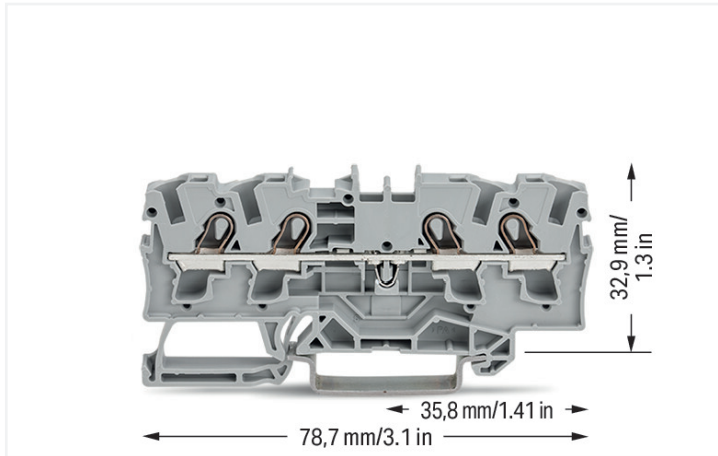


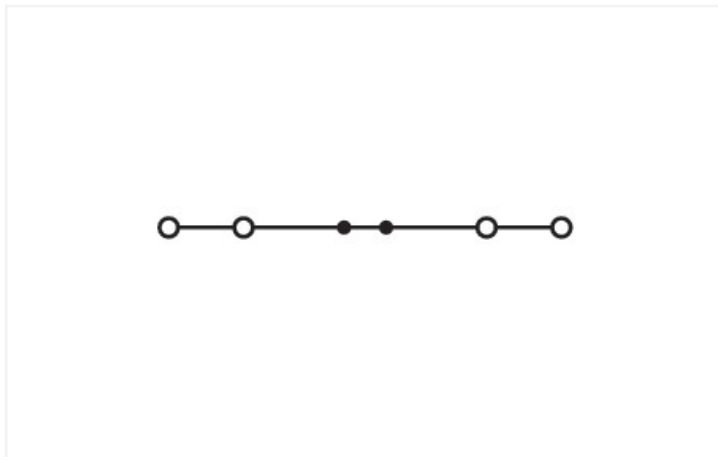
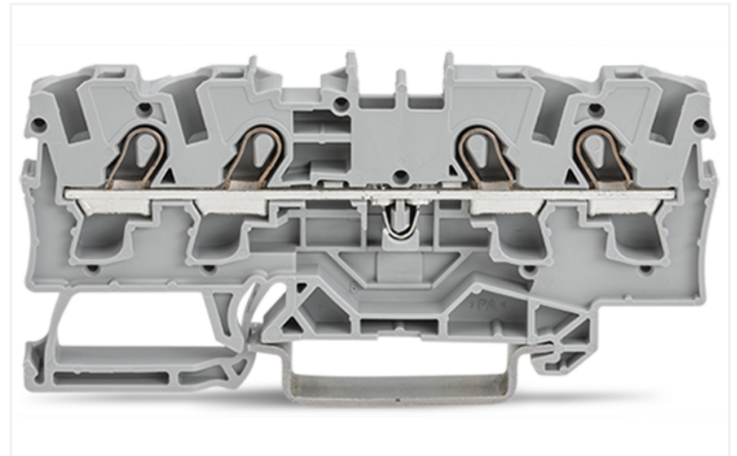
## Data Sheet | Item Number: 2004-1401

4-conductor through terminal block; 4 mm<sup>2</sup>; suitable for Ex e II applications; side and center marking; for DIN-rail 35 x 15 and 35 x 7.5; Push-in CAGE CLAMP®; 4,00 mm<sup>2</sup>; gray

<https://www.wago.com/2004-1401>



Color: ■ gray



Similar to illustration

Through terminal block, 2004 Series, gray

Our through terminal block (item number 2004-1401) ensures effortless electrical installations. Whether for use in industry or building installations, our rail-mount through terminal blocks allow you to quickly and securely connect electrical conductors. They're perfect for either classic through-wiring or distributing potential, depending on the variant. Rated current and voltage are important parameters when choosing a through rail-mount terminal block, as they determine the product's suitability for different applications. This product has a rated voltage of 800 V and a rated current of 32 A. Strip lengths must be between 11 mm and 13 mm when connecting conductors to this through terminal block. Featuring conductor terminals along with Push-in CAGE CLAMP®, this product outperforms the competition. 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. The item's dimensions are 6.2 x 78.7 x 39.5 mm (width x height x depth). Depending on the type of conductor, this through terminal block is ideal for conductor cross sections ranging from 0.5 mm<sup>2</sup> to 6 mm<sup>2</sup>. It has one level. The single potential can connect using the four clamping points. The gray housing is made of polyamide (PA66) for insulation. An operating tool is used to operate this through rail-mount terminal block. Our TOPJOB® S rail-mount terminal blocks are perfect for many different industrial applications and modern building installations as they provide secure electrical connections. You can work anywhere in the world and on any application with just a single rail-mount terminal block system. These through rail-mount terminal blocks are mounted using DIN-35 rails. Conductors made of copper can be connected thanks to front-entry wiring. The two jumper slots enable potential distribution to other clamping points. This product is designed for specific Ex applications (please refer to the product datasheet).



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                                                                                                                                                  |

| Power Loss                                                   |         |
|--------------------------------------------------------------|---------|
| Power loss, per pole (potential)                             | 1.024 W |
| Rated current I <sub>N</sub> for specified power loss        | 32 A    |
| Resistance value for specified, current-dependent power loss | 0.001 Ω |

Connection data

|                            |   |
|----------------------------|---|
| Clamping units             | 4 |
| 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                            | 78.7 mm / 3.098 inches |
| Depth from upper-edge of DIN-rail | 32.9 mm / 1.295 inches |
| Depth                             | 39.5 mm / 1.555 inches |

| Mechanical data |                     |
|-----------------|---------------------|
| 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                          | 0.196 MJ                                                                 |
| Weight                             | 10.5 g                                                                   |

| Environmental requirements                                                                         |                                                                                                                                             |
|----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Processing temperature                                                                             | -35 ... +85 °C                                                                                                                              |
| Continuous operating temperature                                                                   | -60 ... +105 °C                                                                                                                             |
| Environmental Testing (Environmental Conditions)                                                   |                                                                                                                                             |
| 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>Shock and vibration tests | DIN EN 61373 (VDE 0115-0106):2011-04                                                                                                        |
| Spectrum/Installation location                                                                     | Service life test, Category 1, Class A/B                                                                                                    |
| Function test with noise-like vibration                                                            | Test passed according to Section 8 of the standard                                                                                          |
| Frequency                                                                                          | f <sub>1</sub> = 5 Hz to f <sub>2</sub> = 150 Hz<br>f <sub>1</sub> = 5 Hz to f <sub>2</sub> = 150 Hz                                        |
| Acceleration                                                                                       | 0.101g (highest test level used for all axes)<br>0.572g (highest test level used for all axes)<br>5g (highest test level used for all axes) |
| Test duration per axis                                                                             | 10 min.<br>5 h                                                                                                                              |
| Test directions                                                                                    | X, Y and Z axes<br>X, Y and Z axes<br>X, Y and Z axes                                                                                       |
| Monitoring for contact faults/interruptions                                                        | Passed                                                                                                                                      |
| Voltage drop measurement before and after each axis                                                | Passed                                                                                                                                      |
| Simulated service life test through increased levels of noise-like vibration                       | Test passed according to Section 9 of the standard                                                                                          |
| Extended test scope: Monitoring for contact faults/interruptions                                   | Passed<br>Passed                                                                                                                            |
| Extended test scope: Voltage drop measurement before and after each axis                           | Passed<br>Passed                                                                                                                            |
| Shock test                                                                                         | Test passed according to Section 10 of the standard                                                                                         |
| Shock form                                                                                         | Half sine                                                                                                                                   |
| Shock duration                                                                                     | 30 ms                                                                                                                                       |
| Number of shocks per axis                                                                          | 3 pos. und 3 neg.                                                                                                                           |



Environmental Testing (Environmental Conditions)

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                  | 4017332071758 |
| 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 8.0    | 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      | 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) |
| CCCEX<br>CQST/CNEX                                  | GB/T 3836.3 | 2020312313000160 (Ex eb IIC Gb, Ex eb I Mb)                    |



| Approvals for hazardous areas                           |           |                                                        |
|---------------------------------------------------------|-----------|--------------------------------------------------------|
| IECEX<br>Physikalisch Technische<br>Bundesanstalt (PTB) | IEC 60079 | IECEX PTB 05.0033 U (Ex<br>eb IIC Gb resp. Ex eb I Mb) |
| INMETRO<br>TÜV Rheinland do Brasil<br>Ltda.             | IEC 60079 | TÜV 12.1309 U                                          |

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product  
Compliance 2004-1401

↓

| Documentation |            |                  |   |
|---------------|------------|------------------|---|
| Bid Text      |            |                  |   |
| 2004-1401     | 19.02.2019 | xml<br>3.85 KB   | ↓ |
| 2004-1401     | 07.08.2018 | docx<br>14.74 KB | ↓ |

| CAD/CAE-Data              |                                |
|---------------------------|--------------------------------|
| CAD data                  | CAE data                       |
| 2D/3D Models<br>2004-1401 | EPLAN Data Portal<br>2004-1401 |
|                           | WSCAD Universe<br>2004-1401    |
|                           | ZUKEN Portal<br>2004-1401      |

1 Compatible Products

1.1 Required Accessories

1.1.1 End plate

1.1.1.1 End plate



[Item No.: 2004-1491](#)  
End and intermediate plate; 1 mm thick;  
gray



[Item No.: 2004-1492](#)  
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



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 End plate

1.2.2.1 End plate



**Item No.: 2004-1493**  
Separator plate; 2 mm thick; oversized; gray



**Item No.: 2004-1494**  
Separator plate; 2 mm thick; oversized; orange

1.2.3 Ferrule

1.2.3.1 Ferrule



**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.: 216-263**  
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.: 216-264**  
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.: 216-266**  
Ferrule; Sleeve for 2.5 mm<sup>2</sup> / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue



**Item No.: 216-267**  
Ferrule; Sleeve for 4 mm<sup>2</sup> / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray



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.: 2004-171**  
Insulation stop; 0.25 - 0.5 mm<sup>2</sup>; 5 pieces/strip; light gray



**Item No.: 2004-172**  
Insulation stop; 0.75 - 1 mm<sup>2</sup>; 5 pieces/strip; dark gray

1.2.6 Jumper

1.2.6.1 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



1.2.6.1 Jumper



**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

1.2.7 Marking

1.2.7.1 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

1.2.7.2 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.: 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



1.2.7.2 Marker



**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

1.2.7.3 Marker carrier



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

1.2.7.4 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.: 2004-115**  
Protective warning marker; for 5 terminal blocks; with high-voltage symbol, black; yellow



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.: 2004-511**  
Modular TOPJOB®S connector; modular; for jumper contact slot; 1-pole; gray



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



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



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



**Item No.: 2004-555**  
Modular TOPJOB®S connector; modular; for jumper contact slot; 5-pole; 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

1.2.11 Tool

1.2.11.1 Operating tool



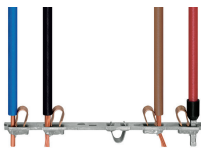
**Item No.: 210-658**  
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; angled; short; multicoloured



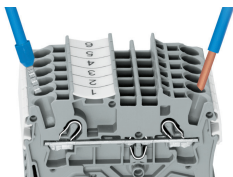
**Item No.: 210-720**  
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

Installation Notes

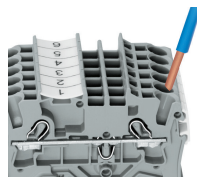
Conductor termination



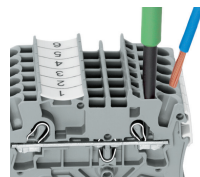
**All conductor types at a glance**



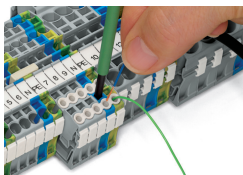
Push-in termination of solid and ferruled conductors



**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.



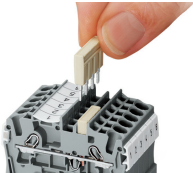
**Inserting a conductor via operating tool:**  
Connecting fine-stranded conductors without ferrules, or small cross-sectional conductors that cannot be pushed in, is performed similarly to the original CAGE CLAMP® – just use an operating tool.  
**Advantage:**  
To open the clamp, the operating tool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



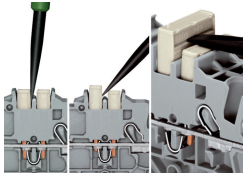
Conductor termination – insulation stop



Commoning

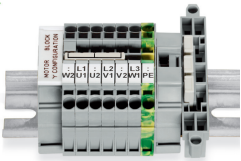


Insert push-in type jumper bar and push down until it hits backstop.

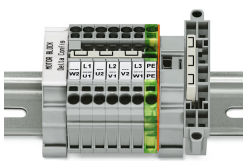


**Removing a push-in type jumper bar:**  
Insert the operating tool between the jumper and partition wall of the dual jumper slots, then lift up the jumper. Place the operating tool in the center of jumpers for up to five contacts (see above), or alternately on both sides for jumpers with more than five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

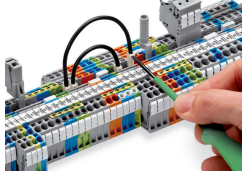
Commoning



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.

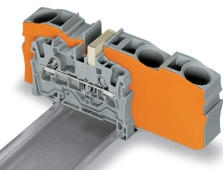


This delta jumper has been specially developed to create a delta configuration and is used on motor terminal boards equipped with rail-mount terminal blocks TOPJOB® S.

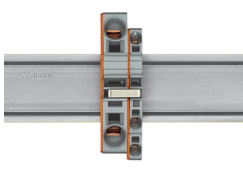


Push down the wire jumper until fully inserted. Lift the jumper with an operating tool for rewiring.

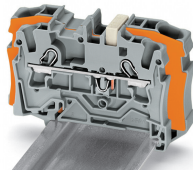
Commoning



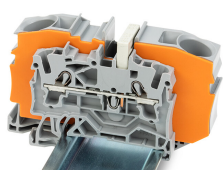
Step-down jumpers common terminal blocks of different sizes, without losing a conductor clamping point. This can be beneficial on long conductor runs where voltage drop can be a problem. A large conductor can be easily connected to smaller conductors at the distribution point. Commoning may be made in 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.



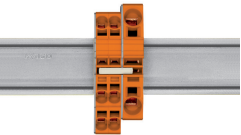
**Using step-down jumpers,** an end plate must be inserted between the terminal blocks to be commoned.



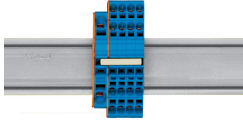
**Step-down jumper (Item No. 2006-499)**  
commons 6/4 mm<sup>2</sup> (10/12 AWG) terminal blocks (2006/2004 Series) with 4/2.5/1.5 mm<sup>2</sup> (AWG 12/14/16) terminal blocks (2004/2002/2001 Series).



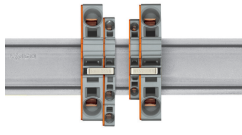
**Step-down jumper (Item No. 2016-499)**  
commons 16/10 mm<sup>2</sup> (16/8 AWG) terminal blocks (2016/2010 Series) with 10/6/4/2.5 mm<sup>2</sup> (8/10/12/14 AWG) terminal blocks (2010/2006/2004/2002 Series).



**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 mm<sup>2</sup> (6 AWG) and 10 mm<sup>2</sup> (8 AWG) and one cross-section size for 6/4/2.5 mm<sup>2</sup> (10/12/14 AWG). An example: from 16 mm<sup>2</sup> (6 AWG) to 6 mm<sup>2</sup> (10 AWG) (see illustration above) or from 10 mm<sup>2</sup> (8 AWG) to 4 mm<sup>2</sup> (12 AWG).



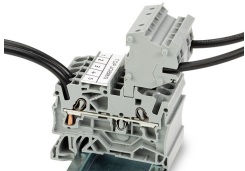
**Stepping down via push-in type jumper bar:**  
Commoning via closed terminal side with end plate allows jumpering over two cross-section sizes, e.g., from 16 mm<sup>2</sup> (6 AWG) to 6 mm<sup>2</sup> (10 AWG) or from 6 mm<sup>2</sup> (10 AWG) to 2.5 mm<sup>2</sup> (14 AWG) (see illustration above).



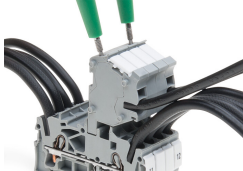
**Note:**  
The total current of the outgoing circuits must not exceed the nominal current of the step-down jumper/push-in type jumper bar.



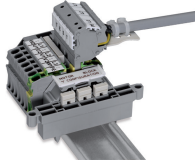
Testing



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

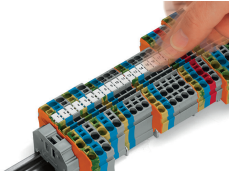


Test plug adapter (Item No. 2009-174, CAT I) for 4 mm Ø plugs – compatible with 2000 to 2016 Series

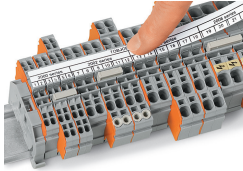


Testing tap (Item No. 2009-182) for tool-free connection of test cables up to 2.5 mm² (12 AWG) – compatible with 2000 to 2016 Series

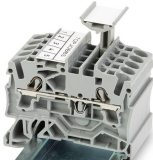
Marking



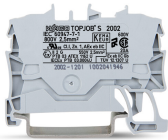
Snapping WMB Inline markers into marker slots.



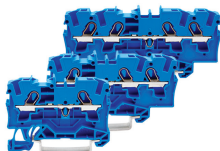
TOPJOB® S 2009-193 Group Marker Carrier (equipped with a marking strip) for all 2001 to 2016 Series TOPJOB® S Rail-Mount Terminal Blocks  
Do not use on an end plate!



Ex application



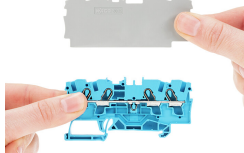
Through terminal blocks with a blue insulated housing are suitable for Ex i applications.



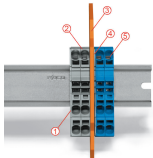
All through and ground conductor terminal blocks are suitable for Ex e II applications.



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.

Subject to changes. Please also observe the further product documentation!

Current addresses can be found at: [www.wago.com](http://www.wago.com)