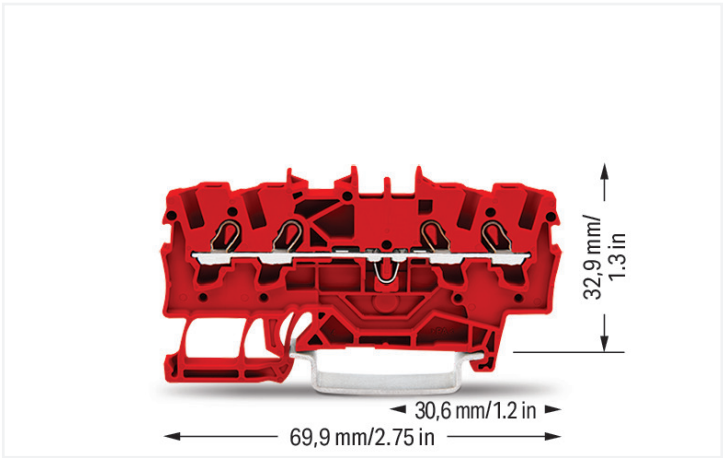


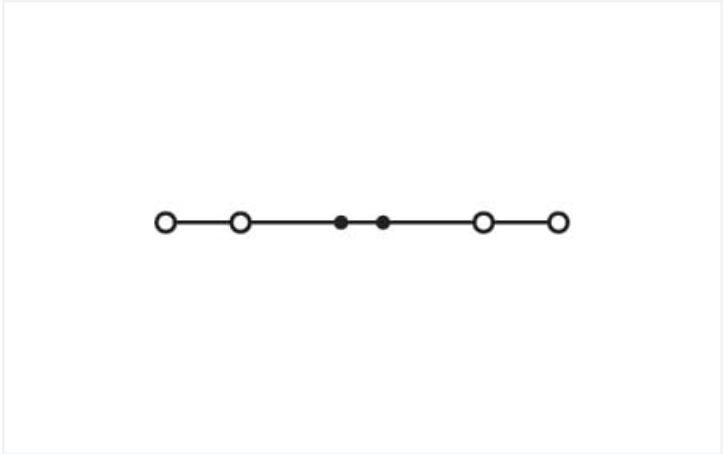
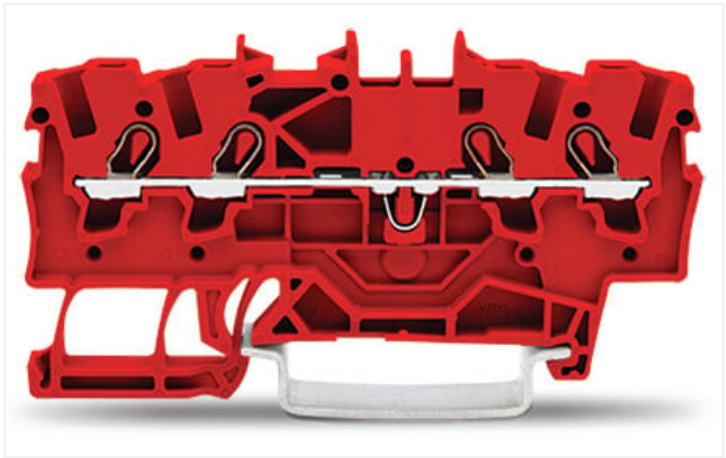
Data Sheet | Item Number: 2001-1403

4-conductor through terminal block; 1.5 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®; 1,50 mm²; red

<https://www.wago.com/2001-1403>



Color: ■ red



Similar to illustration

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		17.5 A	-	-
Current at conductor cross-section (max.) mm²		24 A	-	-
Approvals per		UL 1059		
Use group		B	C	D
Rated voltage		600 V	600 V	-
Rated current		15 A	15 A	-
Approvals per		CSA 22.2 No 158		
Use group		B	C	D
Rated voltage		600 V	600 V	-
Rated current		15 A	15 A	-
Ex information		Reference hazardous areas		
		See application instructions in section "Knowledge and Downloads – Documentation – Additional Information: Technical Section; Technical Explanations"		
Ratings per		ATEX: PTB 05 ATEX 1094 U / IECEx: PTB 05.0034U (Ex eb IIC Gb)		
Rated voltage EN (Ex e II)		550 V		
Rated current (Ex e II)		17 A		
Rated current (Ex e II) with jumper		16 A		



Power Loss	
Power loss, per pole (potential)	0.5929 W
Rated current I _N for specified power loss	18 A
Resistance value for specified, current-dependent power loss	0.00183 Ω

Connection data			
Connection points	4	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	1.5 mm²
		Solid conductor	0.25 ... 2.5 mm² / 22 ... 14 AWG
		Solid conductor; push-in termination	0.75 ... 2.5 mm² / 18 ... 14 AWG
		Fine-stranded conductor	0.25 ... 2.5 mm² / 22 ... 14 AWG
		Fine-stranded conductor; with insulated ferrule	0.25 ... 1.5 mm² / 22 ... 16 AWG
		Fine-stranded conductor; with ferrule; push-in termination	0.75 ... 1.5 mm² / 18 ... 16 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	9 ... 11 mm / 0.35 ... 0.43 inches
		Wiring direction	Front-entry wiring

Physical data	
Width	4.2 mm / 0.165 inches
Height	69.9 mm / 2.752 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	red
Material group	I
Insulation material	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.124 MJ
Weight	5.2 g



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

Commercial data	
Product Group	22 (TOPJOB S)
eCl@ss 10.0	27-14-11-20
eCl@ss 9.0	27-14-11-20
ETIM 8.0	EC000897
ETIM 7.0	EC000897
PU (SPU)	100 pcs
Packaging type	Box
Country of origin	DE
GTIN	4045454537418
Customs tariff number	85369010000

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-7963	ATEX-Attestation of Con- formity WAGO GmbH & Co. KG	-	-
CSA DEKRA Certification B.V.	C22.2 No. 158	1645434	EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
KEMA/KEUR DEKRA Certification B.V.	EN 60947	71-125954	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	EN 60947	20-HG1941090-PDA	AEx UL International Germany GmbH c/o Physikalisch Technische Bundesanstalt	UL 60079	E185892 (AEx e II resp. Ex e II)
BV Bureau Veritas S.A.	EN 60947	38586/B0 BV	ATEX Physikalisch Technische Bundesanstalt (PTB)	EN 60079	PTB 05 ATEX 1094 U (II 2 G Ex eb IIC Gb bzw. I M 2 Ex eb I Mb)
DNV GL Det Norske Veritas, Ger- manischer Lloyd	-	TAE00001V2	CCC CNEX	GB/T 3836.3	2020312313000159 (Ex eb IIC Gb, Ex eb I Mb)
			EAC Brjansker Zertifizierungs- stelle	TP TC 012/2011	RU C-DE.AM02. B.00127/19 (Ex e IIC Gb U)
			IECEx Physikalisch Technische Bundesanstalt (PTB)	IEC 60079	IECEx PTB 05. 0034 U (Ex eb IIC Gb or Ex eb I Mb)



Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 2001-1403

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Documentation

Additional Information

Technical Section

pdf

2142.18 KB

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Bid Text

2001-1403

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02.08.2018

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14.75 KB

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CAD data

2D/3D Models

2001-1403

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CAE data

EPLAN Data Portal

2001-1403

Download icon

WSCAD Universe

2001-1403

Download icon

ZUKEN Portal

2001-1403

Download icon

1 Compatible Products

1.1 Required Accessories

1.1.1 End plate

1.1.1.1 End plate



Item No.: 2002-1491
End and intermediate plate; 0.8 mm thick; gray



Item No.: 2002-1492
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



Item No.: 2002-1493
Seperator plate; 2 mm thick; oversized; gray



Item No.: 2002-1494
Seperator plate; 2 mm thick; oversized; 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.: 216-243
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.: 216-244
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

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; gray

1.2.4 Insulation stop

1.2.4.1 Insulation stop



Item No.: 2001-171
Insulation stop; 0.25 - 0.5 mm²; 5 pieces/strip; light gray

1.2.5 Jumper

1.2.5.1 Jumper

**Item No.: 2001-406/020-000**

Delta jumper; insulated; light gray

**Item No.: 2001-410**

Jumper; 10-way; insulated; light gray

**Item No.: 2001-402**

Jumper; 2-way; insulated; light gray

**Item No.: 2001-403**

Jumper; 3-way; insulated; light gray

**Item No.: 2001-404**

Jumper; 4-way; insulated; light gray

**Item No.: 2001-405**

Jumper; 5-way; insulated; light gray

**Item No.: 2001-406**

Jumper; 6-way; insulated; light gray

**Item No.: 2001-407**

Jumper; 7-way; insulated; light gray

**Item No.: 2001-408**

Jumper; 8-way; insulated; light gray

**Item No.: 2001-409**

Jumper; 9-way; insulated; light gray

**Item No.: 2001-440**

Jumper; from 1 to 10; insulated; light gray

**Item No.: 2001-433**

Jumper; from 1 to 3; insulated; light gray

**Item No.: 2001-434**

Jumper; from 1 to 4; insulated; light gray

**Item No.: 2001-435**

Jumper; from 1 to 5; insulated; light gray

**Item No.: 2001-436**

Jumper; from 1 to 6; insulated; light gray

**Item No.: 2001-437**

Jumper; from 1 to 7; insulated; light gray

**Item No.: 2001-438**

Jumper; from 1 to 8; insulated; light gray

**Item No.: 2001-439**

Jumper; from 1 to 9; insulated; light gray

**Item No.: 2001-405/011-000**

Star point jumper; 3-way; insulated; light gray

**Item No.: 2006-499**

Step-down jumper; from 2006/2004 to 2004/2002/2001 series; from 2206/2204 to 2204/2202/2201 series; insulated; light gray

**Item No.: 210-103**

Wire commoning chain; insulated; black

**Item No.: 210-123**

Wire commoning chain; insulated; blue

1.2.6 Marking

1.2.6.1 Marker

**Item No.: 793-4501/000-006**

WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; blue

**Item No.: 793-4501/000-007**

WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; gray

**Item No.: 793-4501/000-023**

WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; green

**Item No.: 793-4501/000-017**

WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; light green

**Item No.: 793-4501/000-012**

WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; orange

**Item No.: 793-4501/000-005**

WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; red

**Item No.: 793-4501/000-024**

WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; violet

**Item No.: 793-4501**

WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; white

**Item No.: 793-4501/000-002**

WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; yellow

**Item No.: 2009-114/000-006**

WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; blue

**Item No.: 2009-114/000-007**

WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; gray

**Item No.: 2009-114/000-023**

WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; green

**Item No.: 2009-114/000-012**

WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; orange

**Item No.: 2009-114/000-005**

WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; red

**Item No.: 2009-114/000-024**

WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; violet

**Item No.: 2009-114**

WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; white

**Item No.: 2009-114/000-002**

WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; yellow



1.2.6.2 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.: 2001-115
Protective warning marker; for 5 terminal
blocks; with high-voltage symbol, black;
yellow

1.2.8 Push-in type wire jumper

1.2.8.1 Jumper



Item No.: 2009-414
Push-in type wire jumper; 1.5 mm²; insula-
ted; 110 mm long; black



Item No.: 2009-414/000-005
Push-in type wire jumper; 1.5 mm²; insu-
lated; 110 mm long; black



Item No.: 2009-416
Push-in type wire jumper; 1.5 mm²; insu-
lated; 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

1.2.9 Test and measurement

1.2.9.1 Testing accessories



Item No.: 2001-560
Modular TOPJOB®S connector; modular;
for jumper contact slot; 10-pole; 1,50
mm²; gray



Item No.: 2001-511
Modular TOPJOB®S connector; modular;
for jumper contact slot; 1-pole; 1,50 mm²;
gray



Item No.: 2001-552
Modular TOPJOB®S connector; modular;
for jumper contact slot; 2-pole; 1,50 mm²;
gray



Item No.: 2001-553
Modular TOPJOB®S connector; modular;
for jumper contact slot; 3-pole; 1,50 mm²;
gray



Item No.: 2001-554
Modular TOPJOB®S connector; modular;
for jumper contact slot; 4-pole; 1,50 mm²;
gray



Item No.: 2001-555
Modular TOPJOB®S connector; modular;
for jumper contact slot; 5-pole; 1,50 mm²;
gray



Item No.: 2001-556
Modular TOPJOB®S connector; modular;
for jumper contact slot; 6-pole; 1,50 mm²;
gray



Item No.: 2001-557
Modular TOPJOB®S connector; modular;
for jumper contact slot; 7-pole; 1,50 mm²;
gray



Item No.: 2001-558
Modular TOPJOB®S connector; modular;
for jumper contact slot; 8-pole; 1,50 mm²;
gray



Item No.: 2001-559
Modular TOPJOB®S connector; modular;
for jumper contact slot; 9-pole; 1,50 mm²;
gray



Item No.: 2001-549
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 termi-
nal 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.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

Item No.: 210-648
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; angled; short

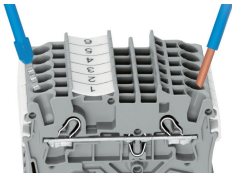
Item No.: 210-647
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; multicoloured

Installation Notes

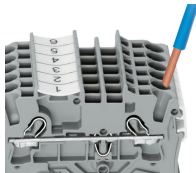
Conductor termination



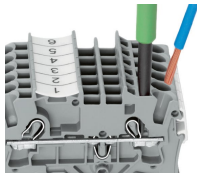
All conductor types at a glance



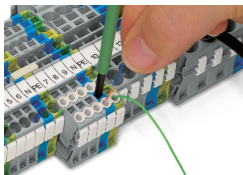
Push-in termination of solid and ferruled conductors



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.

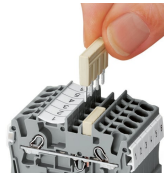


Inserting a conductor via operating tool:
Connecting fine-stranded conductors without ferrules, or small cross-sectional conductors that cannot be pushed in, is performed similarly to the original CAGE CLAMP® – just use an operating tool.
Advantage:
To open the clamp, the operating tool is inserted vertically.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

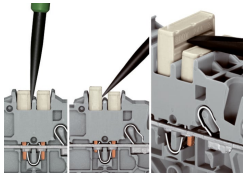


Conductor termination – insulation stop

Commoning

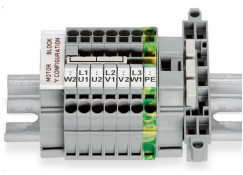


Insert push-in type jumper bar and push down until it hits backstop.

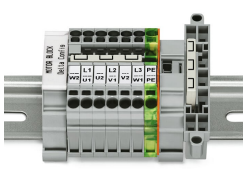


Removing a push-in type jumper bar:
Insert the operating tool between the jumper and partition wall of the dual jumper slots, then lift up the jumper.
Place the operating tool in the center of jumpers for up to five contacts (see above), or alternately on both sides for jumpers with more than five contacts.

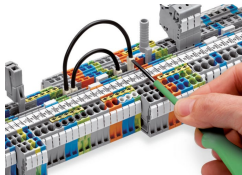
Commoning



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.

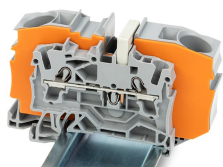
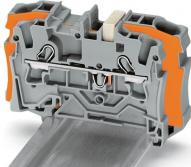
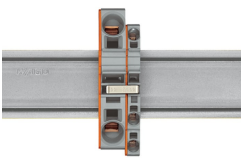
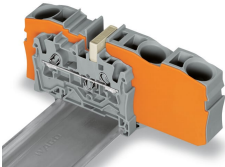


This delta jumper has been specially developed to create a delta configuration and is used on motor terminal boards equipped with rail-mount terminal blocks TOPJOB® S.



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

Commoning

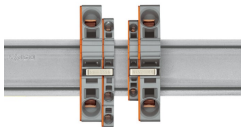
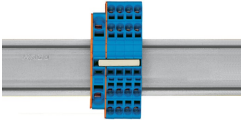
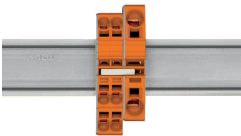


Step-down jumpers common terminal blocks of different sizes, without losing a conductor clamping point. This can be beneficial on long conductor runs where voltage drop can be a problem. A large conductor can be easily connected to smaller conductors at the distribution point. Commoning may be made in 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 (2006-499) commons 6/4 mm² (10/12 AWG) terminal blocks (2006/2004 Series) with 4/2.5/1.5 mm² (AWG 12/14/16) terminal blocks (2004/2002/2001 Series).

Step-down jumper (2016-499) commons 16/10 mm² (16/8 AWG) terminal blocks (2016/2010 Series) with 10/6/4/2.5 mm² (8/10/12/14 AWG) terminal blocks (2010/2006/2004/2002 Series).

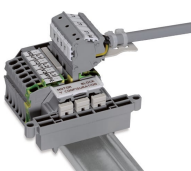
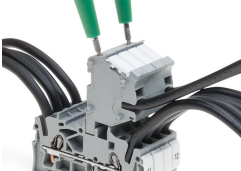


Stepping down via push-in type jumper bar:
Commoning via open terminal side with end plate allows jumpering over two cross-section sizes for 16 mm² (6 AWG) and 10 mm² (8 AWG) and one cross-section size for 6/4/2.5 mm² (10/12/14 AWG). An example: from 16 mm² (6 AWG) to 6 mm² (10 AWG) (see illustration above) or from 10 mm² (8 AWG) to 4 mm² (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 mm² (6 AWG) to 6 mm² (10 AWG) or from 6 mm² (10 AWG) to 2.5 mm² (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

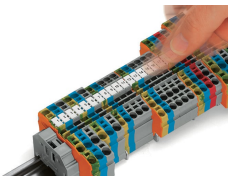
Rail-mount terminal block assembly for electric motor wiring

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

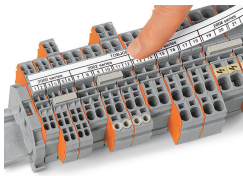


Testing tap (2009-182) for tool-free connection of test cables up to 2.5 mm² (12 AWG) – compatible with 2000 to 2016 Series

Marking

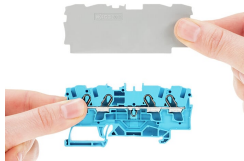
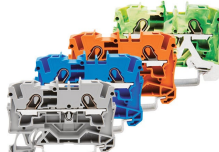
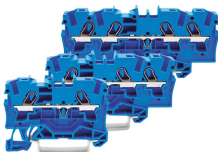
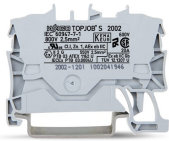


Snapping WMB Inline markers into marker slots.



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!

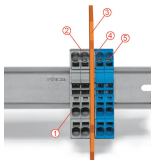
Ex application



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.