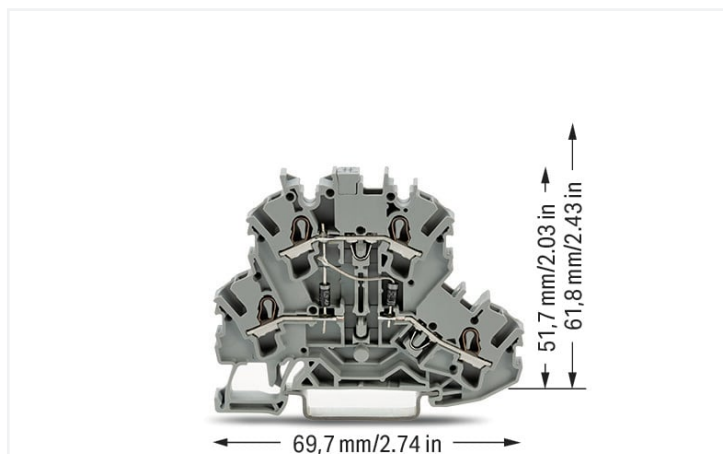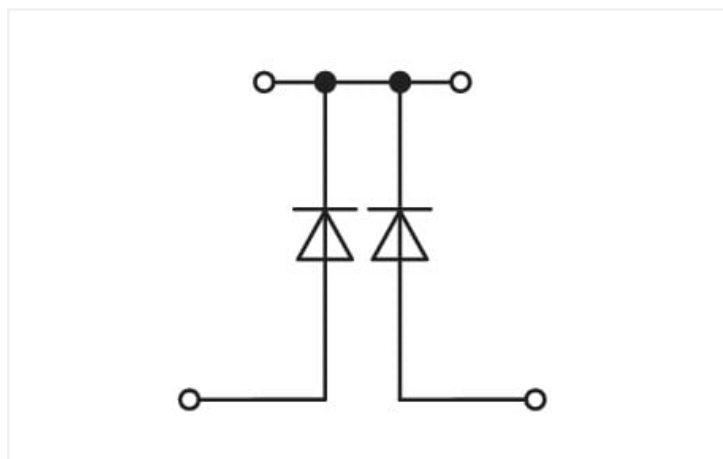# Data Sheet | Item Number: 2002-2214/1000-489

Component terminal block; double-deck; with 2 diodes 1N4007; Bottom anode; for DIN-rail 35 x 15 and 35 x 7.5; 2.5 mm²; Push-in CAGE CLAMP®; 2,50 mm²; gray

https://www.wago.com/2002-2214/1000-489

Color: ■ gray

2002-2214/1000-489

Electrical data

Ratings per	IEC/EN 60947-7-1		
Overvoltage category	III	III	II
Pollution degree	3	2	2
Nominal voltage	-	-	-
Rated surge voltage	-	-	-
Rated current	-	-	-

General information

Nominal voltage	250 V
Reverse voltage	1000 V

Connection data

Connection points	4
Total number of potentials	3
Number of levels	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	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

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Connection 1

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	69.7 mm / 2.744 inches
Depth from upper-edge of DIN-rail	51.7 mm / 2.035 inches

Mechanical data

Mounting type	DIN-35 rail
Marking level	Center/side marking

Material data

Note (material data)	Information on material specifications can be found here
Color	gray
Material group	I
Insulation material	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.234 MJ
Weight	10.2 g

Environmental requirements

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

Commercial data

Product Group	22 (TOPJOB S)
ETIM 8.0	EC000903
ETIM 7.0	EC000903
PU (SPU)	50 pcs
Packaging type	Box
Country of origin	DE
GTIN	4045454375621
Customs tariff number	85369010000

Environmental Product Compliance

CAS-No.	7439-92-1 79-94-7
REACH Candidate List Substance	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol Lead
RoHS Compliance Status	Compliant,With Exemption
RoHS Exemption	7(a) 7(c)-I 7(c)-II
SCIP notification number (Austria)	73493786-e23a-459b-ae30-7db294bc9006
SCIP notification number (Belgium)	ecec7802-eada-4640-8e80-44e55cd5bf02
SCIP notification number (Bulgaria)	c147d163-ab99-4211-b7c3-2efc77b63172
SCIP notification number (Czech Republic)	4a36b8e5-3d57-4818-b684-c498d0cb2a98
SCIP notification number (Denmark)	a8ad1465-5552-4d60-8e99-4a036fba025c
SCIP notification number (Finland)	415676e6-14ff-4d9b-bf36-50b6f4bce6a8
SCIP notification number (France)	eec90a12-d8a6-419e-88e1-01141ed08d58
SCIP notification number (Germany)	f786a48b-e489-4b0d-88f1-931352ee8d34
SCIP notification number (Hungary)	9a21b787-8859-42d5-ad33-50364c4bf7de
SCIP notification number (Italy)	2a1dce82-2e96-4d31-8215-b4824a20787f
SCIP notification number (Netherlands)	2519cd97-abe2-4643-a282-5e62e7f4b41a
SCIP notification number (Poland)	ea5b3105-a17c-4519-8ea7-f477aefae181
SCIP notification number (Romania)	2a6d778e-e7eb-4091-952d-4abffcbdcf7e
SCIP notification number (Sweden)	79ca81c4-9869-485d-8935-78939a9c4389

Approvals / Certificates

Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
Railway WAGO GmbH & Co. KG	-	Railway Ready

Downloads

Environmental Product Compliance

Compliance Search	
Environmental Product Compliance 2002-2214/1000-489	↓

Documentation

Bid Text			
2002-2214/1000-489	23.04.2019	xml 3.96 KB	↓
2002-2214/1000-489	23.04.2019	docx 15.08 KB	↓

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CAD/CAE-Data

CAD data	CAE data
2D/3D Models 2002-2214/1000-489 ⤓	ZUKEN Portal 2002-2214/1000-489 ⤓

1 Compatible Products

1.1 Required Accessories

1.1.1 End plate

1.1.1.1 End plate

Item No.: 2002-2291	Item No.: 2002-2292
End and intermediate plate; 0.8 mm thick; gray	End and intermediate plate; 0.8 mm thick; orange

1.2 Optional Accessories

1.2.1 DIN-rail

1.2.1.1 Mounting accessories

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

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

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1.2.2.1 Ferrule

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

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1.2.5.1 Jumper

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
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.: 210-103 Wire commoning chain; insulated; black	**Item No.: 210-123** Wire commoning chain; insulated; blue		

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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

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.: 2002-121
Adaptor; gray

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 mm²; insulated; 110 mm long; black

Item No.: 2009-414/000-005
Push-in type wire jumper; 1.5 mm²; insulated; 110 mm long; black

Item No.: 2009-416
Push-in type wire jumper; 1.5 mm²; 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 Screwless end stop

1.2.9.1 Mounting accessories

Item No.: 249-117
Screwless end stop; 10 mm wide; for DIN-rail 35 x 15 and 35 x 7.5; gray

Item No.: 249-116
Screwless end stop; 6 mm wide; for DIN-rail 35 x 15 and 35 x 7.5; gray

1.2.10 Test and measurement

1.2.10.1 Testing accessories

Item No.: 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

1.2.11 Tool

1.2.11.1 Operating tool

Item No.: 210-658
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; angled; short; multicoloured
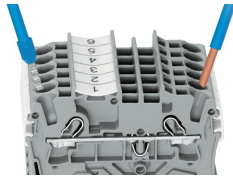
Item No.: 210-720
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured
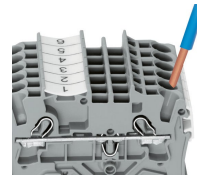
Installation Notes

Conductor termination
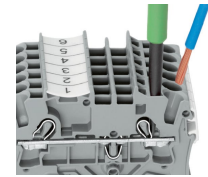
All conductor types at a glance

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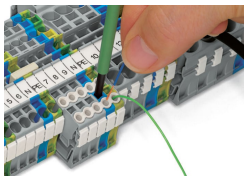
Inserting a conductor via operating tool:
Connecting fine-stranded conductors without ferrules, or small cross-sectional conductors that cannot be pushed in, is performed similarly to the original CAGE CLAMP® – just use an operating tool.
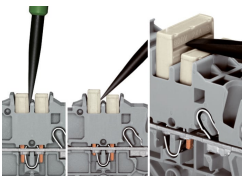**Advantage:**
To open the clamp, the operating tool is inserted vertically. The conductor entry is less than 15 degrees for easier wiring.
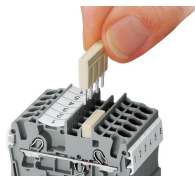
Conductor termination – insulation stop
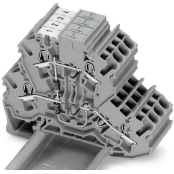
Commoning

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.

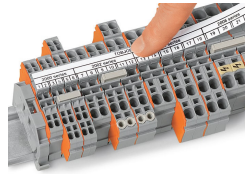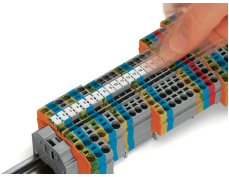Insert push-in type jumper bar and push down until it hits backstop.

Double-deck diode terminal blocks were specifically developed for custom diode circuits, such as lamp test and collective fault signal circuits.
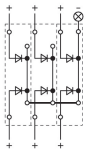These terminal blocks provide high-density wiring in a width of just 5.2 mm.
Push-in type jumper bars provide additional options for custom circuit design.

Marking

Snapping WMB Inline markers into marker slots.

Collective fault signals can be created using the following terminal blocks:
2002-2214/1000-489 or
2002-2214/1000-490

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