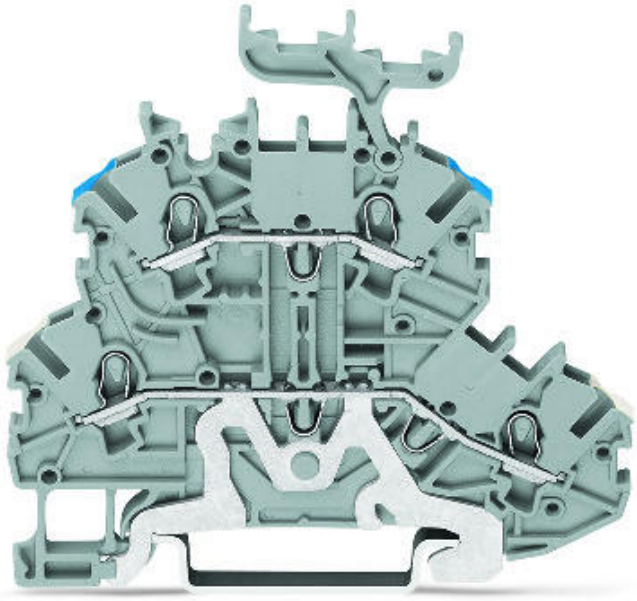
Data sheet | Item number: 2000-2228

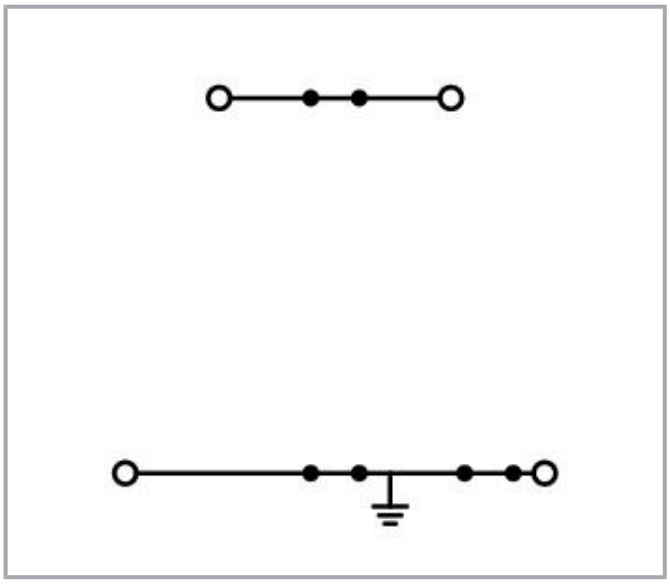
Double-deck terminal block; Shield/through terminal block; 1 mm²; Shielding /L; without marker carrier; for DIN-rail 35 x 15 and 35 x 7.5; Push-in CAGE CLAMP®; 1,00 mm²; gray

www.wago.com/2000-2228



Picture differs from the item.

Color:



Data

Electrical data

Ratings per IEC/EN

Ratings per	IEC/EN 60947-7-1
Nominal voltage (III/3)	500 V
Rated surge voltage (III/3)	6 kV
Rated current	16 A
Rated current 2	18 A
Legend (ratings)	(III / 3) ≙ Overvoltage category III / Pollution degree 3

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

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Ratings per UL

Approvals per	UL 1059
Rated voltage UL (Use Group B)	300 V
Rated current UL (Use Group B)	15 A
Rated voltage UL (Use Group C)	300 V
Rated current UL (Use Group C)	15 A

Ratings per CSA

Rated voltage CSA (Use Group B)	600 V
Rated current CSA (Use Group B)	10 A
Rated voltage CSA (Use Group C)	600 V
Rated current CSA (Use Group C)	10 A

Connection data

Total number of connection points	4
Total number of potentials	2
Number of levels	2
Number of jumper slots	4

Connection 1

Connection technology	Push-in CAGE CLAMP®
Number of connection points	2
Actuation type	Push-in Operating tool
Connectable conductor materials	Copper
Nominal cross-section	1 mm²
Solid conductor	0.14 … 1.5 mm² / 24 … 16 AWG
Solid conductor; push-in termination	0.5 … 1.5 mm² / 20 … 16 AWG
Fine-stranded conductor	0.14 … 1.5 mm² / 24 … 16 AWG
Fine-stranded conductor; with insulated ferrule	0.14 … 0.75 mm² / 24 … 18 AWG
Fine-stranded conductor; with ferrule; push-in termination	0.5 … 0.75 mm² / 20 … 18 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	9 … 11 mm / 0.35 … 0.43 inch
Wiring direction	Front-entry wiring

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Connection 2

Number of connection points 2	2

Physical data

Width	3.5 mm / 0.138 inch
Height	69.7 mm / 2.744 inch
Depth from upper edge of DIN-rail	51.7 mm / 2.035 inch

Mechanical data

Potentialkennzeichnung	Shielding/L
Design	horizontal type
Mounting type	DIN-35 rail
Marking level	Center/side marking

Material data

Color	gray
Insulation material	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.142 MJ
Weight	9.5 g

Commercial data

Product Group	22 (TOPJOB S)
PU (SPU)	50 Stück
Packaging type	box
Country of origin	DE
GTIN	4050821037132
Customs tariff number	85369010000

Approvals / Certificates

Ex-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	AEx Underwriters Laboratories Inc.	UL 60079	E185892 (AEx eb IIC resp. Ex eb IIC)

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	EAC Brjansker Zertifizierungsstelle	TP TC 012/2011	RU C-DE. AM02.B. 00127/19 (Ex e IIC Gb U)

Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate name
	CCA DEKRA Certification B.V.	EN 60947	71- 102841
	CCA DEKRA Certification B.V.	EN 60947	NTR NL 7671
	CSA DEKRA Certification B.V.	C22.2	2130762

UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	UL Underwriters Laboratories Inc.	UL 1059	E45172

Required accessories

End plate

End plate

	Item no.: 2000-2292 End plate; 0.7 mm thick; orange	www.wago.com/2000-2292
	Item no.: 2000-2291 End plate; 0.7 mm thick; gray	www.wago.com/2000-2291

Optional accessories

Marking accessories

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Marking strip



Item no.: 2009-110
Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white
www.wago.com/2009-110

Marker carrier



Item no.: 2000-121
Adaptor; gray
www.wago.com/2000-121

Marker



Item no.: 2009-113
WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; white
www.wago.com/2009-113



Item no.: 2009-113/000-002
WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; yellow
www.wago.com/2009-113/000-002



Item no.: 2009-113/000-012
WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; orange
www.wago.com/2009-113/000-012



Item no.: 2009-113/000-007
WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; gray
www.wago.com/2009-113/000-007



Item no.: 2009-113/000-005
WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; red
www.wago.com/2009-113/000-005



Item no.: 2009-113/000-017
WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; light green
www.wago.com/2009-113/000-017



Item no.: 2009-113/000-006
WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; blue
www.wago.com/2009-113/000-006



Item no.: 2009-113/000-024
WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; violet
www.wago.com/2009-113/000-024



Item no.: 2009-113/000-023
WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; green
www.wago.com/2009-113/000-023

Item no.: 793-3501
WMB marking card; as card; plain; snap-on type; white
www.wago.com/793-3501

Protective warning marker

Cover

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Item no.: 2000-115
Protective warning marker; with high-voltage symbol, black; for 5 terminal blocks; yellow
www.wago.com/2000-115

Mounting

Mounting accessories

Item no.: 709-156
Cover; Type 3; suitable for cover carrier, type 3; 1 m long; transparent
www.wago.com/709-156



Item no.: 709-169
Cover carrier; Type 3; gray
www.wago.com/709-169

Ferrule

Ferrule

Item no.: 216-241
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
www.wago.com/216-241

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
www.wago.com/216-242

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
www.wago.com/216-243

Push-in type wire jumper

Jumper



Item no.: 2009-404
Push-in type wire jumper; 0.75 mm²; insulated; 110 mm long; gray
www.wago.com/2009-404



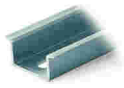
Item no.: 2009-402
Push-in type wire jumper; 0.75 mm²; insulated; 60 mm long; gray
www.wago.com/2009-402



Item no.: 2009-406
Push-in type wire jumper; 0.75 mm²; insulated; 250 mm long; gray
www.wago.com/2009-406

Carrier rail

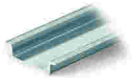
Mounting accessories



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
www.wago.com/210-197



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
www.wago.com/210-198



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
www.wago.com/210-113

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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
www.wago.com/210-118



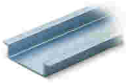
Item no.: 210-112
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 25 mm; silver-colored
www.wago.com/210-112



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
www.wago.com/210-114



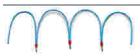
Item no.: 210-115
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 18 mm; silver-colored
www.wago.com/210-115



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
www.wago.com/210-196

Jumpers

Jumper



Item no.: 210-123
Wire commoning chain; insulated; blue
www.wago.com/210-123



Item no.: 2000-408
Jumper; 8-way; insulated; light gray
www.wago.com/2000-408



Item no.: 2000-407
Jumper; 7-way; insulated; light gray
www.wago.com/2000-407



Item no.: 2000-409
Jumper; 9-way; insulated; light gray
www.wago.com/2000-409



Item no.: 2000-408/000-006
Jumper; 8-way; insulated; blue
www.wago.com/2000-408/000-006



Item no.: 2000-408/000-005
Jumper; 8-way; insulated; red
www.wago.com/2000-408/000-005



Item no.: 2000-409/000-005
Jumper; 9-way; insulated; red
www.wago.com/2000-409/000-005



Item no.: 2000-407/000-006
Jumper; 7-way; insulated; blue
www.wago.com/2000-407/000-006



Item no.: 2000-410
Jumper; 10-way; insulated; light gray
www.wago.com/2000-410

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Item no.: 2000-410/000-006
Jumper; 10-way; insulated; blue

www.wago.com/2000-410/000-006



Item no.: 2000-433/000-005
Jumper; from 1 to 3; insulated; red

www.wago.com/2000-433/000-005



Item no.: 2000-407/000-005
Jumper; 7-way; insulated; red

www.wago.com/2000-407/000-005



Item no.: 2000-433/000-006
Jumper; from 1 to 3; insulated; blue

www.wago.com/2000-433/000-006



Item no.: 2000-410/000-005
Jumper; 10-way; insulated; red

www.wago.com/2000-410/000-005



Item no.: 2000-435
Jumper; from 1 to 5; insulated; light gray

www.wago.com/2000-435



Item no.: 2000-409/000-006
Jumper; 9-way; insulated; blue

www.wago.com/2000-409/000-006



Item no.: 2000-436
Jumper; from 1 to 6; insulated; light gray

www.wago.com/2000-436



Item no.: 2000-433
Jumper; from 1 to 3; insulated; light gray

www.wago.com/2000-433



Item no.: 2000-434
Jumper; from 1 to 4; insulated; light gray

www.wago.com/2000-434



Item no.: 2000-402
Jumper; 2-way; insulated; light gray

www.wago.com/2000-402



Item no.: 2000-402/000-006
Jumper; 2-way; insulated; blue

www.wago.com/2000-402/000-006



Item no.: 2000-403
Jumper; 3-way; insulated; light gray

www.wago.com/2000-403



Item no.: 2000-402/000-005
Jumper; 2-way; insulated; red

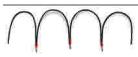
www.wago.com/2000-402/000-005



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	Item no.: 2000-402/000-018 Jumper; 2-way; insulated; yellow-green	www.wago.com/2000-402/000-018
	Item no.: 2000-404 Jumper; 4-way; insulated; light gray	www.wago.com/2000-404
	Item no.: 2000-403/000-005 Jumper; 3-way; insulated; red	www.wago.com/2000-403/000-005
	Item no.: 2000-404/000-006 Jumper; 4-way; insulated; blue	www.wago.com/2000-404/000-006
	Item no.: 2000-403/000-006 Jumper; 3-way; insulated; blue	www.wago.com/2000-403/000-006
	Item no.: 2000-404/000-005 Jumper; 4-way; insulated; red	www.wago.com/2000-404/000-005
	Item no.: 2000-405 Jumper; 5-way; insulated; light gray	www.wago.com/2000-405
	Item no.: 2000-405/011-000 Star point jumper; 3-way; insulated; light gray	www.wago.com/2000-405/011-000
	Item no.: 2000-405/000-006 Jumper; 5-way; insulated; blue	www.wago.com/2000-405/000-006
	Item no.: 2000-406/000-006 Jumper; 6-way; insulated; blue	www.wago.com/2000-406/000-006
	Item no.: 2000-405/000-005 Jumper; 5-way; insulated; red	www.wago.com/2000-405/000-005
	Item no.: 2000-406 Jumper; 6-way; insulated; light gray	www.wago.com/2000-406
	Item no.: 2000-406/000-005 Jumper; 6-way; insulated; red	www.wago.com/2000-406/000-005

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	**Item no.: 2000-406/020-000** Delta jumper; insulated; light gray	www.wago.com/2000-406/020-000
	**Item no.: 2000-437** Jumper; from 1 to 7; insulated; light gray	www.wago.com/2000-437
	**Item no.: 2000-438** Jumper; from 1 to 8; insulated; light gray	www.wago.com/2000-438
	Item no.: 2000-492 Vertical jumper; insulated; light gray	www.wago.com/2000-492
	**Item no.: 2000-439** Jumper; from 1 to 9; insulated; light gray	www.wago.com/2000-439
	**Item no.: 2000-440** Jumper; from 1 to 10; insulated; light gray	www.wago.com/2000-440
	**Item no.: 210-103** Wire commoning chain; insulated; black	www.wago.com/210-103

Testing and measuring

Testing accessories

	**Item no.: 2009-174** Test plug adapter; for 4 mm Ø test plugs; for testing TOPJOB®S rail-mounted terminal blocks; gray	www.wago.com/2009-174
	**Item no.: 2009-182** Testing tap; for max. 2.5 mm²; tool-free connection for individual test wires 0.08 - 2.5 mm; gray	www.wago.com/2009-182

Tool

Operating tool

	**Item no.: 210-648** Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; angled; short	www.wago.com/210-648
	**Item no.: 210-647** Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; multicoloured	www.wago.com/210-647
	**Item no.: 210-719** Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft	www.wago.com/210-719

Downloads

Documentation

Bid Text

2000-2228 X81 - Datei	2019. 2. 19.	xml 3.9 kB	Download

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2000-2228 docx - Datei	2018. 8. 7.	docx 15.0 kB	Download

Additional Information

Technical explanations		pdf 2.2 MB	Download

CAD/CAE-Data

CAE data

WSCAD Universe 2000-2228	URL	Download
ZUKEN Portal 2000-2228	URL	Download
EPLAN Data Portal 2000-2228	URL	Download

CAD data

2D/3D Models 2000-2228	URL	Download

Environmental Product Compliance

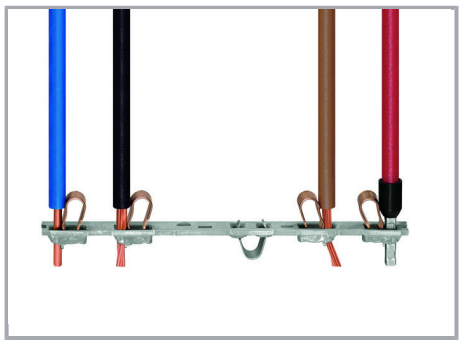
Compliance Search

Environmental Product Compliance 2000-2228 Double-deck terminal block; Shield/through terminal block; 1 mm²; Shielding/L; without marker carrier; for DIN-rail 35 x 15 and 35 x 7.5; Push-in CAGE CLAMP®; 1,00 mm²; gray	URL	Download

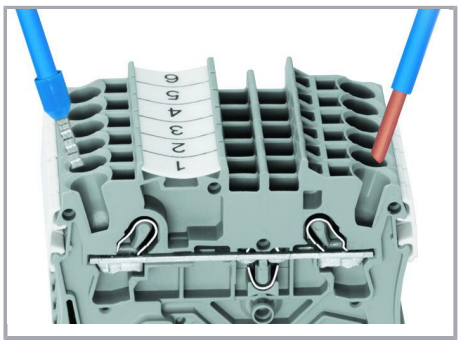
Installation Notes

Conductor termination

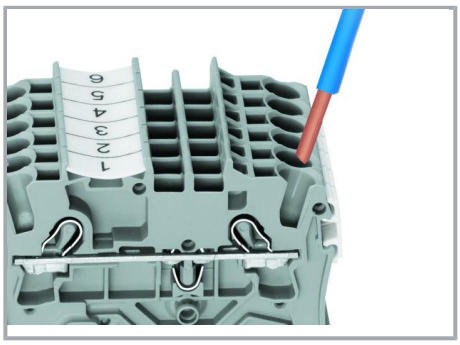
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All conductor types at a glance



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.

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Inserting a conductor via operating tool:

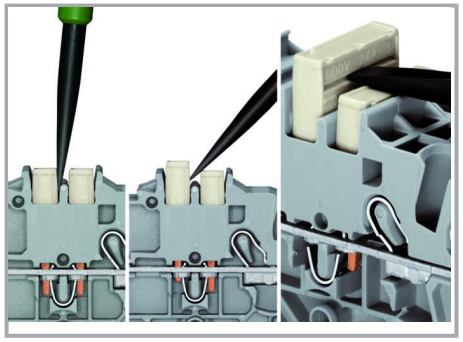
Conductor termination – insulation stop

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.

Commoning



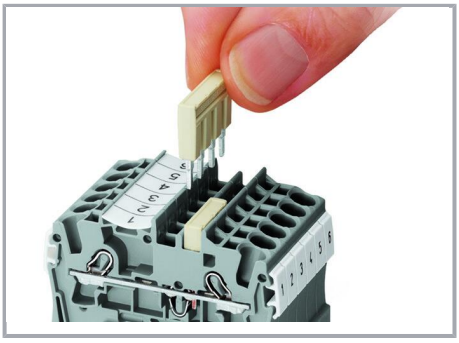
Removing a push-in type jumper bar:

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.

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The push-in type jumper bar system is based on the common plug and socket principle. Each terminal block is spring-loaded with a double socket and a resilient CrNi steel spring. The jumper contact material is pure electrolytic copper, which allows for an extremely small design capable of carrying the full-rated current of the terminal block. Ground terminal blocks can also be commoned using the same jumper system. Custom jumpers are created by breaking and removing jumper contacts (2000, 2001, 2002, 2004 Series).

Commoning



Commoning two levels via double-deck vertical jumper (2000-492).

Marking

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Snapping WMB Inline markers into marker slots.





Double-Deck Terminal Blocks

A double-deck marker carrier (2000-121) can be retrofitted to double-deck terminal blocks without a marker carrier.

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Both ground and shield conductor terminal blocks have a contact foot in the bottom level, automatically establishing direct contact to the DIN-rail or busbar.

The flexible double-deck marker carrier, which is placed above the wiring level, can be pushed aside during wiring. The carrier has two staggered levels for WMB markers that perfectly align with the terminal block decks.

With a terminal block width of just 5.2 mm, an effective width of just 2.6 mm for terminal blocks of same or different potentials can be realized for conductors ranging 0.25 mm² … 4 mm² (22 … 12 AWG).

Shielded control cables are becoming an increasingly common solution to external signal interference.

Front-entry shield conductor terminal blocks are ideal for connecting braided cables. Like front-entry ground conductor terminal blocks, they are equipped with a grounding foot for direct electrical connection to the rail, however they differ significantly by their white insulated housing. Shield conductor terminal blocks for front-entry wiring can be directly mounted beside signal-conductor terminal blocks, providing excellent deflection of interfering signals.

Product family

TOPJOB® S

TOPJOB® S: In various industrial applications and modern building installations, WAGO's wide and versatile range of rail-mount terminal blocks provides more than just reliable electrical connections.

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

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Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.

Show all products from the family

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