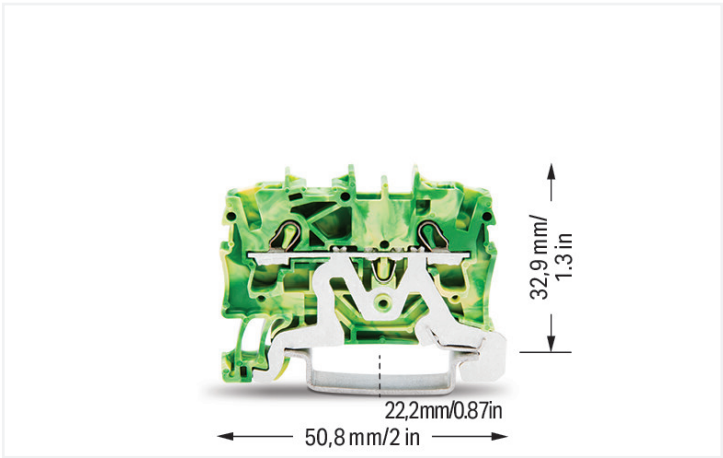
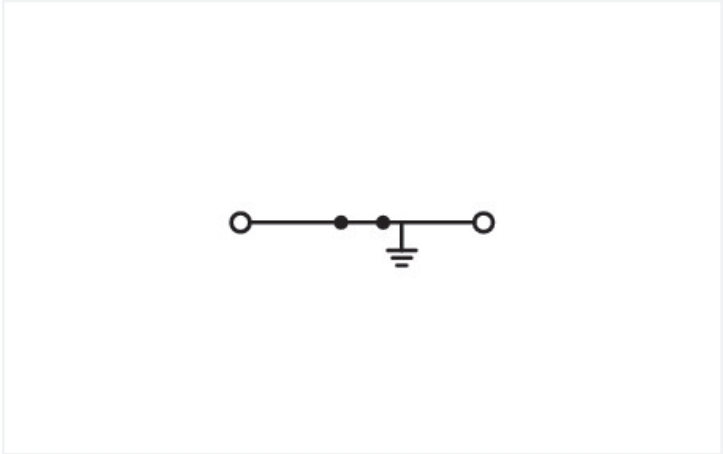
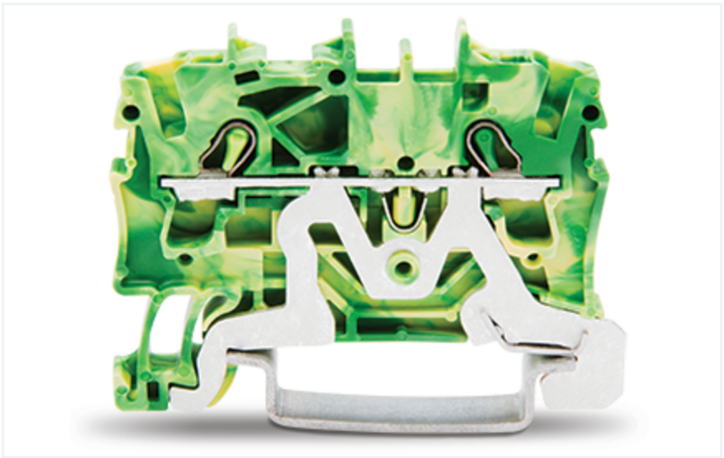


Data Sheet | Item Number: 2002-1207
2-conductor ground terminal block; 2.5 mm²; suitable for Ex e II applications; side and center marking; for DIN-rail 35 x 15 and 35 x 7.5; Push-in CAGE CLAMP®; 2,50 mm²; green-yellow
<https://www.wago.com/2002-1207>



Color: ■ green-yellow



Similar to illustration

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

This ground terminal block (item number 2002-1207) is designed for simple and secure connections. Our ground terminal blocks directly connect the mounting rail and the electrical conductors thanks to an integrated mounting foot. This connection ensures both electrical and mechanical stability between the conductors and the mounting adapter. Ensure that the strip lengths are between 10 mm and 12 mm when connecting conductors to this ground terminal block. This product features conductor terminals and utilizes Push-in CAGE CLAMP®. Push-in CAGE CLAMP® technology provides a universal connection solution for all conductor types. It allows both solid and fine-stranded conductors with ferrules to be inserted directly into the clamping point without the need for tools. Depending on the type of conductor, this ground terminal block is suitable for conductor cross sections ranging from 0.25 mm² to 4 mm². It features one level and two clamping points that you can use to connect a single potential. The green-yellow 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. The front-entry wiring makes it possible to connect copper conductors. 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 60947-7-2		
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	2	Connection 1 <table><tr><td>Connection technology</td><td>Push-in CAGE CLAMP®</td></tr><tr><td>Actuation type</td><td>Operating tool</td></tr><tr><td>Connectable conductor materials</td><td>Copper</td></tr><tr><td>Nominal cross-section</td><td>2.5 mm²</td></tr><tr><td>Solid conductor</td><td>0.25 ... 4 mm² / 22 ... 12 AWG</td></tr><tr><td>Solid conductor; push-in termination</td><td>0.75 ... 4 mm² / 18 ... 12 AWG</td></tr><tr><td>Fine-stranded conductor</td><td>0.25 ... 4 mm² / 22 ... 12 AWG</td></tr><tr><td>Fine-stranded conductor; with insulated ferrule</td><td>0.25 ... 2.5 mm² / 22 ... 14 AWG</td></tr><tr><td>Fine-stranded conductor; with ferrule; push-in termination</td><td>1 ... 2.5 mm² / 18 ... 14 AWG</td></tr><tr><td>Note (conductor cross-section)</td><td>Depending on the conductor characteristic, a conductor with a smaller cross-section can also be inserted via push-in termination.</td></tr><tr><td>Strip length</td><td>10 ... 12 mm / 0.39 ... 0.47 inches</td></tr><tr><td>Wiring direction</td><td>Front-entry wiring</td></tr></table>	Connection technology	Push-in CAGE CLAMP®	Actuation type	Operating tool	Connectable conductor materials	Copper	Nominal cross-section	2.5 mm²	Solid conductor	0.25 ... 4 mm² / 22 ... 12 AWG	Solid conductor; push-in termination	0.75 ... 4 mm² / 18 ... 12 AWG	Fine-stranded conductor	0.25 ... 4 mm² / 22 ... 12 AWG	Fine-stranded conductor; with insulated ferrule	0.25 ... 2.5 mm² / 22 ... 14 AWG	Fine-stranded conductor; with ferrule; push-in termination	1 ... 2.5 mm² / 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
Connection technology	Push-in CAGE CLAMP®																									
Actuation type	Operating tool																									
Connectable conductor materials	Copper																									
Nominal cross-section	2.5 mm²																									
Solid conductor	0.25 ... 4 mm² / 22 ... 12 AWG																									
Solid conductor; push-in termination	0.75 ... 4 mm² / 18 ... 12 AWG																									
Fine-stranded conductor	0.25 ... 4 mm² / 22 ... 12 AWG																									
Fine-stranded conductor; with insulated ferrule	0.25 ... 2.5 mm² / 22 ... 14 AWG																									
Fine-stranded conductor; with ferrule; push-in termination	1 ... 2.5 mm² / 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																									
Total number of potentials	1																									
Number of levels	1																									
Number of jumper slots	2																									

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	Environmental Testing (Environmental Conditions) <table><tr><td>Test specification Railway applications – Rolling stock – Electronic equipment</td><td>DIN EN 50155 (VDE 0115-200):2022-06</td></tr><tr><td>Test procedure Railway applications – Rolling stock equipment – Shock and vibration tests</td><td>DIN EN 61373 (VDE 0115-0106):2011-04</td></tr><tr><td>Spectrum/Installation location</td><td>Service life test, Category 1, Class A/B</td></tr><tr><td>Function test with noise-like vibration</td><td>Test passed according to Section 8 of the standard</td></tr><tr><td>Frequency</td><td>f₁ = 5 Hz to f₂ = 150 Hz</td></tr><tr><td>Acceleration</td><td>0.101g (highest test level used for all axes)</td></tr></table>	Test specification Railway applications – Rolling stock – Electronic equipment	DIN EN 50155 (VDE 0115-200):2022-06	Test procedure Railway applications – Rolling stock equipment – 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 ₁ = 5 Hz to f ₂ = 150 Hz	Acceleration	0.101g (highest test level used for all axes)
Test specification Railway applications – Rolling stock – Electronic equipment	DIN EN 50155 (VDE 0115-200):2022-06													
Test procedure Railway applications – Rolling stock equipment – 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 ₁ = 5 Hz to f ₂ = 150 Hz													
Acceleration	0.101g (highest test level used for all axes)													
Continuous operating temperature	-60 ... +105 °C													



Environmental Testing (Environmental Conditions)	
Test duration per axis	10 min.
Test directions	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
Frequency	f ₁ = 5 Hz to f ₂ = 150 Hz
Acceleration	0.572g (highest test level used for all axes)
Test duration per axis	5 h
Test directions	X, Y and Z axes
Extended test scope: Monitoring for contact faults/interruptions	Passed
Extended test scope: Voltage drop measurement before and after each axis	Passed
Shock test	Test passed according to Section 10 of the standard
Shock 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 test scope: Monitoring for contact faults/interruptions	Passed
Extended test scope: 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 8.0	EC000901
ECCN	NO US CLASSIFICATION



Environmental Product Compliance	
RoHS Compliance Status	Compliant, No Exemption

Approvals / Certificates

General approvals			Declarations of conformity and manufacturer's declarations		
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60947	NTR NL-8054	ATEX-Attestation of Con- formity WAGO GmbH & Co. KG	-	-
CSA CSA Group	C22.2 No. 158	154112	EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
KEMA/KEUR DEKRA Certification B.V.	EN 60947	71-124163	Railway WAGO GmbH & Co. KG	-	Railway Ready
UL Underwriters Laboratories Inc.	UL 1059	E45172	UK-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-

Approvals for marine applications			Approvals for hazardous areas		
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
ABS American Bureau of Ship- ping	EN 60947	20-HG1941090-PDA	AEx Underwriters Laboratories Inc.	UL 60079	E185892 (AEx eb IIC resp. Ex eb IIC)
BV Bureau Veritas S.A.	EN 60947	38586/B0 BV	ATEX Physikalisch Technische Bundesanstalt	EN 60079	PTB 03 ATEX 1162 U (II2G Ex eb IIC Gb, IM2 Ex eb IMb)
DNV GL Det Norske Veritas, Ger- manischer Lloyd	-	TAE00001V2	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
			KTL Korea Testing Laboratory	EN IEC 60079-0, EN IEC 60079-7	19-KA4B0-0922U

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	CAE data
2D/3D Models 2002-1207	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; unslopped; similar to EN 60715; silver-colored



Item No.: 210-198
Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslopped; according to EN 60715; copper-colored



Item No.: 210-508
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slopped; 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; slopped; similar to EN 60715; silver-colored



Item No.: 210-506
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslopped; 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; slopped; similar to EN 60715; silver-colored



Item No.: 210-118
Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslopped; according to EN 60715; silver-colored



Item No.: 210-115
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slopped; according to EN 60715; silver-colored



Item No.: 210-112
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slopped; according to EN 60715; silver-colored



Item No.: 210-504
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slopped; 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; unslopped; according to EN 60715; silver-colored



Item No.: 210-505
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slopped; 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



[Item No.: 2002-409/000-005](#)
Jumper; 9-way; insulated; red



[Item No.: 2002-440](#)
Jumper; from 1 to 10; insulated; light gray



[Item No.: 2002-433](#)
Jumper; from 1 to 3; insulated; light gray



[Item No.: 2002-434](#)
Jumper; from 1 to 4; insulated; light gray



[Item No.: 2002-435](#)
Jumper; from 1 to 5; insulated; light gray



[Item No.: 2002-436](#)
Jumper; from 1 to 6; insulated; light gray



[Item No.: 2002-437](#)
Jumper; from 1 to 7; insulated; light gray



[Item No.: 2002-438](#)
Jumper; from 1 to 8; insulated; light gray



1.2.6.1 Jumper

 Item No.: 2002-439 Jumper; from 1 to 9; insulated; light gray	 Item No.: 2002-480 Staggered jumper; 10-way; insulated; light gray	 Item No.: 2002-481 Staggered jumper; 11-way; insulated; light gray	 Item No.: 2002-482 Staggered jumper; 12-way; insulated; light gray
 Item No.: 2002-473/011-000 Staggered jumper; 2-way; from 1 to 3; insulated; light gray	 Item No.: 2002-472 Staggered jumper; 2-way; insulated; light gray	 Item No.: 2002-473 Staggered jumper; 3-way; insulated; light gray	 Item No.: 2002-475/011-000 Staggered jumper; 3-way; insulated; light gray
 Item No.: 2002-474 Staggered jumper; 4-way; insulated; light gray	 Item No.: 2002-475 Staggered jumper; 5-way; insulated; light gray	 Item No.: 2002-476 Staggered jumper; 6-way; insulated; light gray	 Item No.: 2002-477 Staggered jumper; 7-way; insulated; light gray
 Item No.: 2002-478 Staggered jumper; 8-way; insulated; light gray	 Item No.: 2002-479 Staggered jumper; 9-way; insulated; light gray	 Item No.: 2002-477/011-000 Staggered jumper; insulated; light gray	 Item No.: 2002-479/011-000 Staggered jumper; insulated; light gray
 Item No.: 2002-481/011-000 Staggered jumper; insulated; light gray	 Item No.: 2002-405/011-000 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 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
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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



1.2.7.2 Marker



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



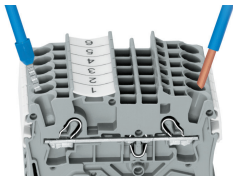
Item No.: 210-720
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

Installation Notes

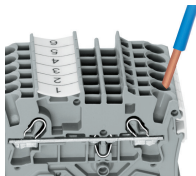
Conductor termination



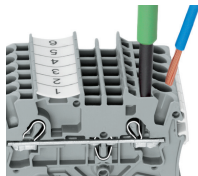
All conductor types at a glance



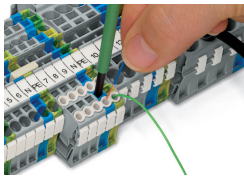
Push-in termination of solid and ferruled conductors



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.

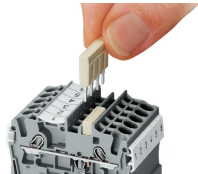


Inserting a conductor via operating tool:
Connecting fine-stranded conductors without ferrules, or small cross-sectional conductors that cannot be pushed in, is performed similarly to the original CAGE CLAMP® – just use an operating tool.
Advantage:
To open the clamp, the operating tool is inserted vertically.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

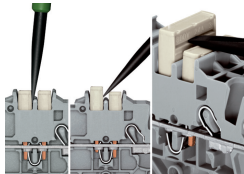


Conductor termination – insulation stop

Commoning

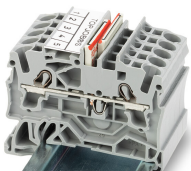


Insert push-in type jumper bar and push down until it hits backstop.

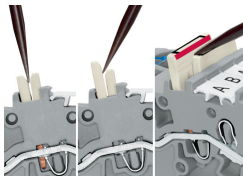


Removing a push-in type jumper bar:
Insert the operating tool between the jumper and partition wall of the dual jumper slots, then lift up the jumper. Place the operating tool in the center of jumpers for up to five contacts (see above), or alternately on both sides for jumpers with more than five contacts.

Commoning

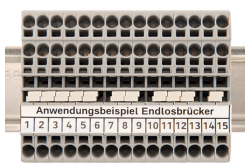


Orient the staggered jumpers' red stripes on the inside.
Insert the staggered jumper and push down until it hits the backstop.

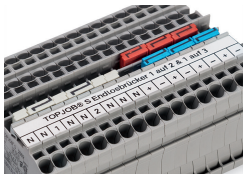


Removing a staggered jumper:
Insert the operating tool between the staggered jumpers, then lift up the jumper.

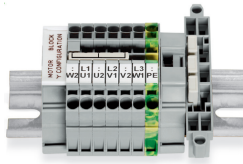
Commoning



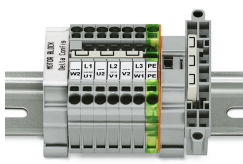
Continuous jumpers (2002 Series) readily connect an endless number of terminal blocks to each other via single jumper slot. Use the second jumper slot for additional commoning or testing.



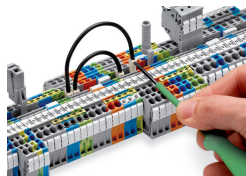
The 1-to-3 adjacent jumper for continuous commoning enables every other terminal block to be commoned. For example, positive and negative potentials can be accommodated alongside each other.



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.

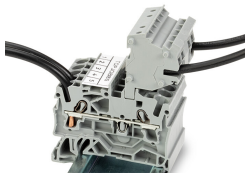


This delta jumper has been specially developed to create a delta configuration and is used on motor terminal boards equipped with rail-mount terminal blocks TOPJOB® S.

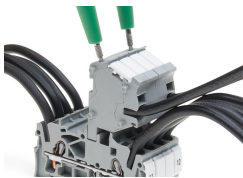


Push down the wire jumper until fully inserted. Lift the jumper with an operating tool for rewiring.

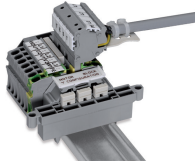
Testing



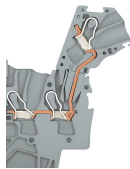
The modular TOPJOB® S connectors also connect conductors of the same size as the terminal blocks being used.



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



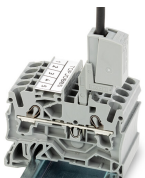
Rail-mount terminal block assembly for electric motor wiring



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



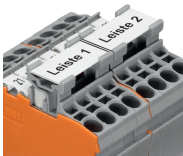
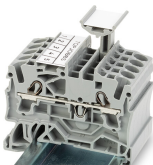
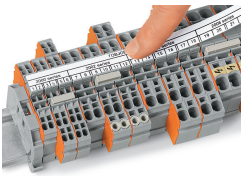
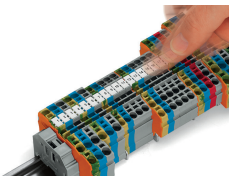
Test plug adapter (2009-174, CAT I) for 4 mm Ø plugs – compatible with 2000 to 2016 Series



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.