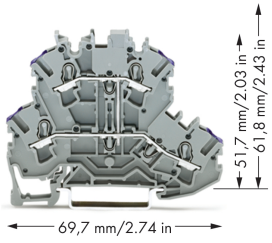
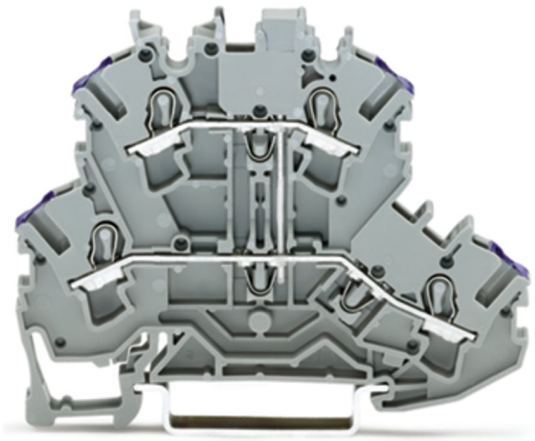
# Data Sheet | Item Number: 2002-2208

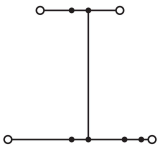
Double-deck terminal block; 4-conductor through terminal block; L; without marker carrier; suitable for Ex e II applications; internal commoning; conductor entry with violet marking; for DIN-rail 35 x 15 and 35 x 7.5; 2.5 mm²; Push-in CAGE CLAMP®; 2,50 mm²; gray

https://www.wago.com/2002-2208



Color: gray



Similar to illustration

Double-deck terminal block, 2002 Series, operating tool

Enjoy error-free electrical installations with this double-deck terminal block (item number 2002-2208). Conductors can only be connected to this double-deck terminal block if their strip length is between 10 and 12 mm . The double-deck terminal block also functions as a through terminal block. Featuring conductor terminals along with Push-in CAGE CLAMP®, this connector is highly versatile. Push-in CAGE CLAMP® technology provides a universal connection solution for any type of conductor. It allows both solid and fine-stranded conductors with ferrules to be inserted directly into the clamping point without the need for tools. This double-deck terminal block is suitable for conductor cross-sections ranging from 0.25 mm² to 4 mm².

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

- Actuation via operating tool
- Ready to install, immediately usable
- The right solution for every wiring task
- L in a single terminal
- Suitable for specific Ex applications

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## 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.) mm² | 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 Explications” |
| 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 $I_N$ 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 mm² |
| Solid conductor | 0.25 … 4 mm² / 22 … 12 AWG |
| Solid conductor; push-in termination | 0.75 … 4 mm² / 18 … 12 AWG |
| Fine-stranded conductor | 0.25 … 4 mm² / 22 … 12 AWG |
| Fine-stranded conductor; with insulated ferrule | 0.25 … 2.5 mm² / 22 … 14 AWG |
| Fine-stranded conductor; with ferrule; push-in termination | 1 … 2.5 mm² / 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 |

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## Physical data

| | |
|---|---|
| Width | 5.2 mm / 0.205 inches |
| Height | 69.7 mm / 2.744 inches |
| Depth from upper-edge of DIN-rail | 51.7 mm / 2.035 inches |

## Mechanical data

| | |
|---|---|
| Potential marking | L |
| Mounting type | DIN-35 rail |
| Marking level | Center/side marking |

## Material data

| | |
|---|---|
| Note (material data) | Information on material specifications can be found here |
| Color | gray |
| Material group | I |
| Insulation material (main housing) | Polyamide (PA66) |
| Flammability class per UL94 | V0 |
| Fire load | 0.189 MJ |
| Weight | 10.7 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 | $f_1$ = 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 |

 Continued on next page

## 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 | 4044918691109 |
| 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 | - | - |

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## Approvals for marine applications

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

## Approvals for hazardous areas

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

## Downloads

### Environmental Product Compliance

**Compliance Search**

Environmental Product Compliance 2002-2208

### Documentation

**Bid Text**

| | | |
|---|---|---|
| 2002-2208 | 23.04.2019 | xml<br>4.30 KB |
| 2002-2208 | 23.04.2019 | docx<br>15.33 KB |

### CAD/CAE-Data

**CAD data**

2D/3D Models 2002-2208

**CAE data**

EPLAN Data Portal 2002-2208

WSCAD Universe 2002-2208

ZUKEN Portal 2002-2208


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# 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 mm² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white



Item No.: 216-242
Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray



Item No.: 216-262
Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray



Item No.: 216-243
Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red



Item No.: 216-263
Ferrule; Sleeve for 1 mm² / 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 mm² / 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 mm² / 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 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue


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### 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


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## 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 mm²; insulated; black

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


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## 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.: 793-5501/000-014
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


Continued on next page

### 1.2.6.3 Marker carrier

Item No.: 2002-121
Adaptor; gray

Item No.: 2002-161
Adaptor; gray

Item No.: 2009-198
Adaptor; gray

### 1.2.6.4 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 mm²; insulated; 110 mm long; black

Item No.: 2009-414/000-005
Push-in type wire jumper; 1.5 mm²; insulated; 110 mm long; black

Item No.: 2009-416
Push-in type wire jumper; 1.5 mm²; 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


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## 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; multicoloured

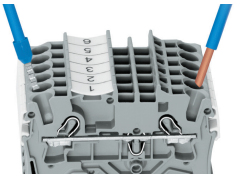
Item No.: 210-720
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

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

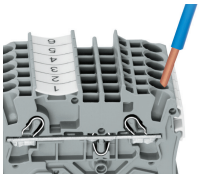
## Installation Notes

### Conductor termination

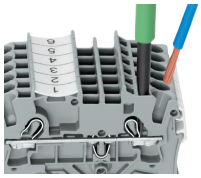
**All conductor types at a glance**



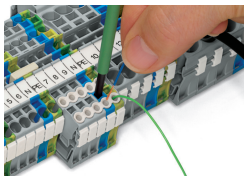
Push-in termination of solid and ferruled conductors



**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.

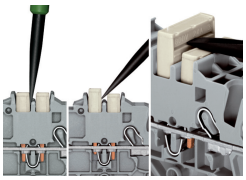


**Inserting a conductor via operating tool:**
Connecting fine-stranded conductors without ferrules, or small cross-sectional conductors that cannot be pushed in, is performed similarly to the original CAGE CLAMP® – just use an operating tool.
**Advantage:**
To open the clamp, the operating tool is inserted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

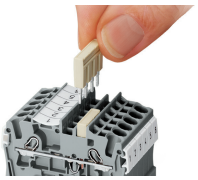


Conductor termination – insulation stop

### 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.

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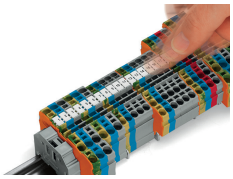
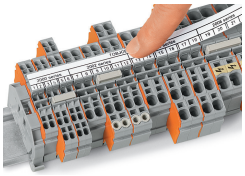
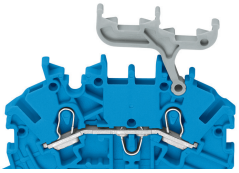
## Marking



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.