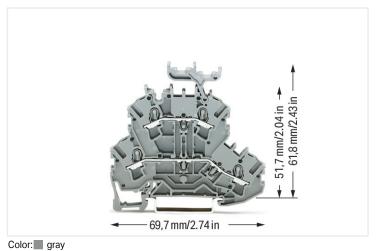
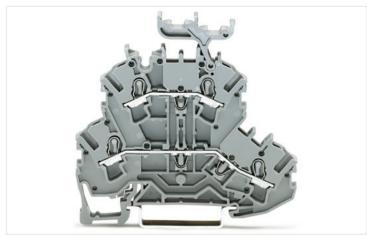
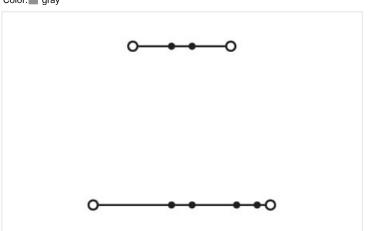
Double-deck terminal block; Through/through terminal block; L/L; with marker carrier; suitable for Ex e II applications; for DIN-rail 35×15 and 35×7.5 ; 2.5 mm^2 ; Push-in CAGE CLAMP®; $2,50 \text{ mm}^2$; gray



https://www.wago.com/2002-2231







Electrical data	
Ratings per IEC/EN	
Ratings per	IEC/EN 60947-7-1
Nominal voltage (III/3)	500 V
Rated impulse voltage (III/3)	6 kV
Rated current	24 A
Rated current 2	28 A
Legend (ratings)	(III / 3) ≙ Overvoltage category III / Pollution degree 3

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

Ratings per UL	
Approvals per	UL 1059
Rated voltage UL (Use Group B)	300 V
Rated current UL (Use Group B)	20 A
Rated voltage UL (Use Group C)	300 V
Rated current UL (Use Group C)	20 A
Rated voltage UL (Use Group D)	600 V
Rated current UL (Use Group D)	5 A

Ex information	
Reference hazardous areas	See Downloads – Documentation – Additional Information: Technical Section; Technical explanations
Ratings per	ATEX: PTB 03 ATEX 1162 U / IECEx: PTB 03.0004U (Ex eb IIC Gb)
Rated voltage EN (Ex e II)	440 V
Rated current (Ex e II)	20 A
Rated current (Ex e II) with jumper	18 A



Connection data			
Total number of connection points	4	Connection 1	
Total number of potentials	2	Connection technology	Push-in CAGE CLAMP®
Number of levels	2	Number of connection points	2
Number of jumper slots 4	4	Actuation type	Push-in 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
		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 inch
		Wiring direction	Front-entry wiring

Connection 2		
Number of connection points 2	2	

Physical data	
Width	5.2 mm / 0.205 inch
Height	69.7 mm / 2.744 inch
Depth from upper-edge of DIN-rail	61.8 mm / 2.433 inch

Mechanical data	
Potential marking	L/L
Mounting type	DIN-35 rail
Marking level	Center/side marking

Material data	
Note (material data)	Information on material data can be found here
Color	gray
Insulation material	Polyamide (PA66)
Flammability class per UL94	VO
Fire load	0.218 MJ
Weight	10.6 g

https://www.wago.com/2002-2231



Commercial data	
Product Group	22 (TOPJOB S)
eCl@ss 10.0	27-14-11-20
eCl@ss 9.0	27-14-11-20
ETIM 7.0	EC000897
ETIM 6.0	EC000897
PU (SPU)	50 Stück
Packaging type	Box
Country of origin VKOrg Germany	DE
GTIN	4044918965316
Customs tariff number VKOrg Germany	85369010000

Approvals and certificates

Ex-Approvals









	E	x e i Mb	
	Approval	Standard	Certificate name
	AEx Underwriters Laboratories Inc.	UL 60079	E185892 (AEx eb IIC resp. Ex eb IIC)
	ATEX Physikalisch Technische Bundesanstalt (PTB)	EN 60079	PTB 03 ATEX 1162 U (II 2 G Ex eb IIC Gb bzw. I M 2 Ex eb I Mb)
	CCCEx CQST/CNEx	CNCA-C23-01	2020312313000238
	EAC Brjansker Zertifizierungs- stelle	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)

Country specific Approvals





Approval	Standard	Certificate name
CCA DEKRA Certification B.V.	EN 60947	71-120369
CCA DEKRA Certification B.V.	EN 60947	NTR NL 7892
CCA DEKRA Certification B.V.	C22.2 No. 158	1536069

Ship Approvals







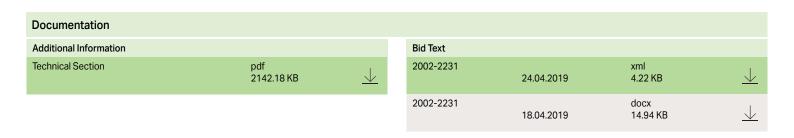


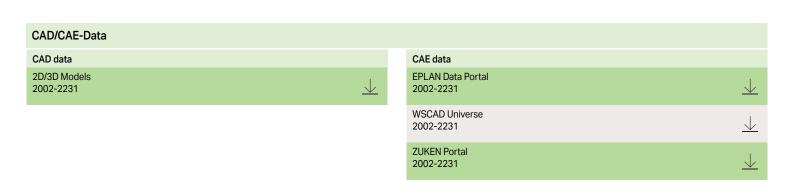
VERITAS		
Approval	Standard	Certificate name
ABS American Bureau of Ship- ping	EN 60947	20-HG1941090-PDA
BV Bureau Veritas S.A.	EN 60947	38586/A0 BV
DNV GL Det Norske Veritas, Ger- manischer Lloyd	-	TAE00001V2
LR Lloyds Register	EN 60947	91/20112 (E9)

https://www.wago.com/2002-2231



Downloads Environmental Product Compliance Compliance Search Environmental Product Compliance 2002-2231







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

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

https://www.wago.com/2002-2231



1.2.1.1 Mounting accessories



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

1.2.2 End plate

1.2.2.1 End plate

Item no.: 209-192



Separator for Ex e/Ex i applications; 3 mm

thick; 125.5 mm wide; orange

Item no.: 2002-2295

Separator plate; oversized upper deck; snap-fit type; 2 mm thick; gray



Item no.: 2002-2296

Separator plate; oversized upper deck; snap-fit type; 2 mm thick; orange

1.2.3 Ferrule

1.2.3.1 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



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



Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228. Part 4/09.90: blue



Item no.: 216-266

Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue

1.2.4 Installation

1.2.4.1 Mounting accessories



Item no.: 709-156

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

Item no.: 709-169 Cover carrier; Type 3; gray



1.2.5 Insulation stop

1.2.5.1 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

1.2.6 Jumper

1.2.6.1 Jumper

Item no.: 2002-400





Item no.: 2002-423/000-006

Continuous jumper; from 1 to 3; insulated;

Item no.: 2002-423

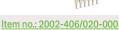
Continuous jumper; from 1 to 3; insulated; light gray

THEFT

Item no.: 2002-423/000-005

Continuous jumper; from 1 to 3; insulated;

Continuous jumper; 2-way; insulated; light



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

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.: 2002-410/000-005

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





TITL

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; from 1 to 10; insulated; light gray

Jumper; 9-way; insulated; red

Item no.: 2002-440

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

XIXIOTAL SEPTEMBER

Item no.: 2002-481 Staggered jumper; 11-way; insulated;

light gray

MAINTALEFEEEE

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

Page 6/10

Staggered jumper; 2-way; insulated; light

Item no.: 2002-473

Staggered jumper; 3-way; insulated; light

Item no.: 2002-475/011-000

Staggered jumper; 3-way; insulated; light

Item no.: 2002-474

Staggered jumper; 4-way; insulated; light



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https://www.wago.com/2002-2231

1.2.6.1 Jumper





Item no.: 2002-477

Item no.: 2002-478

Item no.: 2002-475

Staggered jumper; 5-way; insulated; light gray

Item no.: 2002-476 Staggered jumper; 6-way; insulated; light gray

Staggered jumper; 7-way; insulated; light gray

XIXITIALAL

Staggered jumper; 8-way; insulated; light gray



Item no.: 2002-481/011-000

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

Staggered jumper; insulated; light gray



Item no.: 2002-405/011-000 Star point jumper; 3-way; insulated; light gray

Item no.: 2002-492 Vertical jumper; insulated; light gray Item no.: 2002-492/000-012 Vertical jumper; insulated; orange

Item no.: 210-103 Wire commoning chain; insulated; black

Item no.: 210-123

Wire commoning chain; insulated; blue

1.2.7 Marking

1.2.7.1 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

Item no.: 248-501/000-017

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

Mini-WSB marking card; as card; not stret-

chable; plain; snap-on type; light green



Item no.: 248-501/000-006

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

Mini-WSB marking card; as card; not stret-

chable; plain; snap-on type; orange



Mini-WSB marking card; as card; not

stretchable; plain; snap-on type; red

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

stretchable; plain; snap-on type; green

Mini-WSB marking card; as card; not



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

Item no.: 248-501/000-012

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



Item no.: 248-501/000-005

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 -5.2 mm; plain; snap-on type; blue



WMB marking card; as card; for terminal

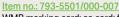
block width 5 - 17.5 mm; stretchable 5 -

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



WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 -



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

Item no.: 793-5501/000-012

5.2 mm; plain; snap-on type; orange



WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 -

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

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

https://www.wago.com/2002-2231



1.2.7.1 Marker









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:

Item no.: 793-501/000-024

ble; plain; snap-on type; violet

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

WMB marking card; as card; not stretcha-

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

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

Item no.: 2009-115/000-005

snap-on type; red

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray

WMB-Inline; for Smart Printer; 1500 pie-

ces on roll; stretchable 5 - 5.2 mm; plain;

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

A

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.: 2009-115/000-024

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet

om no : 2000-115

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; snapon type; yellow

1.2.7.2 Marker carrier



Item no.: 2009-198

Adaptor; gray

1.2.7.3 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

https://www.wago.com/2002-2231



1.2.9 Push-in type wire jumper

1.2.9.1 Jumper



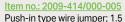






Item no.: 2009-414

Push-in type wire jumper; 1.5 mm²; insulated; 110 mm long; black



Push-in type wire jumper; 1.5 mm²; insulated; 110 mm long; black

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

1.2.10 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

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



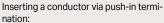


Push-in termination of solid and ferruled

conductors







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/2002-2231



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.

Commoning



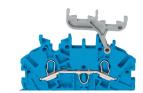
Commoning two levels via double-deck vertical jumper (2002-492).

Marking



Snapping WMB Inline markers into marker slots.





Double-deck terminal blocks A double-deck marker carrier (2002-121) can be retrofitted to double-deck terminal blocks without a marker carrier.

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