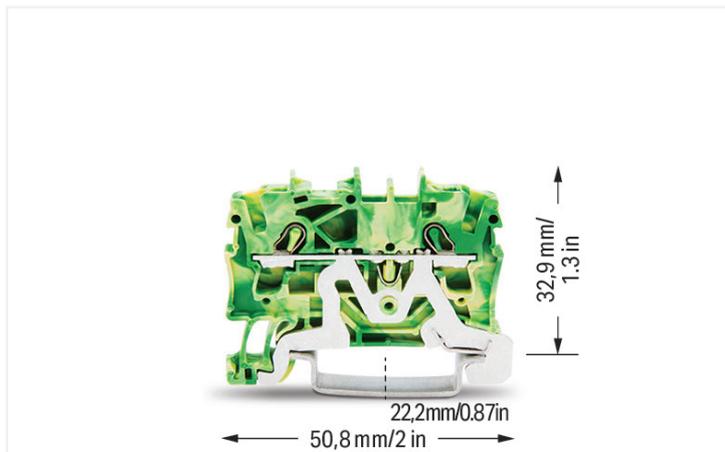


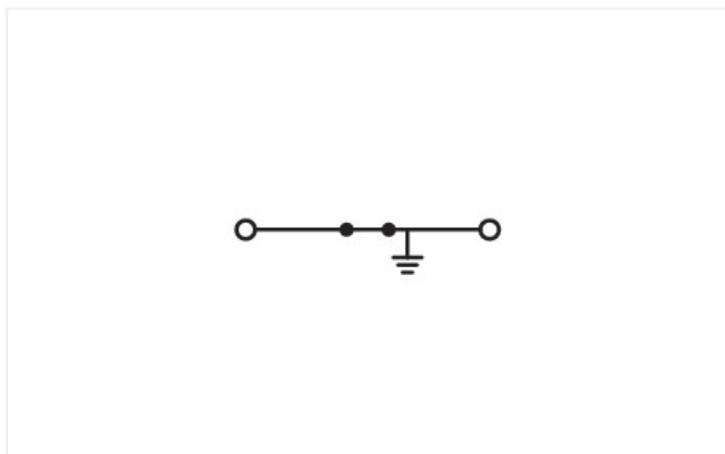
Data Sheet | Item Number: 2002-1207

2-conductor ground terminal block; 2.5 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®; 2,50 mm²; green-yellow

<https://www.wago.com/2002-1207>



Color: ■ green-yellow



Similar to illustration

Ground terminal block, 2002 Series, Push-in CAGE CLAMP®

Easily, quickly and safely connect conductors with this ground terminal block (item number 2002-1207). Strip lengths must be between 10 and 12 mm when connecting conductors to this ground terminal block. Ground terminal blocks connect directly to the mounting rail via an integrated contact foot. This creates an electrical and mechanical connection between the electrical conductors and the mounting adapter. Featuring conductor terminals along with Push-in CAGE CLAMP®, this connector outperforms the competition. Our Push-in CAGE CLAMP® is a universal, maintenance-free connection solution for all conductor types, boasting a key feature: both solid and fine-stranded conductors with ferrules can be directly inserted without the need for tools or any preparation, such as crimping the ferrule. Depending on the type of conductor, this ground terminal block is suitable for conductor cross sections ranging from 0.25 mm² to 4 mm².

This through rail-mount terminal block is operated with an operating tool. Our TOPJOB® S rail-mount terminal blocks guarantee secure electrical connections across many industrial applications and modern building installations. They make wiring work easier as you can quickly plug in solid, stranded, and fine-stranded conductors with ferrules. This product is designed for specific Ex applications (please refer to the product datasheet).

Electrical data

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

Ex information

Reference to hazardous areas	See "Downloads – Documentation – Additional Information: Technical Section; Technical Explanations"
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General information

Wiring direction	Front-entry wiring
------------------	--------------------

Connection Data

Clamping units	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	2.5 mm ²
Solid conductor	0.25 ... 4 mm ² / 22 ... 12 AWG
Solid conductor; push-in termination	0.75 ... 4 mm ² / 18 ... 12 AWG
Fine-stranded conductor	0.25 ... 4 mm ² / 22 ... 12 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 2.5 mm ² / 22 ... 14 AWG
Fine-stranded conductor; with ferrule; push-in termination	1 ... 2.5 mm ² / 18 ... 14 AWG
Note (conductor cross-section)	Depending on the conductor characteristic, a conductor with a smaller cross-section can also be inserted via push-in termination.
Strip length	10 ... 12 mm / 0.39 ... 0.47 inches
Wiring direction	Front-entry wiring

Physical data

Width	5.2 mm / 0.205 inches
Height	50.8 mm / 2 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	0.104 MJ
Weight	7.7 g

Environmental requirements

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

Environmental Testing

Test specification: Railway applications – Rolling stock – Electronic equipment	DIN EN 50155 (VDE 0115-200):2022-06
Test procedure: Railway applications – Rolling stock equipment – Vibration and shock tests	DIN EN 61373 (VDE 0115-0106):2011-04
Spectrum/Mounting location	Service life test, Category 1, Class A/B
Functional test with noise-like oscillations	Test passed according to Section 8 of the standard
Frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 150 \text{ Hz}$
Acceleration	0.101g (highest test level used for all axes)
Test duration per axis	10 min.
Test directions	X, Y and Z axes
Monitoring of contact faults and interruptions	Passed
Voltage drop measurement before and after each axis	Passed
Simulated service life test through increased levels of noise-like oscillations	Test passed according to Section 9 of the standard
Frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 150 \text{ Hz}$
Acceleration	0.572g (highest test level used for all axes)
Test duration per axis	5 h
Test directions	X, Y and Z axes
Extended testing: Monitoring of contact faults and interruptions	Passed
Extended testing: Voltage drop measurement before and after each axis	Passed
Shock test	Test passed according to Section 10 of the standard
Shock pulse form	Half sine
Acceleration	5g (highest test level used for all axes)
Shock duration	30 ms
Number of shocks (per axis)	3 pos. und 3 neg.
Test directions	X, Y and Z axes
Extended testing: Monitoring of contact faults and interruptions	Passed
Extended testing: Voltage drop measurement before and after each axis	Passed
Vibration and shock stress for rolling stock equipment	Passed

Commercial data

Product Group	22 (TOPJOB S)
PU (SPU)	100 pcs
Packaging type	Box
Country of origin	DE
GTIN	4017332999212
Customs tariff number	85369010000

Product Classification

UNSPSC	39121410
eCl@ss 10.0	27-14-11-41
eCl@ss 9.0	27-14-11-41
ETIM 9.0	EC000901
ETIM 10.0	EC000901
ECCN	NO US CLASSIFICATION

Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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Approvals / Certificates

General approvals



Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60947	NTR NL-8054
CSA CSA Group	C22.2 No. 158	154112
DEKRA DEKRA Certification B.V.	EN 60947	71-149763
KEMA/KEUR DEKRA Certification B.V.	EN 60947	71-124163
UL Underwriters Laboratories Inc.	UL 1059	E45172

Declarations of conformity and manufacturer's declarations



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

Approvals for marine applications



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

Approvals for hazardous areas



Approval	Standard	Certificate Name
AEx Underwriters Laboratories Inc.	UL 60079	E185892 (AEx eb IIC resp. Ex eb IIC)
ATEX Physikalisch Technische Bundesanstalt	EN 60079	PTB 03 ATEX 1162 U (II2G Ex eb IIC Gb, IM2 Ex eb IMb)
CCC CQST/CNEx	GB/T 3836.3	2020312313000238 (Ex eb IIC Gb, Ex eb I Mb)
IECEX Physikalisch Technische Bundesanstalt	IEC 60079	IECEX PTB 03.0004U (Ex eb IIC Gb or Ex eb I Mb)
INMETRO TÜV Rheinland do Brasil Ltda.	IEC 60079	TÜV 12.1307 U

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 2002-1207



Documentation

Bid Text

2002-1207	29.04.2019	xml 3.80 KB	
2002-1207	23.04.2019	docx 14.57 KB	

CAD/CAE-Data

CAD data

2D/3D Models
2002-1207



CAE data

EPLAN Data Portal
2002-1207



WSCAD Universe
2002-1207



ZUKEN Portal
2002-1207



1 Compatible Products

1.1 Required Accessories

1.1.1 End plate

1.1.1.1 End plate



Item No.: 2002-1291

End and intermediate plate; 0.8 mm thick; gray

Item No.: 2002-1292

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.: 210-508

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

1.2.1.1 Mounting accessories



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.: 209-190

Separator for Ex e/Ex i applications; 3 mm thick; 90 mm wide; orange



Item No.: 2002-1293

Separator plate; 2 mm thick; oversized; gray



Item No.: 2002-1294

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.: 216-262

Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray



Item No.: 216-243

Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red



Item No.: 216-263

Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red



Item No.: 216-244

Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black



Item No.: 216-264

Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black



Item No.: 216-246

Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue



Item No.: 216-266

Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue

1.2.4 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.: 2002-171

Insulation stop; 0.25 - 0.5 mm²; 5 pieces/strip; light gray



Item No.: 2002-172

Insulation stop; 0.75 - 1 mm²; 5 pieces/strip; dark gray

1.2.6 Jumper

1.2.6.1 Jumper



Item No.: 2002-400

Continuous jumper; 2-way; insulated; light gray



Item No.: 2002-413

Continuous jumper; 3-way; insulated; light gray



Item No.: 2002-415

Continuous jumper; 5-way; insulated; light gray



Item No.: 2002-423/000-006

Continuous jumper; from 1 to 3; insulated; blue



Item No.: 2002-423

Continuous jumper; from 1 to 3; insulated; light gray



Item No.: 2002-423/000-005

Continuous jumper; from 1 to 3; insulated; red



Item No.: 2002-424/000-006

Continuous jumper; from 1 to 4; insulated; blue



Item No.: 2002-424

Continuous jumper; from 1 to 4; insulated; light gray



Item No.: 2002-424/000-005

Continuous jumper; from 1 to 4; insulated; red



Item No.: 2002-406/020-000

Delta jumper; insulated; light gray



Item No.: 2002-410/000-006

Jumper; 10-way; insulated; blue



Item No.: 2002-410

Jumper; 10-way; insulated; light gray



Item No.: 2002-410/000-005

Jumper; 10-way; insulated; red



Item No.: 2002-402/000-006

Jumper; 2-way; insulated; blue



Item No.: 2002-402

Jumper; 2-way; insulated; light gray



Item No.: 2002-402/000-005

Jumper; 2-way; insulated; red



Item No.: 2002-403/000-006

Jumper; 3-way; insulated; blue



Item No.: 2002-403

Jumper; 3-way; insulated; light gray



Item No.: 2002-403/000-005

Jumper; 3-way; insulated; red



Item No.: 2002-404/000-006

Jumper; 4-way; insulated; blue



Item No.: 2002-404

Jumper; 4-way; insulated; light gray



Item No.: 2002-404/000-005

Jumper; 4-way; insulated; red



Item No.: 2002-405/000-006

Jumper; 5-way; insulated; blue



Item No.: 2002-405

Jumper; 5-way; insulated; light gray



Item No.: 2002-405/000-005

Jumper; 5-way; insulated; red



Item No.: 2002-406/000-006

Jumper; 6-way; insulated; blue



Item No.: 2002-406

Jumper; 6-way; insulated; light gray



Item No.: 2002-406/000-005

Jumper; 6-way; insulated; red



Item No.: 2002-407/000-006

Jumper; 7-way; insulated; blue



Item No.: 2002-407

Jumper; 7-way; insulated; light gray



Item No.: 2002-407/000-005

Jumper; 7-way; insulated; red



Item No.: 2002-408/000-006

Jumper; 8-way; insulated; blue



Item No.: 2002-408

Jumper; 8-way; insulated; light gray



Item No.: 2002-408/000-005

Jumper; 8-way; insulated; red



Item No.: 2002-409/000-006

Jumper; 9-way; insulated; blue



Item No.: 2002-409

Jumper; 9-way; insulated; light gray

1.2.6.1 Jumper

 <p>Item No.: 2002-409/000-005 Jumper; 9-way; insulated; red</p>	 <p>Item No.: 2002-440 Jumper; from 1 to 10; insulated; light gray</p>	 <p>Item No.: 2002-433 Jumper; from 1 to 3; insulated; light gray</p>	 <p>Item No.: 2002-434 Jumper; from 1 to 4; insulated; light gray</p>
 <p>Item No.: 2002-435 Jumper; from 1 to 5; insulated; light gray</p>	 <p>Item No.: 2002-436 Jumper; from 1 to 6; insulated; light gray</p>	 <p>Item No.: 2002-437 Jumper; from 1 to 7; insulated; light gray</p>	 <p>Item No.: 2002-438 Jumper; from 1 to 8; insulated; light gray</p>
 <p>Item No.: 2002-439 Jumper; from 1 to 9; insulated; light gray</p>	 <p>Item No.: 2002-480 Staggered jumper; 10-way; insulated; light gray</p>	 <p>Item No.: 2002-481 Staggered jumper; 11-way; insulated; light gray</p>	 <p>Item No.: 2002-482 Staggered jumper; 12-way; insulated; light gray</p>
 <p>Item No.: 2002-473/011-000 Staggered jumper; 2-way; from 1 to 3; insulated; light gray</p>	 <p>Item No.: 2002-472 Staggered jumper; 2-way; insulated; light gray</p>	 <p>Item No.: 2002-473 Staggered jumper; 3-way; insulated; light gray</p>	 <p>Item No.: 2002-475/011-000 Staggered jumper; 3-way; insulated; light gray</p>
 <p>Item No.: 2002-474 Staggered jumper; 4-way; insulated; light gray</p>	 <p>Item No.: 2002-475 Staggered jumper; 5-way; insulated; light gray</p>	 <p>Item No.: 2002-476 Staggered jumper; 6-way; insulated; light gray</p>	 <p>Item No.: 2002-477 Staggered jumper; 7-way; insulated; light gray</p>
 <p>Item No.: 2002-478 Staggered jumper; 8-way; insulated; light gray</p>	 <p>Item No.: 2002-479 Staggered jumper; 9-way; insulated; light gray</p>	 <p>Item No.: 2002-477/011-000 Staggered jumper; insulated; light gray</p>	 <p>Item No.: 2002-479/011-000 Staggered jumper; insulated; light gray</p>
 <p>Item No.: 2002-481/011-000 Staggered jumper; insulated; light gray</p>	 <p>Item No.: 2002-405/011-000 Star point jumper; 3-way; insulated; light gray</p>	 <p>Item No.: 210-103 Wire commoning chain; insulated; black</p>	 <p>Item No.: 210-123 Wire commoning chain; insulated; blue</p>

1.2.7 Marking

1.2.7.1 Group marker carrier

 <p>Item No.: 2009-191 Group marker carrier; gray</p>	 <p>Item No.: 2009-192 Group marker carrier; gray</p>	 <p>Item No.: 2009-193 Group marker carrier; gray</p>
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1.2.7.2 Marker

 <p>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</p>	 <p>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</p>	 <p>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</p>	 <p>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</p>
 <p>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</p>	 <p>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</p>	 <p>Item No.: 2009-145 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white</p>	 <p>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</p>
 <p>Item No.: 248-501/000-006 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; blue</p>	 <p>Item No.: 248-501/000-007 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; gray</p>	 <p>Item No.: 248-501/000-023 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; green</p>	 <p>Item No.: 248-501/000-017 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; light green</p>

1.2.7.2 Marker



Item No.: 248-501/000-012
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; orange



Item No.: 248-501/000-005
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; red



Item No.: 248-501/000-024
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; violet



Item No.: 248-501
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white



Item No.: 248-501/000-002
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; yellow



Item No.: 793-5501/000-006
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; blue



Item No.: 793-5501/000-014
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; brown



Item No.: 793-5501/000-007
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; gray



Item No.: 793-5501/000-023
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; green



Item No.: 793-5501/000-017
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; light green



Item No.: 793-5501/000-012
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; orange



Item No.: 793-5501/000-005
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; red



Item No.: 793-5501/000-024
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; violet



Item No.: 793-5501
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; white



Item No.: 793-5501/000-002
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; yellow



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



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



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



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



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



Item No.: 2009-115/000-005
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; red



Item No.: 2009-115/000-024
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet



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



Item No.: 2009-115/000-002
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow

1.2.7.3 Marker carrier



Item No.: 2002-161
Adaptor; gray



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.: 2002-115
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.: 2002-560

Modular TOPJOB®S connector; modular; for jumper contact slot; 10-pole; gray



Item No.: 2002-511

Modular TOPJOB®S connector; modular; for jumper contact slot; 1-pole; gray



Item No.: 2002-552

Modular TOPJOB®S connector; modular; for jumper contact slot; 2-pole; gray



Item No.: 2002-553

Modular TOPJOB®S connector; modular; for jumper contact slot; 3-pole; gray



Item No.: 2002-554

Modular TOPJOB®S connector; modular; for jumper contact slot; 4-pole; gray



Item No.: 2002-555

Modular TOPJOB®S connector; modular; for jumper contact slot; 5-pole; gray



Item No.: 2002-556

Modular TOPJOB®S connector; modular; for jumper contact slot; 6-pole; gray



Item No.: 2002-557

Modular TOPJOB®S connector; modular; for jumper contact slot; 7-pole; gray



Item No.: 2002-558

Modular TOPJOB®S connector; modular; for jumper contact slot; 8-pole; gray



Item No.: 2002-559

Modular TOPJOB®S connector; modular; for jumper contact slot; 9-pole; gray



Item No.: 2002-549

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



Item No.: 2002-649

TOPJOB®S L-type spacer module; modular; e.g., for bridging commoned terminal blocks; gray



Item No.: 2002-611

TOPJOB®S L-type test plug module; modular; 1-pole; gray

1.2.12 Tool

1.2.12.1 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



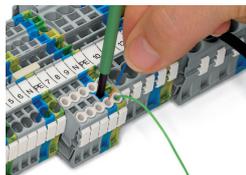
Push-in termination of solid and ferruled conductors



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.

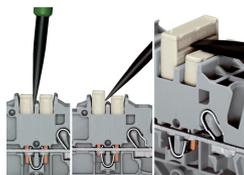


Conductor termination – insulation stop

Commoning

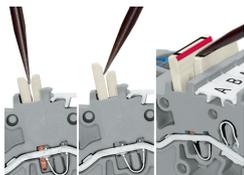


Insert push-in type jumper bar and push down until it hits backstop.



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.

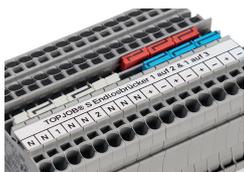
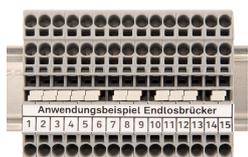
Commoning



Orient the staggered jumpers' red stripes on the inside. Insert the staggered jumper and push down until it hits the backstop.

Removing a staggered jumper: Insert the operating tool between the staggered jumpers, then lift up the jumper.

Commoning

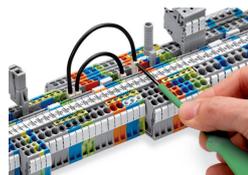


Continuous jumpers (2002 Series) readily connect an endless number of terminal blocks to each other via single jumper slot. Use the second jumper slot for additional commoning or testing.

The 1-to-3 adjacent jumper for continuous commoning enables every other terminal block to be commoned. For example, positive and negative potentials can be accommodated alongside each other.

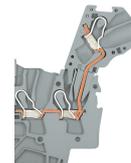
This star point jumper has been specially developed to create a "star point" and is used on motor terminal boards equipped with Rail-Mount Terminal Blocks TOPJOB® S.

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

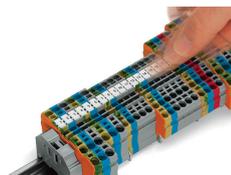
L-type test plug module – cross-sectional view of contacts



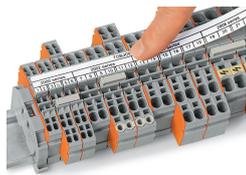
Test plug adapter (2009-174, CAT I) for 4 mm Ø plugs – compatible with 2000 to 2016 Series

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!



Using marker carriers for marking strips (2002-161) in jumper slots.