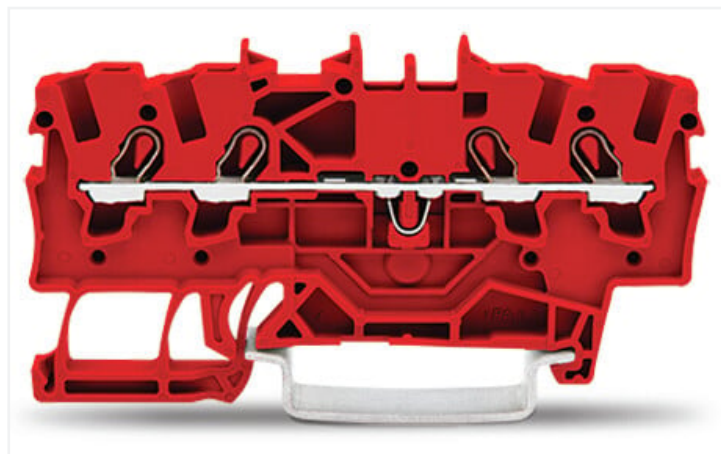
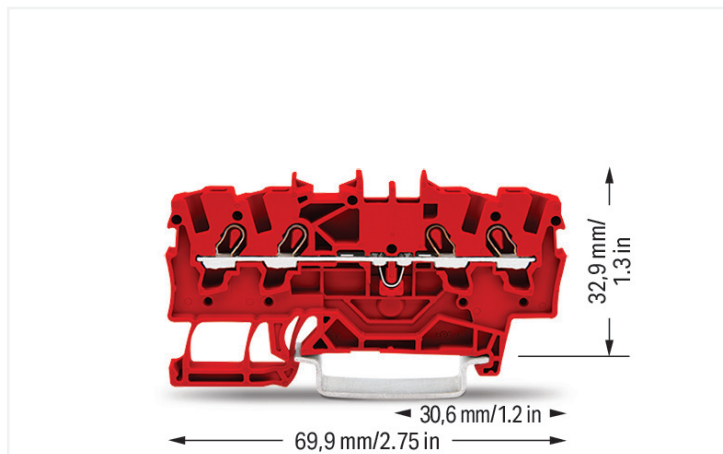


Data Sheet | Item Number: 2001-1403

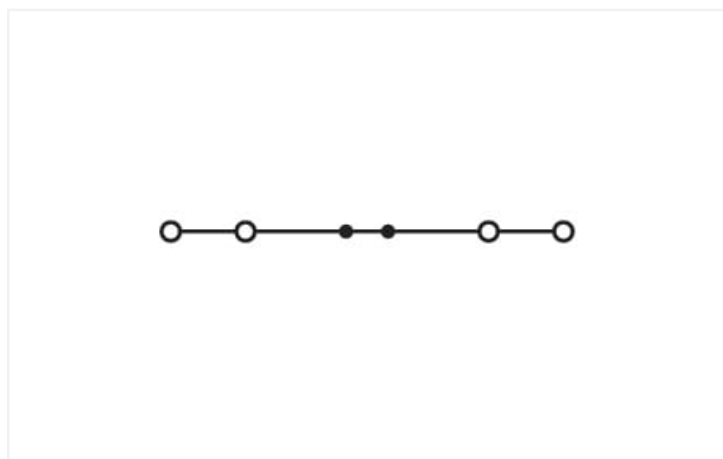
4-conductor through terminal block; 1.5 mm²; suitable for Ex e II applications; side and center marking; for DIN-rail 35 x 15 and 35 x 7.5; Push-in CAGE CLAMP®; 1,50 mm²; red



<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

Additional Information

Technical Section

pdf
2142.18 KB



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](#)

Separator plate; 2 mm thick; oversized; gray



[Item No.: 2002-1494](#)

Separator 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; 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 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 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.: 210-719

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

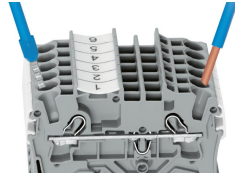
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; multicoloured

Installation Notes

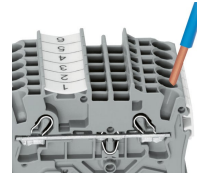
Conductor termination



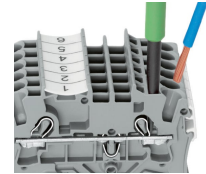
All conductor types at a glance



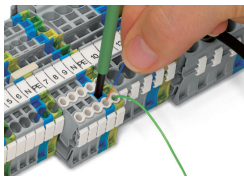
Push-in termination of solid and ferruled conductors



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.

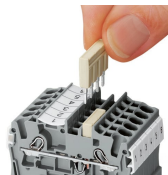


Inserting a conductor via operating tool:
Connecting fine-stranded conductors without ferrules, or small cross-sectional conductors that cannot be pushed in, is performed similarly to the original CAGE CLAMP® – just use an operating tool.
Advantage:
To open the clamp, the operating tool is inserted vertically.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

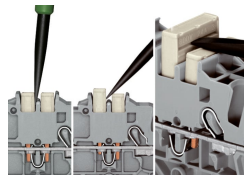


Conductor termination – insulation stop

Commoning

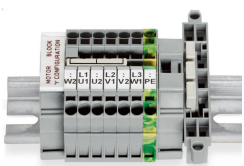


Insert push-in type jumper bar and push down until it hits backstop.

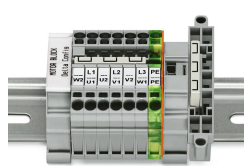


Removing a push-in type jumper bar:
Insert the operating tool between the jumper and partition wall of the dual jumper slots, then lift up the jumper. Place the operating tool in the center of jumpers for up to five contacts (see above), or alternately on both sides for jumpers with more than five contacts.

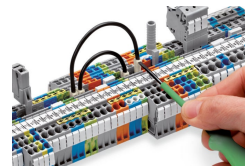
Commoning



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.

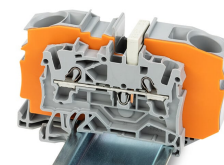
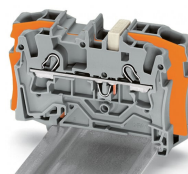
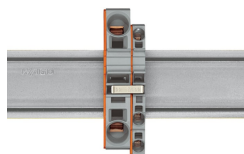
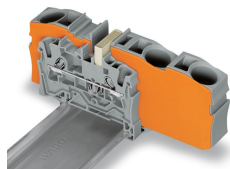


This delta jumper has been specially developed to create a delta configuration and is used on motor terminal boards equipped with rail-mount terminal blocks TOPJOB® S.



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

Commoning

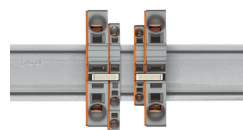
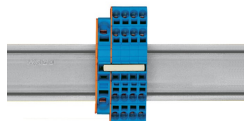
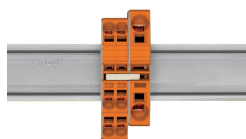


Step-down jumpers common terminal blocks of different sizes, without losing a conductor clamping point. This can be beneficial on long conductor runs where voltage drop can be a problem. A large conductor can be easily connected to smaller conductors at the distribution point. Commoning may be made in 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).

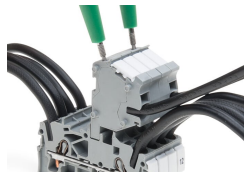


Stepping down via push-in type jumper bar:
Commoning via open terminal side with end plate allows jumpering over two cross-section sizes for 16 mm² (6 AWG) and 10 mm² (8 AWG) and one cross-section size for 6/4/2.5 mm² (10/12/14 AWG). An example: from 16 mm² (6 AWG) to 6 mm² (10 AWG) (see illustration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

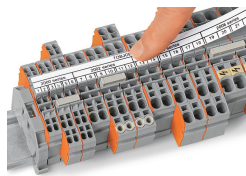
Rail-mount terminal block assembly for electric motor wiring

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

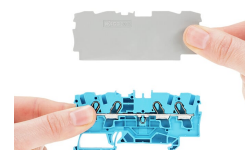
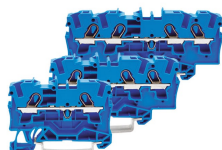
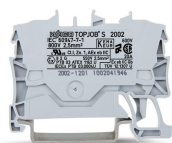
Marking



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!

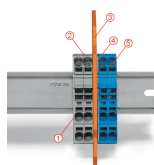
Ex application



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.