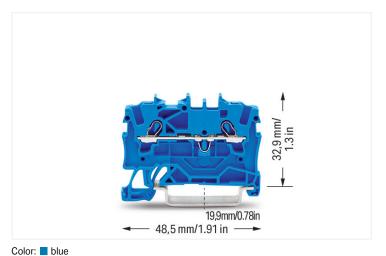
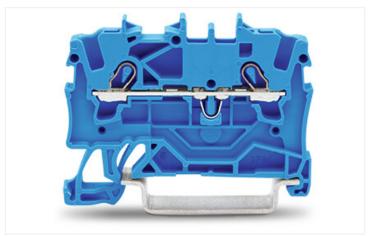
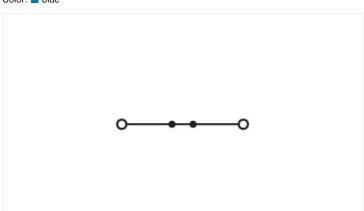
2-conductor through terminal block; 1.5 mm²; for Ex e II and Ex i applications; side and center marking; for DIN-rail 35 x 15 and 35 x 7.5; Push-in CAGE CLAMP®; 1,50 mm²; blue



https://www.wago.com/2001-1204







Similar to illustration

Electrical data			
Ratings per	IEC	'EN 60947-	7-1
Overvoltage category	III	III	II
Pollution degree	3	2	2
Nominal voltage	800 V	-	-
Rated surge voltage	8 kV	-	-
Rated current	17.5 A	-	-
Current at conductor cross-section (max.) mm <sup>2</sup>	24 A	-	-

Approvals per		UL 1059	
Use group	В	С	D
Rated voltage	600 V	600 V	-
Rated current	15 A	15 A	-

Approvals per	CSA 22.2 No 158		
Use group	В	С	D
Rated voltage	600 V	600 V	-
Rated current	15 A	15 A	-

Ex information	
Reference hazardous areas	See application instructions in section "Knowledge and Downloads – Documentation – Additio- nal Information: Technical Section; Tech- nical Explications"
Ratings per	ATEX: PTB 05 ATEX 1094 U / IECEx: PTB 05.0034U (Ex eb IIC Gb)
Rated voltage EN (Ex e II)	550 V
Rated current (Ex e II)	17 A
Rated current (Ex e II) with jumper	16 A

https://www.wago.com/2001-1204





Connection data			
Connection points	2	Connection 1	
Total number of potentials	1	Connection technology	Push-in CAGE CLAMP®
Number of levels	1	Actuation type	Operating tool
Number of jumper slots	2	Connectable conductor materials	Copper
		Nominal cross-section	1.5 mm²
		Solid conductor	0.25 2.5 mm² / 22 14 AWG
		Solid conductor; push-in termination	0.75 2.5 mm² / 18 14 AWG
		Fine-stranded conductor	0.25 2.5 mm² / 22 14 AWG
	Fine-stranded conductor; with insulated ferrule	0.25 1.5 mm² / 22 16 AWG	
	Fine-stranded conductor; with ferrule; push-in termination	0.75 1.5 mm² / 18 16 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 inches
		Wiring direction	Front-entry wiring

Physical data	
Width	4.2 mm / 0.165 inches
Height	48.5 mm / 1.909 inches
Depth from upper-edge of DIN-rail	32.9 mm / 1.295 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
Outer	
Color	blue
Material group	
Insulation material	Polyamide (PA66)
Flammability class per UL94	VO
Fire load	0.086 MJ
Weight	4.4 g



#### **Environmental requirements**

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

Commercial data	
Product Group	22 (TOPJOB S)
eCl@ss 10.0	27-14-11-20
eCl@ss 9.0	27-14-11-20
ETIM 8.0	EC000897
ETIM 7.0	EC000897
PU (SPU)	100 pcs
Packaging type	Box
Country of origin	DE
GTIN	4017332997294
Customs tariff number	85369010000

#### **Environmental Product Compliance**

RoHS Compliance Status Compliant, No Exemption

#### Approvals / Certificates

#### General approvals







Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60947	NTR NL-7963
CSA DEKRA Certification B.V.	C22.2 No. 158	1645434
KEMA/KEUR DEKRA Certification B.V.	EN 60947	71-125954
UL UL International Germany GmbH	UL 1059	E45172

#### Declarations of conformity and manufacturer's declarations



Approval	Standard	Certificate Name
ATEX-Attestation of Conformity WAGO GmbH & Co. KG	-	-
EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
Railway WAGO GmbH & Co. KG	-	Railway Ready
UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

#### Approvals for marine applications







Approval	Standard	Certificate Name
ABS American Bureau of Ship- ping	EN 60947	20-HG1941090-PDA
BV Bureau Veritas S.A.	EN 60947	38586/B0 BV
DNV GL Det Norske Veritas, Ger- manischer Lloyd	-	TAE00001V2

#### Approvals for hazardous areas







Approval	Standard	Certificate Name
AEx UL International Germany GmbH c/o Physikalisch Technische Bundesanstalt	UL 60079	E185892 (AEx e II resp. Ex e II)
ATEX Physikalisch Technische Bundesanstalt (PTB)	EN 60079	PTB 05 ATEX 1094 U (II 2 G Ex eb IIC Gb bzw. I M 2 Ex eb I Mb)
CCC CNEX	GB/T 3836.3	2020312313000159 (Ex eb IIC Gb, Ex eb I Mb)
EAC Brjansker Zertifizierungs- stelle	TP TC 012/2011	RU C-DE.AM02. B.00127/19 (Ex e IIC Gb U)
IECEx Physikalisch Technische Bundesanstalt (PTB)	IEC 60079	IECEx PTB 05. 0034 U (Ex eb IIC Gb or Ex eb I Mb)

https://www.wago.com/2001-1204



#### Approvals for hazardous areas

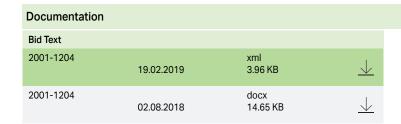
INMETRO IEC 60079

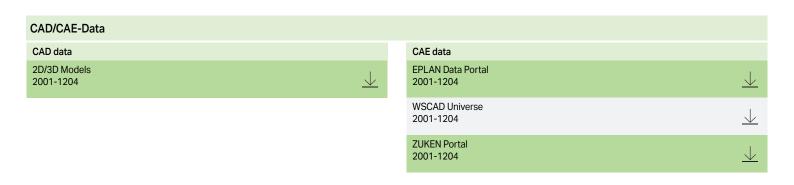
TÜV Rheinland do Brasil

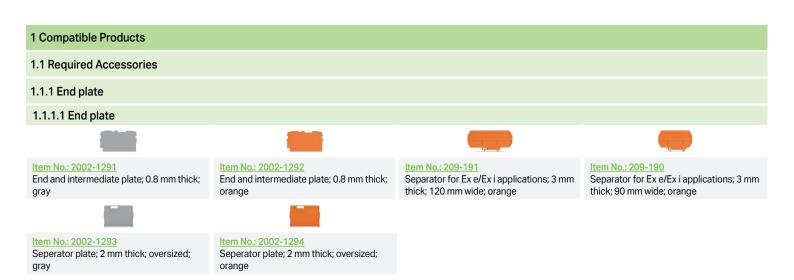
Ltda.

TÜV 12.1308 U

# Downloads Environmental Product Compliance Compliance Search Environmental Product Compliance 2001-1204







https://www.wago.com/2001-1204



#### 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



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; 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



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.: 210-113

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715: silver-colored

#### 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

#### 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.: 216-244

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

#### 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.: 2001-171

Insulation stop; 0.25 - 0.5 mm<sup>2</sup>; 5 pieces/ strip; light gray

#### 1.2.5 Jumper

#### 1.2.5.1 Jumper



Item No.: 2001-406/020-000

Delta jumper; insulated; light gray

Item No.: 2001-404 Jumper; 4-way; insulated; light gray

Item No.: 2001-408

Jumper; 8-way; insulated; light gray



Jumper; from 1 to 4; insulated; light gray



Item No.: 2001-438 Jumper; from 1 to 8; insulated; light gray



Wire commoning chain; insulated; black



Item No.: 2001-410

Jumper; 10-way; insulated; light gray

Item No.: 2001-405

Jumper; 5-way; insulated; light gray



Jumper; 9-way; insulated; light gray



Item No.: 2001-435 Jumper; from 1 to 5; insulated; light gray



Item No.: 2001-439 Jumper; from 1 to 9; insulated; light gray



Item No.: 210-123

Wire commoning chain; insulated; blue



Item No.: 2001-402

Jumper; 2-way; insulated; light gray



Item No.: 2001-406

Jumper; 6-way; insulated; light gray



Item No.: 2001-440

Jumper; from 1 to 10; insulated; light gray



Item No.: 2001-436



Item No.: 2001-405/011-000

Star point jumper; 3-way; insulated; light



Item No.: 2006-499

Item No.: 2001-403

Item No.: 2001-407

Item No.: 2001-433

Item No.: 2001-437

Jumper; 3-way; insulated; light gray

Jumper; 7-way; insulated; light gray

Jumper; from 1 to 3; insulated; light gray

Jumper; from 1 to 7; insulated; light gray

Step-down jumper; from 2006/2004 to 2004/2002/2001 series; from 2206/2204 to 2204/2202/2201 series; insulated; light





#### 1.2.6.1 Marker



Item No.: 793-4501/000-006

WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; blue



WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; gray





WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; green



#### Item No.: 793-4501/000-023



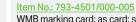
#### Item No.: 793-4501/000-017

WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; light



Item No.: 793-4501/000-012

WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; orange



WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; red



Item No.: 793-4501/000-024 WMB marking card; as card; stretchable

4 - 4.2 mm; plain; snap-on type; violet



Item No.: 793-4501 WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; white



Item No.: 793-4501/000-002

WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; yellow

#### Item No.: 2009-114/000-006

WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; blue

#### Item No.: 2009-114/000-007

WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; gray



WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; green

https://www.wago.com/2001-1204



#### 1.2.6.1 Marker









#### Item No.: 2009-114/000-012

WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; orange

#### Item No.: 2009-114/000-005

WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; red

#### Item No.: 2009-114/000-024

WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; violet

#### Item No.: 2009-114

WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; white

#### \*

#### Item No.: 2009-114/000-002

WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snapon type; yellow

#### 1.2.6.2 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.: 2001-115

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 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 DINrail 35 x 15 and 35 x 7.5; gray

#### Item No.: 249-116

Screwless end stop; 6 mm wide; for DINrail 35 x 15 and 35 x 7.5; gray



#### 1.2.10 Test and measurement

#### 1.2.10.1 Testing accessories

#### Item No.: 2001-560

Modular TOPJOB®S connector; modular; for jumper contact slot; 10-pole; 1,50 mm²; gray

#### Item No.: 2001-511

Modular TOPJOB®S connector; modular; for jumper contact slot; 1-pole; 1,50 mm²; gray

#### Item No.: 2001-552

Modular TOPJOB®S connector; modular; for jumper contact slot; 2-pole; 1,50 mm²; grav

#### Item No.: 2001-553

Modular TOPJOB®S connector; modular; for jumper contact slot; 3-pole; 1,50 mm²; gray

#### Item No.: 2001-554

Modular TOPJOB®S connector; modular; for jumper contact slot; 4-pole; 1,50 mm²; gray

#### Item No.: 2001-555

Modular TOPJOB®S connector; modular; for jumper contact slot; 5-pole; 1,50 mm²; gray

#### Item No.: 2001-556

Modular TOPJOB®S connector; modular; for jumper contact slot; 6-pole; 1,50 mm²; gray

#### Item No.: 2001-557

Modular TOPJOB®S connector; modular; for jumper contact slot; 7-pole; 1,50 mm²; gray

#### Item No.: 2001-558

Modular TOPJOB®S connector; modular; for jumper contact slot; 8-pole; 1,50 mm²; gray

#### Item No.: 2001-559

Modular TOPJOB®S connector; modular; for jumper contact slot; 9-pole; 1,50 mm²; gray

#### Item No.: 2001-549

Spacer module; modular; e.g., for bridging commoned terminal blocks; gray

#### 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 mm<sup>2</sup>; tool-free connection for individual test wires 0.08 - 2.5 mm; gray

#### 1.2.11 Tool

#### 1.2.11.1 Operating tool

#### Item No.: 210-719

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

#### Item No.: 210-648

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; angled; short

#### Item No.: 210-647

Operating tool; Blade: 2.5 x 0.4 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

# W/AGO

#### Commoning



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



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.

#### Commoning



This star point jumper has been specially developed to create a "star point" and is used on motor terminal boards equipped with Rail-Mount Terminal Blocks TOPJOB® S.



This delta jumper has been specially developed to create a delta configuration and is used on motor terminal boards equipped with rail-mount terminal blocks TOPJOB® S.



Push down the wire jumper until fully inserted. Lift the jumper with an operating tool for rewiring.

#### Commoning



Step-down jumpers common terminal blocks of different sizes, without losing a conductor clamping point. This can be beneficial on long conductor runs where voltage drop can be a problem. A large conductor can be easily connected to smaller conductors at the distribution point.

Commoning may be made in either direction using the special thin end plate to cover the open side. Additional through terminal blocks having a smaller cross-section may be commoned using push-in type jumper bars.



**Using step-down jumpers,** an end plate must be inserted between the terminal blocks to be commoned.



**Step-down jumper (Item No. 2006-499)** commons 6/4 mm<sup>2</sup> (10/12 AWG) terminal blocks (2006/2004 Series) with 4/2.5/1.5 mm<sup>2</sup> (AWG 12/14/16) terminal blocks (2004/2002/2001 Series).



**Step-down jumper (Item No. 2016-499)** commons 16/10 mm² (16/8 AWG) terminal blocks (2016/2010 Series) with 10/6/4/2.5 mm² (8/10/12/14 AWG) terminal blocks (2010/2006/2004/2002 Series).



# Stepping down via push-in type jumper bar:

Commoning via open terminal side with end plate allows jumpering over two cross-section sizes for 16 mm² (6 AWG) and 10 mm² (8 AWG) and one cross-section size for 6/4/2.5 mm² (10/12/14 AWG). An example: from 16 mm² (6 AWG) to 6 mm² (10 AWG) (see illustration above) or from 10 mm² (8 AWG) to 4 mm² (12 AWG).



# Stepping down via push-in type jumper bar:

Commoning via closed terminal side with end plate allows jumpering over two cross-section sizes, e.g., from 16 mm² (6 AWG) to 6 mm² (10 AWG) or from 6 mm² (10 AWG) to 2.5 mm² (14 AWG) (see illustration above).



#### Note:

The total current of the outgoing circuits must not exceed the nominal current of the step-down jumper/push-in type jumper bar.

https://www.wago.com/2001-1204



#### Testing



The modular TOPJOB® S connectors also connect conductors of the same size as the terminal blocks being used.



TOPJOB® S Connectors with a 2 mm Ø test socket for testing voltage via 2-pole voltage tester



Rail-mount terminal block assembly for electric motor wiring



Test plug adapter (Item No. 2009-174, CAT I) for 4 mm Ø plugs – compatible with 2000 to 2016 Series



Testing tap (Item No. 2009-182) for toolfree connection of test cables up to 2.5 mm² (12 AWG) – compatible with 2000 to 2016 Series

#### Marking



Snapping WMB Inline markers into marker slots.





TOPJOB® S 2009-193 Group Marker Carrier (equipped with a marking strip) for all 2001 to 2016 Series TOPJOB® S Rail-Mount Terminal Blocks
Do not use on an end plate!

#### Ex application



Through terminal blocks with a blue insulated housing are suitable for Ex i applica-



All through and ground conductor terminal blocks are suitable for Ex e II applications.



Separator plate for Ex e/Ex i applications

An end plate must be applied to the terminal block located directly behind an Ex e/ Ex i separator plate.



#### Ex e II/Ex i terminal strip Note:

The movable feet of terminal blocks and separator plates must face the same direction.



A separator plate is located between the Ex e II and Ex i terminal strip.

End plat

Ex e II terminal blocks

Separator plate for Ex e/Ex i applications

End plate

Ex i terminal blocks

According to EN 50020, a minimum distance of 50 mm must be kept between live parts of Ex e and Ex i circuits. The use of Ex e/Ex i separators is a space-saving solution when Ex e and Ex i terminal blocks are mounted on a common DIN-



Page 11/11 Version 02.05.2024