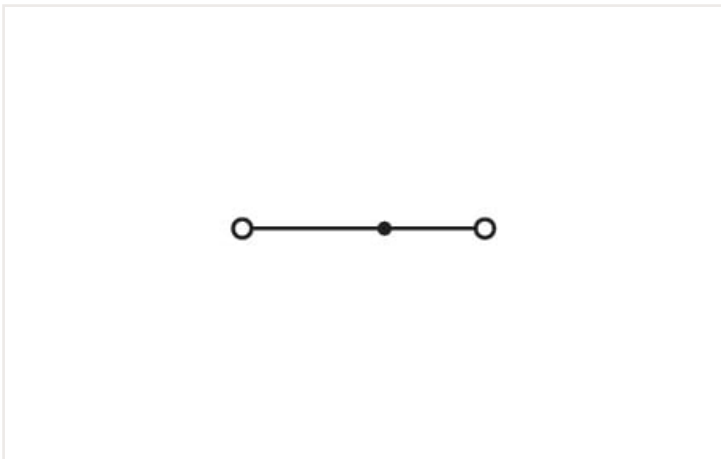
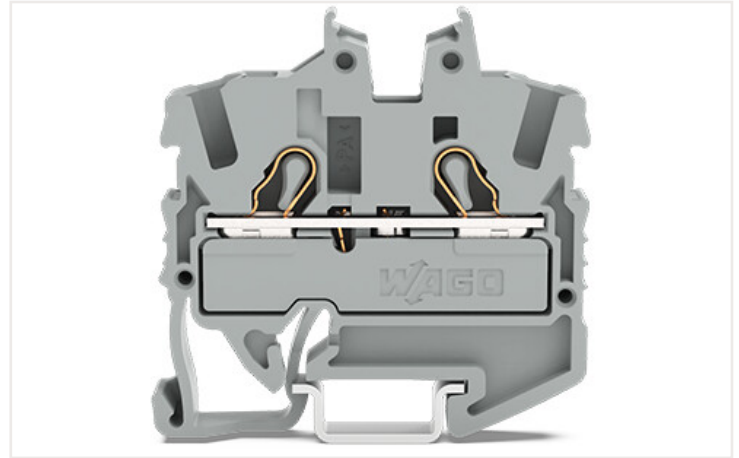
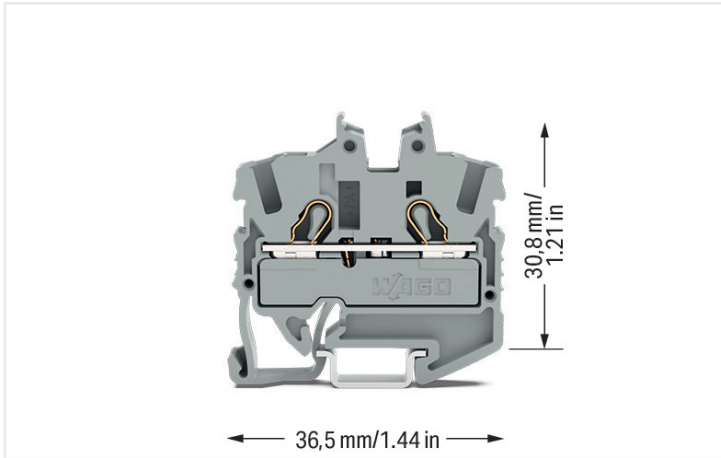


**Data sheet | Item number: 2052-1201**

2-conductor miniature through terminal block; with operating slots; 2.5 mm<sup>2</sup>; with test port; side and center marking; for DIN-15 rail; Push-in CAGE CLAMP®; 2,50 mm<sup>2</sup>; gray



**Electrical data**

Ratings per IEC/EN	
Ratings per	IEC/EN 60947-7-1
Nominal voltage (III/3)	800 V
Rated impulse voltage (III/3)	8 kV
Rated current	24 A
Rated current 2	32 A
Legend (ratings)	(III / 3) ≙ Overvoltage category III / Pollution degree 3

Ratings per UL	
Approvals per	UL 1059
Rated voltage UL (Use Group B)	600 V
Rated current UL (Use Group B)	20 A
Rated voltage UL (Use Group C)	600 V
Rated current UL (Use Group C)	20 A

**Ratings per CSA**

Approvals per	CSA 22.2 No 158
Rated voltage CSA (Use Group B)	600 V
Rated current CSA (Use Group B)	20 A
Rated voltage CSA (Use Group C)	600 V
Rated current CSA (Use Group C)	20 A

**Ex information**

Reference hazardous areas	See Downloads – Documentation – Additional Information: Technical Section; Technical explanations
Ratings per	ATEX: PTB 20 ATEX 1013 U / IECEx: PTB 20.0029U (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 $I_N$ for specified power loss	24 A
Resistance value for specified, current-dependent power loss	0.00133 $\Omega$

### Connection data

Total number of connection points	2
Total number of potentials	1
Number of levels	1
Number of jumper slots	1

### Connection 1

Connection technology	Push-in CAGE CLAMP®
Actuation type	Push-in 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	1 ... 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	1 ... 2.5 mm <sup>2</sup> / 18 ... 14 AWG
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	36.5 mm / 1.437 inches
Depth from upper-edge of DIN-rail	30.8 mm / 1.213 inches

### Mechanical data

Mounting type	DIN-15 rail
Marking level	Center/side marking

### Material data

Note (material data)	<a href="#">Information on material data can be found here</a>
Color	gray
Material group	I
Insulation material	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.09 MJ
Weight	4.2 g

### Environmental requirements

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

### Commercial data

ETIM 8.0	EC000897
ETIM 7.0	EC000897
PU (SPU)	100 Pieces
Country of origin VKOrg Germany	DE
GTIN	4066966147025
Customs tariff number VKOrg Germany	85369010000

### Approvals and certificates

#### Ex-Approvals



Approval	Standard	Certificate name
AEx Underwriters Laboratories Inc.	UL 60079	E185892 (AEx eb IIC resp. Ex eb IIC)
ATEX Physikalisch Technische Bundesanstalt	EN IEC 60079-0	PTB 20 ATEX 1013 U (II 2 G Ex eb IIC Gb bzw. I M 2 Ex eb I Mb)
IECEX Physikalisch Technische Bundesanstalt	IEC 60079	IECEX PTB 20.0029 U (Ex eb IIC Gb resp. Ex eb I Mb)

#### Country specific Approvals



Approval	Standard	Certificate name
CCA DEKRA Certification B.V.	EN 60947	NTR NL 7884
CCA DEKRA Certification B.V.	EN 60998	NTR NL 7885
CSA DEKRA Certification B.V.	C22.2	80058059
KEMA/KEUR DEKRA Certification B.V.	EN 60947	71-119664
KEMA/KEUR DEKRA Certification B.V.	EN 60998	71-119680

#### UL-Approvals



Approval	Standard	Certificate name
UL Underwriters Laboratories Inc.	UL 1059	E45172

### Downloads

#### Environmental Product Compliance

##### Compliance Search

Environmental Product  
Compliance 2052-1201



## Documentation

Additional Information		
Technical Section	pdf 2142.18 KB	

## CAD/CAE-Data

CAD data		
2D/3D Models 2052-1201		

CAE data		
EPLAN Data Portal 2052-1201		
ZUKEN Portal 2052-1201		

## 1 Compatible products

### 1.1 Required accessories

#### 1.1.1 End plate

##### 1.1.1.1 End plate



[Item no.: 2052-1291](#)  
End plate; gray

### 1.2 Optional accessories

#### 1.2.1 DIN-rail

##### 1.2.1.1 Mounting accessories



[Item no.: 210-296](#)  
Aluminum carrier rail; 15 x 5.5 mm; 1 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored



[Item no.: 210-111](#)  
Steel carrier rail; 15 x 5.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; silver-colored



[Item no.: 210-295](#)  
Steel carrier rail; 15 x 5.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored

#### 1.2.2 Ferrule

##### 1.2.2.1 Ferrule



[Item no.: 216-241](#)  
Ferrule; Sleeve for 0.5 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



[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

### 1.2.2.1 Ferrule



**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

### 1.2.3 Installation

#### 1.2.3.1 Mounting accessories



**Item no.: 709-169**

Cover carrier; Type 3; gray



**Item no.: 709-156**

Cover; Type 3; suitable for cover carrier, type 3; 1 m long; transparent



**Item no.: 249-101**

Screwless end stop; 6 mm wide; for WMB markers; 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.: 2002-406/020-000**

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

1.2.5.1 Jumper









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

1.2.6 Marking

1.2.6.1 Group marker carrier

 <b>Item no.: 2009-191</b> Group marker carrier; gray	 <b>Item no.: 2009-192</b> Group marker carrier; gray	 <b>Item no.: 2009-193</b> Group marker carrier; gray
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1.2.6.2 Marker

 <b>Item no.: 2009-145/000-006</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue	 <b>Item no.: 2009-145/000-007</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray	 <b>Item no.: 2009-145/000-023</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green	 <b>Item no.: 2009-145/000-012</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange
 <b>Item no.: 2009-145/000-005</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; red	 <b>Item no.: 2009-145/000-024</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet	 <b>Item no.: 2009-145</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white	 <b>Item no.: 2009-145/000-002</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow

1.2.6.2 Marker



**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.: 793-501/000-006**  
WMB marking card; as card; not stretchable; plain; snap-on type; blue



**Item no.: 793-501/000-007**  
WMB marking card; as card; not stretchable; plain; snap-on type; gray



**Item no.: 793-501/000-023**  
WMB marking card; as card; not stretchable; plain; snap-on type; green



**Item no.: 793-501/000-017**  
WMB marking card; as card; not stretchable; plain; snap-on type; light green



**Item no.: 793-501/000-012**  
WMB marking card; as card; not stretchable; plain; snap-on type; orange



**Item no.: 793-501/000-005**  
WMB marking card; as card; not stretchable; plain; snap-on type; red



**Item no.: 793-501/000-024**  
WMB marking card; as card; not stretchable; plain; snap-on type; violet



**Item no.: 793-501**  
WMB marking card; as card; not stretchable; plain; snap-on type; white



**Item no.: 793-501/000-002**  
WMB marking card; as card; not stretchable; 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 Protective warning marker

#### 1.2.7.1 Cover



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

### 1.2.8 Push-in type wire jumper

#### 1.2.8.1 Jumper



**Item no.: 2009-414**  
Push-in type wire jumper; 1.5 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

### 1.2.9 Test and measurement

#### 1.2.9.1 Testing accessories



**Item no.: 2009-174**  
Test plug adapter; for 4 mm Ø test plugs; for testing TOPJOB®S rail-mounted terminal blocks; gray



**Item no.: 210-136**  
Test plug; 2 mm Ø; with 500 mm cable; red



**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



## 1.2.10 Tool

### 1.2.10.1 Operating tool



**Item no.: 210-658**

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; angled; short; multicoloured

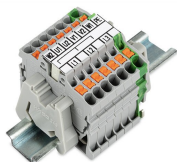


**Item no.: 210-720**

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

## Installation notes

### Installation



## Conductor termination



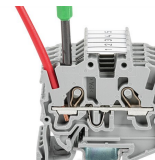
Insert solid conductors via push-in termination.



Insert ferruled conductors via push-in termination.



Insert fine-stranded conductors via operating tool.

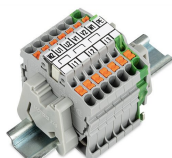


Remove all conductors via operating tool.

## Commoning



Insert a delta jumper and push down until it hits the backstop (example shows terminal blocks with push-buttons).



Marking strip (2009-110) inserted in the marking slot with jumper symbols of the inserted jumper (delta jumper) (example shows terminal blocks with push-buttons)



Insert a star point jumper and push down until it hits the backstop (example shows terminal blocks with push-buttons).



Marking strip (2009-110) inserted in the marking slot with jumper symbols of the inserted jumper (2000-405/011-000 Delta Jumper) (example shows terminal blocks with push-buttons)

## Testing



Testing with a 2 mm Ø 210-136 Test Plug (max. 42 V).

Marking



Snapping a marking strip into the marker slot.

Snapping a marking strip (2009-110) into a marker slot.