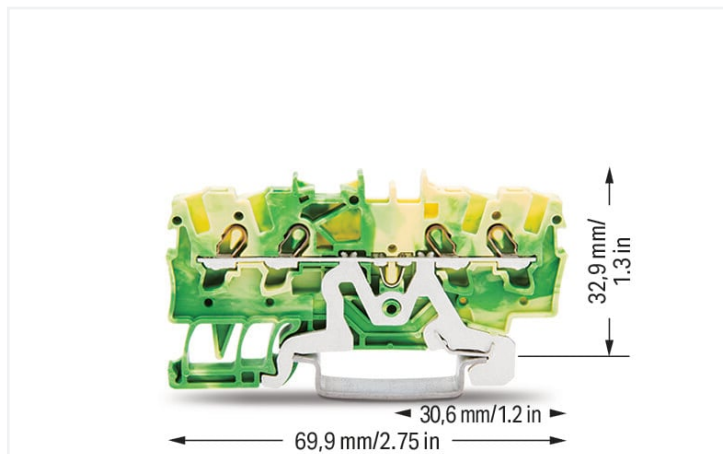


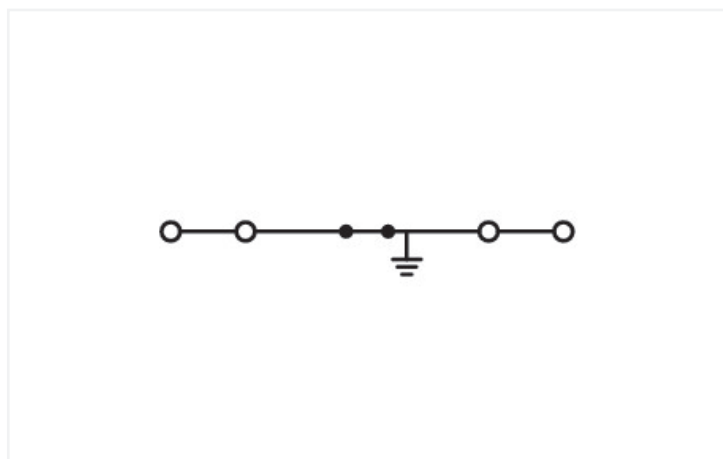
Data Sheet | Item Number: 2001-1407

4-conductor ground terminal block; 1.5 mm²; 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®; 1,50 mm²; green-yellow

<https://www.wago.com/2001-1407>



Color: ■ green-yellow



Similar to illustration

Electrical data

| Ratings per | IEC/EN 60947-7-2 | | |
|----------------------|------------------|-----|----|
| | III | III | II |
| Overvoltage category | III | III | II |
| Pollution degree | 3 | 2 | 2 |
| Nominal voltage | - | - | - |
| Rated surge voltage | - | - | - |
| Rated current | - | - | - |

Ex information

| | |
|---------------------------|---|
| Reference hazardous areas | See "Downloads – Documentation – Additional Information: Technical Section; Technical Explanations" |
|---------------------------|---|

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 | 1.5 mm ² |
| Solid conductor | 0.25 ... 2.5 mm ² / 22 ... 14 AWG |
| Solid conductor; push-in termination | 0.75 ... 2.5 mm ² / 18 ... 14 AWG |
| Fine-stranded conductor | 0.25 ... 2.5 mm ² / 22 ... 14 AWG |
| Fine-stranded conductor; with insulated ferrule | 0.25 ... 1.5 mm ² / 22 ... 16 AWG |



| Connection 1 | |
|--|---|
| Fine-stranded conductor; with ferrule; push-in termination | 0.75 ... 1.5 mm ² / 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 | 69.9 mm / 2.752 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 | green-yellow |
| Material group | I |
| Insulation material (main housing) | Polyamide (PA66) |
| Flammability class per UL94 | V0 |
| Fire load | 0.122 MJ |
| Weight | 8.7 g |

| Environmental requirements | | Environmental Testing (Environmental Conditions) | |
|----------------------------------|-----------------|--|---|
| Processing temperature | -35 ... +85 °C | Test specification | DIN EN 50155 (VDE 0115-200):2022-06 |
| Continuous operating temperature | -60 ... +105 °C | Railway applications – Rolling stock – Electronic equipment | |
| | | Test procedure | DIN EN 61373 (VDE 0115-0106):2011-04 |
| | | Railway applications – Rolling stock equipment – Shock and vibration tests | |
| | | 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 ₁ = 5 Hz to f ₂ = 150 Hz f ₁ = 5 Hz to f ₂ = 150 Hz |
| | | Acceleration | 0.101g (highest test level used for all axes) 0.572g (highest test level used for all axes) 5g (highest test level used for all axes) |
| | | Test duration per axis | 10 min. 5 h |
| | | Test directions | X, Y and Z axes X, Y and Z axes X, Y and Z axes |
| | | Monitoring for contact faults/interruptions | Passed |
| | | Voltage drop measurement before and after each axis | Passed |

Environmental Testing (Environmental Conditions)

| | |
|--|---|
| 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 Passed |
| Extended test scope: Voltage drop measurement before and after each axis | Passed 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. |
| Vibration and shock stress for rolling stock equipment | Passed |

Commercial data

| | |
|-----------------------|---------------|
| Product Group | 22 (TOPJOB S) |
| eCl@ss 10.0 | 27-14-11-41 |
| eCl@ss 9.0 | 27-14-11-41 |
| ETIM 9.0 | EC000901 |
| ETIM 8.0 | EC000901 |
| PU (SPU) | 100 pcs |
| Packaging type | Box |
| Country of origin | DE |
| GTIN | 4055143616973 |
| Customs tariff number | 85369010000 |

Environmental Product Compliance

| | |
|------------------------|-------------------------|
| RoHS Compliance Status | Compliant, No Exemption |
|------------------------|-------------------------|

Approvals / Certificates

General approvals



| Approval | Standard | Certificate Name |
|-------------------------------------|---------------|------------------|
| CSA DEKRA Certification B.V. | C22.2 No. 158 | 1645434 |
| UL UL International Germany GmbH | UL 1059 | E45172 |

Declarations of conformity and manufacturer's declarations



| Approval | Standard | Certificate Name |
|--|----------|------------------|
| ATEX-Attestation of Conformity WAGO GmbH & Co. KG | - | - |
| Railway WAGO GmbH & Co. KG | - | Railway Ready |

Approvals for marine applications



| Approval | Standard | Certificate Name |
|--|----------|------------------|
| ABS American Bureau of Shipping | EN 60947 | 20-HG1941090-PDA |
| BV Bureau Veritas S.A. | EN 60947 | 38586/B0 BV |
| DNV GL Det Norske Veritas, Germanischer Lloyd | - | TAE00001V2 |

Approvals for hazardous areas



| Approval | Standard | Certificate Name |
|--|-------------|--|
| AEx UL International Germany GmbH c/o Physikalisch Technische Bundesanstalt | UL 60079 | E185892 (AEx e II resp. Ex e II) |
| ATEX Physikalisch Technische Bundesanstalt (PTB) | EN 60079 | PTB 05 ATEX 1094 U (II 2 G Ex eb IIC Gb bzw. I M 2 Ex eb I Mb) |
| CCC CNEX | GB/T 3836.3 | 2020312313000159 (Ex eb IIC Gb, Ex eb I Mb) |

Approvals for hazardous areas

| | | |
|---|----------------|--|
| EAC Brjansker Zertifizierungs- stelle | TP TC 012/2011 | RU C-DE.AM02. B.00127/19 (Ex e IIC Gb U) |
| IECEX Physikalisch Technische Bundesanstalt (PTB) | IEC 60079 | IECEX PTB 05.0034U (Ex eb IIC Gb or Ex eb I Mb) |
| INMETRO TÜV Rheinland do Brasil Ltda. | IEC 60079 | TÜV 12.1308 U |

Downloads

Environmental Product Compliance

Compliance Search

| | |
|---|-------------------|
| Environmental Product Compliance 2001-1407 | ↓ |
|---|-------------------|

Documentation

Additional Information

| | | |
|-------------------|-------------------|-------------------|
| Technical Section | pdf 2246.92 KB | ↓ |
|-------------------|-------------------|-------------------|

Bid Text

| | | | |
|-----------|------------|------------------|-------------------|
| 2001-1407 | 19.02.2019 | xml 3.59 KB | ↓ |
| 2001-1407 | 02.08.2018 | docx 14.40 KB | ↓ |

CAD/CAE-Data

CAD data

| | |
|---------------------------|-------------------|
| 2D/3D Models 2001-1407 | ↓ |
|---------------------------|-------------------|

CAE data

| | |
|--------------------------------|-------------------|
| EPLAN Data Portal 2001-1407 | ↓ |
| WSCAD Universe 2001-1407 | ↓ |
| ZUKEN Portal 2001-1407 | ↓ |

1 Compatible Products

1.1 Required Accessories

1.1.1 End plate

1.1.1.1 End plate



Item No.: 2002-1491
End and intermediate plate; 0.8 mm thick;
gray

Item No.: 2002-1492
End and intermediate plate; 0.8 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.: 210-197

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.: 2002-1493

Separator plate; 2 mm thick; oversized; gray



Item No.: 2002-1494

Separator 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

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; insulated; black



Item No.: 210-123

Wire commoning chain; insulated; blue

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

1.2.7.1 Marker



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

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; 1,50 mm²; gray



Item No.: 2001-511
Modular TOPJOB®S connector; modular; for jumper contact slot; 1-pole; 1,50 mm²; gray



Item No.: 2001-552
Modular TOPJOB®S connector; modular; for jumper contact slot; 2-pole; 1,50 mm²; gray



Item No.: 2001-553
Modular TOPJOB®S connector; modular; for jumper contact slot; 3-pole; 1,50 mm²; gray



Item No.: 2001-554
Modular TOPJOB®S connector; modular; for jumper contact slot; 4-pole; 1,50 mm²; gray



Item No.: 2001-555
Modular TOPJOB®S connector; modular; for jumper contact slot; 5-pole; 1,50 mm²; gray



Item No.: 2001-556
Modular TOPJOB®S connector; modular; for jumper contact slot; 6-pole; 1,50 mm²; gray



Item No.: 2001-557
Modular TOPJOB®S connector; modular; for jumper contact slot; 7-pole; 1,50 mm²; gray



Item No.: 2001-558
Modular TOPJOB®S connector; modular; for jumper contact slot; 8-pole; 1,50 mm²; gray



Item No.: 2001-559
Modular TOPJOB®S connector; modular; for jumper contact slot; 9-pole; 1,50 mm²; 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

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



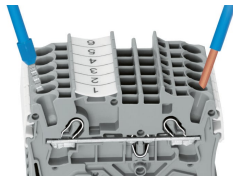
Item No.: 210-647
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; multicoloured

Installation Notes

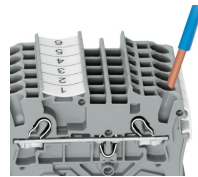
Conductor termination



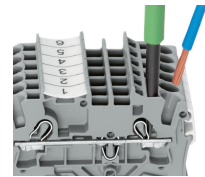
All conductor types at a glance



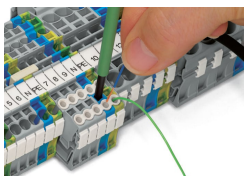
Push-in termination of solid and ferruled conductors



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.

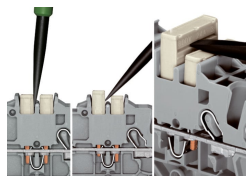
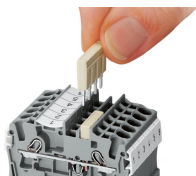


Inserting a conductor via operating tool:
Connecting fine-stranded conductors without ferrules, or small cross-sectional conductors that cannot be pushed in, is performed similarly to the original CAGE CLAMP® – just use an operating tool.
Advantage:
To open the clamp, the operating tool is inserted vertically.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



Conductor termination – insulation stop

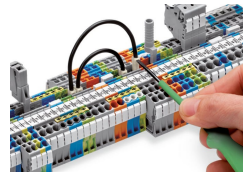
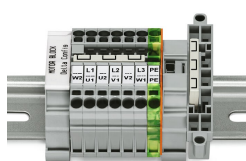
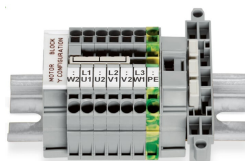
Commoning



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.

Commoning

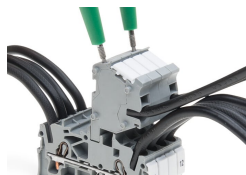


This star point jumper has been specially developed to create a "star point" and is used on motor terminal boards equipped with Rail-Mount Terminal Blocks TOPJOB® S.

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.

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

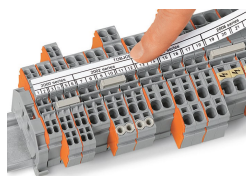
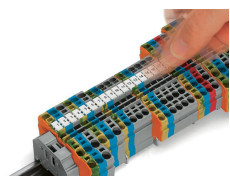
Rail-mount terminal block assembly for electric motor wiring

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!

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

Current addresses can be found at: www.wago.com