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

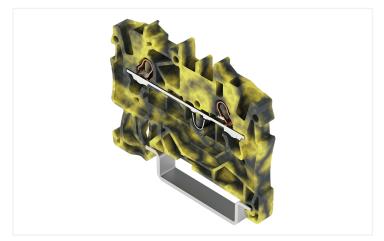


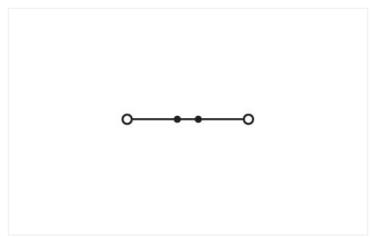
https://www.wago.com/2001-1201/000-053





Color: dark gray/yellow





Similar to illustration

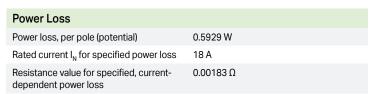
Electrical data			
Ratings per	IEC/	'EN 60947-	7-1
Overvoltage category	III	III	II
Pollution degree	3	2	2
Nominal voltage	800 V	-	-
Rated surge voltage	8 kV	-	-
Rated current	17.5 A	-	-
Current at conductor cross-section (max.) mm <sup>2</sup>	24 A	-	-

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/2001-1201/000-053





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 mm <sup>2</sup>
		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)	<a href="https://www.wago.com/us/material-specifications">Information on material specifications can be found here</a>
Color	dark gray/yellow
Material group	T. Control of the Con
Insulation material	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.09 MJ
Weight	4 g

https://www.wago.com/2001-1201/000-053



# **Environmental requirements**

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

Commercial data		
ETIM 8.0	EC000897	
PU (SPU)	100 pcs	
Country of origin	DE	
GTIN	4066966256895	
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

# 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)
IECEx Physikalisch Technische Bundesanstalt (PTB)	IEC 60079-0	IECEx PTB 05. 0034 U (Ex eb IIC Gb or Ex eb I Mb)

# **Downloads**

# **Environmental Product Compliance**

# Compliance Search

**Environmental Product** Compliance 2001-1201/000-053



# Documentation

#### **Additional Information**

**Technical Section** . 2240.62 KB

https://www.wago.com/2001-1201/000-053



#### CAD/CAE-Data

CAD data

2D/3D Models 2001-1201/000-053



# 1 Compatible Products

#### 1.1 Required Accessories

#### 1.1.1 End plate

# 1.1.1.1 End plate

Item No.: 2002-1291

gray



End and intermediate plate; 0.8 mm thick;



End and intermediate plate; 0.8 mm thick; orange



Separator for Ex e/Ex i applications; 3 mm thick; 120 mm wide; orange

#### Item No.: 209-190

Separator for Ex e/Ex i applications; 3 mm thick; 90 mm wide; orange



Item No.: 2002-1293

Seperator plate; 2 mm thick; oversized; gray

Item No.: 2002-1294

Seperator plate; 2 mm thick; oversized; orange

# 1.2 Optional Accessories

# 1.2.1 DIN-rail

# 1.2.1.1 Mounting accessories



# Item No.: 210-196 Item No.

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

# <u>Item No.: 210-114</u>

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;  $35 \times 7.5$  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.: 216-241

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 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 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



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#### 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 mm²; 5 pieces/ strip; light gray

# 1.2.5 Jumper

## 1.2.5.1 Jumper



1

Item No.: 2001-410 Jumper; 10-way; insulated; light gray



Item No.: 2001-402

Jumper; 2-way; insulated; light gray



ght gray Jumper; 3-way; insulated; light gray



TH

Item No.: 2001-404

Jumper; 4-way; insulated; light gray

Item No.: 2001-406/020-000

Delta jumper; insulated; light gray

Item No.: 2001-405

Jumper; 5-way; insulated; light gray

Item No.: 2001-406

Jumper; 6-way; insulated; light gray

l; light gray

Item No.: 2001-407
Jumper; 7-way; insulated; light gray



<u>Item No.: 2001-408</u> Jumper; 8-way; insulated; light gray Item No.: 2001-409

Item No.: 2001-435

Jumper; from 1 to 10; insulated; light gray

<u>Item No.: 2001-440</u>

Y

Item No.: 2001-403





Item No.: 2001-434

Jumper; from 1 to 4; insulated; light gray

Y

Jumper; 9-way; 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



Jumper; from 1 to 5; insulated; light gray

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

Item No.: 2001-405/011-000

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

YY

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





<u>Item No.: 210-103</u>
Wire commoning chain; insulated; black

Item No.: 210-123

Wire commoning chain; insulated; blue

https://www.wago.com/2001-1201/000-053



# 1.2.6 Marking

# 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



#### 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 green



#### Item No.: 793-4501/000-012

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



#### Item No.: 793-4501/000-005

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



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



# Item No.: 793-4501/000-002

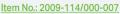
WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; yellow

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

Item No.: 2009-114/000-005

snap-on type; red

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



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



# 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-

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

# 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



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

https://www.wago.com/2001-1201/000-053



# 1.2.8 Push-in type wire jumper

# 1.2.8.1 Jumper



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

# Item No.: 2009-416

Push-in type wire jumper; 1.5 mm<sup>2</sup>; insulated; 250 mm long; black

# Item No.: 2009-414/000-006

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



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 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.: 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; 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; grav

# 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

https://www.wago.com/2001-1201/000-053



# 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 termi-

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.

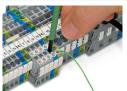


Inserting a conductor via operating tool:

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.

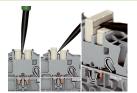


Conductor termination - insulation stop

# 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 jum-

pers with more than five contacts.

https://www.wago.com/2001-1201/000-053

# W/AGO

#### 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 (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 mm<sup>2</sup> (16/8 AWG) terminal blocks (2016/2010 Series) with 10/6/4/2.5 mm<sup>2</sup> (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

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 Ø 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

https://www.wago.com/2001-1201/000-053



# 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







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 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!

Current addresses can be found at::  $\underline{www.wago.com}$