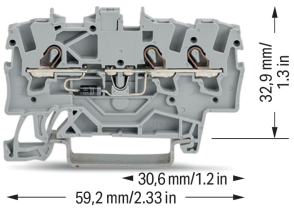
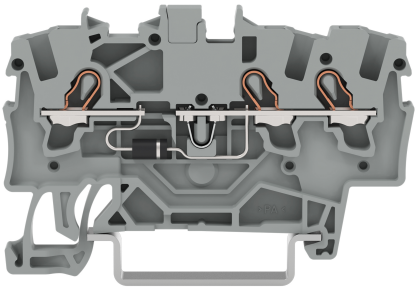
# Data Sheet | Item Number: 2001-1311/1000-410

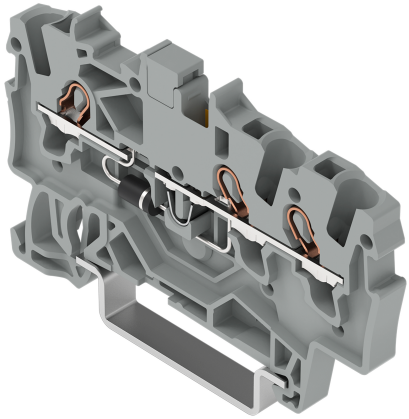
Component terminal block; 3-conductor; with diode 1N4007; anode, left side; for DIN-rail 35 x 15 and 35 x 7.5; 1.5 mm²; Push-in CAGE CLAMP®; 1,50 mm²; gray

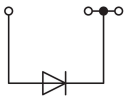
https://www.wago.com/2001-1311/1000-410



Color: gray





Component terminal block with diode, 2001 Series, operating tool

Quick and easy connections are guaranteed with this component terminal block with diode (item number 2001-1311/1000-410). Conductors should only be connected to this component terminal block with diode if their strip length is between 9 and 11 mm . Featuring conductor terminals along with Push-in CAGE CLAMP®, this connector delivers reliable performance. Push-in CAGE CLAMP® technology provides a universal connection solution for all conductor types. It allows both solid and fine-stranded conductors with ferrules to be inserted directly into the clamping point without the need for tools. Depending on the type of conductor, this component terminal block with diode is suitable for conductor cross sections ranging from 0.25 mm² to 2.5 mm².

## Electrical data

| Approvals per | UL 1059 | | |
|---|---|---|---|
| Use group | B | C | D |
| Rated voltage | - | - | - |

| General information | |
|---|---|
| Nominal voltage | 250 V |
| Reverse voltage | 1000 V |
| Continuous current (max.) | 500 mA |
| Number/type of diode/LED | with 1N4007 diode |
| Wiring direction | Front-entry wiring |
| Alignment | Left-side anode |

## Connection Data

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

### Connection 1

| | |
|---|---|
| Connection technology | Push-in CAGE CLAMP® |
| Actuation type | Operating tool |
| Connectable conductor materials | Copper |
| Nominal cross-section | 1.5 mm² |
| Solid conductor | 0.25 … 2.5 mm² / 22 … 14 AWG |
| Solid conductor; push-in termination | 0.75 … 2.5 mm² / 18 … 14 AWG |
| Fine-stranded conductor | 0.25 … 2.5 mm² / 22 … 14 AWG |
| Fine-stranded conductor; with insulated ferrule | 0.25 … 1.5 mm² / 22 … 16 AWG |
| Fine-stranded conductor; with ferrule; push-in termination | 0.75 … 1.5 mm² / 18 … 16 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 | 9 … 11 mm / 0.35 … 0.43 inches |
| Wiring direction | Front-entry wiring |

## Physical data

| | |
|---|---|
| Width | 4.2 mm / 0.165 inches |
| Height | 59.2 mm / 2.33 inches |
| Depth from upper-edge of DIN-rail | 32.9 mm / 1.295 inches |

## Mechanical data

| | |
|---|---|
| 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 | 0.115 MJ |
| Weight | 4.9 g |

## Environmental requirements

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

### Environmental Testing

| | |
|---|---|
| Test specification: Railway applications – Rolling stock – Electronic equipment | DIN EN 50155 (VDE 0115-200):2022-06 |
| Test procedure: Railway applications – Rolling stock equipment – 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. |


Continued on next page

## Environmental Testing

| | |
|---|---|
| Test directions | X, Y and Z axes |
| Monitoring of contact faults and interruptions | Passed |
| Voltage drop measurement before and after each axis | Passed |
| Simulated service life test through increased levels of noise-like oscillations | Test passed according to Section 9 of the standard |
| Frequency | $f_1$ = 5 Hz to $f_2$ = 150 Hz |
| Acceleration | 0.572g (highest test level used for all axes) |
| Test duration per axis | 5 h |
| Test directions | X, Y and Z axes |
| Extended testing: Monitoring of contact faults and interruptions | Passed |
| Extended testing: Voltage drop measurement before and after each axis | Passed |
| Shock test | Test passed according to Section 10 of the standard |
| Shock pulse form | Half sine |
| Acceleration | 5g (highest test level used for all axes) |
| Shock duration | 30 ms |
| Number of shocks (per axis) | 3 pos. und 3 neg. |
| Test directions | X, Y and Z axes |
| Extended testing: Monitoring of contact faults and interruptions | Passed |
| Extended testing: Voltage drop measurement before and after each axis | Passed |
| Vibration and shock stress for rolling stock equipment | Passed |

## Commercial data

| | |
|---|---|
| Product Group | 22 (TOPJOB S) |
| PU (SPU) | 100 pcs |
| Packaging type | Box |
| Country of origin | CN |
| GTIN | 4045454537562 |
| Customs tariff number | 85369010000 |

## Product Classification

| | |
|---|---|
| UNSPSC | 39121410 |
| eCl@ss 10.0 | 27-14-11-27 |
| eCl@ss 9.0 | 27-14-11-27 |
| ETIM 9.0 | EC000903 |
| ETIM 10.0 | EC000903 |
| ECCN | NO US CLASSIFICATION |

## Environmental Product Compliance

| | |
|---|---|
| CAS-No. | 7439-92-1<br>79-94-7 |
| REACH Candidate List Substance | 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol<br>Lead |
| RoHS Compliance Status | Compliant,With Exemption |
| RoHS Exemption | 7(a) |
| SCIP notification number (Austria) | df213f70-244b-4bc7-a882-3a8f7f53fb22 |
| SCIP notification number (Belgium) | 7c99a122-ab14-436f-b882-dc548841f014 |
| SCIP notification number (Bulgaria) | 6fca59c7-a3dd-4f83-ae2c-43aeae1829aa |
| SCIP notification number (Czech Republic) | 1ed3e8a7-93dd-42fd-82b9-efec303fcfaa |


Continued on next page

## Environmental Product Compliance

| | |
|---|---|
| SCIP notification number (Denmark) | 944bad80-6cd2-44f2-a3ba-d2c5dfba9ebb |
| SCIP notification number (Finland) | ebf3fadf-af36-4a4f-a404-469e0965902e |
| SCIP notification number (France) | ce99e58d-1497-4892-b578-b4e3924b0e39 |
| SCIP notification number (Germany) | 8c9179bf-1c82-4435-b354-ca235b545d8f |
| SCIP notification number (Hungary) | eb102369-f855-41f2-86b2-82513010070d |
| SCIP notification number (Italy) | 474d4997-09dd-4dd5-8933-5766d4fe844f |
| SCIP notification number (Netherlands) | 5104c5fa-1065-4d38-a4a5-23197616c837 |
| SCIP notification number (Poland) | 5ea85053-af21-4998-bfc9-11f55146b489 |
| SCIP notification number (Romania) | 13777d39-bef8-443e-8ce2-4886868d9b8e |
| SCIP notification number (Sweden) | 689b3586-7a43-4e94-9002-058c5a71ab36 |

## Approvals / Certificates

### Declarations of conformity and manufacturer's declarations

| Approval | Standard | Certificate Name |
|---|---|---|
| Railway<br>WAGO GmbH & Co. KG | - | Railway Ready |

## Downloads

### Environmental Product Compliance

**Compliance Search**

Environmental Product Compliance
2001-1311/1000-410

### Documentation

**Bid Text**

| | | |
|---|---|---|
| 2001-1311/1000-410 | 02.08.2018 | docx<br>14.91 KB |
| 2001-1311/1000-410 | 19.02.2019 | xml<br>3.69 KB |

## CAD/CAE-Data

**CAD data**

2D/3D Models
2001-1311/1000-410

**CAE data**

EPLAN Data Portal
2001-1311/1000-410

WSCAD Universe
2001-1311/1000-410

ZUKEN Portal
2001-1311/1000-410


Continued on next page

# 1 Compatible Products

## 1.1 Required Accessories

### 1.1.1 End plate

#### 1.1.1.1 End plate



Item No.: 2002-1391
End and intermediate plate; 0.8 mm thick; gray



Item No.: 2002-1392
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 End plate

#### 1.2.2.1 End plate



Item No.: 2002-1393
Seperator plate; 2 mm thick; oversized; gray



Item No.: 2002-1394
Seperator plate; 2 mm thick; oversized; orange

### 1.2.3 Ferrule

#### 1.2.3.1 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.: 216-243
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.: 216-244
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


Continued on next page

## 1.2.4 Installation

### 1.2.4.1 Cover



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

### 1.2.4.2 Cover carrier



Item No.: 709-169
Cover carrier; Type 3; incl. fixing/retaining screws and knurled nut; suitable for 279 to 282 and 880 Series rail-mounted terminal blocks; suitable for 264 Series miniature rail-mounted terminal blocks; suitable for 270 Series sensor and actuator terminal blocks; gray

## 1.2.5 Insulation stop

### 1.2.5.1 Insulation stop



Item No.: 2001-171
Insulation stop; 0.25 - 0.5 mm²; 5 pieces/ strip; light gray

## 1.2.6 Jumper

### 1.2.6.1 Jumper



Item No.: 2001-406/020-000
Delta jumper; insulated; light gray



Item No.: 2001-410
Jumper; 10-way; insulated; light gray



Item No.: 2001-402
Jumper; 2-way; insulated; light gray



Item No.: 2001-403
Jumper; 3-way; insulated; light gray



Item No.: 2001-404
Jumper; 4-way; insulated; light gray



Item No.: 2001-405
Jumper; 5-way; insulated; light gray



Item No.: 2001-406
Jumper; 6-way; insulated; light gray



Item No.: 2001-407
Jumper; 7-way; insulated; light gray



Item No.: 2001-408
Jumper; 8-way; insulated; light gray



Item No.: 2001-409
Jumper; 9-way; insulated; light gray



Item No.: 2001-440
Jumper; from 1 to 10; insulated; light gray



Item No.: 2001-433
Jumper; from 1 to 3; insulated; light gray



Item No.: 2001-434
Jumper; from 1 to 4; insulated; light gray



Item No.: 2001-435
Jumper; from 1 to 5; insulated; light gray



Item No.: 2001-436
Jumper; from 1 to 6; insulated; light gray



Item No.: 2001-437
Jumper; from 1 to 7; insulated; light gray



Item No.: 2001-438
Jumper; from 1 to 8; insulated; light gray



Item No.: 2001-439
Jumper; from 1 to 9; insulated; light gray



Item No.: 2001-405/011-000
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


Continued on next page

## 1.2.7 Marking

### 1.2.7.1 Marker



Item No.: 793-4501/000-006
WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; blue



Item No.: 793-4501/000-007
WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; gray



Item No.: 793-4501/000-023
WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; green



Item No.: 793-4501/000-017
WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; light green



Item No.: 793-4501/000-012
WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; orange



Item No.: 793-4501/000-005
WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; red



Item No.: 793-4501/000-024
WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; violet



Item No.: 793-4501
WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; white



Item No.: 793-4501/000-002
WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; yellow



Item No.: 2009-114/000-006
WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; blue



Item No.: 2009-114/000-007
WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; gray



Item No.: 2009-114/000-023
WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; green



Item No.: 2009-114/000-012
WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; orange



Item No.: 2009-114/000-005
WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; red



Item No.: 2009-114/000-024
WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; violet



Item No.: 2009-114
WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; white



Item No.: 2009-114/000-002
WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; yellow

### 1.2.7.2 Marking strip



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

## 1.2.8 Protective warning marker

### 1.2.8.1 Cover



Item No.: 2001-115
Protective warning marker; for 5 terminal blocks; with high-voltage symbol, black; yellow


Continued on next page

## 1.2.9 Push-in type wire jumper

### 1.2.9.1 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

## 1.2.10 Screwless end stop

### 1.2.10.1 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

## 1.2.11 Test and measurement

### 1.2.11.1 Testing accessories



Item No.: 2001-560
Modular TOPJOB®S connector; modular; for jumper contact slot; 10-pole; gray



Item No.: 2001-511
Modular TOPJOB®S connector; modular; for jumper contact slot; 1-pole; gray



Item No.: 2001-552
Modular TOPJOB®S connector; modular; for jumper contact slot; 2-pole; gray



Item No.: 2001-553
Modular TOPJOB®S connector; modular; for jumper contact slot; 3-pole; gray



Item No.: 2001-554
Modular TOPJOB®S connector; modular; for jumper contact slot; 4-pole; gray



Item No.: 2001-555
Modular TOPJOB®S connector; modular; for jumper contact slot; 5-pole; gray



Item No.: 2001-556
Modular TOPJOB®S connector; modular; for jumper contact slot; 6-pole; gray



Item No.: 2001-557
Modular TOPJOB®S connector; modular; for jumper contact slot; 7-pole; gray



Item No.: 2001-558
Modular TOPJOB®S connector; modular; for jumper contact slot; 8-pole; gray



Item No.: 2001-559
Modular TOPJOB®S connector; modular; for jumper contact slot; 9-pole; gray



Item No.: 2001-549
Spacer module; modular; e.g., for bridging commoned terminal blocks; gray



Item No.: 2009-174
Test plug adapter; for 4 mm Ø test plugs; for testing TOPJOB®S rail-mounted terminal blocks; gray



Item No.: 2009-182
Testing tap; for max. 2.5 mm²; tool-free connection for individual test wires 0.08 - 2.5 mm; gray


Continued on next page

## 1.2.12 Tool

### 1.2.12.1 Operating tool



Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft



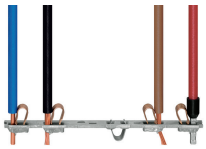
Item No.: 210-648
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; angled; short



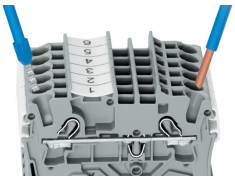
Item No.: 210-647
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; multicoloured

## Installation Notes

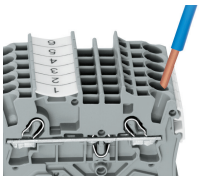
### Conductor termination



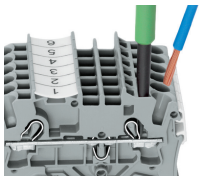
**All conductor types at a glance**



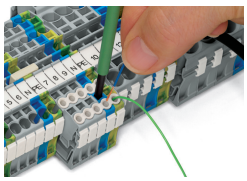
Push-in termination of solid and ferruled conductors



**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.

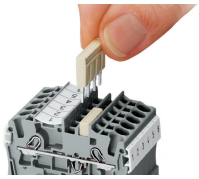


**Inserting a conductor via operating tool:**
Connecting fine-stranded conductors without ferrules, or small cross-sectional conductors that cannot be pushed in, is performed similarly to the original CAGE CLAMP® – just use an operating tool.
**Advantage:**
To open the clamp, the operating tool is inserted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

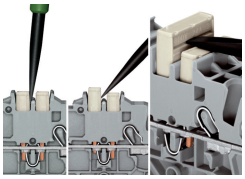


Conductor termination – insulation stop

### Commoning



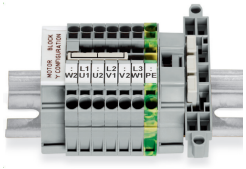
Insert push-in type jumper bar and push down until it hits backstop.



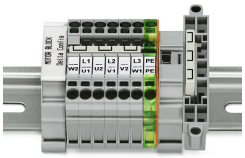
**Removing a push-in type jumper bar:**
Insert the operating tool between the jumper and partition wall of the dual jumper slots, then lift up the jumper.
Place the operating tool in the center of jumpers for up to five contacts (see above), or alternately on both sides for jumpers with more than five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


Continued on next page

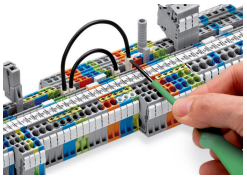
## Commoning



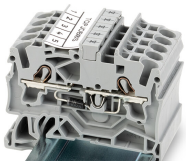
This star point jumper has been specially developed to create a “star point” and is used on motor terminal boards equipped with Rail-Mount Terminal Blocks TOPJOB® S.



This delta jumper has been specially developed to create a delta configuration and is used on motor terminal boards equipped with rail-mount terminal blocks TOPJOB® S.

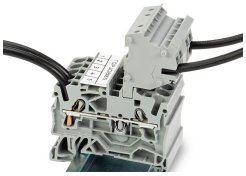


Push down the wire jumper until fully inserted. Lift the jumper with an operating tool for rewiring.

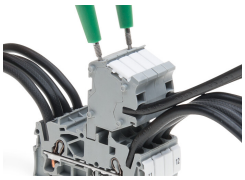


These diode terminal blocks have been specially developed for custom diode circuits, such as lamp test and collective fault signal circuits.

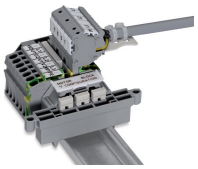
## Testing



The modular TOPJOB® S connectors also connect conductors of the same size as the terminal blocks being used.



TOPJOB® S Connectors with a 2 mm Ø test socket for testing voltage via 2-pole voltage tester



Rail-mount terminal block assembly for electric motor wiring

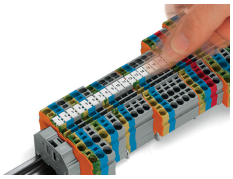


Test plug adapter (Item No. 2009-174, CAT I) for 4 mm Ø plugs – compatible with 2000 to 2016 Series

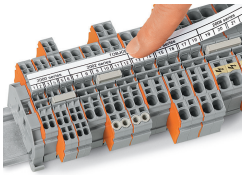


Testing tap (Item No. 2009-182) for tool-free connection of test cables up to 2.5 mm² (12 AWG) – compatible with 2000 to 2016 Series

## Marking



Snapping WMB Inline markers into marker slots.



 Continued on next page



Polarized diode gates with a common cathode can be created using the following terminal blocks:
2001-1311/1000-410 or
2001-1311/1000-411