60079 | E185892 (AEx eb IIC resp. Ex eb IIC) |
| ATEX<br>Physikalisch Technische Bundesanstalt | EN 60079-0 | PTB 18 ATEX 1009 U (II 2 G Ex eb IIC Gb bzw. I M 2 Ex eb I Mb) |
| CCC<br>CNEX | GB/T 3836.3 | 2020312313000175 (Ex eb IIC Gb, Ex eb I Mb) |
| IECEx<br>Physikalisch Technische Bundesanstalt | IEC 60079 | IECEx PTB 18.0016U (Ex eb IIC Gb and Ex eb I Mb) |
| INMETRO<br>TÜV Rheinland do Brasil Ltda. | IEC 60079 | TÜV 23.1454 U |


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## Downloads

### Environmental Product Compliance

**Compliance Search**

Environmental Product Compliance 2216-1307

### Documentation

**Bid Text**

| | | |
|---|---|---|
| 2216-1307 | 15.04.2019 | xml 3.80 KB |
| 2216-1307 | 15.04.2019 | docx 14.86 KB |

### CAD/CAE-Data

**CAD data**

2D/3D Models 2216-1307

**CAE data**

EPLAN Data Portal 2216-1307

ZUKEN Portal 2216-1307

## 1 Compatible Products

### 1.1 Required Accessories

#### 1.1.1 End plate

##### 1.1.1.1 End plate



Item No.: 2016-1391
End and intermediate plate; 1 mm thick; gray



Item No.: 2016-1392
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



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## 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

## 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



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## 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

## 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



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



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### 1.2.6.2 Marker



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; 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



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## 1.2.9 Tool

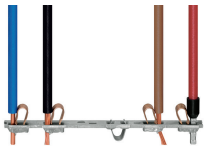
### 1.2.9.1 Operating tool



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

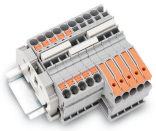


Insert fine-stranded conductors via operating tool.



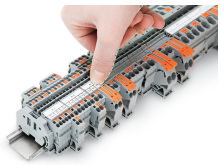
Removing all conductors via operating tool.

### Commoning

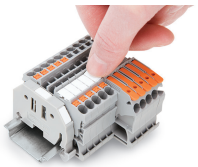


Insert a push-in type jumper bar and push down until it hits the backstop.

### Marking



Snapping a marking strip into a marker slot.



Snapping a marking strip into the marker slot.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