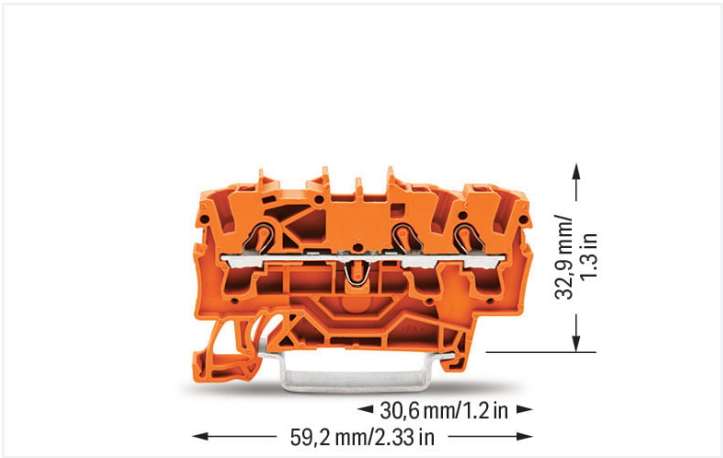


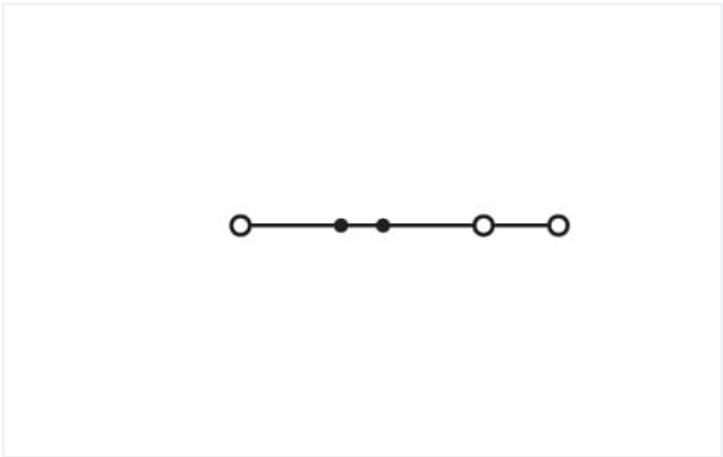
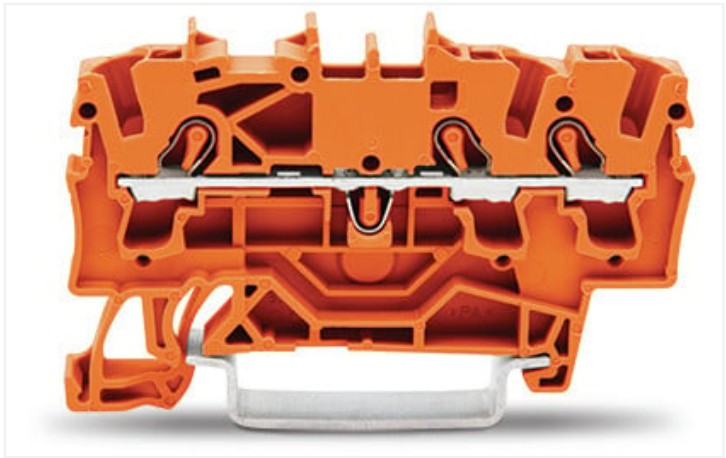
Data Sheet | Item Number: 2002-1302

3-conductor through terminal block; 2.5 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®; 2,50 mm²; orange

<https://www.wago.com/2002-1302>



Color: ■ orange



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		24 A	-	-
Current at conductor cross-section (max.) mm²		32 A	-	-
Approvals per		UL 1059		
Use group		B	C	D
Rated voltage		600 V	600 V	-
Rated current		20 A	20 A	-
Approvals per		CSA 22.2 No 158		
Use group		B	C	D
Rated voltage		600 V	600 V	-
Rated current		20 A	20 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 03 ATEX 1162 U / IECEx: PTB 03.0004U (Ex eb IIC Gb)		
Rated voltage EN (Ex e II)		550 V		
Rated current (Ex e II)		22 A		
Rated current (Ex e II) with jumper		20 A		



Power Loss	
Power loss, per pole (potential)	0.7661 W
Rated current I <sub>N</sub> for specified power loss	24 A
Resistance value for specified, current-dependent power loss	0.00133 Ω

Connection data			
Connection points	3	<b>Connection 1</b>	
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	2.5 mm²
		Solid conductor	0.25 ... 4 mm² / 22 ... 12 AWG
		Solid conductor; push-in termination	0.75 ... 4 mm² / 18 ... 12 AWG
		Fine-stranded conductor	0.25 ... 4 mm² / 22 ... 12 AWG
		Fine-stranded conductor; with insulated ferrule	0.25 ... 2.5 mm² / 22 ... 14 AWG
		Fine-stranded conductor; with ferrule; push-in termination	1 ... 2.5 mm² / 18 ... 14 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	10 ... 12 mm / 0.39 ... 0.47 inches
		Wiring direction	Front-entry wiring

Physical data	
Width	5.2 mm / 0.205 inches
Height	59.2 mm / 2.33 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)	<a href="https://www.wago.com/us/material-specifications">Information on material specifications can be found here</a>
Color	orange
Material group	I
Insulation material	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.129 MJ
Weight	5.9 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	4017332999267
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 7941
CSA DEKRA Certification B.V.	C22.2 No. 158	1536069
KEMA/KEUR DEKRA Certification B.V.	EN 60947	71-124163
UL Underwriters Laboratories Inc.	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 Underwriters Laboratories Inc.	UL 60079	E185892 (AEx eb IIC resp. Ex eb IIC)
ATEX Physikalisch Technische Bundesanstalt	EN 60079	PTB 03 ATEX 1162 U (II2G Ex eb IIC Gb, IM2 Ex eb IMb)
CCC CNEX	GB/T 3836.3	2020312313000238 (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	IEC 60079	IECEx PTB 03.0004U (Ex eb IIC Gb or Ex eb I Mb)








Approvals for hazardous areas		
INMETRO TÜV Rheinland do Brasil Ltda.	IEC 60079	TÜV 12.1307 U

Downloads	
Environmental Product Compliance	
Compliance Search	
Environmental Product Compliance 2002-1302	<a href="#">↓</a>

Documentation			
Additional Information		Bid Text	
Technical Section	pdf 2240.62 KB	2002-1302	29.04.2019 xml 4.15 KB
	<a href="#">↓</a>	2002-1302	23.04.2019 docx 14.92 KB
			<a href="#">↓</a>

CAD/CAE-Data	
CAD data	CAE data
2D/3D Models 2002-1302	EPLAN Data Portal 2002-1302
<a href="#">↓</a>	<a href="#">↓</a>
	WSCAD Universe 2002-1302
	<a href="#">↓</a>
	ZUKEN Portal 2002-1302
	<a href="#">↓</a>













1 Compatible Products			
1.1 Required Accessories			
1.1.1 End plate			
1.1.1.1 End plate			
			
<a href="#">Item No.: 2002-1391</a> End and intermediate plate; 0.8 mm thick; gray	<a href="#">Item No.: 2002-1392</a> End and intermediate plate; 0.8 mm thick; orange	<a href="#">Item No.: 209-191</a> Separator for Ex e/Ex i applications; 3 mm thick; 120 mm wide; orange	<a href="#">Item No.: 2002-1393</a> Seperator plate; 2 mm thick; oversized; gray
			
<a href="#">Item No.: 2002-1394</a> Seperator plate; 2 mm thick; oversized; orange			



1.2 Optional Accessories










1.2.1 DIN-rail

1.2.1.1 Mounting accessories

 <b>Item No.: 210-196</b> Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored	 <b>Item No.: 210-198</b> Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; copper-colored	 <b>Item No.: 210-508</b> Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715; silver-colored	 <b>Item No.: 210-197</b> Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715; silver-colored
 <b>Item No.: 210-506</b> Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715; silver-colored	 <b>Item No.: 210-114</b> Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored	 <b>Item No.: 210-118</b> Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored	 <b>Item No.: 210-115</b> 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
 <b>Item No.: 210-112</b> 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	 <b>Item No.: 210-504</b> Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715; silver-colored	 <b>Item No.: 210-113</b> Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored	 <b>Item No.: 210-505</b> Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; according to EN 60715; silver-colored

1.2.2 Ferrule

1.2.2.1 Ferrule

 <b>Item No.: 216-241</b> 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	 <b>Item No.: 216-242</b> 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	 <b>Item No.: 216-262</b> 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	 <b>Item No.: 216-243</b> Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red
 <b>Item No.: 216-263</b> Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red	 <b>Item No.: 216-244</b> 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	 <b>Item No.: 216-264</b> 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	 <b>Item No.: 216-246</b> Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue
 <b>Item No.: 216-266</b> Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue			

1.2.3 Installation

1.2.3.1 Cover

 <b>Item No.: 709-156</b> 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.: 2002-171**

Insulation stop; 0.25 - 0.5 mm<sup>2</sup>; 5 pieces/strip; light gray

**Item No.: 2002-172**

Insulation stop; 0.75 - 1 mm<sup>2</sup>; 5 pieces/strip; dark gray

## 1.2.5 Jumper

## 1.2.5.1 Jumper

**Item No.: 2002-400**

Continuous jumper; 2-way; insulated; light gray

**Item No.: 2002-423/000-006**

Continuous jumper; from 1 to 3; insulated; blue

**Item No.: 2002-423**

Continuous jumper; from 1 to 3; insulated; light gray

**Item No.: 2002-423/000-005**

Continuous jumper; from 1 to 3; insulated; red

**Item No.: 2002-424/000-006**

Continuous jumper; from 1 to 4; insulated; blue

**Item No.: 2002-424**

Continuous jumper; from 1 to 4; insulated; light gray

**Item No.: 2002-424/000-005**

Continuous jumper; from 1 to 4; insulated; red

**Item No.: 2002-406/020-000**

Delta jumper; insulated; light gray

**Item No.: 2002-410/000-006**

Jumper; 10-way; insulated; blue

**Item No.: 2002-410**

Jumper; 10-way; insulated; light gray

**Item No.: 2002-410/000-005**

Jumper; 10-way; insulated; red

**Item No.: 2002-402/000-006**

Jumper; 2-way; insulated; blue

**Item No.: 2002-402**

Jumper; 2-way; insulated; light gray

**Item No.: 2002-402/000-005**

Jumper; 2-way; insulated; red

**Item No.: 2002-403/000-006**

Jumper; 3-way; insulated; blue

**Item No.: 2002-403**

Jumper; 3-way; insulated; light gray

**Item No.: 2002-403/000-005**

Jumper; 3-way; insulated; red

**Item No.: 2002-404/000-006**

Jumper; 4-way; insulated; blue

**Item No.: 2002-404**

Jumper; 4-way; insulated; light gray

**Item No.: 2002-404/000-005**

Jumper; 4-way; insulated; red

**Item No.: 2002-405/000-006**

Jumper; 5-way; insulated; blue

**Item No.: 2002-405**

Jumper; 5-way; insulated; light gray

**Item No.: 2002-405/000-005**

Jumper; 5-way; insulated; red

**Item No.: 2002-406/000-006**

Jumper; 6-way; insulated; blue

**Item No.: 2002-406**

Jumper; 6-way; insulated; light gray

**Item No.: 2002-406/000-005**

Jumper; 6-way; insulated; red

**Item No.: 2002-407/000-006**

Jumper; 7-way; insulated; blue

**Item No.: 2002-407**

Jumper; 7-way; insulated; light gray

**Item No.: 2002-407/000-005**

Jumper; 7-way; insulated; red

**Item No.: 2002-408/000-006**

Jumper; 8-way; insulated; blue

**Item No.: 2002-408**

Jumper; 8-way; insulated; light gray

**Item No.: 2002-408/000-005**

Jumper; 8-way; insulated; red

**Item No.: 2002-409/000-006**

Jumper; 9-way; insulated; blue

**Item No.: 2002-409**

Jumper; 9-way; insulated; light gray

**Item No.: 2002-409/000-005**

Jumper; 9-way; insulated; red

**Item No.: 2002-440**

Jumper; from 1 to 10; insulated; light gray

## 1.2.5.1 Jumper

**Item No.: 2002-433**

Jumper; from 1 to 3; insulated; light gray

**Item No.: 2002-437**

Jumper; from 1 to 7; insulated; light gray

**Item No.: 2002-481**

Staggered jumper; 11-way; insulated; light gray

**Item No.: 2002-473**

Staggered jumper; 3-way; insulated; light gray

**Item No.: 2002-476**

Staggered jumper; 6-way; insulated; light gray

**Item No.: 2002-477/011-000**

Staggered jumper; 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.: 2002-434**

Jumper; from 1 to 4; insulated; light gray

**Item No.: 2002-438**

Jumper; from 1 to 8; insulated; light gray

**Item No.: 2002-482**

Staggered jumper; 12-way; insulated; light gray

**Item No.: 2002-475/011-000**

Staggered jumper; 3-way; insulated; light gray

**Item No.: 2002-477**

Staggered jumper; 7-way; insulated; light gray

**Item No.: 2002-479/011-000**

Staggered jumper; insulated; light gray

**Item No.: 2016-499**

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

**Item No.: 2002-435**

Jumper; from 1 to 5; insulated; light gray

**Item No.: 2002-439**

Jumper; from 1 to 9; insulated; light gray

**Item No.: 2002-473/011-000**

Staggered jumper; 2-way; from 1 to 3; insulated; light gray

**Item No.: 2002-474**

Staggered jumper; 4-way; insulated; light gray

**Item No.: 2002-478**

Staggered jumper; 8-way; insulated; light gray

**Item No.: 2002-481/011-000**

Staggered jumper; insulated; light gray

**Item No.: 210-103**

Wire commoning chain; insulated; black

**Item No.: 2002-436**

Jumper; from 1 to 6; insulated; light gray

**Item No.: 2002-480**

Staggered jumper; 10-way; insulated; light gray

**Item No.: 2002-472**

Staggered jumper; 2-way; insulated; light gray

**Item No.: 2002-475**

Staggered jumper; 5-way; insulated; light gray

**Item No.: 2002-479**

Staggered jumper; 9-way; insulated; light gray

**Item No.: 2002-405/011-000**

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

**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

**Item No.: 2009-192**

Group marker carrier; gray

**Item No.: 2009-193**

Group marker carrier; gray

## 1.2.6.2 Marker

**Item No.: 2009-145/000-006**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue

**Item No.: 2009-145/000-005**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; red

**Item No.: 248-501/000-006**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; blue

**Item No.: 2009-145/000-007**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray

**Item No.: 2009-145/000-024**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet

**Item No.: 248-501/000-007**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; gray

**Item No.: 2009-145/000-023**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green

**Item No.: 2009-145**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

**Item No.: 248-501/000-023**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; green

**Item No.: 2009-145/000-012**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange

**Item No.: 2009-145/000-002**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow

**Item No.: 248-501/000-017**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; light green



1.2.6.2 Marker



**Item No.: 248-501/000-012**  
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; orange



**Item No.: 248-501/000-005**  
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; red



**Item No.: 248-501/000-024**  
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; violet



**Item No.: 248-501**  
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white



**Item No.: 248-501/000-002**  
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; yellow



**Item No.: 793-5501/000-006**  
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; blue



**Item No.: 793-5501/000-014**  
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; brown



**Item No.: 793-5501/000-007**  
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; gray



**Item No.: 793-5501/000-023**  
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; green



**Item No.: 793-5501/000-017**  
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; light green



**Item No.: 793-5501/000-012**  
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; orange



**Item No.: 793-5501/000-005**  
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; red



**Item No.: 793-5501/000-024**  
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; violet



**Item No.: 793-5501**  
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; white



**Item No.: 793-5501/000-002**  
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; yellow



**Item No.: 2009-115/000-006**  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue



**Item No.: 2009-115/000-007**  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray



**Item No.: 2009-115/000-023**  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green



**Item No.: 2009-115/000-017**  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; light green



**Item No.: 2009-115/000-012**  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange



**Item No.: 2009-115/000-005**  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; red



**Item No.: 2009-115/000-024**  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet



**Item No.: 2009-115**  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white



**Item No.: 2009-115/000-002**  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow

1.2.6.3 Marker carrier



**Item No.: 2002-161**  
Adaptor; gray



**Item No.: 2009-198**  
Adaptor; gray

1.2.6.4 Marking strip



**Item No.: 2009-110**  
Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white

1.2.7 Plug

1.2.7.1 Component module with diode



**Item No.: 2002-880/1000-411**  
Component plug; 2-pole; with diode 1N4007; 10.4 mm wide; Operating temperature 85°C max.; gray





1.2.7.2 Component module with LED



**Item No.: 2002-880/1000-541**  
Component plug; 2-pole; LED (red); 10.4 mm wide; Operating temperature 85°C max.; gray



**Item No.: 2002-880/1000-836**  
Component plug; 2-pole; LED (red); 10.4 mm wide; Operating temperature 85°C max.; gray



**Item No.: 2002-880/1000-542**  
Component plug; 2-pole; LED (red); 10.4 mm wide; Operating temperature 85°C max.; multicoloured

1.2.7.3 Empty component plug housing



**Item No.: 2002-880**  
Empty component plug housing; 10.4 mm wide; 2-pole; Type 4; gray

1.2.8 Protective warning marker

1.2.8.1 Cover



**Item No.: 2002-115**  
Protective warning marker; for 5 terminal blocks; with high-voltage symbol, black; yellow

1.2.9 Push-in type wire jumper

1.2.9.1 Jumper



**Item No.: 2009-414**  
Push-in type wire jumper; 1.5 mm<sup>2</sup>; insulated; 110 mm long; black



**Item No.: 2009-414/000-005**  
Push-in type wire jumper; 1.5 mm<sup>2</sup>; insulated; 110 mm long; black



**Item No.: 2009-416**  
Push-in type wire jumper; 1.5 mm<sup>2</sup>; 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

1.2.10 Screwless end stop

1.2.10.1 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



1.2.11 Test and measurement

1.2.11.1 Testing accessories



**Item No.: 2002-560**  
Modular TOPJOB®S connector; modular; for jumper contact slot; 10-pole; 2,50 mm²; gray



**Item No.: 2002-511**  
Modular TOPJOB®S connector; modular; for jumper contact slot; 1-pole; 2,50 mm²; gray



**Item No.: 2002-552**  
Modular TOPJOB®S connector; modular; for jumper contact slot; 2-pole; 2,50 mm²; gray



**Item No.: 2002-553**  
Modular TOPJOB®S connector; modular; for jumper contact slot; 3-pole; 2,50 mm²; gray



**Item No.: 2002-554**  
Modular TOPJOB®S connector; modular; for jumper contact slot; 4-pole; 2,50 mm²; gray



**Item No.: 2002-555**  
Modular TOPJOB®S connector; modular; for jumper contact slot; 5-pole; 2,50 mm²; gray



**Item No.: 2002-556**  
Modular TOPJOB®S connector; modular; for jumper contact slot; 6-pole; 2,50 mm²; gray



**Item No.: 2002-557**  
Modular TOPJOB®S connector; modular; for jumper contact slot; 7-pole; 2,50 mm²; gray



**Item No.: 2002-558**  
Modular TOPJOB®S connector; modular; for jumper contact slot; 8-pole; 2,50 mm²; gray



**Item No.: 2002-559**  
Modular TOPJOB®S connector; modular; for jumper contact slot; 9-pole; 2,50 mm²; gray



**Item No.: 2002-549**  
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



**Item No.: 2002-649**  
TOPJOB®S L-type spacer module; modular; e.g., for bridging commoned terminal blocks; gray



**Item No.: 2002-611**  
TOPJOB®S L-type test plug module; modular; 1-pole; 2,50 mm²; gray

1.2.12 Tool

1.2.12.1 Operating tool



**Item No.: 210-658**  
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; angled; short; multicoloured



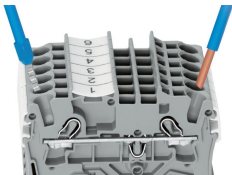
**Item No.: 210-720**  
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

Installation Notes

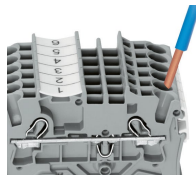
Conductor termination



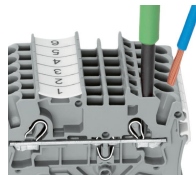
All conductor types at a glance



Push-in termination of solid and ferruled conductors

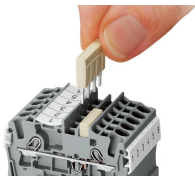


**Inserting a conductor via push-in termination:**  
Solid conductors with cross-sections from either one size above, or up to two sizes below, the rated cross-section can be simply pushed in – no tools needed.

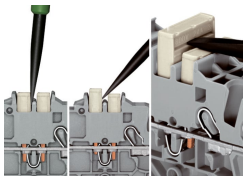


**Inserting a conductor via operating tool:**  
Connecting fine-stranded conductors without ferrules, or small cross-sectional conductors that cannot be pushed in, is performed similarly to the original CAGE CLAMP® – just use an operating tool.  
**Advantage:**  
To open the clamp, the operating tool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

Commoning

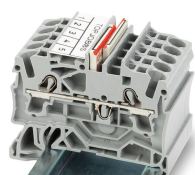


Insert push-in type jumper bar and push down until it hits backstop.

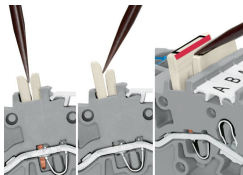


**Removing a push-in type jumper bar:**  
Insert the operating tool between the jumper and partition wall of the dual jumper slots, then lift up the jumper. Place the operating tool in the center of jumpers for up to five contacts (see above), or alternately on both sides for jumpers with more than five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

Commoning



Orient the staggered jumpers' red stripes on the inside. Insert the staggered jumper and push down until it hits the backstop.

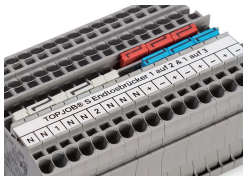


**Removing a staggered jumper:**  
Insert the operating tool between the staggered jumpers, then lift up the jumper.

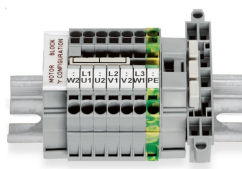
Commoning



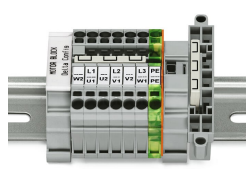
Continuous jumpers (2002 Series) readily connect an endless number of terminal blocks to each other via single jumper slot. Use the second jumper slot for additional commoning or testing.



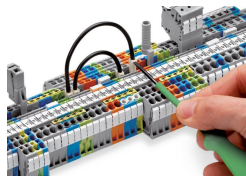
The 1-to-3 adjacent jumper for continuous commoning enables every other terminal block to be commoned. For example, positive and negative potentials can be accommodated alongside each other.



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.



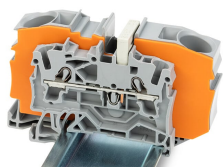
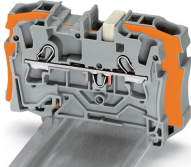
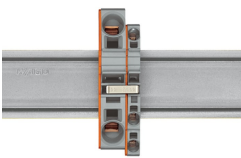
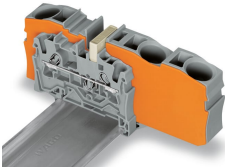
This delta jumper has been specially developed to create a delta configuration and is used on motor terminal boards equipped with rail-mount terminal blocks TOPJOB® S.



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



Commoning

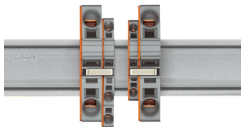
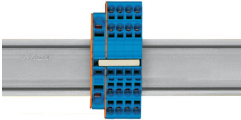
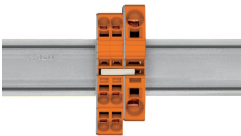


Step-down jumpers common terminal blocks of different sizes, without losing a conductor clamping point. This can be beneficial on long conductor runs where voltage drop can be a problem. A large conductor can be easily connected to smaller conductors at the distribution point. Commoning may be made in 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 mm<sup>2</sup> (10/12 AWG) terminal blocks (2006/2004 Series) with 4/2.5/1.5 mm<sup>2</sup> (AWG 12/14/16) terminal blocks (2004/2002/2001 Series).

**Step-down jumper (2016-499)** commons 16/10 mm<sup>2</sup> (16/8 AWG) terminal blocks (2016/2010 Series) with 10/6/4/2.5 mm<sup>2</sup> (8/10/12/14 AWG) terminal blocks (2010/2006/2004/2002 Series).

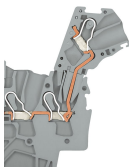
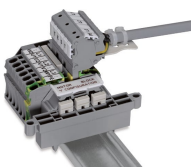
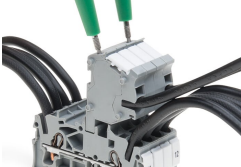


**Stepping down via push-in type jumper bar:** Commoning via open terminal side with end plate allows jumpering over two cross-section sizes for 16 mm<sup>2</sup> (6 AWG) and 10 mm<sup>2</sup> (8 AWG) and one cross-section size for 6/4/2.5 mm<sup>2</sup> (10/12/14 AWG). An example: from 16 mm<sup>2</sup>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

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

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

Testing

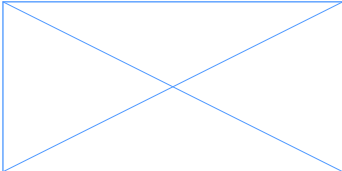


The modular TOPJOB® S connectors also connect conductors of the same size as the terminal blocks being used.

TOPJOB® S Connectors with a 2 mm Ø test socket for testing voltage via 2-pole voltage tester

Rail-mount terminal block assembly for electric motor wiring

L-type test plug module – cross-sectional view of contacts

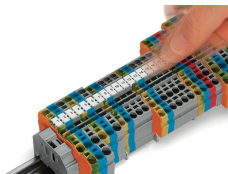


Test plug adapter (2009-174, CAT I) for 4 mm Ø plugs – compatible with 2000 to 2016 Series

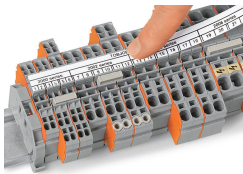


Testing tap (2009-182) for tool-free connection of test cables up to 2.5 mm<sup>2</sup> (12 AWG) – compatible with 2000 to 2016 Series

Marking



Snapping WMB Inline markers into marker slots.

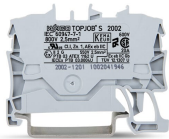


TOPJOB® S 2009-193 Group Marker Carrier (equipped with a marking strip) for all 2001 to 2016 Series TOPJOB® S Rail-Mount Terminal Blocks  
Do not use on an end plate!

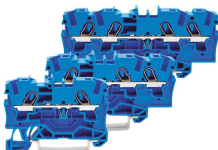


Using marker carriers for marking strips (2002-161) in jumper slots.

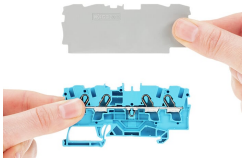
Ex application



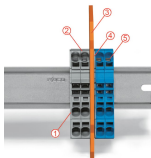
Through terminal blocks with a blue insulated housing are suitable for Ex i applications.



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.