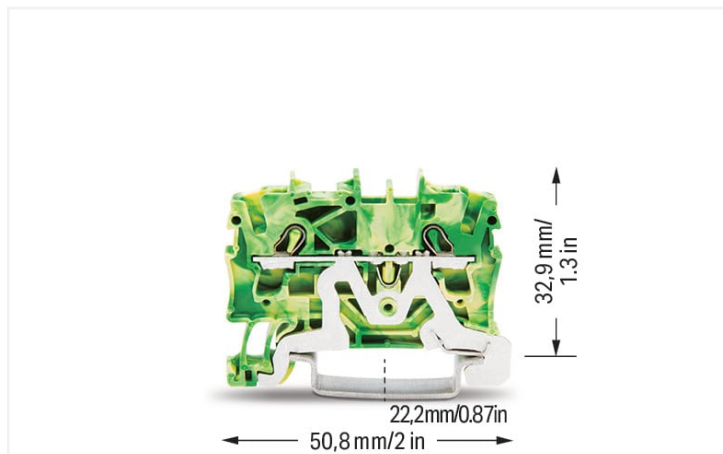


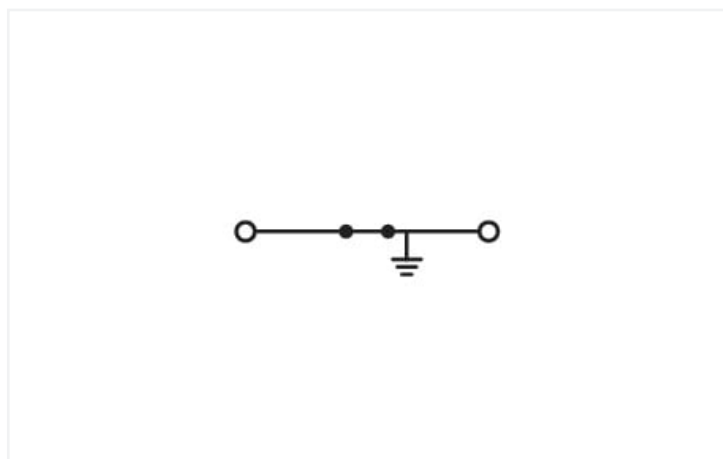
## Data Sheet | Item Number: 2002-1207

2-conductor ground 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>; green-yellow

<https://www.wago.com/2002-1207>



Color: ■ green-yellow



Similar to illustration

### Electrical data

Ratings per	IEC/EN 60947-7-2		
Overvoltage category	III	III	II
Pollution degree	3	2	2
Nominal voltage	-	-	-
Rated surge voltage	-	-	-
Rated current	-	-	-

### Ex information

Reference hazardous areas	See "Downloads – Documentation – Additional Information: Technical Section; Technical Explanations"
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### 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	2.5 mm <sup>2</sup>
Solid conductor	0.25 ... 4 mm <sup>2</sup> / 22 ... 12 AWG
Solid conductor; push-in termination	0.75 ... 4 mm <sup>2</sup> / 18 ... 12 AWG
Fine-stranded conductor	0.25 ... 4 mm <sup>2</sup> / 22 ... 12 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 2.5 mm <sup>2</sup> / 22 ... 14 AWG

### Connection 1

Fine-stranded conductor; with ferrule; push-in termination	1 ... 2.5 mm <sup>2</sup> / 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	50.8 mm / 2 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="#">Information on material specifications can be found here</a>
Color	green-yellow
Material group	I
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.104 MJ
Weight	7.7 g

### Environmental requirements

Processing temperature	-35 ... +85 °C	<b>Environmental Testing (Environmental Conditions)</b>	
Continuous operating temperature	-60 ... +105 °C	Test specification Railway applications – Rolling stock – Electronic equipment	DIN EN 50155 (VDE 0115-200):2022-06
		Test procedure Railway applications – Rolling stock equipment – Shock and vibration tests	DIN EN 61373 (VDE 0115-0106):2011-04
		Spectrum/Installation location	Service life test, Category 1, Class A/B
		Function test with noise-like vibration	Test passed according to Section 8 of the standard
		Frequency	f <sub>1</sub> = 5 Hz to f <sub>2</sub> = 150 Hz f <sub>1</sub> = 5 Hz to f <sub>2</sub> = 150 Hz
		Acceleration	0.101g (highest test level used for all axes) 0.572g (highest test level used for all axes) 5g (highest test level used for all axes)
		Test duration per axis	10 min. 5 h
		Test directions	X, Y and Z axes X, Y and Z axes X, Y and Z axes
		Monitoring for contact faults/interruptions	Passed
		Voltage drop measurement before and after each axis	Passed

**Environmental Testing (Environmental Conditions)**

Simulated service life test through increased levels of noise-like vibration	Test passed according to Section 9 of the standard
Extended test scope: Monitoring for contact faults/interruptions	Passed Passed
Extended test scope: Voltage drop measurement before and after each axis	Passed Passed
Shock test	Test passed according to Section 10 of the standard
Shock form	Half sine
Shock duration	30 ms
Number of shocks per axis	3 pos. und 3 neg.
Vibration and shock stress for rolling stock equipment	Passed

**Commercial data**

Product Group	22 (TOPJOB S)
eCl@ss 10.0	27-14-11-41
eCl@ss 9.0	27-14-11-41
ETIM 9.0	EC000901
ETIM 8.0	EC000901
PU (SPU)	100 pcs
Packaging type	Box
Country of origin	DE
GTIN	4017332999212
Customs tariff number	8536901000

**Environmental Product Compliance**

RoHS Compliance Status	Compliant, No Exemption
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**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)
INMETRO TÜV Rheinland do Brasil Ltda.	IEC 60079	TÜV 12.1307 U
KTL Korea Testing Laboratory	EN IEC 60079-0, EN IEC 60079-7	19-KA4B0-0922U

Downloads

Environmental Product Compliance

Compliance Search	
Environmental Product Compliance 2002-1207	<a href="#">↓</a>

Documentation

Additional Information		
Technical Section	pdf 2246.92 KB	<a href="#">↓</a>

Bid Text			
2002-1207	29.04.2019	xml 3.80 KB	<a href="#">↓</a>
2002-1207	23.04.2019	docx 14.57 KB	<a href="#">↓</a>

CAD/CAE-Data

CAD data	
2D/3D Models 2002-1207	<a href="#">↓</a>

CAE data	
EPLAN Data Portal 2002-1207	<a href="#">↓</a>
WSCAD Universe 2002-1207	<a href="#">↓</a>
ZUKEN Portal 2002-1207	<a href="#">↓</a>

## 1 Compatible Products

### 1.1 Required Accessories

#### 1.1.1 End plate

##### 1.1.1.1 End plate



**Item No.: 2002-1291**

End and intermediate plate; 0.8 mm thick; gray



**Item No.: 2002-1292**

End and intermediate plate; 0.8 mm thick; orange



**Item No.: 209-191**

Separator for Ex e/Ex i applications; 3 mm thick; 120 mm wide; orange

### 1.2 Optional Accessories

#### 1.2.1 DIN-rail

##### 1.2.1.1 Mounting accessories



**Item No.: 210-196**

Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored



**Item No.: 210-198**

Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; copper-colored



**Item No.: 210-508**

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715; silver-colored



**Item No.: 210-197**

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715; silver-colored



**Item No.: 210-506**

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715; silver-colored



**Item No.: 210-114**

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored



**Item No.: 210-118**

Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored



**Item No.: 210-115**

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 18 mm; silver-colored



**Item No.: 210-112**

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 25 mm; silver-colored



**Item No.: 210-504**

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715; silver-colored



**Item No.: 210-113**

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored



**Item No.: 210-505**

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 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



**Item No.: 2002-1293**

Separator plate; 2 mm thick; oversized; gray



**Item No.: 2002-1294**

Separator plate; 2 mm thick; oversized; orange

#### 1.2.3 Ferrule

##### 1.2.3.1 Ferrule



**Item No.: 216-241**

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red

1.2.3.1 Ferrule



**Item No.: 216-263**  
 Ferrule; Sleeve for 1 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue

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 Insulation stop

1.2.5.1 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

1.2.6 Jumper

1.2.6.1 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

1.2.6.1 Jumper

 <b>Item No.:</b> <a href="#">2002-410/000-006</a> Jumper; 10-way; insulated; blue	 <b>Item No.:</b> <a href="#">2002-410</a> Jumper; 10-way; insulated; light gray	 <b>Item No.:</b> <a href="#">2002-410/000-005</a> Jumper; 10-way; insulated; red	 <b>Item No.:</b> <a href="#">2002-402/000-006</a> Jumper; 2-way; insulated; blue
 <b>Item No.:</b> <a href="#">2002-402</a> Jumper; 2-way; insulated; light gray	 <b>Item No.:</b> <a href="#">2002-402/000-005</a> Jumper; 2-way; insulated; red	 <b>Item No.:</b> <a href="#">2002-403/000-006</a> Jumper; 3-way; insulated; blue	 <b>Item No.:</b> <a href="#">2002-403</a> Jumper; 3-way; insulated; light gray
 <b>Item No.:</b> <a href="#">2002-403/000-005</a> Jumper; 3-way; insulated; red	 <b>Item No.:</b> <a href="#">2002-404/000-006</a> Jumper; 4-way; insulated; blue	 <b>Item No.:</b> <a href="#">2002-404</a> Jumper; 4-way; insulated; light gray	 <b>Item No.:</b> <a href="#">2002-404/000-005</a> Jumper; 4-way; insulated; red
 <b>Item No.:</b> <a href="#">2002-405/000-006</a> Jumper; 5-way; insulated; blue	 <b>Item No.:</b> <a href="#">2002-405</a> Jumper; 5-way; insulated; light gray	 <b>Item No.:</b> <a href="#">2002-405/000-005</a> Jumper; 5-way; insulated; red	 <b>Item No.:</b> <a href="#">2002-406/000-006</a> Jumper; 6-way; insulated; blue
 <b>Item No.:</b> <a href="#">2002-406</a> Jumper; 6-way; insulated; light gray	 <b>Item No.:</b> <a href="#">2002-406/000-005</a> Jumper; 6-way; insulated; red	 <b>Item No.:</b> <a href="#">2002-407/000-006</a> Jumper; 7-way; insulated; blue	 <b>Item No.:</b> <a href="#">2002-407</a> Jumper; 7-way; insulated; light gray
 <b>Item No.:</b> <a href="#">2002-407/000-005</a> Jumper; 7-way; insulated; red	 <b>Item No.:</b> <a href="#">2002-408/000-006</a> Jumper; 8-way; insulated; blue	 <b>Item No.:</b> <a href="#">2002-408</a> Jumper; 8-way; insulated; light gray	 <b>Item No.:</b> <a href="#">2002-408/000-005</a> Jumper; 8-way; insulated; red
 <b>Item No.:</b> <a href="#">2002-409/000-006</a> Jumper; 9-way; insulated; blue	 <b>Item No.:</b> <a href="#">2002-409</a> Jumper; 9-way; insulated; light gray	 <b>Item No.:</b> <a href="#">2002-409/000-005</a> Jumper; 9-way; insulated; red	 <b>Item No.:</b> <a href="#">2002-440</a> Jumper; from 1 to 10; insulated; light gray
 <b>Item No.:</b> <a href="#">2002-433</a> Jumper; from 1 to 3; insulated; light gray	 <b>Item No.:</b> <a href="#">2002-434</a> Jumper; from 1 to 4; insulated; light gray	 <b>Item No.:</b> <a href="#">2002-435</a> Jumper; from 1 to 5; insulated; light gray	 <b>Item No.:</b> <a href="#">2002-436</a> Jumper; from 1 to 6; insulated; light gray
 <b>Item No.:</b> <a href="#">2002-437</a> Jumper; from 1 to 7; insulated; light gray	 <b>Item No.:</b> <a href="#">2002-438</a> Jumper; from 1 to 8; insulated; light gray	 <b>Item No.:</b> <a href="#">2002-439</a> Jumper; from 1 to 9; insulated; light gray	 <b>Item No.:</b> <a href="#">2002-480</a> Staggered jumper; 10-way; insulated; light gray
 <b>Item No.:</b> <a href="#">2002-481</a> Staggered jumper; 11-way; insulated; light gray	 <b>Item No.:</b> <a href="#">2002-482</a> Staggered jumper; 12-way; insulated; light gray	 <b>Item No.:</b> <a href="#">2002-473/011-000</a> Staggered jumper; 2-way; from 1 to 3; insulated; light gray	 <b>Item No.:</b> <a href="#">2002-472</a> Staggered jumper; 2-way; insulated; light gray
 <b>Item No.:</b> <a href="#">2002-473</a> Staggered jumper; 3-way; insulated; light gray	 <b>Item No.:</b> <a href="#">2002-475/011-000</a> Staggered jumper; 3-way; insulated; light gray	 <b>Item No.:</b> <a href="#">2002-474</a> Staggered jumper; 4-way; insulated; light gray	 <b>Item No.:</b> <a href="#">2002-475</a> Staggered jumper; 5-way; insulated; light gray
 <b>Item No.:</b> <a href="#">2002-476</a> Staggered jumper; 6-way; insulated; light gray	 <b>Item No.:</b> <a href="#">2002-477</a> Staggered jumper; 7-way; insulated; light gray	 <b>Item No.:</b> <a href="#">2002-478</a> Staggered jumper; 8-way; insulated; light gray	 <b>Item No.:</b> <a href="#">2002-479</a> Staggered jumper; 9-way; insulated; light gray
 <b>Item No.:</b> <a href="#">2002-477/011-000</a> Staggered jumper; insulated; light gray	 <b>Item No.:</b> <a href="#">2002-479/011-000</a> Staggered jumper; insulated; light gray	 <b>Item No.:</b> <a href="#">2002-481/011-000</a> Staggered jumper; insulated; light gray	 <b>Item No.:</b> <a href="#">2002-405/011-000</a> Star point jumper; 3-way; insulated; light gray
 <b>Item No.:</b> <a href="#">210-103</a> Wire commoning chain; insulated; black	 <b>Item No.:</b> <a href="#">210-123</a> Wire commoning chain; insulated; blue		

1.2.7 Marking

1.2.7.1 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

1.2.7.2 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



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

### 1.2.7.3 Marker carrier



**Item No.: 2002-161**

Adaptor; gray

**Item No.: 2009-198**

Adaptor; gray

### 1.2.7.4 Marking strip



**Item No.: 2009-110**

Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white

### 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



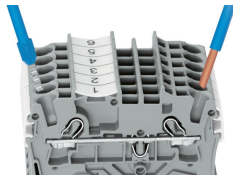
**Item No.: 210-720**  
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

## Installation Notes

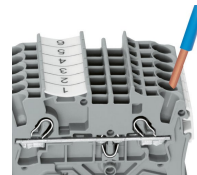
### Conductor termination



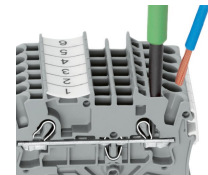
**All conductor types at a glance**



Push-in termination of solid and ferruled conductors

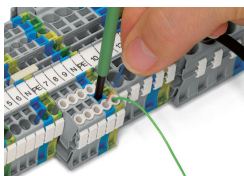


**Inserting a conductor via push-in termination:**  
Solid conductors with cross-sections from either one size above, or up to two sizes below, the rated cross-section can be simply pushed in – no tools needed.



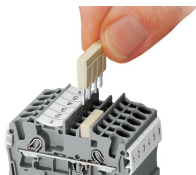
**Inserting a conductor via operating tool:**  
Connecting fine-stranded conductors without ferrules, or small cross-sectional conductors that cannot be pushed in, is performed similarly to the original CAGE CLAMP® – just use an operating tool.  
**Advantage:**  
To open the clamp, the operating tool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

### Conductor termination

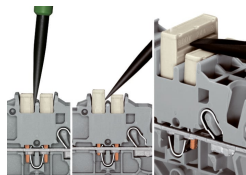


Conductor termination – insulation stop

### Commoning

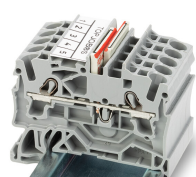


Insert push-in type jumper bar and push down until it hits backstop.

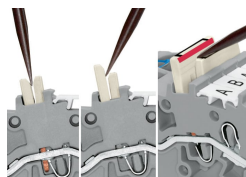


**Removing a push-in type jumper bar:** Insert the operating tool between the jumper and partition wall of the dual jumper slots, then lift up the jumper. Place the operating tool in the center of jumpers for up to five contacts (see above), or alternately on both sides for jumpers with more than five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

### Commoning



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

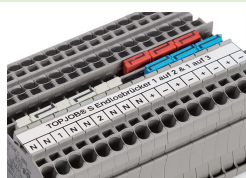


**Removing a staggered jumper:** Insert the operating tool between the staggered jumpers, then lift up the jumper.

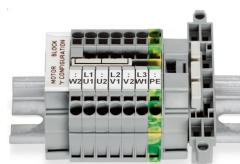
### Commoning



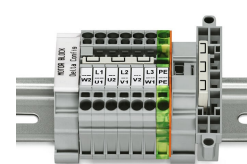
Continuous jumpers (2002 Series) readily connect an endless number of terminal blocks to each other via single jumper slot. Use the second jumper slot for additional commoning or testing.



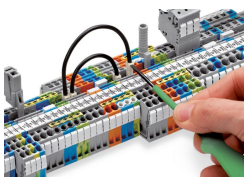
The 1-to-3 adjacent jumper for continuous commoning enables every other terminal block to be commoned. For example, positive and negative potentials can be accommodated alongside each other.



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 TOPJOB® S.

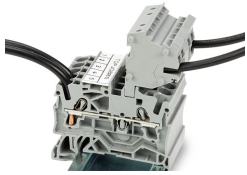


This delta jumper has been specially developed to create a delta configuration and is used on motor terminal boards equipped with rail-mount terminal blocks TOPJOB® S.

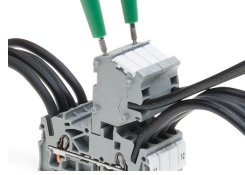


Push down the wire jumper until fully inserted. Lift the jumper with an operating tool for rewiring.

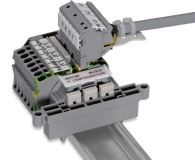
Testing



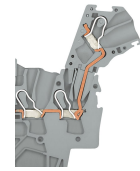
The modular TOPJOB® S connectors also connect conductors of the same size as the terminal blocks being used.



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

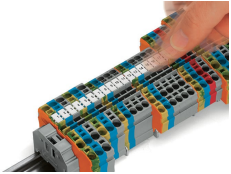


Test plug adapter (2009-174, CAT I) for 4 mm Ø plugs – compatible with 2000 to 2016 Series

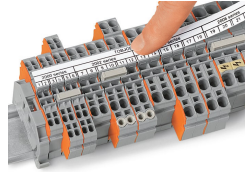


Testing tap (2009-182) for tool-free connection of test cables up to 2.5 mm<sup>2</sup> (12 AWG) – compatible with 2000 to 2016 Series

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.