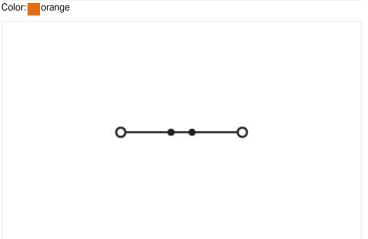
2-conductor through terminal block; 1.5 mm^2 ; suitable for Ex e II applications; side and center marking; for DIN-rail 35×15 and 35×7.5 ; Push-in CAGE CLAMP®; $1,50 \text{ mm}^2$; orange



https://www.wago.com/2001-1202







Similar to illustration

Electrical data	
Ratings per IEC/EN	
Ratings per	IEC/EN 60947-7-1
Nominal voltage (III/3)	800 V
Rated impulse voltage (III/3)	8 kV
Rated current	17.5 A
Current at conductor cross-section (max.) mm ²	24 A
Legend (ratings)	(III / 3) ≙ Overvoltage category III / Pollution degree 3

Ratings per UL 1059	
Approvals per	UL 1059
Rated voltage UL (Use Group B)	600 V
Rated current UL (Use Group B)	15 A
Rated voltage UL (Use Group C)	600 V
Rated current UL (Use Group C)	15 A

Ratings per CSA	
Approvals per	CSA 22.2 No 158
Rated voltage CSA (Use Group B)	600 V
Rated current CSA (Use Group B)	15 A
Rated voltage CSA (Use Group C)	600 V
Rated current CSA (Use Group C)	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/2001-1202





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
Color	orange
Material group	1
Insulation material	Polyamide (PA66)
Flammability class per UL94	VO
Fire load	0.074 MJ
Weight	3.5 g

https://www.wago.com/2001-1202



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	4017332997300
Customs tariff number	85369010000

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
EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
Railway WAGO GmbH & Co. KG	-	Railway Ready
UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Approvals for marine applications







VERTIAS		
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







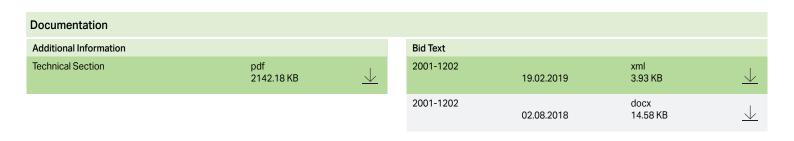
Approval	Standard	Certificate Name
AEx UL International Germany GmbH c/o Physikalisch Technische Bundesanstalt	UL 60079	E185892 (AEx e II resp. Ex e II)
ATEX Physikalisch Technische Bundesanstalt (PTB)	EN 60079	PTB 05 ATEX 1094 U (II 2 G Ex eb IIC Gb bzw. I M 2 Ex eb I Mb)
CCC CNEX	GB/T 3836.3	2020312313000159 (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)
INMETRO TÜV Rheinland do Brasil Ltda.	IEC 60079	TÜV 12.1308 U

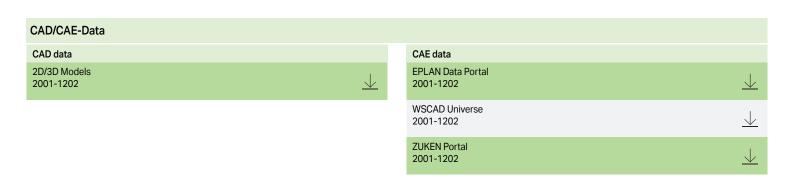
Downloads

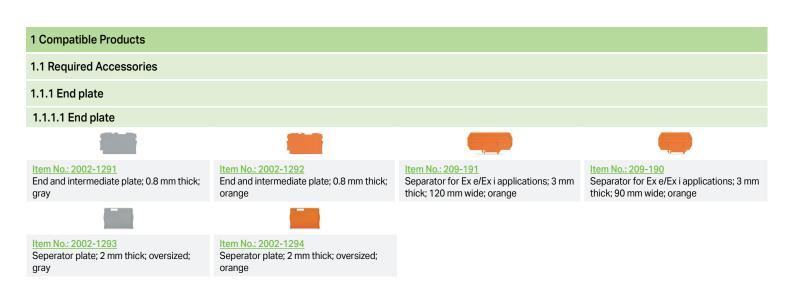
https://www.wago.com/2001-1202



Environmental Product Compliance Compliance Search Environmental Product Compliance 2001-1202







1.2 Optional Accessories

1.2.1 DIN-rail

https://www.wago.com/2001-1202



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.: 210-197

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; 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.: 210-113

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



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.: 216-241

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

<u>Item No.: 216-242</u>

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.: 216-244

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; gray

1.2.4 Insulation stop

1.2.4.1 Insulation stop



Item No.: 2001-171

Insulation stop; 0.25 - 0.5 mm²; 5 pieces/ strip; light gray

1.2.5 Jumper

https://www.wago.com/2001-1202



1.2.5.1 Jumper









Item No.: 2001-406/020-000

Delta jumper; insulated; light gray

Item No.: 2001-410

Item No.: 2001-405

Item No.: 2001-409

Jumper; 10-way; insulated; light gray

Item No.: 2001-402

Jumper; 2-way; insulated; light gray

Item No.: 2001-403

Jumper; 3-way; insulated; light gray



Jumper; 4-way; insulated; light gray

Item No.: 2001-406



Jumper; 6-way; insulated; light gray



Item No.: 2001-408

Jumper; 8-way; insulated; light gray



Jumper; 9-way; insulated; light gray

Item No.: 2001-440

Jumper; from 1 to 10; insulated; light gray



Jumper; 7-way; insulated; light gray

Item No.: 2001-433

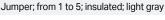
Jumper; from 1 to 3; insulated; light gray

Item No.: 2001-434





Jumper; from 1 to 4; insulated; light gray



Item No.: 2001-436

Jumper; from 1 to 6; insulated; light gray

Item No.: 2001-437

Jumper; from 1 to 7; insulated; light gray



Item No.: 2001-438

Jumper; from 1 to 8; insulated; light gray

Item No.: 2001-439

Item No.: 2001-435

Jumper; from 1 to 9; insulated; light gray

Item No.: 2001-405/011-000

Star point jumper; 3-way; insulated; light gray

Item No.: 2006-499

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





Item No.: 210-123

Wire commoning chain; insulated; blue



Wire commoning chain; insulated; black

1.2.6 Marking

1.2.6.1 Marker



WMB marking card; as card; stretchable

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



Item No.: 793-4501/000-007 WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; gray



Item No.: 793-4501/000-023

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



Item No.: 793-4501/000-017

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

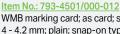






WMB marking card; as card; stretchable



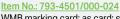


Item No.: 793-4501/000-006

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



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

A



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



WMB-Inline; for Smart Printer; 2000 pie-

ces on roll; stretchable 4 - 4.2 mm; plain;

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

Item No.: 2009-114/000-023 WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; green



snap-on type; blue

Item No.: 2009-114/000-006

ces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; red

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



WMB-Inline; for Smart Printer; 2000 pie-

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

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https://www.wago.com/2001-1202



1.2.6.2 Marking strip



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 mm²; insulated; 110 mm long; black



Item No.: 2009-412

Push-in type wire jumper; insulated; 60 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

1.2.9 Test and measurement

1.2.9.1 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; grav

Item No.: 2001-552

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

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 mm²; tool-free connection for individual test wires 0.08 - 2.5 mm; gray

1.2.10 Tool

W/AGO

1.2.10.1 Operating tool

Item No.: 210-719

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

Item No.: 210-648

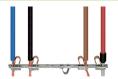
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; angled; short

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



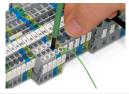
Inserting a conductor via push-in termination:

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

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.

N/AGO

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 (2006-499) commons 6/4 mm² (10/12 AWG) terminal blocks (2006/2004 Series) with 4/2.5/1.5 mm² (AWG 12/14/16) terminal blocks (2004/2002/2001 Series).

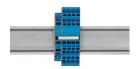


Step-down jumper (2016-499) commons 16/10 mm² (16/8 AWG) terminal blocks (2016/2010 Series) with 10/6/4/2.5 mm² (8/10/12/14 AWG) terminal blocks (2010/2006/2004/2002 Series).



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.

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 \emptyset test socket for testing voltage via 2-pole voltage tester



Rail-mount terminal block assembly for electric motor wiring



Test plug adapter (2009-174, CAT I) for 4 mm Ø plugs – compatible with 2000 to 2016 Series



Testing tap (2009-182) for tool-free connection of test cables up to 2.5 mm² (12 AWG) – compatible with 2000 to 2016 Series

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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 Exiapplica-



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 di-

rection.



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

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