

Data Sheet | Item Number: 2010-1307

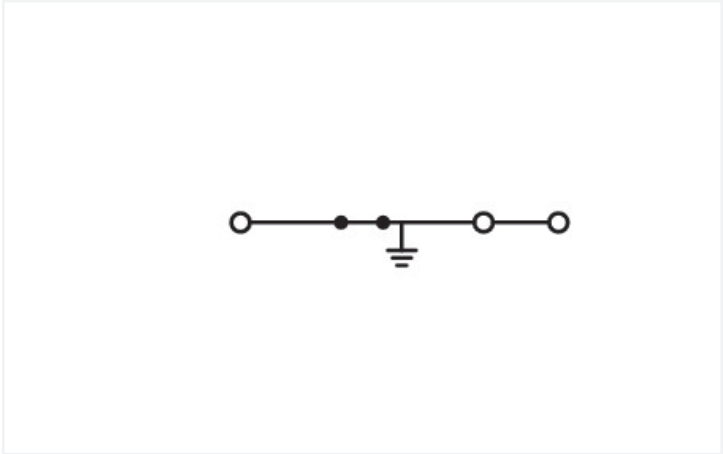
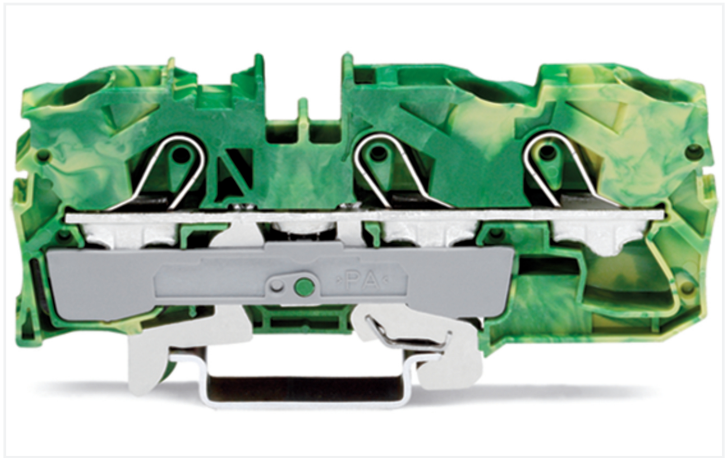
3-conductor ground terminal block; 10 mm²; suitable for Ex e II applications; side and center marking; for DIN-rail 35 x 15 and 35 x 7.5; Push-in CAGE CLAMP®; 10,00 mm²; green-yellow



<https://www.wago.com/2010-1307>



Color: ■ green-yellow



Similar to illustration

Ground terminal block, 2010 Series, green-yellow

Easily, quickly and safely connect conductors with this ground terminal block (item number 2010-1307). Ground terminal blocks connect directly to the mounting rail via an integrated contact foot. This creates an electrical and mechanical link between the electrical conductors and the mounting adapter. Strip lengths must be between 17 mm and 19 mm when connecting conductors to this ground terminal block. Featuring conductor terminals along with Push-in CAGE CLAMP®, this connector outperforms the competition. Push-in CAGE CLAMP® connection technology is ideal for connecting all conductor types. Solid and fine-stranded conductors with ferrules can be pushed in without needing to use any tools—all thanks to its pluggable design. This ground terminal block is suitable for conductor cross sections ranging from 0.5 mm² to 16 mm². It comes with one level and three clamping points that you can use to connect a single potential. The green-yellow housing is made of polyamide (PA66) for insulation. This through rail-mount terminal block is operated with an operating tool. 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.. You can connect copper conductors via front-entry wiring. The two jumper slots enable potential distribution to other clamping points. This product is designed for specific Ex applications (please refer to the product datasheet).

Electrical data			
Ratings per	IEC/EN 60947-7-2		
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	3	Connection 1	
Total number of potentials	1	Connection technology	Push-in CAGE CLAMP®
Number of levels	1	Actuation type	Operating tool
Number of jumper slots	2	Connectable conductor materials	Copper
		Nominal cross-section	10 mm²
		Solid conductor	0.5 ... 16 mm² / 20 ... 6 AWG
		Solid conductor; push-in termination	4 ... 16 mm² / 14 ... 6 AWG
		Fine-stranded conductor	0.5 ... 16 mm² / 20 ... 6 AWG
		Fine-stranded conductor; with insulated ferrule	0.5 ... 10 mm² / 20 ... 8 AWG
		Fine-stranded conductor; with ferrule; push-in termination	4 ... 10 mm² / 12 ... 8 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. AWG specifications were converted according to IEC.
		Strip length	17 ... 19 mm / 0.67 ... 0.75 inches
		Wiring direction	Front-entry wiring

Physical data

Width	10 mm / 0.394 inches
Height	89 mm / 3.504 inches
Depth from upper-edge of DIN-rail	36.9 mm / 1.453 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	0.386 MJ
Weight	35.6 g

Environmental requirements

Processing temperature	-35 ... +85 °C	Environmental Testing (Environmental Conditions)	
Continuous operating temperature	-60 ... +105 °C	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



Environmental Testing (Environmental Conditions)	
Acceleration	0.101g (highest test level used for all axes)
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)	25 pcs
Packaging type	Box
Country of origin	DE
GTIN	4017332076340
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 7876	ATEX-Attestation of Con- formity WAGO GmbH & Co. KG	-	-
CSA DEKRA Certification B.V.	C22.2 No. 158	70111238	EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
KEMA/KEUR DEKRA Certification B.V.	EN 60947	71-119201	Railway WAGO GmbH & Co. KG	-	Railway Ready
UL UL International Germany GmbH	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	-	20-HG1941090-PDA	AEx UL International Germany GmbH c/o Physikalisch Technische Bundesanstalt	UL 60079	E185892 (Ex e II)
DNV GL Det Norske Veritas, Ger- manischer Lloyd	-	TAE00001V2	ATEX Physikalisch Technische Bundesanstalt (PTB)	EN 60079	PTB 05 ATEX 1070 U (II 2 G Ex eb II C bzw. I M 2 Ex eb I Mb)
			CCC CNEX	GB/T 3836.3	2020312313000161 (Ex eb IIC Gb, Ex eb I Mb)
			IECEx Physikalisch Technische Bundesanstalt (PTB)	IEC 60079	IECEx PTB 06.0003 U (Ex eb IIC Gb and Ex ebl Mb)
			INMETRO TÜV Rheinland do Brasil Ltda.	IEC 60079	TÜV 12.1311 U

Downloads

Environmental Product Compliance	
Compliance Search	
Environmental Product Compliance 2010-1307	



Documentation

Bid Text			
2010-1307	17.04.2019	xml 3.80 KB	
2010-1307	17.04.2019	docx 14.88 KB	

CAD/CAE-Data

CAD data
2D/3D Models 2010-1307



CAE data
EPLAN Data Portal 2010-1307
WSCAD Universe 2010-1307
ZUKEN Portal 2010-1307



1 Compatible Products

1.1 Required Accessories

1.1.1 End plate

1.1.1.1 End plate



Item No.: 2010-1391
End and intermediate plate; 1 mm thick; gray



Item No.: 2010-1392
End and intermediate plate; 1 mm thick; orange



Item No.: 209-191
Separator for Ex e/Ex i applications; 3 mm thick; 120 mm wide; orange

1.2 Optional Accessories

1.2.1 Cover

1.2.1.1 Cover



Item No.: 2010-100
Finger guard; touchproof cover protects unused conductor entries; yellow

1.2.2 DIN-rail

1.2.2.1 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



1.2.2.1 Mounting accessories



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.: 210-113
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored

1.2.3 Ferrule

1.2.3.1 Ferrule



Item No.: 216-284
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.: 216-289
Ferrule; Sleeve for 10 mm² / AWG 8; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red



Item No.: 216-286
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.: 216-287
Ferrule; Sleeve for 4 mm² / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray



Item No.: 216-288
Ferrule; Sleeve for 6 mm² / AWG 10; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; yellow

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 Jumper

1.2.5.1 Jumper



Item No.: 2010-402
Jumper; 2-way; insulated; light gray



Item No.: 2010-403
Jumper; 3-way; insulated; light gray



Item No.: 2010-404
Jumper; 4-way; insulated; light gray



Item No.: 2010-405
Jumper; 5-way; insulated; light gray



Item No.: 2010-433
Jumper; from 1 to 3; insulated; light gray



Item No.: 2010-434
Jumper; from 1 to 4; insulated; light gray



Item No.: 2010-435
Jumper; from 1 to 5; insulated; light gray



Item No.: 2010-405/011-000
Star point jumper; 3-way; insulated; light gray



1.2.6 Marking

1.2.6.1 Group marker carrier



Item No.: 2009-191

Group marker carrier; gray

Item No.: 2009-192

Group marker carrier; gray

Item No.: 2009-193

Group marker carrier; gray

1.2.6.2 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.: 793-5501/000-007

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; gray

Item No.: 793-5501/000-023

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; green



Item No.: 793-5501/000-017

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; light green

Item No.: 793-5501/000-012

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; orange

Item No.: 793-5501/000-005

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; red

Item No.: 793-5501/000-024

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; violet



Item No.: 793-5501

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; white

Item No.: 793-5501/000-002

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; yellow

Item No.: 793-501/000-006

WMB marking card; as card; not stretchable; plain; snap-on type; blue

Item No.: 793-501/000-007

WMB marking card; as card; not stretchable; plain; snap-on type; gray



Item No.: 793-501/000-023

WMB marking card; as card; not stretchable; plain; snap-on type; green

Item No.: 793-501/000-017

WMB marking card; as card; not stretchable; plain; snap-on type; light green

Item No.: 793-501/000-012

WMB marking card; as card; not stretchable; plain; snap-on type; orange

Item No.: 793-501/000-005

WMB marking card; as card; not stretchable; plain; snap-on type; red



Item No.: 793-501/000-024

WMB marking card; as card; not stretchable; plain; snap-on type; violet

Item No.: 793-501

WMB marking card; as card; not stretchable; plain; snap-on type; white

Item No.: 793-501/000-002

WMB marking card; as card; not stretchable; plain; snap-on type; yellow

Item No.: 2009-115/000-006

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue



Item No.: 2009-115/000-007

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray

Item No.: 2009-115/000-023

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green

Item No.: 2009-115/000-017

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; light green

Item No.: 2009-115/000-012

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange



1.2.6.2 Marker



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 Protective warning marker

1.2.7.1 Cover



Item No.: 2010-115
Protective warning marker; for 5 terminal blocks; with high-voltage symbol, black; yellow

1.2.8 Screwless end stop

1.2.8.1 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

1.2.9 Test and measurement

1.2.9.1 Testing accessories



Item No.: 2010-511
Modular TOPJOB®S connector; modular; for jumper contact slot; 1-pole; gray



Item No.: 2010-549
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



1.2.10 Tool

1.2.10.1 Operating tool



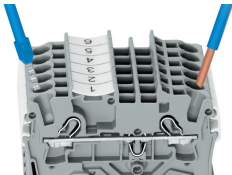
Item No.: 210-721
Operating tool; Blade: 5.5 x 0.8 mm; with a partially insulated shaft; multicoloured

Installation Notes

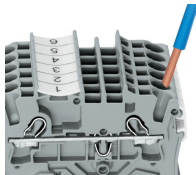
Conductor termination



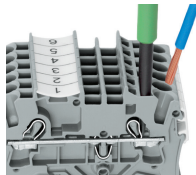
All conductor types at a glance



Push-in termination of solid and ferruled conductors

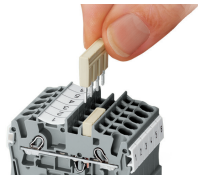


Inserting a conductor via push-in termination:
Solid conductors with cross-sections from either one size above, or up to two sizes below, the rated cross-section can be simply pushed in – no tools needed.

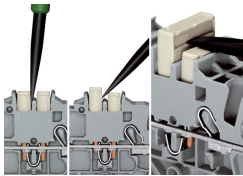


Inserting a conductor via operating tool:
Connecting fine-stranded conductors without ferrules, or small cross-sectional conductors that cannot be pushed in, is performed similarly to the original CAGE CLAMP® – just use an operating tool.
Advantage:
To open the clamp, the operating tool is inserted vertically.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

Commoning

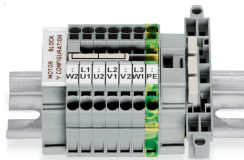


Insert push-in type jumper bar and push down until it hits backstop.



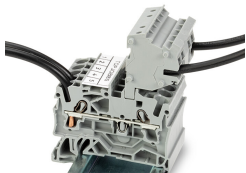
Removing a push-in type jumper bar:
Insert the operating tool between the jumper and partition wall of the dual jumper slots, then lift up the jumper.
Place the operating tool in the center of jumpers for up to five contacts (see above), or alternately on both sides for jumpers with more than five contacts.

Commoning

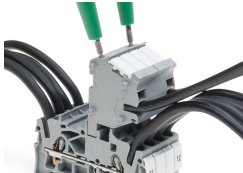


This star point jumper has been specially developed to create a “star point” and is used on motor terminal boards equipped with Rail-Mount Terminal Blocks TOPJOB® S.

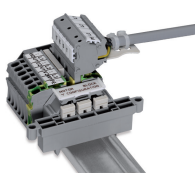
Testing



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

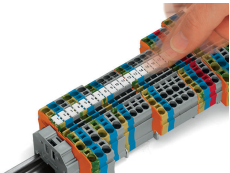


Test plug adapter (Item No. 2009-174, CAT I) for 4 mm Ø plugs – compatible with 2000 to 2016 Series

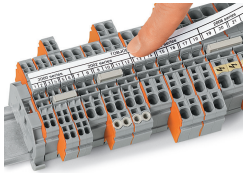


Testing tap (Item No. 2009-182) for tool-free connection of test cables up to 2.5 mm² (12 AWG) – compatible with 2000 to 2016 Series

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!