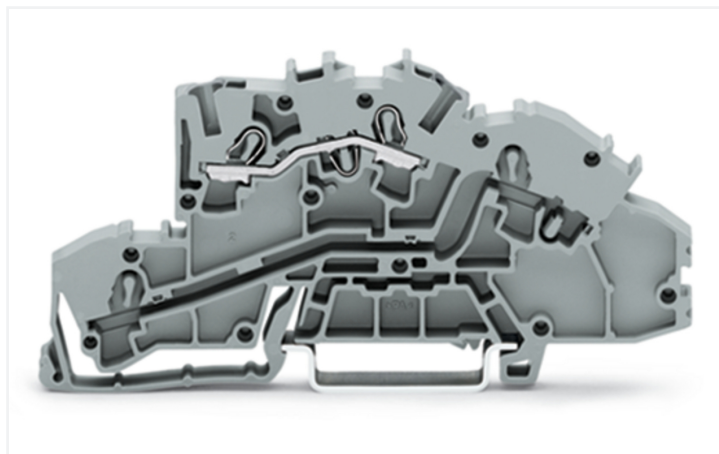
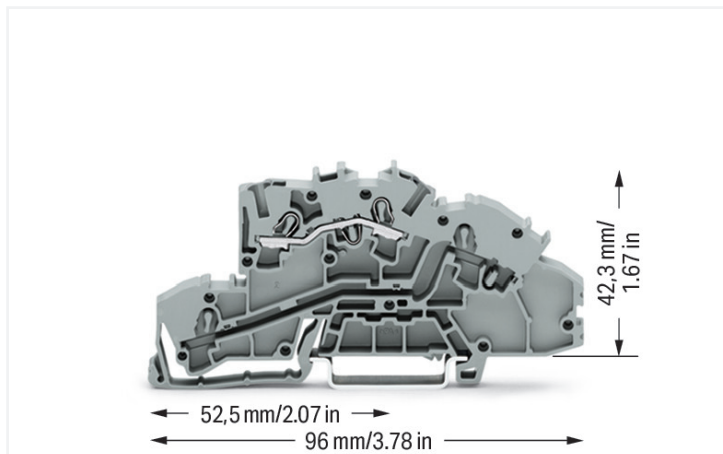


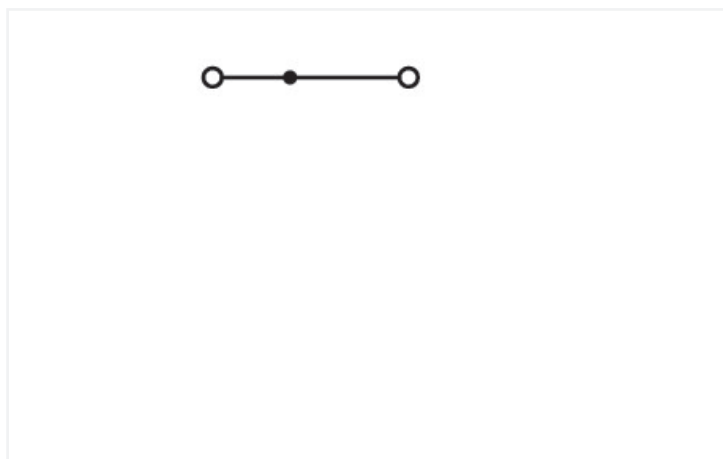
## Data Sheet | Item Number: 2003-7650

Multilevel installation terminal block; with operating slots; 2.5 mm<sup>2</sup>; L; Push-in CAGE CLAMP®; 2,50 mm<sup>2</sup>; gray

<https://www.wago.com/2003-7650>



Color: ■ gray



Similar to illustration

### Multilevel installation terminal block, 2003 Series, Push-in CAGE CLAMP®

Quick and easy connections are guaranteed with this multilevel installation terminal block (item number 2003-7650). Ensure that the strip lengths are between 10 and 12 mm when connecting conductors to this multilevel installation terminal block. This product features conductor terminals and utilizes Push-in CAGE CLAMP®. 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. Depending on the conductor type, this multilevel installation terminal block is ideal for conductor cross sections ranging from 0.25 mm<sup>2</sup> to 4 mm<sup>2</sup>.

#### Electrical data

| Ratings                         | Potential - potential |                     |                     |
|---------------------------------|-----------------------|---------------------|---------------------|
| Ratings per                     | IEC/EN<br>60947-7-1   | IEC/EN<br>60947-7-1 | IEC/EN<br>60947-7-1 |
| Overvoltage category            | III                   | III                 | II                  |
| Pollution degree                | 3                     | 2                   | 2                   |
| Nominal voltage                 | 400 V                 | -                   | -                   |
| Rated impulse withstand voltage | 6 kV                  | -                   | -                   |
| Rated current                   | 24 A                  | -                   | -                   |

| Ratings  | Potential - potential |   |   |
|--|-----------------------|---|---|
| Current at conductor cross-section<br>(max.) mm <sup>2</sup> | 32 A                  | - | - |

### Power Loss

|  |                  |
|--|------------------|
| Power loss, per pole (potential)                             | 0.7661 W         |
| Rated current $I_N$ for power loss specification             | 24 A             |
| Resistance value for specified, current-dependent power loss | 0.00133 $\Omega$ |

### General information

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

### Connection Data

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

### Connection 1

|  |   |
|--|---|
| Connection technology                                      | Push-in CAGE CLAMP®   |
| Actuation type   | Operating tool  |
| Connectable conductor materials                            | Copper  |
| Nominal cross-section                                      | 2.5 mm <sup>2</sup>   |
| Solid conductor  | 0.25 ... 4 mm <sup>2</sup> / 22 ... 12 AWG  |
| Solid conductor; push-in termination                       | 0.75 ... 4 mm <sup>2</sup> / 18 ... 12 AWG  |
| Fine-stranded conductor                                    | 0.25 ... 4 mm <sup>2</sup> / 22 ... 12 AWG  |
| Fine-stranded conductor; with insulated ferrule            | 0.25 ... 2.5 mm <sup>2</sup> / 22 ... 14 AWG  |
| Fine-stranded conductor; with ferrule; push-in termination | 1 ... 2.5 mm <sup>2</sup> / 18 ... 14 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   | 10 ... 12 mm / 0.39 ... 0.47 inches   |
| Wiring direction   | Front-entry wiring  |

### Physical data

|                                   |                        |
|-----------------------------------|------------------------|
| Width                             | 5.2 mm / 0.205 inches  |
| Height                            | 96 mm / 3.78 inches    |
| Depth from upper-edge of DIN-rail | 42.3 mm / 1.665 inches |

### Mechanical data

|                   |                     |
|-------------------|---------------------|
| Potential marking | L                   |
| 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                              | gray   |
| Material group                     | I  |
| Insulation material (main housing) | Polyamide (PA66)   |
| Flammability class per UL94        | V0   |
| Fire load                          | 0.241 MJ   |
| Weight                             | 9.8 g  |

### Environmental requirements

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

### Commercial data

|                       |               |
|-----------------------|---------------|
| Product Group         | 22 (TOPJOB S) |
| PU (SPU)              | 50 pcs        |
| Packaging type        | Box           |
| Country of origin     | DE            |
| GTIN                  | 4045454735944 |
| Customs tariff number | 85369010000   |

### Product Classification

|             |                      |
|-------------|----------------------|
| UNSPSC      | 39121410             |
| eCl@ss 10.0 | 27-14-11-25          |
| eCl@ss 9.0  | 27-14-11-25          |
| ETIM 9.0    | EC001329             |
| ETIM 10.0   | EC001329             |
| 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 | 71-113530        |
| CCA<br>DEKRA Certification B.V. | EN 60947 | NTR NL-7828      |

#### Declarations of conformity and manufacturer's declarations

| Approval  | Standard | Certificate Name |
|---|----------|------------------|
| EU-Declaration of Confor-<br>mity<br>WAGO GmbH & Co. KG | -        | -                |
| UK-Declaration of Confor-<br>mity<br>WAGO GmbH & Co. KG | -        | -                |

### Downloads

#### Environmental Product Compliance

##### Compliance Search

Environmental Product  
Compliance 2003-7650



## Documentation

| Bid Text  |            |                  |  |
|-----------|------------|------------------|--|
| 2003-7650 | 29.04.2019 | xml<br>3.91 KB   |  |
| 2003-7650 | 29.04.2019 | docx<br>14.68 KB |  |

## CAD/CAE-Data

| CAD data                  | CAE data                       |
|---------------------------|--------------------------------|
| 2D/3D Models<br>2003-7650 | EPLAN Data Portal<br>2003-7650 |
|                           | WSCAD Universe<br>2003-7650    |
|                           | ZUKEN Portal<br>2003-7650      |

## 1 Compatible Products

### 1.1 Required Accessories

#### 1.1.1 End plate

##### 1.1.1.1 End plate



**Item No.: 2003-7692**

End and intermediate plate; 0.8 mm thick; orange

### 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray



**Item No.: 216-262**

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 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 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red



**Item No.: 216-263**

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red



**Item No.: 216-244**

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black



**Item No.: 216-264**

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black



**Item No.: 216-246**

Ferrule; Sleeve for 2.5 mm<sup>2</sup> / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue



**Item No.: 216-266**

Ferrule; Sleeve for 2.5 mm<sup>2</sup> / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue

## 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.: 2009-304**

Busbar carrier; not suitable for use as end stop; for DIN 35 rail; 1.5 mm thick; blue



**Item No.: 2009-305**

Busbar carrier; with end stop function and detachable separator plate; for DIN 35 rail; 7.5 mm thick; blue

1.2.4 Insulation stop

1.2.4.1 Insulation stop



**Item No.: 2002-171**

Insulation stop; 0.25 - 0.5 mm<sup>2</sup>; 5 pieces/strip; light gray

**Item No.: 2002-172**

Insulation stop; 0.75 - 1 mm<sup>2</sup>; 5 pieces/strip; dark gray

1.2.5 Jumper

1.2.5.1 Jumper



**Item No.: 2002-400**

Continuous jumper; 2-way; insulated; light gray



**Item No.: 2002-413**

Continuous jumper; 3-way; insulated; light gray



**Item No.: 2002-415**

Continuous jumper; 5-way; insulated; light gray



**Item No.: 2002-423/000-006**

Continuous jumper; from 1 to 3; insulated; blue



**Item No.: 2002-423**

Continuous jumper; from 1 to 3; insulated; light gray



**Item No.: 2002-423/000-005**

Continuous jumper; from 1 to 3; insulated; red



**Item No.: 2002-424/000-006**

Continuous jumper; from 1 to 4; insulated; blue



**Item No.: 2002-424**

Continuous jumper; from 1 to 4; insulated; light gray



**Item No.: 2002-424/000-005**

Continuous jumper; from 1 to 4; insulated; red



**Item No.: 2002-406/020-000**

Delta jumper; insulated; light gray



**Item No.: 2002-410/000-006**

Jumper; 10-way; insulated; blue



**Item No.: 2002-410**

Jumper; 10-way; insulated; light gray



**Item No.: 2002-410/000-005**

Jumper; 10-way; insulated; red



**Item No.: 2002-402/000-006**

Jumper; 2-way; insulated; blue



**Item No.: 2002-402**

Jumper; 2-way; insulated; light gray



**Item No.: 2002-402/000-005**

Jumper; 2-way; insulated; red



**Item No.: 2002-403/000-006**

Jumper; 3-way; insulated; blue



**Item No.: 2002-403**

Jumper; 3-way; insulated; light gray



**Item No.: 2002-403/000-005**

Jumper; 3-way; insulated; red



**Item No.: 2002-404/000-006**

Jumper; 4-way; insulated; blue



**Item No.: 2002-404**

Jumper; 4-way; insulated; light gray



**Item No.: 2002-404/000-005**

Jumper; 4-way; insulated; red



**Item No.: 2002-405/000-006**

Jumper; 5-way; insulated; blue



**Item No.: 2002-405**

Jumper; 5-way; insulated; light gray



**Item No.: 2002-405/000-005**

Jumper; 5-way; insulated; red



**Item No.: 2002-406/000-006**

Jumper; 6-way; insulated; blue



**Item No.: 2002-406**

Jumper; 6-way; insulated; light gray



**Item No.: 2002-406/000-005**

Jumper; 6-way; insulated; red



**Item No.: 2002-407/000-006**

Jumper; 7-way; insulated; blue



**Item No.: 2002-407**

Jumper; 7-way; insulated; light gray



**Item No.: 2002-407/000-005**

Jumper; 7-way; insulated; red



**Item No.: 2002-408/000-006**

Jumper; 8-way; insulated; blue



**Item No.: 2002-408**

Jumper; 8-way; insulated; light gray



**Item No.: 2002-408/000-005**

Jumper; 8-way; insulated; red



**Item No.: 2002-409/000-006**

Jumper; 9-way; insulated; blue



**Item No.: 2002-409**

Jumper; 9-way; insulated; light gray



**Item No.: 2002-409/000-005**

Jumper; 9-way; insulated; red



**Item No.: 2002-440**

Jumper; from 1 to 10; insulated; light gray



**Item No.: 2002-433**

Jumper; from 1 to 3; insulated; light gray



**Item No.: 2002-434**

Jumper; from 1 to 4; insulated; light gray



**Item No.: 2002-435**

Jumper; from 1 to 5; insulated; light gray



**Item No.: 2002-436**

Jumper; from 1 to 6; insulated; light gray



**Item No.: 2002-437**

Jumper; from 1 to 7; insulated; light gray



**Item No.: 2002-438**




Jumper; from 1 to 8; insulated; light gray

1.2.5.1 Jumper





















|   |   |  |  |
|---|---|--|--|
| <br><b>Item No.: 2002-439</b><br>Jumper; from 1 to 9; insulated; light gray                          | <br><b>Item No.: 2002-480</b><br>Staggered jumper; 10-way; insulated; light gray         | <br><b>Item No.: 2002-481</b><br>Staggered jumper; 11-way; insulated; light gray | <br><b>Item No.: 2002-482</b><br>Staggered jumper; 12-way; insulated; light gray        |
| <br><b>Item No.: 2002-473/011-000</b><br>Staggered jumper; 2-way; from 1 to 3; insulated; light gray | <br><b>Item No.: 2002-472</b><br>Staggered jumper; 2-way; insulated; light gray          | <br><b>Item No.: 2002-473</b><br>Staggered jumper; 3-way; insulated; light gray   | <br><b>Item No.: 2002-475/011-000</b><br>Staggered jumper; 3-way; insulated; light gray |
| <br><b>Item No.: 2002-474</b><br>Staggered jumper; 4-way; insulated; light gray                      | <br><b>Item No.: 2002-475</b><br>Staggered jumper; 5-way; insulated; light gray          | <br><b>Item No.: 2002-476</b><br>Staggered jumper; 6-way; insulated; light gray   | <br><b>Item No.: 2002-477</b><br>Staggered jumper; 7-way; insulated; light gray         |
| <br><b>Item No.: 2002-478</b><br>Staggered jumper; 8-way; insulated; light gray                      | <br><b>Item No.: 2002-479</b><br>Staggered jumper; 9-way; insulated; light gray          | <br><b>Item No.: 2002-477/011-000</b><br>Staggered jumper; insulated; light gray | <br><b>Item No.: 2002-479/011-000</b><br>Staggered jumper; insulated; light gray        |
| <br><b>Item No.: 2002-481/011-000</b><br>Staggered jumper; insulated; light gray                     | <br><b>Item No.: 2002-405/011-000</b><br>Star point jumper; 3-way; insulated; light gray | <br><b>Item No.: 210-103</b><br>Wire commoning chain; insulated; black           | <br><b>Item No.: 210-123</b><br>Wire commoning chain; insulated; blue                   |

1.2.6 Marking

1.2.6.1 Group marker carrier

|  |  |  |
|--|--|--|
| <br><b>Item No.: 2009-191</b><br>Group marker carrier; gray | <br><b>Item No.: 2009-192</b><br>Group marker carrier; gray | <br><b>Item No.: 2009-193</b><br>Group marker carrier; gray |
|--|--|--|

1.2.6.2 Marker

|  |  |  |  |
|--|--|--|--|
| <br><b>Item No.: 2009-145/000-006</b><br>Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue | <br><b>Item No.: 2009-145/000-007</b><br>Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray         | <br><b>Item No.: 2009-145/000-023</b><br>Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green         | <br><b>Item No.: 2009-145/000-012</b><br>Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange       |
| <br><b>Item No.: 2009-145/000-005</b><br>Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; red  | <br><b>Item No.: 2009-145/000-024</b><br>Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet       | <br><b>Item No.: 2009-145</b><br>Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white                 | <br><b>Item No.: 2009-145/000-002</b><br>Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow       |
| <br><b>Item No.: 248-501/000-006</b><br>Mini-WSB marking card; as card; not stretchable; plain; snap-on type; blue                                  | <br><b>Item No.: 248-501/000-007</b><br>Mini-WSB marking card; as card; not stretchable; plain; snap-on type; gray  | <br><b>Item No.: 248-501/000-023</b><br>Mini-WSB marking card; as card; not stretchable; plain; snap-on type; green  | <br><b>Item No.: 248-501/000-017</b><br>Mini-WSB marking card; as card; not stretchable; plain; snap-on type; light green                                   |
| <br><b>Item No.: 248-501/000-012</b><br>Mini-WSB marking card; as card; not stretchable; plain; snap-on type; orange                                | <br><b>Item No.: 248-501/000-005</b><br>Mini-WSB marking card; as card; not stretchable; plain; snap-on type; red   | <br><b>Item No.: 248-501/000-024</b><br>Mini-WSB marking card; as card; not stretchable; plain; snap-on type; violet   | <br><b>Item No.: 248-501</b><br>Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white   |
| <br><b>Item No.: 248-501/000-002</b><br>Mini-WSB marking card; as card; not stretchable; plain; snap-on type; yellow                                | <br><b>Item No.: 793-5501/000-006</b><br>WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; blue | <br><b>Item No.: 793-5501/000-014</b><br>WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; brown | <br><b>Item No.: 793-5501/000-007</b><br>WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; gray |

1.2.6.2 Marker



**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.: 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.: 2009-115/000-005**

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; red



**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 Push-in type wire jumper

1.2.7.1 Jumper



**Item No.: 2009-414**

Push-in type wire jumper; 1.5 mm<sup>2</sup>; insulated; 110 mm long; black



**Item No.: 2009-414/000-005**

Push-in type wire jumper; 1.5 mm<sup>2</sup>; insulated; 110 mm long; black



**Item No.: 2009-416**

Push-in type wire jumper; 1.5 mm<sup>2</sup>; insulated; 250 mm long; black



**Item No.: 2009-414/000-006**

Push-in type wire jumper; insulated; 110 mm long; black



**Item No.: 2009-412**

Push-in type wire jumper; insulated; 60 mm long; black

## 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 mm<sup>2</sup>; 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.: 210-658**

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; angled; short; multicoloured



**Item No.: 210-720**

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured



**Item No.: 2009-309**

Operating tool; Blades: 3.5 x 0.5 mm and 2.5 x 0.4 mm; for TOPJOB®S installation terminal blocks

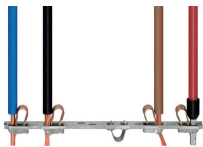


**Item No.: 2009-310**

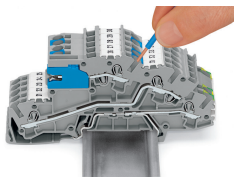
Operating tool; Blades: 3.5 x 0.5 mm and 5.5 x 0.8 mm; for TOPJOB®S installation terminal blocks; green

## Installation Notes

### Conductor termination

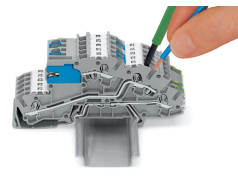


**All conductor types at a glance**



**Inserting a conductor via push-in termination.**

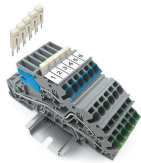
Solid conductors with cross-sections from either one size above, or up to two sizes below, the rated cross-section can be simply pushed in – no tools needed.



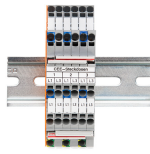
**Inserting a conductor via operating tool.**

Connecting fine-stranded conductors without ferrules, or small cross-sectional conductors that cannot be pushed in, is performed similarly to the original CAGE CLAMP® – just use an operating tool.

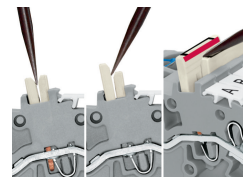
### Commoning



Adjacent Jumpers for Continuous Commoning (2002-400)

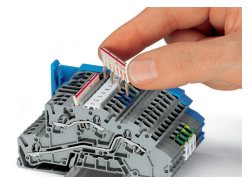


Commoning two potentials in one single jumper slot via extremely slim staggered jumpers.

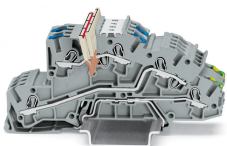


**Removing a staggered jumper:**

Insert the operating tool between the staggered jumpers, then lift up the jumper.

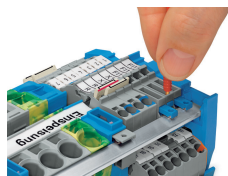


Orient the staggered jumpers' red stripes on the inside. Insert the staggered jumper and push down until it hits the backstop.

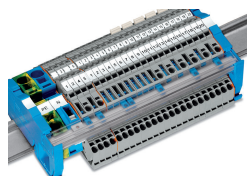
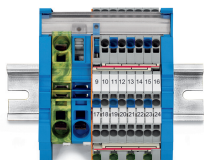


Orient the staggered jumpers' red stripes on the inside. Insert the staggered jumper and push down until it hits the backstop.

## Testing



## Busbar



Mounting busbars on busbar carriers: Insert busbar ends onto large busbar carriers (Item No. 2009-305) or onto supply terminal blocks with an integrated busbar carrier.

The busbar transparent cover (Item No. 777-303) protects the busbar against accidental contact and makes it easy to see which terminal blocks are connected to the busbar.