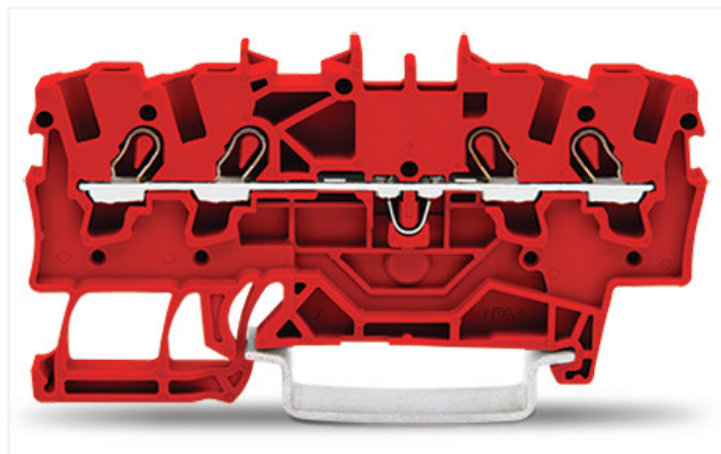
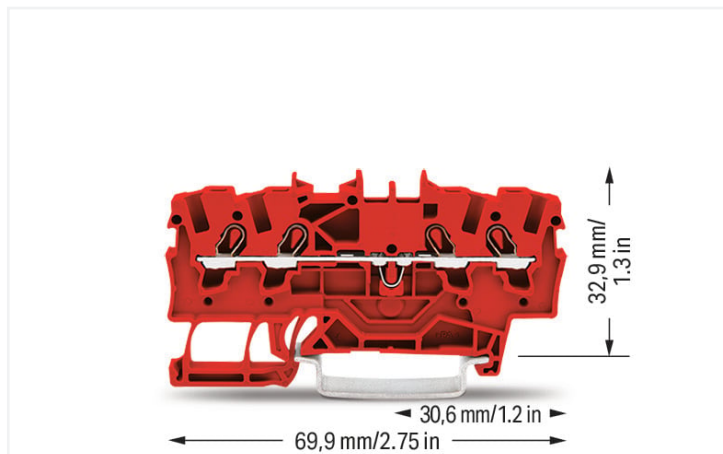


Data Sheet | Item Number: 2001-1403

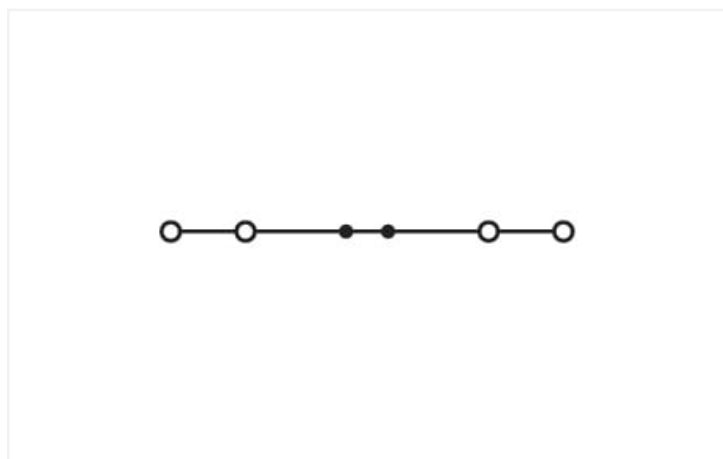
4-conductor through terminal block; 1.5 mm²; suitable for Ex e II applications; side and center marking; for DIN-rail 35 x 15 and 35 x 7.5; Push-in CAGE CLAMP®; 1,50 mm²; red



<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.) mm ²	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
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	1.5 mm ²
Solid conductor	0.25 ... 2.5 mm ² / 22 ... 14 AWG
Solid conductor; push-in termination	0.75 ... 2.5 mm ² / 18 ... 14 AWG
Fine-stranded conductor	0.25 ... 2.5 mm ² / 22 ... 14 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 1.5 mm ² / 22 ... 16 AWG
Fine-stranded conductor; with ferrule; push-in termination	0.75 ... 1.5 mm ² / 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



Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60947	NTR NL-7963
CSA DEKRA Certification B.V.	C22.2 No. 158	1645434
KEMA/KEUR DEKRA Certification B.V.	EN 60947	71-125954
UL UL International Germany GmbH	UL 1059	E45172

Declarations of conformity and manufacturer's declarations



Approval	Standard	Certificate Name
ATEX-Attestation of Conformity WAGO GmbH & Co. KG	-	-
EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
Railway WAGO GmbH & Co. KG	-	Railway Ready
UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Approvals for marine applications



Approval	Standard	Certificate Name
ABS American Bureau of Shipping	EN 60947	20-HG1941090-PDA
BV Bureau Veritas S.A.	EN 60947	38586/B0 BV
DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE00001V2

Approvals for hazardous areas



Approval	Standard	Certificate Name
AEx UL International Germany GmbH c/o Physikalisch Technische Bundesanstalt	UL 60079	E185892 (AEx e II resp. Ex e II)
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)
CCC CNEX	GB/T 3836.3	2020312313000159 (Ex eb IIC Gb, Ex eb I Mb)
EAC Brjansker Zertifizierungsstelle	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	↓

Documentation

Bid Text			
2001-1403	19.02.2019	xml 3.93 KB	↓
2001-1403	02.08.2018	docx 14.75 KB	↓

CAD/CAE-Data

CAD data	
2D/3D Models 2001-1403	↓

CAE data	
EPLAN Data Portal 2001-1403	↓
WSCAD Universe 2001-1403	↓
ZUKEN Portal 2001-1403	↓

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; 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

1.2.4 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

1.2.6.1 Marker



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; insulated; 110 mm long; black



Item No.: 2009-414/000-005

Push-in type wire jumper; 1.5 mm²; insulated; 110 mm long; black



Item No.: 2009-416

Push-in type wire jumper; 1.5 mm²; insulated; 250 mm long; black



Item No.: 2009-414/000-006

Push-in type wire jumper; insulated; 110 mm long; black



Item No.: 2009-412

Push-in type wire jumper; insulated; 60 mm long; black

1.2.9 Screwless end stop

1.2.9.1 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

1.2.10 Test and measurement

1.2.10.1 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 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

1.2.11 Tool

1.2.11.1 Operating tool



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



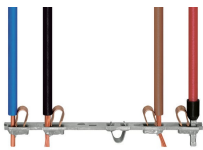
Item No.: 210-648
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; angled; short



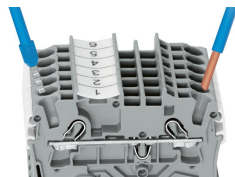
Item No.: 210-647
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; multicoloured

Installation Notes

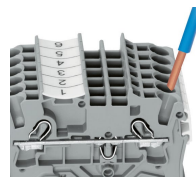
Conductor termination



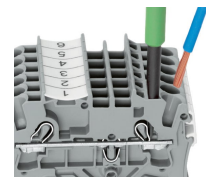
All conductor types at a glance



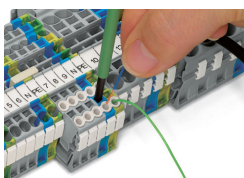
Push-in termination of solid and ferruled conductors



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.

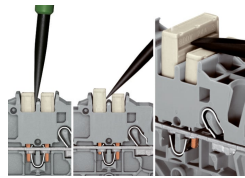
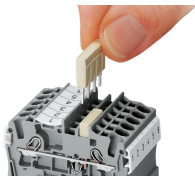


Inserting a conductor via operating tool:
Connecting fine-stranded conductors without ferrules, or small cross-sectional conductors that cannot be pushed in, is performed similarly to the original CAGE CLAMP® – just use an operating tool.
Advantage:
To open the clamp, the operating tool is inserted vertically.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



Conductor termination – insulation stop

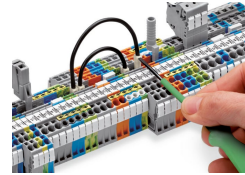
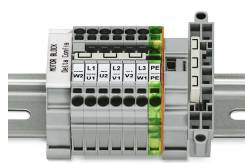
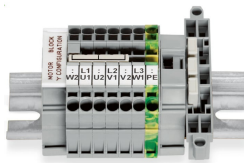
Commoning



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

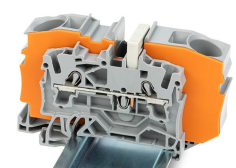
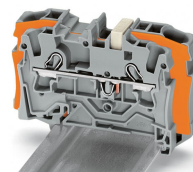
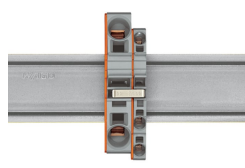
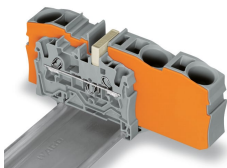


This star point jumper has been specially developed to create a "star point" and is used on motor terminal boards equipped with Rail-Mount Terminal Blocks TOPJOB® S.

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

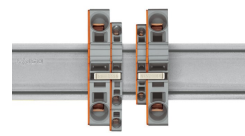
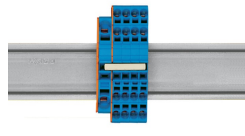
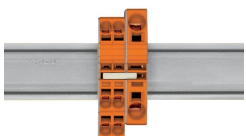


Step-down jumpers common terminal blocks of different sizes, without losing a conductor clamping point. This can be beneficial on long conductor runs where voltage drop can be a problem. A large conductor can be easily connected to smaller conductors at the distribution point. Commoning may be made in 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 (Item No. 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 (Item No. 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).

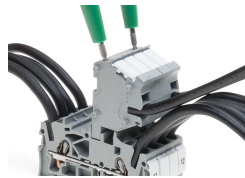
Stepping down via push-in type jumper bar: Commoning via closed terminal side with end plate allows jumpering over two cross-section sizes, e.g., from 16 mm² (6 AWG) to 6 mm² (10 AWG) or from 6 mm² (10 AWG) to 2.5 mm² (14 AWG) (see illustration above).

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

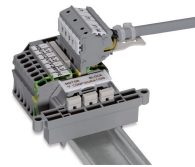
Testing



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

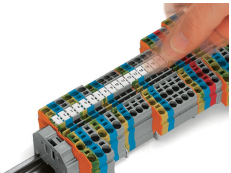


Test plug adapter (Item No. 2009-174, CAT I) for 4 mm Ø plugs – compatible with 2000 to 2016 Series

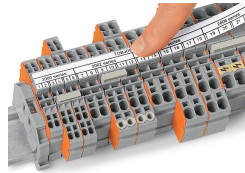


Testing tap (Item No. 2009-182) for tool-free connection of test cables up to 2.5 mm² (12 AWG) – compatible with 2000 to 2016 Series

Marking



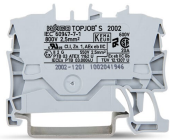
Snapping WMB Inline markers into marker slots.



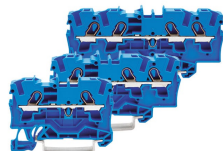
TOPJOB® S 2009-193 Group Marker Carrier (equipped with a marking strip) for all 2001 to 2016 Series TOPJOB® S Rail-Mount Terminal Blocks
Do not use on an end plate!



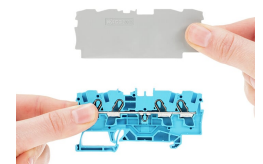
Ex application



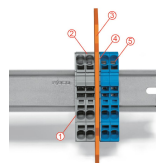
Through terminal blocks with a blue insulated housing are suitable for Ex i applications.



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.

Subject to changes. Please also observe the further product documentation!

Current addresses can be found at: www.wago.com