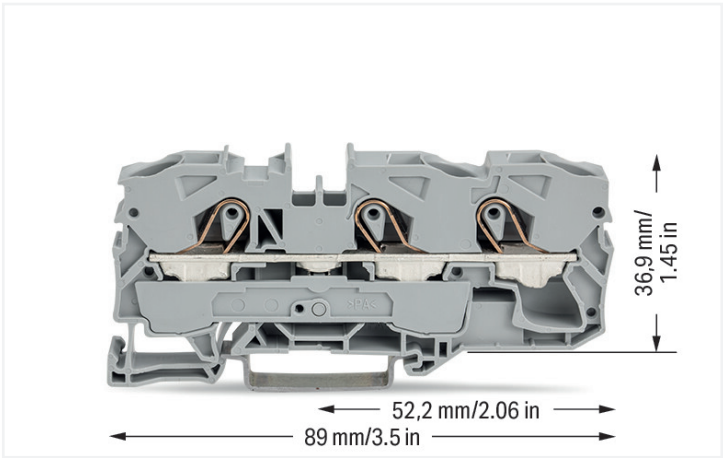


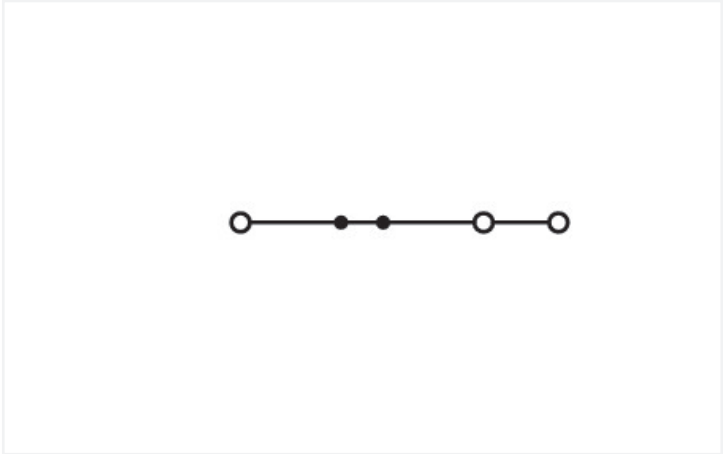
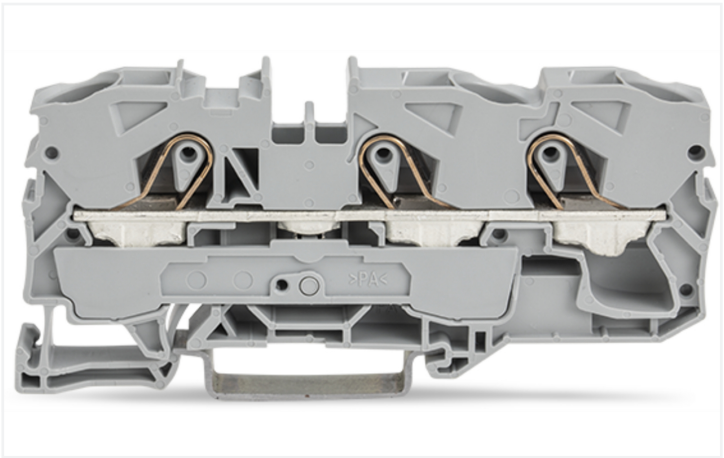
Data Sheet | Item Number: 2010-1301

3-conductor through 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; gray

<https://www.wago.com/2010-1301>



Color: ■ gray



Similar to illustration

Through terminal block, 2010 Series, gray

This through terminal block (item number 2010-1301) is designed to connect conductors quickly and easily. Whether for industrial or building applications, you can use our through terminal blocks to connect electrical conductors quickly and safely. We offer variants for both classic through-wiring and potential distribution. Rated current and voltage are key factors to consider when choosing a through rail-mount terminal block, as they indicate possible applications and uses. This product has a rated voltage of 800 V and a rated current of 57 A. Strip lengths must be between 17 mm and 19 mm when connecting conductors to this through terminal block. This product features conductor terminals and utilizes Push-in CAGE CLAMP®. 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 the need for tools—all thanks to its pluggable design. Dimensions: 10 x 89 x 43.5 mm (width x height x depth). This through 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 gray 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 offer more than just secure electrical connections in various industrial applications and modern building installations. They also offer the perfect solution for every use: lever, push-button, or operating slot. These through rail-mount terminal blocks are mounted using DIN-35 rails.. Conductors made of copper can be connected 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 60947-7-1		
Overvoltage category		III	III	II
Pollution degree		3	2	2
Nominal voltage		800 V	-	-
Rated surge voltage		8 kV	-	-
Rated current		57 A	-	-

Ratings per		IEC/EN 60947-7-1		
Current at conductor cross-section (max.) mm²		76 A	-	-



Approvals per		UL 1059		
Use group		B	C	D
Rated voltage		600 V	600 V	-
Rated current		65 A	65 A	-

Ex information	
Reference hazardous areas	See application instructions in section “Knowledge and Downloads – Documentation – Additional Information: Technical Section; Technical Explications”
Ratings per	ATEX: PTB 05 ATEX 1070 U / IECEx: PTB 06.0003U (Ex eb IIC Gb)
Rated voltage EN (Ex e II)	550 V
Rated current (Ex e II)	50 A

Approvals per		CSA 22.2 No 158		
Use group		B	C	D
Rated voltage		600 V	600 V	-
Rated current		65 A	65 A	-

Power Loss	
Power loss, per pole (potential)	1.8194 W
Rated current I <sub>N</sub> for specified power loss	57 A
Resistance value for specified, current-dependent power loss	0.00056 Ω

Connection data

Clamping units	3
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	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
Depth	43.5 mm / 1.713 inches

Mechanical data

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	0.417 MJ
Weight	24.7 g

Environmental requirements	
Processing temperature	-35 ... +85 °C
Continuous operating temperature	-60 ... +105 °C
Environmental Testing (Environmental Conditions)	
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 <sub>1</sub> = 5 Hz to f <sub>2</sub> = 150 Hz f <sub>1</sub> = 5 Hz to f <sub>2</sub> = 150 Hz
Acceleration	0.101g (highest test level used for all axes) 0.572g (highest test level used for all axes) 5g (highest test level used for all axes)
Test duration per axis	10 min. 5 h
Test directions	X, Y and Z axes X, Y and Z axes X, Y and Z axes
Monitoring for contact faults/interruptions	Passed
Voltage drop measurement before and after each axis	Passed
Simulated service life test through increased levels of noise-like vibration	Test passed according to Section 9 of the standard
Extended test scope: Monitoring for contact faults/interruptions	Passed Passed
Extended test scope: Voltage drop measurement before and after each axis	Passed Passed
Shock test	Test passed according to Section 10 of the standard
Shock form	Half sine
Shock duration	30 ms
Number of shocks per axis	3 pos. und 3 neg.
Vibration and shock stress for rolling stock equipment	Passed



Commercial data	
Product Group	22 (TOPJOB S)
PU (SPU)	25 pcs
Packaging type	Box
Country of origin	DE
GTIN	4017332011341
Customs tariff number	85369010000

Product classification	
UNSPSC	39121410
eCl@ss 10.0	27-14-11-20
eCl@ss 9.0	27-14-11-20
ETIM 9.0	EC000897
ETIM 8.0	EC000897
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 2010-1301

↓

Documentation				
Bid Text				
2010-1301	17.04.2019	xml	4.08 KB	↓
2010-1301	17.04.2019	docx	15.04 KB	↓

CAD/CAE-Data

CAD data

2D/3D Models 2010-1301

↓

CAE data

EPLAN Data Portal 2010-1301

↓

WSCAD Universe 2010-1301

↓

ZUKEN Portal 2010-1301


↓


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



**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



**Item No.: 2016-499**

Step-down jumper; from 2016/2010 to 2010/2006/2004/2002 series; from 2216/2210 to 2210/2206/2204/2202 series; insulated; light gray



**Item No.: 285-430**

Step-down jumper; from 285 (35mm<sup>2</sup>) to 2016/2010 series; insulated; 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



1.2.6.2 Marker



**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



**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



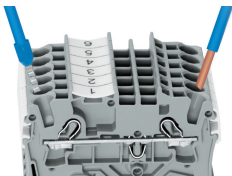
**Item No.: 210-721**  
Operating tool; Blade: 5.5 x 0.8 mm; with a partially insulated shaft; multicoloured

Installation Notes

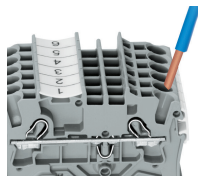
Conductor termination



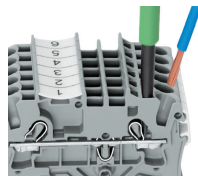
**All conductor types at a glance**



Push-in termination of solid and ferruled conductors

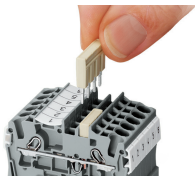


**Inserting a conductor via push-in termination:**  
Solid conductors with cross-sections from either one size above, or up to two sizes below, the rated cross-section can be simply pushed in – no tools needed.

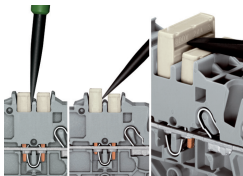


**Inserting a conductor via operating tool:**  
Connecting fine-stranded conductors without ferrules, or small cross-sectional conductors that cannot be pushed in, is performed similarly to the original CAGE CLAMP® – just use an operating tool.  
**Advantage:**  
To open the clamp, the operating tool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

Commoning

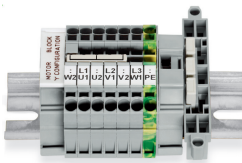


Insert push-in type jumper bar and push down until it hits backstop.



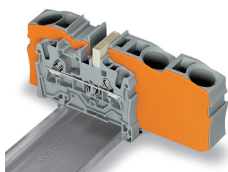
**Removing a push-in type jumper bar:**  
Insert the operating tool between the jumper and partition wall of the dual jumper slots, then lift up the jumper. Place the operating tool in the center of jumpers for up to five contacts (see above), or alternately on both sides for jumpers with more than five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

Commoning

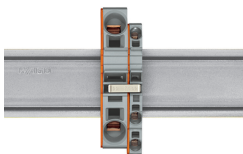


This star point jumper has been specially developed to create a “star point” and is used on motor terminal boards equipped with Rail-Mount Terminal Blocks TOPJOB® S.

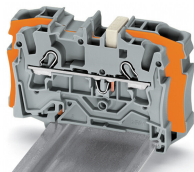
Commoning



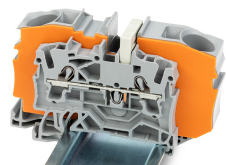
Step-down jumpers common terminal blocks of different sizes, without losing a conductor clamping point. This can be beneficial on long conductor runs where voltage drop can be a problem. A large conductor can be easily connected to smaller conductors at the distribution point. Commoning may be made in either direction using the special thin end plate to cover the open side. Additional through terminal blocks having a smaller cross-section may be commoned using push-in type jumper bars.



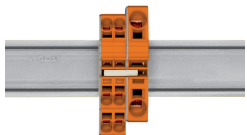
**Using step-down jumpers,** an end plate must be inserted between the terminal blocks to be commoned.



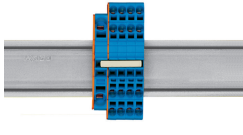
**Step-down jumper (Item No. 2006-499)**  
commons 6/4 mm<sup>2</sup> (10/12 AWG) terminal blocks (2006/2004 Series) with 4/2.5/1.5 mm<sup>2</sup> (AWG 12/14/16) terminal blocks (2004/2002/2001 Series).



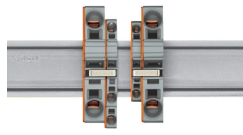
**Step-down jumper (Item No. 2016-499)**  
commons 16/10 mm<sup>2</sup> (16/8 AWG) terminal blocks (2016/2010 Series) with 10/6/4/2.5 mm<sup>2</sup> (8/10/12/14 AWG) terminal blocks (2010/2006/2004/2002 Series).



**Stepping down via push-in type jumper bar:**  
Commoning via open terminal side with end plate allows jumpering over two cross-section sizes for 16 mm<sup>2</sup> (6 AWG) and 10 mm<sup>2</sup> (8 AWG) and one cross-section size for 6/4/2.5 mm<sup>2</sup> (10/12/14 AWG). An example: from 16 mm<sup>2</sup> (6 AWG) to 6 mm<sup>2</sup> (10 AWG) (see illustration above) or from 10 mm<sup>2</sup> (8 AWG) to 4 mm<sup>2</sup> (12 AWG).



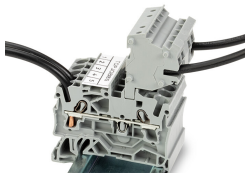
**Stepping down via push-in type jumper bar:**  
Commoning via closed terminal side with end plate allows jumpering over two cross-section sizes, e.g., from 16 mm<sup>2</sup> (6 AWG) to 6 mm<sup>2</sup> (10 AWG) or from 6 mm<sup>2</sup> (10 AWG) to 2.5 mm<sup>2</sup> (14 AWG) (see illustration above).



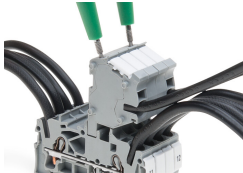
**Note:**  
The total current of the outgoing circuits must not exceed the nominal current of the step-down jumper/push-in type jumper bar.



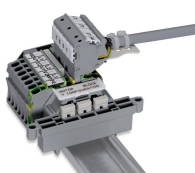
Testing



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

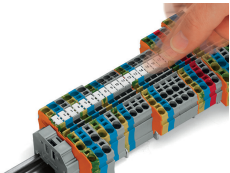


Test plug adapter (Item No. 2009-174, CAT I) for 4 mm Ø plugs – compatible with 2000 to 2016 Series

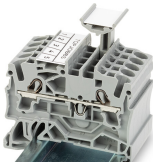
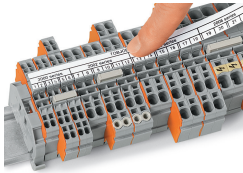


Testing tap (Item No. 2009-182) for tool-free connection of test cables up to 2.5 mm² (12 AWG) – compatible with 2000 to 2016 Series

Marking

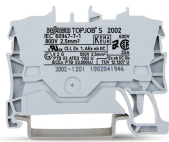


Snapping WMB Inline markers into marker slots.

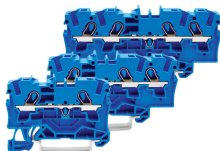


TOPJOB® S 2009-193 Group Marker Carrier (equipped with a marking strip) for all 2001 to 2016 Series TOPJOB® S Rail-Mount Terminal Blocks  
Do not use on an end plate!

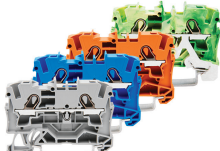
Ex application



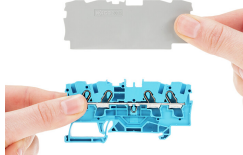
Through terminal blocks with a blue insulated housing are suitable for Ex i applications.



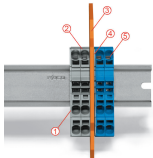
All through and ground conductor terminal blocks are suitable for Ex e II applications.



Separator plate for Ex e/Ex i applications  
An end plate must be applied to the terminal block located directly behind an Ex e/Ex i separator plate.



**Ex e II/Ex i terminal strip**  
**Note:**  
The movable feet of terminal blocks and separator plates must face the same direction.



A separator plate is located between the Ex e II and Ex i terminal strip.  
End plate  
Ex e II terminal blocks  
Separator plate for Ex e/Ex i applications  
End plate  
Ex i terminal blocks  
According to EN 50020, a minimum distance of 50 mm must be kept between live parts of Ex e and Ex i circuits. The use of Ex e/Ex i separators is a space-saving solution when Ex e and Ex i terminal blocks are mounted on a common DIN-rail.

