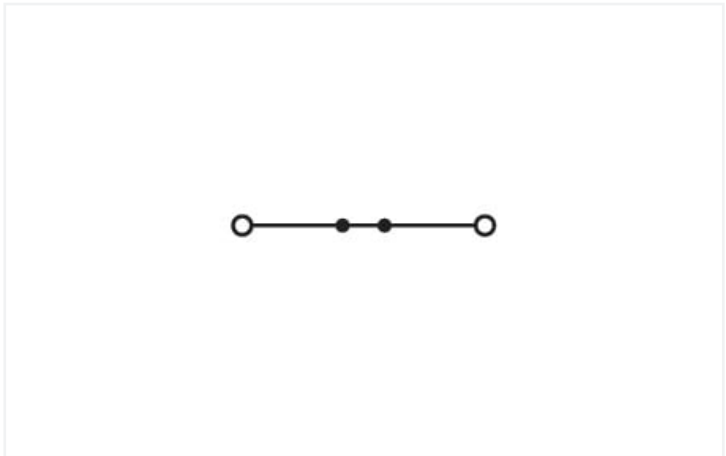


**Data Sheet | Item Number: 2002-1209**  
2-conductor through terminal block; 2.5 mm<sup>2</sup>; suitable for Ex e II applications; side and center marking; for DIN-rail 35 x 15 and 35 x 7.5; Push-in CAGE CLAMP®; 2,50 mm<sup>2</sup>; light gray  
<https://www.wago.com/2002-1209>



Color: ■ light gray

Similar to illustration



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	-	-

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	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	2.5 mm²
Solid conductor	0.25 ... 4 mm² / 22 ... 12 AWG
Solid conductor; push-in termination	1 ... 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	48.5 mm / 1.909 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	light gray
Material group	I
Insulation material	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.109 MJ
Weight	5.1 g

## Environmental requirements

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



Commercial data	
Product Group	22 (TOPJOB S)
PU (SPU)	100 pcs
Country of origin	DE
GTIN	4045454994877
Customs tariff number	85369010000

Environmental Product Compliance	
RoHS Compliance Status	Compliant, No Exemption

Approvals / Certificates

General approvals		Declarations of conformity and manufacturer's declarations												
Approval	Standard	Certificate Name												
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												
		<table><tr><th>Approval</th><th>Standard</th><th>Certificate Name</th></tr><tr><td>ATEX-Attestation of Conformity WAGO GmbH &amp; Co. KG</td><td>-</td><td>-</td></tr><tr><td>EU-Declaration of Conformity WAGO GmbH &amp; Co. KG</td><td>-</td><td>-</td></tr><tr><td>UK-Declaration of Conformity WAGO GmbH &amp; Co. KG</td><td>-</td><td>-</td></tr></table>	Approval	Standard	Certificate Name	ATEX-Attestation of Conformity WAGO GmbH & Co. KG	-	-	EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-	UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-
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UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-												

Approvals for marine applications		Approvals for hazardous areas																		
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																		
		<table><tr><th>Approval</th><th>Standard</th><th>Certificate Name</th></tr><tr><td>AEx Underwriters Laboratories Inc.</td><td>UL 60079</td><td>E185892 (AEx eb IIC resp. Ex eb IIC)</td></tr><tr><td>ATEX Physikalisch Technische Bundesanstalt</td><td>EN 60079</td><td>PTB 03 ATEX 1162 U (II2G Ex eb IIC Gb, IM2 Ex eb IMb)</td></tr><tr><td>CCC CNEX</td><td>GB/T 3836.3</td><td>2020312313000238 (Ex eb IIC Gb, Ex eb I Mb)</td></tr><tr><td>IECEx Physikalisch Technische Bundesanstalt</td><td>IEC 60079</td><td>IECEx PTB 03.0004U (Ex eb IIC Gb or Ex eb I Mb)</td></tr><tr><td>INMETRO TÜV Rheinland do Brasil Ltda.</td><td>IEC 60079</td><td>TÜV 12.1307 U</td></tr></table>	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)	IECEx Physikalisch Technische Bundesanstalt	IEC 60079	IECEx PTB 03.0004U (Ex eb IIC Gb or Ex eb I Mb)	INMETRO TÜV Rheinland do Brasil Ltda.	IEC 60079	TÜV 12.1307 U
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IECEx Physikalisch Technische Bundesanstalt	IEC 60079	IECEx PTB 03.0004U (Ex eb IIC Gb or Ex eb I Mb)																		
INMETRO TÜV Rheinland do Brasil Ltda.	IEC 60079	TÜV 12.1307 U																		



Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 2002-1209

Download icon

Documentation

Additional Information

Technical Section

pdf

2240.62 KB

Download icon

1 Compatible Products

1.1 Required Accessories

1.1.1 End plate

1.1.1.1 End plate

1.2 Optional Accessories

1.2.1 DIN-rail

1.2.1.1 Mounting accessories



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.: 216-262**  
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.: 216-263**  
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



**Item No.: 216-264**  
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



**Item No.: 216-246**  
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



**Item No.: 216-266**  
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



**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.: 2002-171**  
Insulation stop; 0.25 - 0.5 mm²; 5 pieces/strip; light gray



**Item No.: 2002-172**  
Insulation stop; 0.75 - 1 mm²; 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

**Item No.: 2002-433**

Jumper; from 1 to 3; insulated; light gray

**Item No.: 2002-434**

Jumper; from 1 to 4; insulated; light gray

**Item No.: 2002-435**

Jumper; from 1 to 5; insulated; light gray

**Item No.: 2002-436**

Jumper; from 1 to 6; insulated; light gray

**Item No.: 2002-437**

Jumper; from 1 to 7; insulated; light gray

**Item No.: 2002-438**

Jumper; from 1 to 8; insulated; light gray

**Item No.: 2002-439**

Jumper; from 1 to 9; insulated; light gray

**Item No.: 2002-480**

Staggered jumper; 10-way; insulated; light gray

**Item No.: 2002-481**

Staggered jumper; 11-way; insulated; light gray

**Item No.: 2002-482**

Staggered jumper; 12-way; insulated; light gray

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

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

**Item No.: 2002-472**

Staggered jumper; 2-way; insulated; light gray

**Item No.: 2002-473**

Staggered jumper; 3-way; insulated; light gray

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

Staggered jumper; 3-way; insulated; light gray

**Item No.: 2002-474**

Staggered jumper; 4-way; insulated; light gray

**Item No.: 2002-475**

Staggered jumper; 5-way; insulated; light gray

**Item No.: 2002-476**

Staggered jumper; 6-way; insulated; light gray

**Item No.: 2002-477**

Staggered jumper; 7-way; insulated; light gray

**Item No.: 2002-478**

Staggered jumper; 8-way; insulated; light gray

**Item No.: 2002-479**

Staggered jumper; 9-way; insulated; light gray

## 1.2.5.1 Jumper



Item No.: 2002-477/011-000

Staggered jumper; insulated; light gray



Item No.: 2002-479/011-000

Staggered jumper; insulated; light gray



Item No.: 2002-481/011-000

Staggered jumper; insulated; light gray



Item No.: 2002-405/011-000

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.: 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.: 210-103

Wire commoning chain; 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



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.: 2009-145/000-007

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



Item No.: 2009-145/000-023

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



Item No.: 2009-145/000-012

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



Item No.: 2009-145/000-005

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



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.: 2009-145

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



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.: 248-501/000-006

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



Item No.: 248-501/000-007

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



Item No.: 248-501/000-023

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



Item No.: 248-501/000-017

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



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



1.2.6.2 Marker



**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 mm<sup>2</sup>; gray



**Item No.: 2002-511**

Modular TOPJOB®S connector; modular; for jumper contact slot; 1-pole; 2,50 mm<sup>2</sup>; gray



**Item No.: 2002-552**

Modular TOPJOB®S connector; modular; for jumper contact slot; 2-pole; 2,50 mm<sup>2</sup>; gray



**Item No.: 2002-553**

Modular TOPJOB®S connector; modular; for jumper contact slot; 3-pole; 2,50 mm<sup>2</sup>; gray



**Item No.: 2002-554**

Modular TOPJOB®S connector; modular; for jumper contact slot; 4-pole; 2,50 mm<sup>2</sup>; gray



**Item No.: 2002-555**

Modular TOPJOB®S connector; modular; for jumper contact slot; 5-pole; 2,50 mm<sup>2</sup>; gray



**Item No.: 2002-556**

Modular TOPJOB®S connector; modular; for jumper contact slot; 6-pole; 2,50 mm<sup>2</sup>; gray



**Item No.: 2002-557**

Modular TOPJOB®S connector; modular; for jumper contact slot; 7-pole; 2,50 mm<sup>2</sup>; gray



**Item No.: 2002-558**

Modular TOPJOB®S connector; modular; for jumper contact slot; 8-pole; 2,50 mm<sup>2</sup>; gray



**Item No.: 2002-559**

Modular TOPJOB®S connector; modular; for jumper contact slot; 9-pole; 2,50 mm<sup>2</sup>; 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 mm<sup>2</sup>; 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 mm<sup>2</sup>; 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

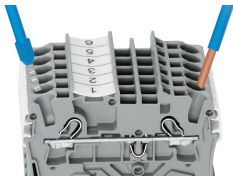
**Item No.: 210-720**  
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

Installation Notes

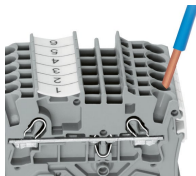
Conductor termination



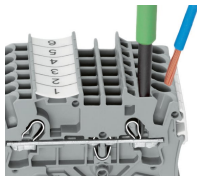
**All conductor types at a glance**



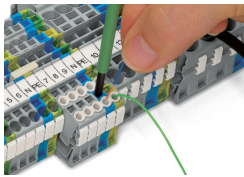
Push-in termination of solid and ferruled conductors



**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.

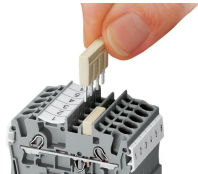


**Inserting a conductor via operating tool:**  
Connecting fine-stranded conductors without ferrules, or small cross-sectional conductors that cannot be pushed in, is performed similarly to the original CAGE CLAMP® – just use an operating tool.  
**Advantage:**  
To open the clamp, the operating tool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

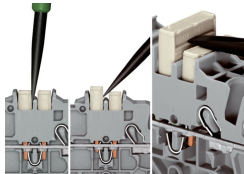


Conductor termination – insulation stop

Commoning

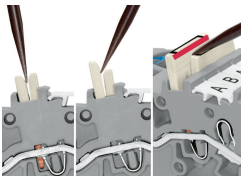
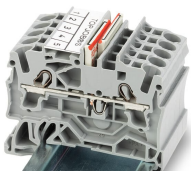


Insert push-in type jumper bar and push down until it hits backstop.



**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.

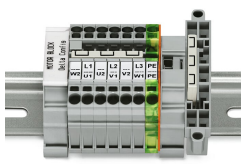
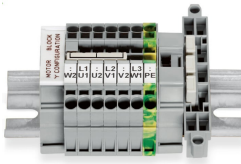
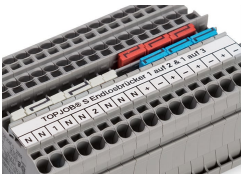
Commoning



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

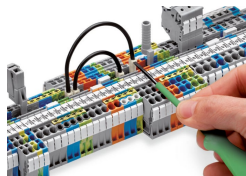


Continuous jumpers (2002 Series) readily connect an endless number of terminal blocks to each other via single jumper slot. Use the second jumper slot for additional commoning or testing.

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.

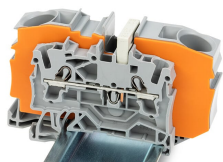
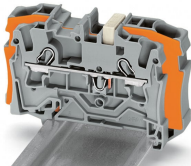
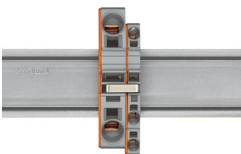
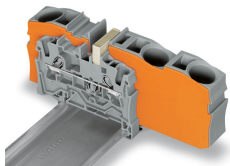
This star point jumper has been specially developed to create a "star point" and is used on motor terminal boards equipped with Rail-Mount Terminal Blocks TOP-JOB® S.

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).

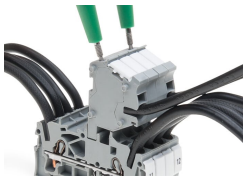
**Step-down jumper (2016-499)** commons 16/10 mm<sup>2</sup> (16/8 AWG) terminal blocks (2016/2010 Series) with 10/6/4/2.5 mm<sup>2</sup> (8/10/12/14 AWG) terminal blocks (2010/2006/2004/2002 Series).



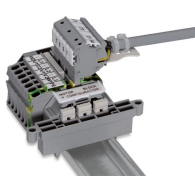
Testing



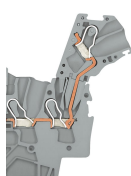
The modular TOPJOB® S connectors also connect conductors of the same size as the terminal blocks being used.



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

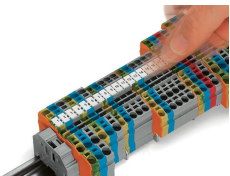


Test plug adapter (2009-174, CAT I) for 4 mm Ø plugs – compatible with 2000 to 2016 Series

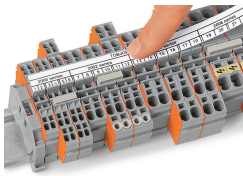


Testing tap (2009-182) for tool-free connection of test cables up to 2.5 mm² (12 AWG) – compatible with 2000 to 2016 Series

Marking



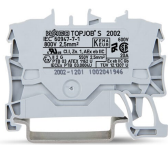
Snapping WMB Inline markers into marker slots.



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



Ex application



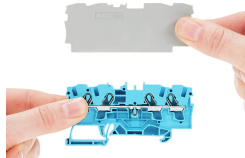
Through terminal blocks with a blue insulated housing are suitable for Ex i applications.



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.



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

