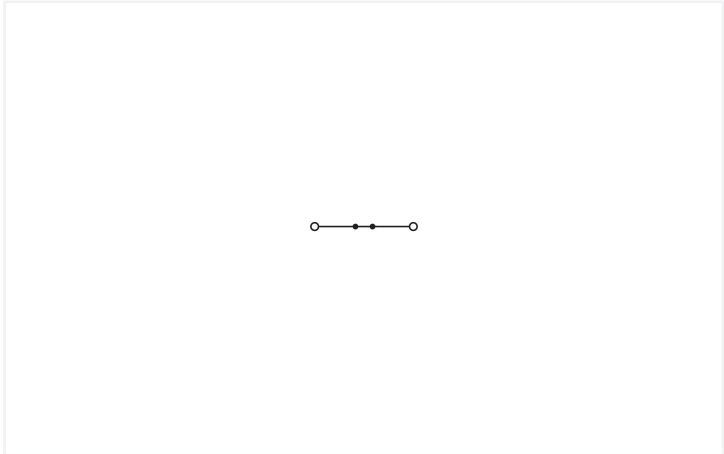
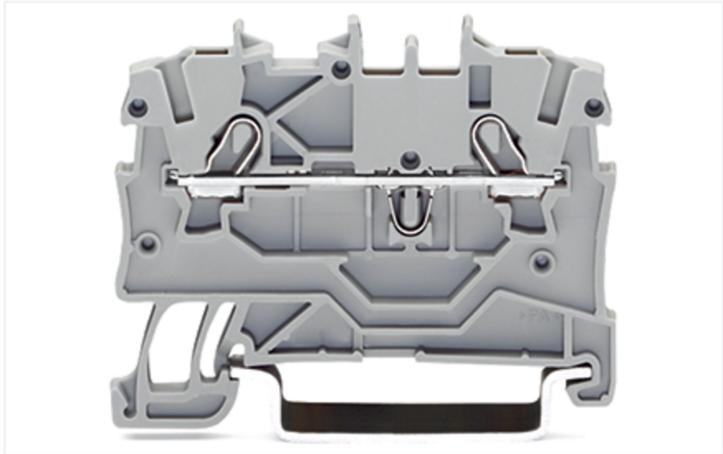




Color: ■ blue Similar to illustration Similar to illustration

Through terminal block, 2000 Series, Push-in CAGE CLAMP®

Quick and easy connections are guaranteed with this through terminal block (item number 2000-1204). Strip lengths must be between 9 and 11 mm when connecting conductors to this through terminal block. Whether for use in industry or building installations, our rail-mount through terminal blocks allow you to quickly and securely connect electrical conductors. They're perfect for either classic through-wiring or distributing potential, depending on the variant. Featuring conductor terminals along with Push-in CAGE CLAMP®, this product delivers reliable performance. Push-in CAGE CLAMP® technology provides a universal connection solution for all conductor types. It allows both solid and fine-stranded conductors with ferrules to be inserted directly into the clamping point without the need for tools. The item's dimensions are (3.5 x 48.5 x 39.5) mm (width x height x depth). Depending on the conductor type, this through terminal block is ideal for conductor cross sections ranging from 0.14 mm² to 1.5 mm².

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 different industrial applications and modern building installations. They also offer the perfect solution for every need: lever, push-button, or operating slot. 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 impulse withstand voltage		8 kV	-	-
Rated current		13.5 A	-	-
Current at conductor cross-section (max.) mm²		17.5 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		10 A	10 A	-
Ex information		See application instructions in section "Knowledge and Downloads – Documentation – Additional Information: Technical Section; Technical Explanations"		
Reference to hazardous areas				
Ratings per		ATEX: PTB 11 ATEX 1041 U / IECEx: PTB 11.0093U (Ex eb IIC Gb)		
Rated voltage EN (Ex e II)		550 V		



Ex information	
Rated current (Ex e II)	13 A
Rated current (Ex e II) with jumper	12 A

Power Loss	
Power loss, per pole (potential)	0.4338 W
Rated current I _N for power loss specification	13.5 A
Resistance value for specified, current-dependent power loss	0.00238 Ω

General information	
Wiring direction	Front-entry wiring

Connection Data	
Clamping units	2
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 mm²
Solid conductor	0.14 ... 1.5 mm² / 24 ... 16 AWG
Solid conductor; push-in termination	0.5 ... 1.5 mm² / 20 ... 16 AWG
Stranded conductor	0.14 ... 1.5 mm² / 24 ... 16 AWG
Fine-stranded conductor	0.14 ... 1.5 mm² / 24 ... 16 AWG
Fine-stranded conductor; with insulated ferrule	0.14 ... 0.75 mm² / 24 ... 18 AWG
Fine-stranded conductor; with ferrule; push-in termination	0.5 ... 0.75 mm² / 20 ... 18 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	3.5 mm / 0.138 inches
Height	48.5 mm / 1.909 inches
Depth from upper-edge of DIN-rail	32.9 mm / 1.295 inches
Depth	39.5 mm / 1.555 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	blue
Material group	I
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.071 MJ
Weight	3.6 g

Environmental requirements

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

Environmental Testing

Test specification: Railway applications – Rolling stock – Electronic equipment	DIN EN 50155 (VDE 0115-200):2022-06
Test procedure: Railway applications – Rolling stock equipment – Vibration and shock tests	DIN EN 61373 (VDE 0115-0106):2011-04
Spectrum/Mounting location	Service life test, Category 1, Class A/B
Functional test with noise-like oscillations	Test passed according to Section 8 of the standard
Frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 150 \text{ Hz}$
Acceleration	0.101g (highest test level used for all axes)
Test duration per axis	10 min.
Test directions	X, Y and Z axes
Monitoring of contact faults and interruptions	Passed
Voltage drop measurement before and after each axis	Passed
Simulated service life test through increased levels of noise-like oscillations	Test passed according to Section 9 of the standard
Frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 150 \text{ Hz}$
Acceleration	0.572g (highest test level used for all axes)
Test duration per axis	5 h
Test directions	X, Y and Z axes
Extended testing: Monitoring of contact faults and interruptions	Passed
Extended testing: Voltage drop measurement before and after each axis	Passed
Shock test	Test passed according to Section 10 of the standard
Shock pulse form	Half sine
Acceleration	5g (highest test level used for all axes)
Shock duration	30 ms
Number of shocks (per axis)	3 pos. und 3 neg.
Test directions	X, Y and Z axes
Extended testing: Monitoring of contact faults and interruptions	Passed
Extended testing: Voltage drop measurement before and after each axis	Passed
Vibration and shock stress for rolling stock equipment	Passed

Commercial data

Product Group	22 (TOPJOB S)
PU (SPU)	100 pcs
Packaging type	Box
Country of origin	CN
GTIN	4045454966799
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 10.0		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
CCA DEKRA Certification B.V.	EN 60947	NTR NL 7962
CSA DEKRA Certification B.V.	C22.2	2130762
KEMA/KEUR DEKRA Certification B.V.	EN 60947	71-125928
UL Underwriters Laboratories Inc.	UL 1059	E45172
Approval	Standard	Certificate Name
ATEX-Attestation of Confor- mity WAGO GmbH & Co. KG	-	-
EU-Declaration of Conformi- ty WAGO GmbH & Co. KG	-	-
Railway WAGO GmbH & Co. KG	-	Railway Ready
UK-Declaration of Conformi- ty WAGO GmbH & Co. KG	-	-

Approvals for marine applications		
Approval	Standard	Certificate Name
ABS American Bureau of Ship- ping	EN 60947	24-0152298-PDA
DNV GL Det Norske Veritas, Ger- manischer Lloyd	-	TAE00001V2
LR Lloyds Register	EN 60947	LR23325966TA
PRS Polski Rejestr Statków	-	TE/1094/880590/23
Approvals for hazardous areas		
Approval	Standard	Certificate Name
AEx Underwriters Laboratories Inc.	UL 60079	E185892 (AEx eb IIC resp. Ex eb IIC)
ATEX Physikalisch Technische Bundesanstalt	EN 60079	PTB 11 ATEX 1041 U (II 2 G Ex eb IIC Gb bzw. I M 2 Ex eb I Mb)
CCC CNEX	GB/T 3836.3	2020312313000182 (Ex eb IIC Gb, Ex eb I Mb)
IECEx Physikalisch Technische Bundesanstalt	IEC 60079	IECEx PTB 11.0093U (Ex e IIC Gb or Ex e I Mb)



Downloads

Environmental Product Compliance

Compliance Search			
Environmental Product Compliance 2000-1204			

Documentation

Bid Text			
2000-1204	19.02.2019	xml 3.95 KB	
2000-1204	07.08.2018	docx 14.49 KB	

CAD/CAE-Data

CAD data	
2D/3D Models 2000-1204	

CAE data	
EPLAN Data Portal 2000-1204	
WSCAD Universe 2000-1204	
ZUKEN Portal 2000-1204	

1 Compatible Products

1.1 Required Accessories

1.1.1 End plate

1.1.1.1 End plate



Item No.: 2000-1291
End and intermediate plate; 0.7 mm thick; gray



Item No.: 2000-1292
End and intermediate plate; 0.7 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 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; unslopped; similar to EN 60715; silver-colored



Item No.: 210-198
Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslopped; according to EN 60715; copper-colored



Item No.: 210-197
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slopped; similar to EN 60715; silver-colored



Item No.: 210-114
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslopped; similar to EN 60715; silver-colored



Item No.: 210-118
Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslopped; according to EN 60715; silver-colored



Item No.: 210-115
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slopped; 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; slopped; 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; unslopped; according to EN 60715; silver-colored



1.2.2 End plate

1.2.2.1 End plate



Item No.: 209-190
Separator for Ex e/Ex i applications; 3 mm thick; 90 mm wide; orange

1.2.3 Ferrule

1.2.3.1 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

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.: 2000-406/020-000
Delta jumper; insulated; light gray



Item No.: 2000-410/000-006
Jumper; 10-way; insulated; blue



Item No.: 2000-410
Jumper; 10-way; insulated; light gray



Item No.: 2000-410/000-005
Jumper; 10-way; insulated; red



Item No.: 2000-402/000-006
Jumper; 2-way; insulated; blue



Item No.: 2000-402
Jumper; 2-way; insulated; light gray



Item No.: 2000-402/000-005
Jumper; 2-way; insulated; red



Item No.: 2000-402/000-018
Jumper; 2-way; insulated; yellow-green



Item No.: 2000-403/000-006
Jumper; 3-way; insulated; blue



Item No.: 2000-403
Jumper; 3-way; insulated; light gray



Item No.: 2000-403/000-005
Jumper; 3-way; insulated; red



Item No.: 2000-404/000-006
Jumper; 4-way; insulated; blue

1.2.5.1 Jumper

**Item No.: 2000-404**

Jumper; 4-way; insulated; light gray

**Item No.: 2000-404/000-005**

Jumper; 4-way; insulated; red

**Item No.: 2000-405/000-006**

Jumper; 5-way; insulated; blue

**Item No.: 2000-405**

Jumper; 5-way; insulated; light gray

**Item No.: 2000-405/000-005**

Jumper; 5-way; insulated; red

**Item No.: 2000-406/000-006**

Jumper; 6-way; insulated; blue

**Item No.: 2000-406**

Jumper; 6-way; insulated; light gray

**Item No.: 2000-406/000-005**

Jumper; 6-way; insulated; red

**Item No.: 2000-407/000-006**

Jumper; 7-way; insulated; blue

**Item No.: 2000-407**

Jumper; 7-way; insulated; light gray

**Item No.: 2000-407/000-005**

Jumper; 7-way; insulated; red

**Item No.: 2000-408/000-006**

Jumper; 8-way; insulated; blue

**Item No.: 2000-408**

Jumper; 8-way; insulated; light gray

**Item No.: 2000-408/000-005**

Jumper; 8-way; insulated; red

**Item No.: 2000-409/000-006**

Jumper; 9-way; insulated; blue

**Item No.: 2000-409**

Jumper; 9-way; insulated; light gray

**Item No.: 2000-409/000-005**

Jumper; 9-way; insulated; red

**Item No.: 2000-440**

Jumper; from 1 to 10; insulated; light gray

**Item No.: 2000-433/000-006**

Jumper; from 1 to 3; insulated; blue

**Item No.: 2000-433**

Jumper; from 1 to 3; insulated; light gray

**Item No.: 2000-433/000-005**

Jumper; from 1 to 3; insulated; red

**Item No.: 2000-434**

Jumper; from 1 to 4; insulated; light gray

**Item No.: 2000-435**

Jumper; from 1 to 5; insulated; light gray

**Item No.: 2000-436**

Jumper; from 1 to 6; insulated; light gray

**Item No.: 2000-437**

Jumper; from 1 to 7; insulated; light gray

**Item No.: 2000-438**

Jumper; from 1 to 8; insulated; light gray

**Item No.: 2000-439**

Jumper; from 1 to 9; insulated; light gray

**Item No.: 2000-405/011-000**

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

**Item No.: 210-103**

Wire commoning chain; 0.5 mm²; insulated; black

**Item No.: 210-123**

Wire commoning chain; insulated; blue

1.2.6 Marking

1.2.6.1 Group marker carrier

**Item No.: 2009-191**

Group marker carrier; gray

1.2.6.2 Marker

**Item No.: 793-3501**

WMB marking card; as card; plain; snap-on type; white

**Item No.: 2009-113/000-006**

WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; blue

**Item No.: 2009-113/000-007**

WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; gray

**Item No.: 2009-113/000-023**

WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; green

**Item No.: 2009-113/000-017**

WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; light green

**Item No.: 2009-113/000-012**

WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; orange

**Item No.: 2009-113/000-005**

WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; red

**Item No.: 2009-113/000-024**

WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; violet

**Item No.: 2009-113**

WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; white

**Item No.: 2009-113/000-002**

WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; yellow

1.2.6.3 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.: 2000-115
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.: 2009-404
Push-in type wire jumper; 0.75 mm²; insulated; 110 mm long; gray



Item No.: 2009-406
Push-in type wire jumper; 0.75 mm²; insulated; 250 mm long; gray



Item No.: 2009-402
Push-in type wire jumper; 0.75 mm²; insulated; 60 mm long; gray

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.: 2000-560
Modular TOPJOB*S connector; modular; for jumper contact slot; 10-pole; gray



Item No.: 2000-552
Modular TOPJOB*S connector; modular; for jumper contact slot; 2-pole; gray



Item No.: 2000-553
Modular TOPJOB*S connector; modular; for jumper contact slot; 3-pole; gray



Item No.: 2000-554
Modular TOPJOB*S connector; modular; for jumper contact slot; 4-pole; gray



Item No.: 2000-555
Modular TOPJOB*S connector; modular; for jumper contact slot; 5-pole; gray



Item No.: 2000-556
Modular TOPJOB*S connector; modular; for jumper contact slot; 6-pole; gray



Item No.: 2000-557
Modular TOPJOB*S connector; modular; for jumper contact slot; 7-pole; gray



Item No.: 2000-558
Modular TOPJOB*S connector; modular; for jumper contact slot; 8-pole; gray



Item No.: 2000-559
Modular TOPJOB*S connector; modular; for jumper contact slot; 9-pole; gray



Item No.: 2000-549
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.: 210-136
Test plug; 2 mm Ø; with 500 mm cable; red

1.2.10.1 Testing accessories



Item No.: 2009-182
Testing tap; for max. 2.5 mm²; tool-free connection for individual test wires 0.08 - 2.5 mm; gray



Item No.: 2000-511
TOPJOB*S L-type test plug module; modular; for jumper contact slot; 1-pole; gray



Item No.: 2000-510
TOPJOB*S L-type test plug module; modular; for jumper contact slot; 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



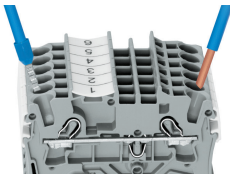
Item No.: 210-647
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; multicoloured

Installation Notes

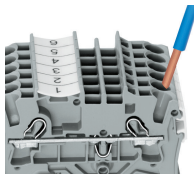
Conductor termination



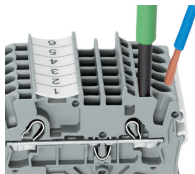
All conductor types at a glance



Push-in termination of solid and ferruled conductors

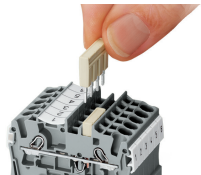


Inserting a conductor via push-in termination:
Solid conductors with cross-sections from either one size above, or up to two sizes below, the rated cross-section can be simply pushed in – no tools needed.

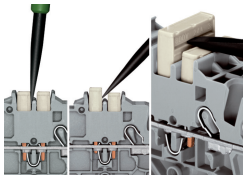


Inserting a conductor via operating tool:
Connecting fine-stranded conductors without ferrules, or small cross-sectional conductors that cannot be pushed in, is performed similarly to the original CAGE CLAMP® – just use an operating tool.
Advantage:
To open the clamp, the operating tool is inserted vertically.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

Commoning

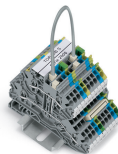
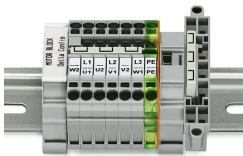
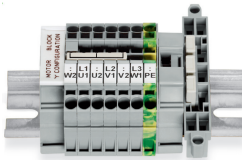


Insert push-in type jumper bar and push down until it hits backstop.



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

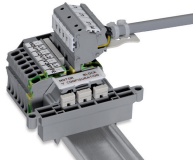
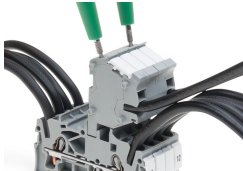
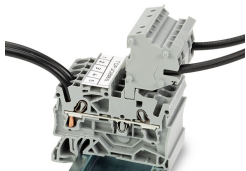


This star point jumper has been specially developed to create a “star point” and is used on motor terminal boards equipped with Rail-Mount Terminal Blocks TOPJOB® S.

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 (2009-402) until fully inserted. For rewiring, lift the jumper with an operating tool at the notch provided for this purpose on the jumper.

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

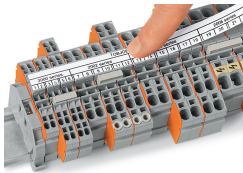
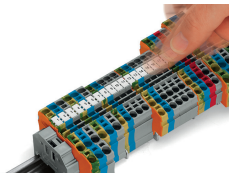
Rail-mount terminal block assembly for electric motor wiring

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

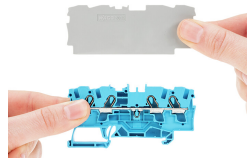
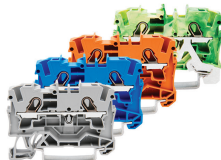
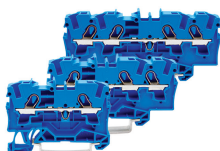
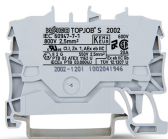
Marking



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

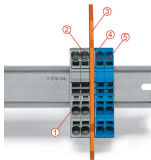


Through terminal blocks with a blue insulated housing are suitable for Ex i applications.

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 application



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.