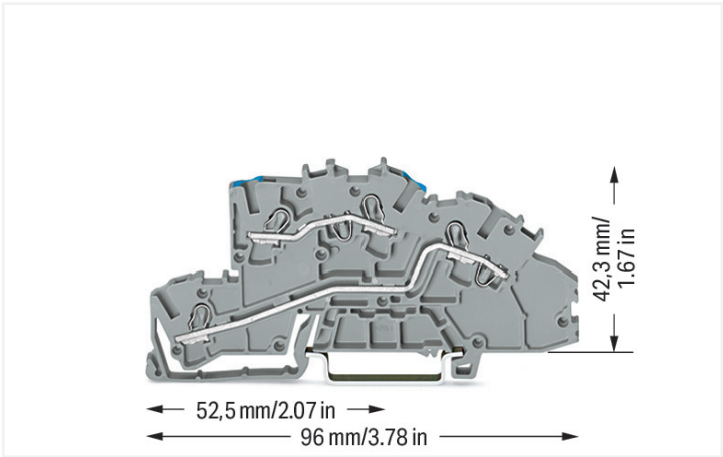


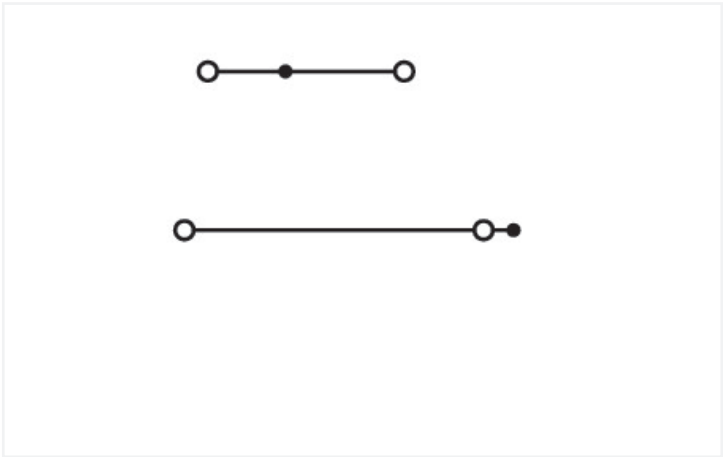
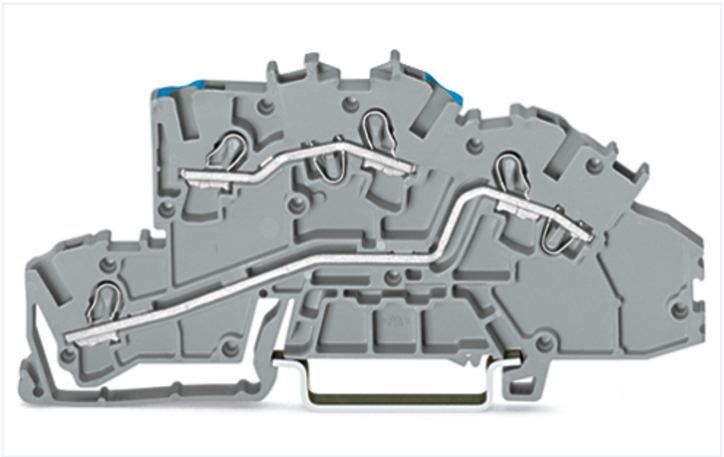
Data Sheet | Item Number: 2003-7649

Multilevel installation terminal block; with operating slots; 2.5 mm²; N/L; Push-in CAGE CLAMP®; 2,50 mm²; gray

<https://www.wago.com/2003-7649>



Color: ■ gray



Similar to illustration

Multilevel installation terminal block, 2003 Series, gray

Our multilevel installation terminal block (item number 2003-7649) makes connections quick and easy. Conductors can only be connected to this multilevel installation terminal block if their strip length is between 10 mm and 12 mm. This product incorporates conductor terminals and utilizes Push-in CAGE CLAMP®. Our Push-in CAGE CLAMP® is a universal, maintenance-free connection solution for all conductor types, offering a key advantage: It allows direct insertion of both solid and fine-stranded conductors with ferrules without needing tools. No preparation is required; for example, crimping the conductor's ferrule is not necessary. This multilevel installation terminal block is suitable for conductor cross sections ranging from 0.25 mm² to 4 mm². It comes with three levels and four clamping points that you can use to connect two potentials. The gray housing is made of polyamide (PA66) for insulation. These installation rail-mount terminal blocks are mounted using DIN-35 rails..

Electrical data				
Ratings		Potential - potential		
Ratings per	IEC/EN 60947-7-1	IEC/EN 60947-7-1	IEC/EN 60947-7-1	Power Loss
Overvoltage category	III	III	II	Power loss, per pole (potential)
Pollution degree	3	2	2	Rated current I <sub>N</sub> for power loss specification
Nominal voltage	400 V	-	-	Resistance value for specified, current-dependent power loss
Rated surge voltage	6 kV	-	-	
Rated current	24 A	-	-	
Current at conductor cross-section (max.) mm²	32 A	-	-	



Connection data		
Clamping units	4	
Total number of potentials	2	
Number of levels	3	
Connection 1		
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	

Physical data		
Width	5.2 mm / 0.205 inches	
Height	96 mm / 3.78 inches	
Depth from upper-edge of DIN-rail	42.3 mm / 1.665 inches	

Mechanical data		
Potential marking	N/L	
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	0.26 MJ	
Weight	13.6 g	

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




Commercial data		
Product Group	22 (TOPJOB S)	
PU (SPU)	50 pcs	
Packaging type	Box	
Country of origin	DE	
GTIN	4044918925624	
Customs tariff number	85369010000	


Product classification		
UNSPSC	39121410	
eCl@ss 10.0	27-14-11-25	
eCl@ss 9.0	27-14-11-25	
ETIM 9.0	EC001329	
ETIM 8.0	EC001329	
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	71-113530	EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
CCA DEKRA Certification B.V.	EN 60947	NTR NL-7828	UK-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-

Approvals for marine applications

		
Approval	Standard	Certificate Name
ABS American Bureau of Ship- ping	EN 60947	20-HG1941090-PDA
DNV GL Det Norske Veritas, Ger- manischer Lloyd	-	TAE00001V2



Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 2003-7649

↓

Documentation			
Bid Text			
2003-7649	29.04.2019	xml 3.91 KB	↓
2003-7649	29.04.2019	docx 14.84 KB	↓

CAD/CAE-Data	
CAD data	CAE data
2D/3D Models 2003-7649	EPLAN Data Portal 2003-7649
↓	↓
	WSCAD Universe 2003-7649
	↓
	ZUKEN Portal 2003-7649
	↓

1 Compatible Products

1.1 Required Accessories

1.1.1 End plate

1.1.1.1 End plate



[Item No.: 2003-7692](#)  
End and intermediate plate; 0.8 mm thick;  
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 Ferrule

1.2.2.1 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

1.2.3 Installation

1.2.3.1 Cover



**Item No.: 709-156**  
Cover; Type 3; suitable for cover carrier, type 3; 1 m long; transparent

1.2.3.2 Cover carrier



**Item No.: 709-169**  
Cover carrier; Type 3; 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

1.2.3.3 Mounting accessories



**Item No.: 2009-304**  
Busbar carrier; not suitable for use as end stop; for DIN 35 rail; 1.5 mm thick; blue



**Item No.: 2009-305**  
Busbar carrier; with end stop function and detachable separator plate; for DIN 35 rail; 7.5 mm thick; blue



1.2.4 Insulation stop

1.2.4.1 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

1.2.5 Jumper

1.2.5.1 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






1.2.5.1 Jumper





















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

1.2.6 Marking

1.2.6.1 Group marker carrier

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

1.2.6.2 Marker

 <b>Item No.: 2009-145/000-006</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue	 <b>Item No.: 2009-145/000-007</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray	 <b>Item No.: 2009-145/000-023</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green	 <b>Item No.: 2009-145/000-012</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange
 <b>Item No.: 2009-145/000-005</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; red	 <b>Item No.: 2009-145/000-024</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet	 <b>Item No.: 2009-145</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white	 <b>Item No.: 2009-145/000-002</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow
 <b>Item No.: 248-501/000-006</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; blue	 <b>Item No.: 248-501/000-007</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; gray	 <b>Item No.: 248-501/000-023</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; green	 <b>Item No.: 248-501/000-017</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; light green
 <b>Item No.: 248-501/000-012</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; orange	 <b>Item No.: 248-501/000-005</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; red	 <b>Item No.: 248-501/000-024</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; violet	 <b>Item No.: 248-501</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white
 <b>Item No.: 248-501/000-002</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; yellow	 <b>Item No.: 793-5501/000-006</b> WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; blue	 <b>Item No.: 793-5501/000-014</b> WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; brown	 <b>Item No.: 793-5501/000-007</b> WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; gray



1.2.6.2 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

1.2.6.3 Marker carrier



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

1.2.6.4 Marking strip



**Item No.: 2009-110**  
Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white

1.2.7 Push-in type wire jumper

1.2.7.1 Jumper



**Item No.: 2009-414**  
Push-in type wire jumper; 1.5 mm<sup>2</sup>; insulated; 110 mm long; black



**Item No.: 2009-414/000-005**  
Push-in type wire jumper; 1.5 mm<sup>2</sup>; insulated; 110 mm long; black



**Item No.: 2009-416**  
Push-in type wire jumper; 1.5 mm<sup>2</sup>; 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



1.2.8 Test and measurement

1.2.8.1 Testing accessories



**Item No.: 2009-174**  
Test plug adapter; for 4 mm Ø test plugs; for testing TOPJOB®S rail-mounted terminal blocks; gray



**Item No.: 210-136**  
Test plug; 2 mm Ø; with 500 mm cable; red



**Item No.: 2009-182**  
Testing tap; for max. 2.5 mm<sup>2</sup>; tool-free connection for individual test wires 0.08 - 2.5 mm; gray

1.2.9 Tool

1.2.9.1 Operating tool



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



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



**Item No.: 2009-309**  
Operating tool; Blades: 3.5 x 0.5 mm and 2.5 x 0.4 mm; for TOPJOB®S installation terminal blocks



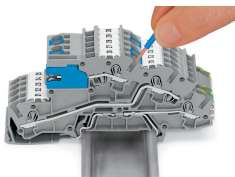
**Item No.: 2009-310**  
Operating tool; Blades: 3.5 x 0.5 mm and 5.5 x 0.8 mm; for TOPJOB®S installation terminal blocks; green

Installation Notes

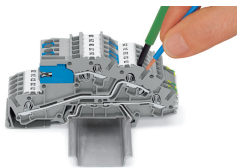
Conductor termination



**All conductor types at a glance**

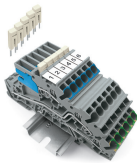


**Inserting a conductor via push-in termination.**  
Solid conductors with cross-sections from either one size above, or up to two sizes below, the rated cross-section can be simply pushed in – no tools needed.

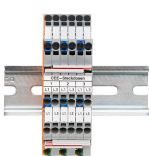


**Inserting a conductor via operating tool.**  
Connecting fine-stranded conductors without ferrules, or small cross-sectional conductors that cannot be pushed in, is performed similarly to the original CAGE CLAMP® – just use an operating tool.

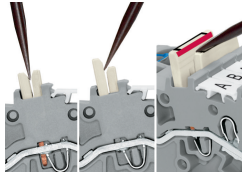
Commoning



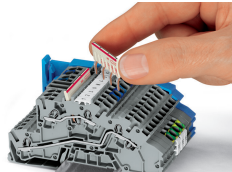
**Adjacent Jumpers for Continuous Commoning (2002-400)**



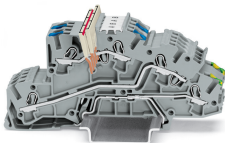
**Commoning two potentials in one single jumper slot via extremely slim staggered jumpers.**



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

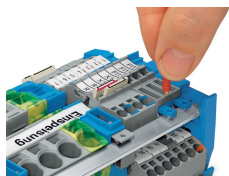


**Orient the staggered jumpers' red stripes on the inside.**  
Insert the staggered jumper and push down until it hits the backstop.

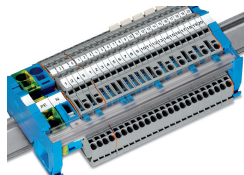
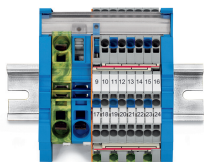


**Orient the staggered jumpers' red stripes on the inside.**  
Insert the staggered jumper and push down until it hits the backstop.

## Testing



## Busbar



Mounting busbars on busbar carriers: Insert busbar ends onto large busbar carriers (Item No. 2009-305) or onto supply terminal blocks with an integrated busbar carrier.

The busbar transparent cover (Item No. 777-303) protects the busbar against accidental contact and makes it easy to see which terminal blocks are connected to the busbar.