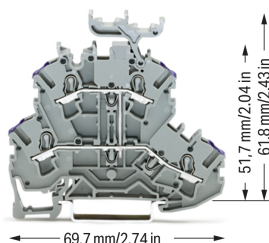
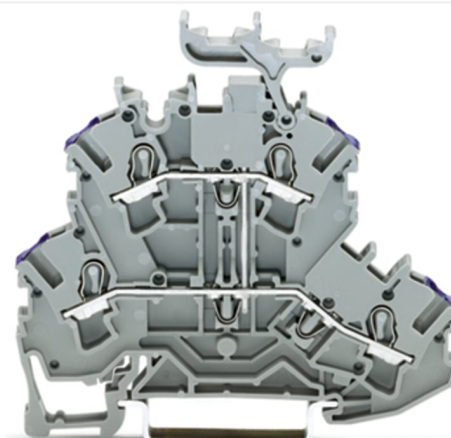


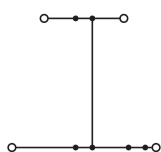
## Data Sheet | Item Number: 2002-2238

Double-deck terminal block; 4-conductor through terminal block; L; with marker carrier; suitable for Ex e II applications; internal commoning; conductor entry with violet marking; for DIN-rail 35 x 15 and 35 x 7.5; 2.5 mm<sup>2</sup>; Push-in CAGE CLAMP®; 2,50 mm<sup>2</sup>; gray

<https://www.wago.com/2002-2238>



Color: ■ gray



Similar to illustration

Double-deck terminal block, 2002 Series, Push-in CAGE CLAMP®

This double-deck terminal block (item number 2002-2238) simplifies electrical installations. Strip lengths must be between 10 and 12 mm when connecting conductors to this double-deck terminal block. The double-deck terminal block also serves as a through 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 needing to use any tools—all thanks to its pluggable design. Depending on the conductor type, this double-deck terminal block is designed for conductor cross sections ranging from 0.25 mm<sup>2</sup> to 4 mm<sup>2</sup>.

This product is designed for specific Ex applications (please refer to the product datasheet).

- Safe and fast installation
- L in a single terminal
- The right solution for every wiring task
- Actuation via operating tool
- Suitable for specific Ex applications



Electrical data

| Ratings per                                                  | IEC/EN 60947-7-1 |     |    |
|--------------------------------------------------------------|------------------|-----|----|
| Overvoltage category                                         | III              | III | II |
| Pollution degree                                             | 3                | 2   | 2  |
| Nominal voltage                                              | 500 V            | -   | -  |
| Rated impulse withstand voltage                              | 6 kV             | -   | -  |
| Rated current                                                | 24 A             | -   | -  |
| Current at conductor cross-section (max.)<br>mm <sup>2</sup> | 28 A             | -   | -  |

| Approvals per | UL 1059 |       |       |
|---------------|---------|-------|-------|
| Use group     | B       | C     | D     |
| Rated voltage | 300 V   | 300 V | 600 V |
| Rated current | 20 A    | 20 A  | 5 A   |

| Approvals per | CSA 22.2 No 158 |       |   |
|---------------|-----------------|-------|---|
| Use group     | B               | C     | D |
| Rated voltage | 300 V           | 300 V | - |
| Rated current | 20 A            | 20 A  | - |

| Ex information                      |                                                                                                     |
|-------------------------------------|-----------------------------------------------------------------------------------------------------|
| Reference to hazardous areas        | See "Downloads – Documentation – Additional Information: Technical Section; Technical Explanations" |
| Ratings per                         | ATEX: PTB 03 ATEX 1162 U / IECEx: PTB 03.0004U (Ex eb IIC Gb)                                       |
| Rated voltage EN (Ex e II)          | 440 V                                                                                               |
| Rated current (Ex e II)             | 20 A                                                                                                |
| Rated current (Ex e II) with jumper | 18 A                                                                                                |

| Power Loss                                                   |           |
|--------------------------------------------------------------|-----------|
| Power loss, per pole (potential)                             | 0.7661 W  |
| Rated current I <sub>N</sub> for power loss specification    | 24 A      |
| Resistance value for specified, current-dependent power loss | 0.00133 Ω |

| General information |                    |
|---------------------|--------------------|
| Wiring direction    | Front-entry wiring |

Connection Data

|                            |   |
|----------------------------|---|
| Clamping units             | 4 |
| Total number of potentials | 1 |
| Number of levels           | 2 |
| Number of jumper slots     | 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                            | 69.7 mm / 2.744 inches |
| Depth from upper-edge of DIN-rail | 61.8 mm / 2.433 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                          | 0.201 MJ                                                                 |
| Weight                             | 11.2 g                                                                   |

| Environmental requirements       |                 |
|----------------------------------|-----------------|
| Processing temperature           | -35 ... +85 °C  |
| 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 <sub>1</sub> = 5 Hz to f <sub>2</sub> = 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 <sub>1</sub> = 5 Hz to f <sub>2</sub> = 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                                     |



Environmental Testing

|                                                                       |        |
|-----------------------------------------------------------------------|--------|
| 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

|                       |               |
|-----------------------|---------------|
| Product Group         | 22 (TOPJOB S) |
| PU (SPU)              | 50 pcs        |
| Packaging type        | Box           |
| Country of origin     | DE            |
| GTIN                  | 4044918989824 |
| Customs tariff number | 85369010000   |

Product Classification

|             |                      |
|-------------|----------------------|
| UNSPSC      | 39121410             |
| eCl@ss 10.0 | 27-14-11-20          |
| eCl@ss 9.0  | 27-14-11-20          |
| ETIM 9.0    | EC000897             |
| ETIM 10.0   | EC000897             |
| 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-8054      |
| CSA<br>CSA Group                      | C22.2 No. 158 | 154112           |
| DEKRA<br>DEKRA Certification B.V.     | EN 60947      | 71-149763        |
| KEMA/KEUR<br>DEKRA Certification B.V. | EN 60947      | 71-124163        |
| UL<br>Underwriters Laboratories Inc.  | UL 1059       | E45172           |

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                        | -        | Railway Ready    |
| UK-Declaration of Conformity<br>WAGO GmbH & Co. KG   | -        | -                |



Approvals for marine applications



| Approval                                              | Standard | Certificate Name  |
|-------------------------------------------------------|----------|-------------------|
| ABS<br>American Bureau of Ship-<br>ping               | EN 60947 | 24-0152298-PDA    |
| DNV GL<br>Det Norske Veritas, Ger-<br>manischer Lloyd | -        | TAE00001V2        |
| PRS<br>Polski Rejestr Statków                         | -        | TE/1094/880590/23 |

Approvals for hazardous areas



| Approval                                          | Standard    | Certificate Name                                            |
|---------------------------------------------------|-------------|-------------------------------------------------------------|
| ATEX<br>Physikalisch Technische<br>Bundesanstalt  | EN 60079    | PTB 03 ATEX 1162 U (II2G<br>Ex eb IIC Gb, IM2 Ex eb<br>IMb) |
| CCC<br>CQST/CNEx                                  | GB/T 3836.3 | 2020312313000238 (Ex eb<br>IIC Gb, Ex eb I Mb)              |
| IECEX<br>Physikalisch Technische<br>Bundesanstalt | IEC 60079   | IECEX PTB 03.0004U (Ex eb<br>IIC Gb or Ex eb I Mb)          |
| INMETRO<br>TÜV Rheinland do Brasil Lt-<br>da.     | IEC 60079   | TÜV 12.1307 U                                               |

Downloads

Environmental Product Compliance

| Compliance Search                             |
|-----------------------------------------------|
| Environmental Product<br>Compliance 2002-2238 |

Documentation

| Bid Text  |            |                  |                                                                                                     |
|-----------|------------|------------------|-----------------------------------------------------------------------------------------------------|
| 2002-2238 | 24.04.2019 | xml<br>4.30 KB   | <a href="#"></a> |
| 2002-2238 | 18.04.2019 | docx<br>15.31 KB | <a href="#"></a> |

CAD/CAE-Data

| CAD data                  |
|---------------------------|
| 2D/3D Models<br>2002-2238 |

| CAE data                       |
|--------------------------------|
| EPLAN Data Portal<br>2002-2238 |
| WSCAD Universe<br>2002-2238    |
| ZUKEN Portal 2002-2238         |

## 1 Compatible Products

### 1.1 Required Accessories

#### 1.1.1 End plate

##### 1.1.1.1 End plate



**Item No.: 2002-2291**

End and intermediate plate; 0.8 mm thick; gray



**Item No.: 2002-2292**

End and intermediate plate; 0.8 mm thick; orange



**Item No.: 209-192**

Separator for Ex e/Ex i applications; 3 mm thick; 125.5 mm wide; orange



**Item No.: 2002-2295**

Separator plate; oversized upper deck; snap-fit type; 2 mm thick; gray



**Item No.: 2002-2296**

Separator plate; oversized upper deck; snap-fit type; 2 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.: 210-508**

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715; silver-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.: 210-506**

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; 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.: 210-504**

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715; 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



**Item No.: 210-505**

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; 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

1.2.2.1 Ferrule



Item No.: 216-266

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

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 Insulation stop

1.2.4.1 Insulation stop



Item No.: 2002-171

Insulation stop; 0.25 - 0.5 mm²; 5 pieces/strip; light gray



Item No.: 2002-172

Insulation stop; 0.75 - 1 mm²; 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

## 1.2.5.1 Jumper



**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



**Item No.: 2002-439**  
Jumper; from 1 to 9; insulated; light gray



**Item No.: 2002-480**  
Staggered jumper; 10-way; insulated; light gray



**Item No.: 2002-481**  
Staggered jumper; 11-way; insulated; light gray



**Item No.: 2002-482**  
Staggered jumper; 12-way; insulated; light gray



**Item No.: 2002-473/011-000**  
Staggered jumper; 2-way; from 1 to 3; insulated; light gray



**Item No.: 2002-472**  
Staggered jumper; 2-way; insulated; light gray



**Item No.: 2002-473**  
Staggered jumper; 3-way; insulated; light gray



**Item No.: 2002-475/011-000**  
Staggered jumper; 3-way; insulated; light gray



**Item No.: 2002-474**  
Staggered jumper; 4-way; insulated; light gray



**Item No.: 2002-475**  
Staggered jumper; 5-way; insulated; light gray



**Item No.: 2002-476**  
Staggered jumper; 6-way; insulated; light gray



**Item No.: 2002-477**  
Staggered jumper; 7-way; insulated; light gray



**Item No.: 2002-478**  
Staggered jumper; 8-way; insulated; light gray



**Item No.: 2002-479**  
Staggered jumper; 9-way; insulated; light gray



**Item No.: 2002-477/011-000**  
Staggered jumper; insulated; light gray



**Item No.: 2002-479/011-000**  
Staggered jumper; insulated; light gray



**Item No.: 2002-481/011-000**  
Staggered jumper; insulated; light gray



**Item No.: 2002-405/011-000**  
Star point jumper; 3-way; insulated; light gray



**Item No.: 210-103**  
Wire commoning chain; 0.5 mm<sup>2</sup>; insulated; black



**Item No.: 210-123**  
Wire commoning chain; insulated; blue

## 1.2.6 Marking

## 1.2.6.1 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.: 793-5501/000-014**

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

**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.: 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

1.2.6.2 Marker carrier



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

1.2.6.3 Marking strip



**Item No.: 2009-110**  
Marking strips; for Smart Printer; 50 m on roll; not stretchable; plain; snap-on type; white

1.2.7 Protective warning marker

1.2.7.1 Cover



**Item No.: 2002-115**  
Protective warning marker; for 5 terminal blocks; with high-voltage symbol, black; yellow

1.2.8 Push-in type wire jumper

1.2.8.1 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

1.2.9 Screwless end stop

1.2.9.1 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

1.2.10 Test and measurement

1.2.10.1 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



**Item No.: 2002-649**  
TOPJOB®S L-type spacer module; modular; e.g., for bridging commoned terminal blocks; gray



**Item No.: 2002-611**  
TOPJOB®S L-type test plug module; modular; 1-pole; gray

1.2.11 Tool

1.2.11.1 Operating tool



**Item No.: 210-658**  
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; angled; short; multi-coloured



**Item No.: 210-720**  
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured



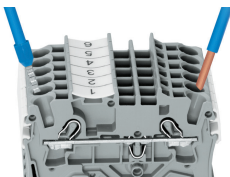
**Item No.: 2009-309**  
Operating tool; Blades: 3.5 x 0.5 mm and 2.5 x 0.4 mm; for TOPJOB®S installation terminal blocks

Installation Notes

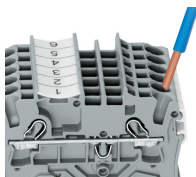
Conductor termination



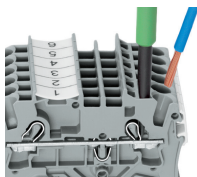
All conductor types at a glance



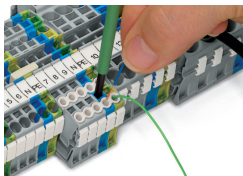
Push-in termination of solid and ferruled conductors



**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.

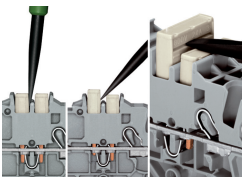


**Inserting a conductor via operating tool:**  
Connecting fine-stranded conductors without ferrules, or small cross-sectional conductors that cannot be pushed in, is performed similarly to the original CAGE CLAMP® – just use an operating tool.  
**Advantage:**  
To open the clamp, the operating tool is inserted vertically. The conductor entry is less than 15 degrees for easier wiring.

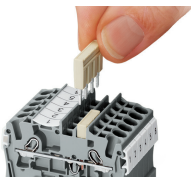


Conductor termination – insulation stop

Commoning

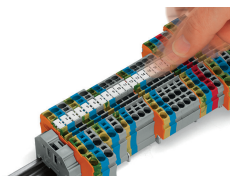


**Removing a push-in type jumper bar:**  
Insert the operating tool between the jumper and partition wall of the dual jumper slots, then lift up the jumper. Place the operating tool in the center of jumpers for up to five contacts (see above), or alternately on both sides for jumpers with more than five contacts.

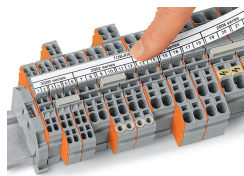
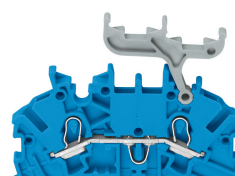


Insert push-in type jumper bar and push down until it hits backstop.

Marking



Snapping WMB Inline markers into marker slots.



**Double-deck terminal blocks**

A double-deck marker carrier (2002-121) can be retrofitted to double-deck terminal blocks without a marker carrier.