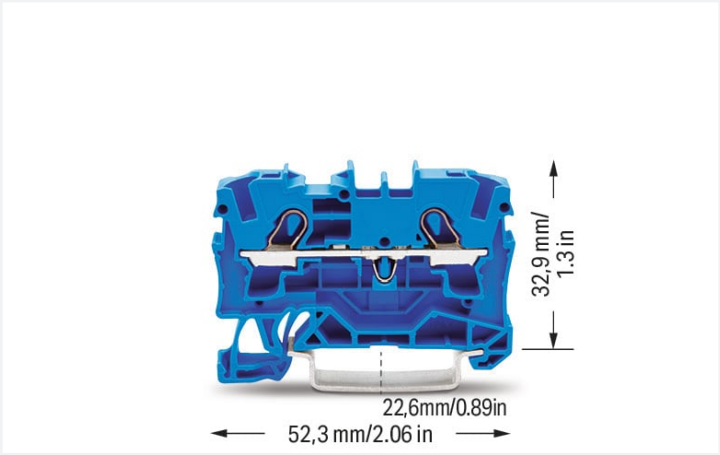
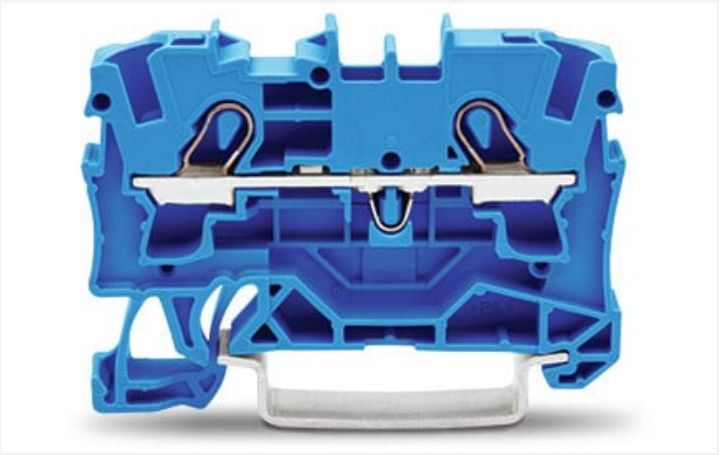
# Data Sheet | Item Number: 2004-1204

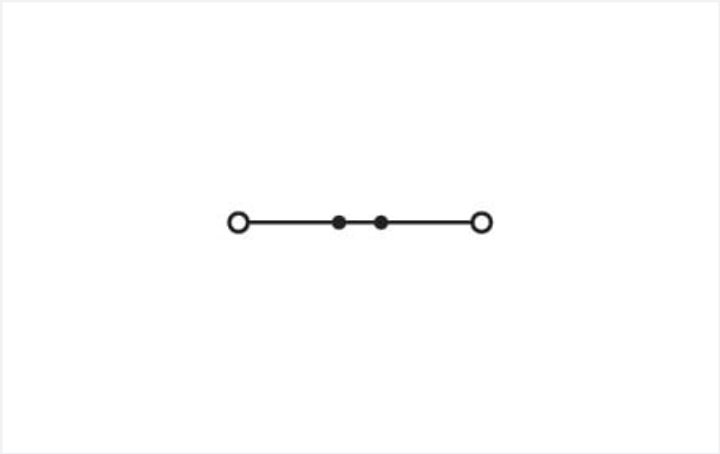
2-conductor through terminal block; 4 mm²; for Ex e II and Ex i applications; side and center marking; for DIN-rail 35 x 15 and 35 x 7.5; Push-in CAGE CLAMP®; 4,00 mm²; blue

https://www.wago.com/2004-1204



Color: blue



Similar to illustration

## Electrical data

| Ratings per | IEC/EN 60947-7-1 | | |
|---|---|---|---|
| Overvoltage category | III | III | II |
| Pollution degree | 3 | 2 | 2 |
| Nominal voltage | 800 V | - | - |
| Rated surge voltage | 8 kV | - | - |
| Rated current | 32 A | - | - |
| Current at conductor cross-section (max.) mm² | 41 A | - | - |

| Approvals per | UL 1059 | | |
|---|---|---|---|
| Use group | B | C | D |
| Rated voltage | 600 V | 600 V | - |
| Rated current | 30 A | 30 A | - |

| Approvals per | CSA 22.2 No 158 | | |
|---|---|---|---|
| Use group | B | C | D |
| Rated voltage | 600 V | 600 V | - |
| Rated current | 30 A | 30 A | - |

| Ex information | |
|---|---|
| Reference hazardous areas | See application instructions in section “Knowledge and Downloads – Documentation – Additional Information: Technical Section; Technical Explications” |
| Ratings per | ATEX: PTB 05 ATEX 1095 U / IECEx: PTB 05.0033U (Ex eb IIC Gb) |
| Rated voltage EN (Ex e II) | 550 V |
| Rated current (Ex e II) | 30 A |


Continued on next page

## Power Loss

| | |
|---|---|
| Power loss, per pole (potential) | 1.024 W |
| Rated current $I_N$ for specified power loss | 32 A |
| Resistance value for specified, current-dependent power loss | 0.001 Ω |

## Connection data

| | |
|---|---|
| Connection points | 2 |
| Total number of potentials | 1 |
| Number of levels | 1 |
| Number of jumper slots | 2 |

### Connection 1

| | |
|---|---|
| Connection technology | Push-in CAGE CLAMP® |
| Actuation type | Operating tool |
| Connectable conductor materials | Copper |
| Nominal cross-section | 4 mm² |
| Solid conductor | 0.5 … 6 mm² / 20 … 10 AWG |
| Solid conductor; push-in termination | 1.5 … 6 mm² / 14 … 10 AWG |
| Fine-stranded conductor | 0.5 … 6 mm² / 20 … 10 AWG |
| Fine-stranded conductor; with insulated ferrule | 0.5 … 4 mm² / 20 … 12 AWG |
| Fine-stranded conductor; with ferrule; push-in termination | 1.5 … 4 mm² / 18 … 12 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 | 11 … 13 mm / 0.43 … 0.51 inches |
| Wiring direction | Front-entry wiring |

## Physical data

| | |
|---|---|
| Width | 6.2 mm / 0.244 inches |
| Height | 52.3 mm / 2.059 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) | <a href="https://www.wago.com/us/material-specifications" href="_blank">Information on material specifications can be found here</a> |
| Color | blue |
| Material group | I |
| Insulation material | Polyamide (PA66) |
| Flammability class per UL94 | V0 |
| Fire load | 0.135 MJ |
| Weight | 6.9 g |

 Continued on next page

## Environmental requirements

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

## Commercial data

| | |
|---|---|
| Product Group | 22 (TOPJOB S) |
| eCl@ss 10.0 | 27-14-11-20 |
| eCl@ss 9.0 | 27-14-11-20 |
| ETIM 8.0 | EC000897 |
| ETIM 7.0 | EC000897 |
| PU (SPU) | 50 pcs |
| Packaging type | Box |
| Country of origin | DE |
| GTIN | 4017332071086 |
| Customs tariff number | 85369010000 |

## 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 | 71-125978 |
| CCA<br>DEKRA Certification B.V. | EN 60947 | NTR NL-7964 |
| CSA<br>DEKRA Certification B.V. | C22.2 No. 158 | 1645435 |
| 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 Shipping | - | 20-HG1941090-PDA |
| BV<br>Bureau Veritas S.A. | EN 60947 | 38586/B0 BV |

### Approvals for hazardous areas

| Approval | Standard | Certificate Name |
|---|---|---|
| AEx<br>Underwriters Laboratories Inc. | EN 60079 | E185892 (AEx eb IIC resp. Ex eb IIC) |
| ATEX<br>Physikalisch Technische Bundesanstalt (PTB) | EN 60079 | PTB 05 ATEX 1095 U (II 2 G Ex eb IIC Gb bzw. I M 2 Ex eb I Mb) |
| CCC<br>CNEX | GB/T 3836.3 | 2020312313000160 (Ex eb IIC Gb, Ex eb I Mb) |
| EAC<br>Brjansker Zertifizierungsstelle | TP TC 012/2011 | RU C-DE.AM02.B.00127/19 (Ex e IIC Gb U) |
| IECEx<br>Physikalisch Technische Bundesanstalt (PTB) | IEC 60079 | IECEx PTB 05.0033 U (Ex eb IIC Gb resp. Ex eb I Mb) |


Continued on next page

### Approvals for hazardous areas

| | | |
|---|---|---|
| INMETRO<br>TÜV Rheinland do Brasil Ltda. | IEC 60079 | TÜV 12.1309 U |

## Downloads

### Environmental Product Compliance

**Compliance Search**

Environmental Product Compliance 2004-1204

### Documentation

**Additional Information**

| | | |
|---|---|---|
| Technical Section | pdf<br>2142.18 KB | |

**Bid Text**

| | | |
|---|---|---|
| 2004-1204 | 07.08.2018 | docx<br>14.66 KB |
| 2004-1204 | 19.02.2019 | xml<br>3.88 KB |

### CAD/CAE-Data

**CAD data**

2D/3D Models 2004-1204

**CAE data**

EPLAN Data Portal 2004-1204

WSCAD Universe 2004-1204

ZUKEN Portal 2004-1204

## 1 Compatible Products

### 1.1 Required Accessories

#### 1.1.1 End plate

##### 1.1.1.1 End plate



Item No.: 2004-1291
End and intermediate plate; 1 mm thick; gray



Item No.: 2004-1292
End and intermediate plate; 1 mm thick; orange



Item No.: 209-191
Separator for Ex e/Ex i applications; 3 mm thick; 120 mm wide; orange



Item No.: 209-190
Separator for Ex e/Ex i applications; 3 mm thick; 90 mm wide; orange



Item No.: 2004-1293
Seperator plate; 2 mm thick; oversized; gray



Item No.: 2004-1294
Seperator plate; 2 mm thick; oversized; 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.: 216-262
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.: 216-263
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.: 216-264
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.: 216-266
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



Item No.: 216-267
Ferrule; Sleeve for 4 mm² / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray

## 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; gray

## 1.2.4 Insulation stop

 Continued on next page

### 1.2.4.1 Insulation stop



Item No.: 2004-171
Insulation stop; 0.25 - 0.5 mm²; 5 pieces/ strip; light gray



Item No.: 2004-172
Insulation stop; 0.75 - 1 mm²; 5 pieces/ strip; dark gray

## 1.2.5 Jumper

### 1.2.5.1 Jumper



Item No.: 2004-406/020-000
Delta jumper; insulated; light gray



Item No.: 2004-410
Jumper; 10-way; insulated; light gray



Item No.: 2004-402
Jumper; 2-way; insulated; light gray



Item No.: 2004-403
Jumper; 3-way; insulated; light gray



Item No.: 2004-404
Jumper; 4-way; insulated; light gray



Item No.: 2004-405
Jumper; 5-way; insulated; light gray



Item No.: 2004-406
Jumper; 6-way; insulated; light gray



Item No.: 2004-407
Jumper; 7-way; insulated; light gray



Item No.: 2004-408
Jumper; 8-way; insulated; light gray



Item No.: 2004-409
Jumper; 9-way; insulated; light gray



Item No.: 2004-440
Jumper; from 1 to 10; insulated; light gray



Item No.: 2004-433
Jumper; from 1 to 3; insulated; light gray



Item No.: 2004-434
Jumper; from 1 to 4; insulated; light gray



Item No.: 2004-435
Jumper; from 1 to 5; insulated; light gray



Item No.: 2004-436
Jumper; from 1 to 6; insulated; light gray



Item No.: 2004-437
Jumper; from 1 to 7; insulated; light gray



Item No.: 2004-438
Jumper; from 1 to 8; insulated; light gray



Item No.: 2004-439
Jumper; from 1 to 9; insulated; light gray



Item No.: 2004-405/011-000
Star point jumper; 3-way; insulated; light gray



Item No.: 2006-499
Step-down jumper; from 2006/2004 to 2004/2002/2001 series; from 2206/2204 to 2204/2202/2201 series; insulated; light gray



Item No.: 2016-499
Step-down jumper; from 2016/2010 to 2010/2006/2004/2002 series; from 2216/2210 to 2210/2206/2204/2202 series; insulated; light gray



Item No.: 210-103
Wire commoning chain; insulated; black



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

## 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


Continued on next page

## 1.2.6.2 Marker



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.: 793-501/000-006
WMB marking card; as card; not stretchable; plain; snap-on type; blue



Item No.: 793-501/000-007
WMB marking card; as card; not stretchable; plain; snap-on type; gray



Item No.: 793-501/000-023
WMB marking card; as card; not stretchable; plain; snap-on type; green



Item No.: 793-501/000-017
WMB marking card; as card; not stretchable; plain; snap-on type; light green



Item No.: 793-501/000-012
WMB marking card; as card; not stretchable; plain; snap-on type; orange



Item No.: 793-501/000-005
WMB marking card; as card; not stretchable; plain; snap-on type; red



Item No.: 793-501/000-024
WMB marking card; as card; not stretchable; plain; snap-on type; violet



Item No.: 793-501
WMB marking card; as card; not stretchable; plain; snap-on type; white



Item No.: 793-501/000-002
WMB marking card; as card; not stretchable; plain; snap-on type; yellow



Item No.: 2009-115/000-006
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue



Item No.: 2009-115/000-007
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray



Item No.: 2009-115/000-023
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green



Item No.: 2009-115/000-017
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; light green



Item No.: 2009-115/000-012
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange



Item No.: 2009-115/000-005
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.: 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 Protective warning marker

### 1.2.7.1 Cover



Item No.: 2004-115
Protective warning marker; for 5 terminal blocks; with high-voltage symbol, black; yellow

## 1.2.8 Test and measurement

### 1.2.8.1 Testing accessories



Item No.: 2004-511
Modular TOPJOB®S connector; modular; for jumper contact slot; 1-pole; 4,00 mm²; gray



Item No.: 2004-552
Modular TOPJOB®S connector; modular; for jumper contact slot; 2-pole; 4,00 mm²; gray



Item No.: 2004-553
Modular TOPJOB®S connector; modular; for jumper contact slot; 3-pole; 4,00 mm²; gray



Item No.: 2004-554
Modular TOPJOB®S connector; modular; for jumper contact slot; 4-pole; 4,00 mm²; gray



Item No.: 2004-555
Modular TOPJOB®S connector; modular; for jumper contact slot; 5-pole; 4,00 mm²; gray



Item No.: 2004-549
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

## 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

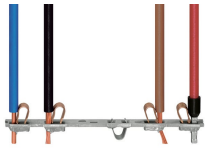


Item No.: 210-720
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

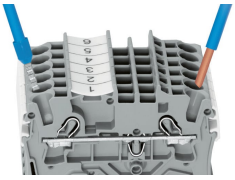
## Installation Notes


Continued on next page

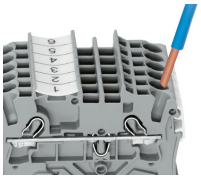
## Conductor termination



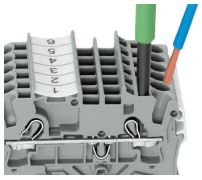
All conductor types at a glance



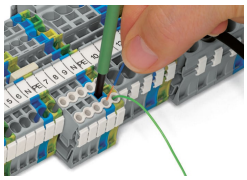
Push-in termination of solid and ferruled conductors



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.

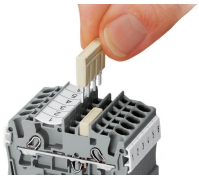


Inserting a conductor via operating tool:
Connecting fine-stranded conductors without ferrules, or small cross-sectional conductors that cannot be pushed in, is performed similarly to the original CAGE CLAMP® – just use an operating tool.
Advantage:
To open the clamp, the operating tool is inserted vertically.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

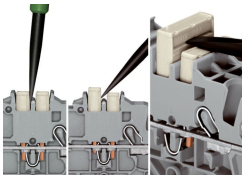


Conductor termination – insulation stop

## Commoning

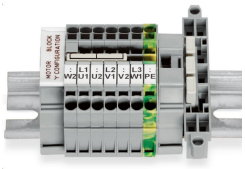


Insert push-in type jumper bar and push down until it hits backstop.

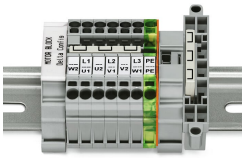


Removing a push-in type jumper bar:
Insert the operating tool between the jumper and partition wall of the dual jumper slots, then lift up the jumper.
Place the operating tool in the center of jumpers for up to five contacts (see above), or alternately on both sides for jumpers with more than five contacts.

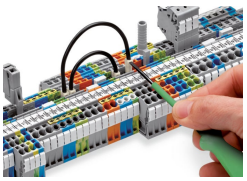
## Commoning



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.

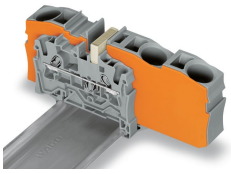


This delta jumper has been specially developed to create a delta configuration and is used on motor terminal boards equipped with rail-mount terminal blocks TOPJOB® S.

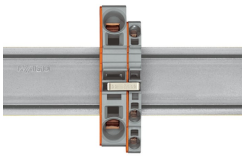


Push down the wire jumper until fully inserted. Lift the jumper with an operating tool for rewiring.

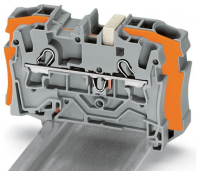
## Commoning



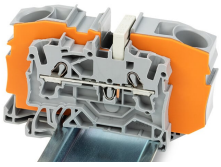
Step-down jumpers common terminal blocks of different sizes, without losing a conductor clamping point. This can be beneficial on long conductor runs where voltage drop can be a problem. A large conductor can be easily connected to smaller conductors at the distribution point.
Commoning may be made in either direction using the special thin end plate to cover the open side. Additional through terminal blocks having a smaller cross-section may be commoned using push-in type jumper bars.



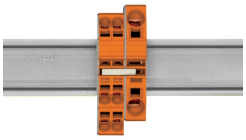
Using step-down jumpers, an end plate must be inserted between the terminal blocks to be commoned.



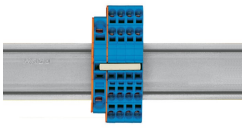
Step-down jumper (2006-499) commons 6/4 mm² (10/12 AWG) terminal blocks (2006/2004 Series) with 4/2.5/1.5 mm² (AWG 12/14/16) terminal blocks (2004/2002/2001 Series).



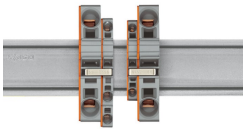
Step-down jumper (2016-499) commons 16/10 mm² (16/8 AWG) terminal blocks (2016/2010 Series) with 10/6/4/2.5 mm² (8/10/12/14 AWG) terminal blocks (2010/2006/2004/2002 Series).



Stepping down via push-in type jumper bar:
Commoning via open terminal side with end plate allows jumpering over two cross-section sizes for 16 mm² (6 AWG) and 10 mm² (8 AWG) and one cross-section size for 6/4/2.5 mm² (10/12/14 AWG). An example: from 16 mm² (6 AWG) to 6 mm² (10 AWG) (see illustration above) or from 10 mm² (8 AWG) to 4 mm² (12 AWG).

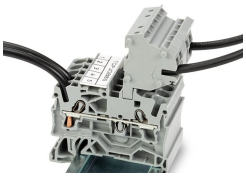


Stepping down via push-in type jumper bar:
Commoning via closed terminal side with end plate allows jumpering over two cross-section sizes, e.g., from 16 mm² (6 AWG) to 6 mm² (10 AWG) or from 6 mm² (10 AWG) to 2.5 mm² (14 AWG) (see illustration above).

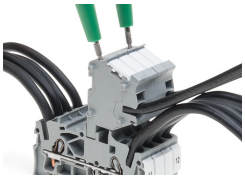


Note:
The total current of the outgoing circuits must not exceed the nominal current of the step-down jumper/push-in type jumper bar.

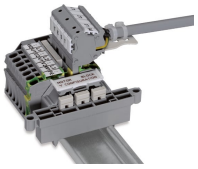
## Testing



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

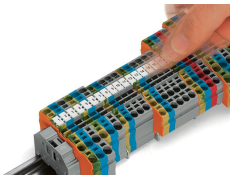


Test plug adapter (2009-174, CAT I) for 4 mm Ø plugs – compatible with 2000 to 2016 Series

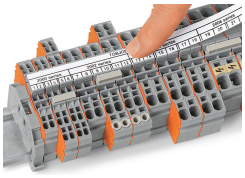


Testing tap (2009-182) for tool-free connection of test cables up to 2.5 mm² (12 AWG) – compatible with 2000 to 2016 Series

## Marking



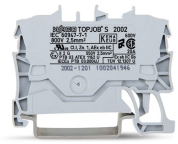
Snapping WMB Inline markers into marker slots.





TOPJOB® S 2009-193 Group Marker Carrier (equipped with a marking strip) for all 2001 to 2016 Series TOPJOB® S Rail-Mount Terminal Blocks
Do not use on an end plate!

## Ex application

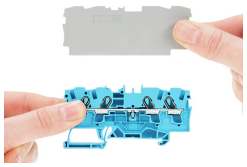




Through terminal blocks with a blue insulated housing are suitable for Ex i applications.



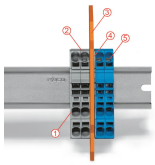
All through and ground conductor terminal blocks are suitable for Ex e II applications.



Separator plate for Ex e/Ex i applications
An end plate must be applied to the terminal block located directly behind an Ex e/Ex i separator plate.



Ex e II/Ex i terminal strip
Note:
The movable feet of terminal blocks and separator plates must face the same direction.



A separator plate is located between the Ex e II and Ex i terminal strip.
End plate
Ex e II terminal blocks
Separator plate for Ex e/Ex i applications
End plate
Ex i terminal blocks
According to EN 50020, a minimum distance of 50 mm must be kept between live parts of Ex e and Ex i circuits. The use of Ex e/Ex i separators is a space-saving solution when Ex e and Ex i terminal blocks are mounted on a common DIN-rail.