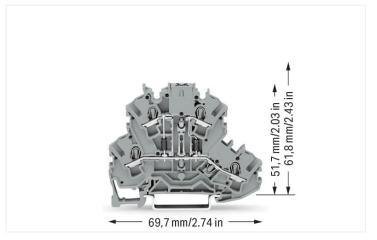
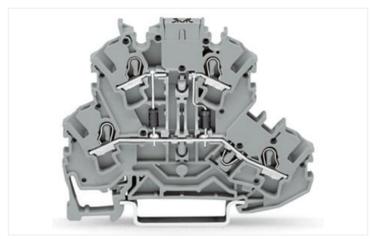
Component terminal block; double-deck; with 2 diodes 1N4007; Bottom anode; for DIN-rail 35×15 and 35×7.5 ; 2.5 mm^2 ; Push-in CAGE CLAMP®; 2.50 mm^2 ; gray

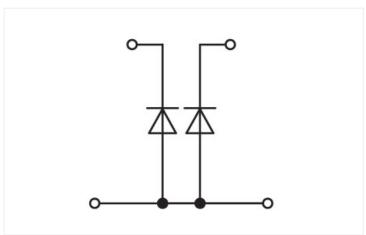


https://www.wago.com/2002-2213/1000-487





Color: ■ gray



2002-2213/1000-487

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	2	
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 mm ²
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

https://www.wago.com/2002-2213/1000-487



Connection 1

Fine-stranded conductor; with ferrule;

push-in termination

 $1\dots 2.5~\text{mm}^2$ / $18\dots 14~\text{AWG}$

Note (conductor cross-section)

Depending on the conductor characteristic, a conductor with a smaller crosssection can also be inserted via push-in

termination.

Strip length

10 ... 12 mm / 0.39 ... 0.47 inches

Wiring direction

Front-entry wiring

	l 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)

 $\verb|-a href="https://www.wago.com/us/material-specifications"| \verb|-Information| on material| \\$

specifications can be found here

Color

Material group
Insulation material

Polyamide (PA66)

Flammability class per UL94

V0

Fire load

0.241 MJ

Weight

10.6 g

gray

Environmental requirements

Processing temperature

-35 ... +85 °C

Continuous operating temperature

-60 ... +105 °C

Commercial data

Product Group 22 (TOPJOBS) eCl@ss 10.0 27-14-11-27 eCl@ss 9.0 27-14-11-27 ETIM 8.0 EC000903 ETIM 7.0 EC000903 PU (SPU) 50 pcs Packaging type Box Country of origin DE 4045454375591 85369010000 Customs tariff number

https://www.wago.com/2002-2213/1000-487



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)-l
SCIP notification number (Austria)	83807c2c-9afd-443f-a032-8c2e968ecc38
SCIP notification number (Belgium)	a4421150-108b-43d7-a694-9ef556c5af9a
SCIP notification number (Bulgaria)	9ddb8fb6-348b-4b57-8f06-37c3a1b8cd68
SCIP notification number (Czech Republic)	dfbfc651-7b07-4bd9-890f-127567ea9482
SCIP notification number (Denmark)	a703e15e-5b41-4640-b871-4c86a6e3b426
SCIP notification number (Finland)	716dbf6c-875a-4175-b890-123795b0df60
SCIP notification number (France)	6d35e850-4940-4fe1-bc49-59f4619df5cd
SCIP notification number (Germany)	ee122e0d-c02d-4212-9d1d-3b1359ecfac8
SCIP notification number (Hungary)	aa994f7b-862e-4394-9f19-07c525613ab4
SCIP notification number (Italy)	c63ef36a-2702-4b1b-899f-5c59a2f1e37e
SCIP notification number (Netherlands)	568d28e3-d488-4fef-8c24-913e56d48748
SCIP notification number (Poland)	3be07c96-ec28-439e-8037-7bc5bdd4e801
SCIP notification number (Romania)	030b4ef2-3d96-4db7-b215-073afada0868
SCIP notification number (Sweden)	a8f9de5f-0f71-4839-afae-75b33dad9759

Approvals / Certificates

Declarations of conformity and manufacturer's declarations



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

Downloads

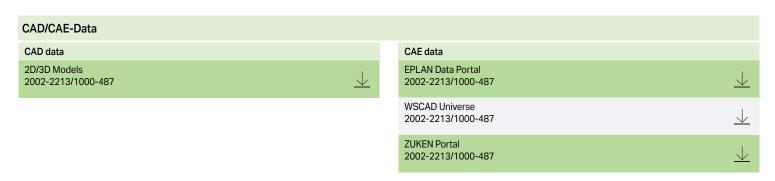
Environmental Product Compliance

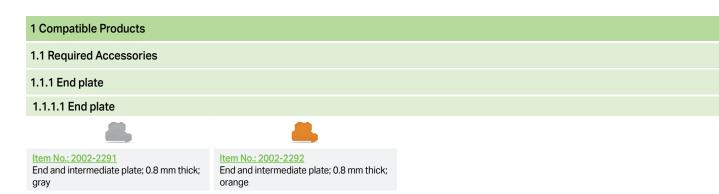
Compliance Search	
Environmental Product Compliance	
2002-2213/1000-497	

Documentation						
Additional Information			Bid Text			
Technical Section	pdf 2240.62 KB	<u>↓</u>	2002-2213/1000-487	23.04.2019	xml 3.92 KB	<u>↓</u>
			2002-2213/1000-487	23.04.2019	docx 15.19 KB	$\underline{\downarrow}$

https://www.wago.com/2002-2213/1000-487







1.2 Optional Accessories

1.2.1 DIN-rail

1.2.1.1 Mounting accessories



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



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

https://www.wago.com/2002-2213/1000-487



1.2.2 Ferrule

1.2.2.1 Ferrule



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



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



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 Item No.: 2002-423/000-006

Continuous jumper; from 1 to 3; insulated;

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;



Item No.: 2002-424/000-006

Continuous jumper; from 1 to 4; insulated;

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;

Item No.: 2002-406/020-000

Delta jumper; insulated; light gray



Item No.: 2002-410/000-006

Item No.: 2002-410

Jumper; 10-way; insulated; light gray



Jumper; 10-way; insulated; blue

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

Item No.: 2002-403 Jumper; 3-way; insulated; blue 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

Item No.: 2002-405/000-006

Item No.: 2002-405

Jumper; 5-way; insulated; light gray

Item No.: 2002-405/000-005

Jumper; 4-way; insulated; red



11111

Jumper; 5-way; insulated; blue

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

Jumper; 8-way; insulated; blue

Item No.: 2002-408/000-006

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

Item No.: 2002-409

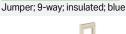
Item No.: 2002-482

light gray

Jumper; 9-way; insulated; light gray

Item No.: 2002-409/000-005

Item No.: 2002-440



Item No.: 2002-434 Jumper; from 1 to 4; insulated; light gray Jumper; 9-way; insulated; red

Jumper; from 1 to 10; insulated; light gray



Item No.: 2002-433

Jumper; from 1 to 3; insulated; light gray

Item No.: 2002-435 Jumper; from 1 to 5; insulated; light gray

Item No.: 2002-436



Item No.: 2002-438 Jumper; from 1 to 8; insulated; light gray

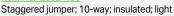
Jumper; from 1 to 6; insulated; light gray



Item No.: 2002-437

Jumper; from 1 to 7; insulated; light gray

Item No.: 2002-439 Jumper; from 1 to 9; insulated; light gray Item No.: 2002-480



gray

Item No.: 2002-481 Staggered jumper; 11-way; insulated; light MINISTRA PROPERTY

gray

gray

Item No.: 2002-473/011-000 Staggered jumper; 2-way; from 1 to 3; insulated; light gray

gray

Item No.: 2002-472



gray

Item No.: 2002-473 Staggered jumper; 3-way; insulated; light gray

Staggered jumper; 12-way; insulated;

Item No.: 2002-475/011-000

Staggered jumper; 3-way; insulated; light gray

Item No.: 2002-474 Staggered jumper; 4-way; insulated; light

Item No.: 2002-475 Staggered jumper; 5-way; insulated; light gray

Staggered jumper; 2-way; insulated; light



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

Item No.: 2002-479 Staggered jumper; 9-way; insulated; light gray



https://www.wago.com/2002-2213/1000-487



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

Wire commoning chain; insulated; black



Item No.: 210-123

Wire commoning chain; insulated; blue

1.2.6 Marking

Item No.: 210-103

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.: 248-501/000-023

Mini-WSB marking card; as card; not

Item No.: 2009-145/000-002 Mini-WSB Inline: for Smart Printer: 1700

Item No.: 248-501/000-017

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



stretchable; plain; snap-on type; green

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



WMB marking card; as card; for terminal

Item No.: 248-501/000-024

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



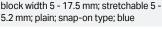
Item No.: 248-501

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

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

https://www.wago.com/2002-2213/1000-487



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

A

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





4

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

https://www.wago.com/2002-2213/1000-487



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: 3.5×0.5 mm; with a partially insulated shaft; angled; short; multicoloured

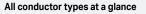


Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

Installation Notes

Conductor termination







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

https://www.wago.com/2002-2213/1000-487



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 jum-

pers 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.





Lamp test circuits can be created using the following terminal blocks: 2002-2213/1000-487 or 2002-2213/1000-488

Subject to changes. Please also observe the further product documentation!