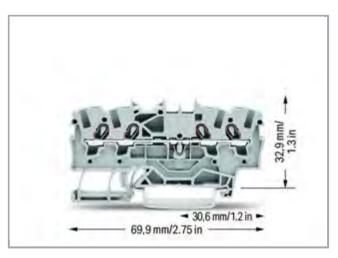
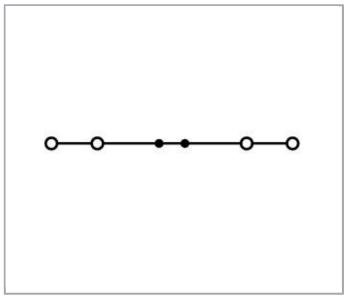
Data sheet | Item number: 2001-1401

4-conductor through terminal block; 1.5 mm 2 ; suitable for Ex e II applications; side and center marking; for DIN-rail 35 x 15 and 35 x 7.5; Pushin CAGE CLAMP 8 ; 1,50 mm 2 ; gray









Data Electrical data



Ratings per IEC/EN 60664-1

Ratings per	IEC/EN 60947-7-1
Nominal voltage (III/3)	800 V
Rated surge voltage (III/3)	8 kV
Rated current	18 A
Rated current 2	24 A
Legend (ratings)	(III / 3) ≙ Overvoltage category III / Pollution degree 3

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

Approvals per CSA

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

Approvals Ex

Rated voltage EN (Ex e II)	550 V
Rated current (Ex e II)	17 A
Rated current (Ex e II) with jumper	16A

Connection data

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

Connection technology	Push-in CAGE CLAMP®
Actuation type	Push-in
	Open Tool Slot
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	0,75 1,5 mm² / 18 16 AWG
Fine-stranded conductor; with ferrule; push-in termination	0,75 1,5 mm² / 18 16 AWG

Web: https://www.bolenscontrol.com/ - Phone: (800) 658-5241 - Email: sales@bolenscontrol.com



Strip length	9 11 mm / 0.35 0.43 inch
Total number of connection points	4
Total number of potentials	1
Number of levels	1
Wiring type	Front-entry wiring
Note (conductor cross-section)	Depending on the conductor characteristic, a conductor with a smaller cross-section can also be inserted via push-in termination.
Number of jumper slots	2

Geometrical Data

Width	4,2 mm / 0.165 inch
Height from upper-edge of DIN-rail	32,9 mm / 1.295 inch
Depth	69,9 mm / 2.752 inch

Mechanical data

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

Material Data

Color	gray
Insulation material	Polyamide 66 (PA 66)
Weight	5.9 g

Commercial data

Product Group	22 (TOPJOB S)
Packaging type	BOX
Country of origin	DE
GTIN	4017332998666
Customs tariff number	85369010000

Approvals / Certificates

Ex-Approvals

			Certificate
Logo	Approval	Additional Approval Text	name
	ATEx	EN 60079	PTB 05
	Physikalisch Technische Bundesanstalt (PTB)		ATEX





1094 U (II 2 G Ex e II bzw.IM2 Ex e I)

Logo	Approval	Additional Approval Text	Certificate name
CCA	CCA DEKRA Certification B.V.	EN 60947	NTR NL- 7084
KEMA	CCA DEKRA Certification B.V.	EN 60947	2160584.07
(SP	CSA DEKRA Certification B.V.	C22.2 No. 158	1645434
ERC Ex	EAC Brjansker Zertifizierungsstelle	TP TC 012/2011	RU C-DE. AM02.B. 00127/19
Ship Approv	als		0.115
Logo	Approval	Additional Approval Text	Certificate name
ABS.	ABS American Bureau of Shipping	EN 60947	20- HG1941090- PDA
DNV-GL	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE00001V2
IS CONTRACTOR	LR Lloyds Register	EN 60947	91/20112 (E9)

Certificate Logo Approval Additional Approval Text name





ULUL International Germany GmbH

UL 1059

20190731-E45172

Compatible products

_	h	Δ	^	L

Na Na	Item no.: 2001-511
	Modular TOPJOB®S connector; modular; for jumper contact slot; 1-pole; 1,50 mm²; gray
Nor	Item no.: 2001-549
1681	Spacer module; modular; e.g., for bridging commoned terminal blocks; gray
5	Item no.: 2001-552
1	Modular TOPJOB®S connector; modular; for jumper contact slot; 2-pole; 1,50 mm²; gray
	Item no.: 2001-553
1	Modular TOPJOB®S connector; modular; for jumper contact slot; 3-pole; 1,50 mm²; gray
3	Item no.: 2001-554
g-	Modular TOPJOB®S connector; modular; for jumper contact slot; 4-pole; 1,50 mm²; gray
10	Item no.: 2001-555
8	Modular TOPJOB®S connector; modular; for jumper contact slot; 5-pole; 1,50 mm²; gray
5	Item no.: 2001-556
No.	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
3	Item no.: 2001-558
	Modular TOPJOB®S connector; modular; for jumper contact slot; 8-pole; 1,50 mm²; gray
4	Item no.: 2001-559
	Modular TOPJOB®S connector; modular; for jumper contact slot; 9-pole; 1,50 mm²; gray
-	Item no.: 2001-560
St.	Modular TOPJOB®S connector; modular; for jumper contact slot; 10-pole; 1,50 mm²; gray



4

Item no.: 2009-174

Test plug adapter; for 4 mm Ø test plugs; for testing TOPJOB®S rail-mounted terminal blocks; gray



tem no.: 2009-182

Testing tap; for max. 2.5 mm²; tool-free connection for individual test wires 0.08 - 2.5 mm; gray

Push-In type wire jumper



Item no.: 2009-412

Push-in type wire jumper; insulated; 60 mm long; black



Item no.: 2009-414

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



Item no.: 2009-414/000-005

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



Item no.: 2009-414/000-006

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



Item no.: 2009-416

Push-in type wire jumper; 1.5 mm²; insulated; 250 mm long; black

Carrier rail



Item no.: 210-112

Steel carrier rail; 35×7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 25 mm



Item no.: 210-113

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



Item no.: 210-114

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715



Item no.: 210-115

Steel carrier rail; 35×7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 18 mm



Item no.: 210-118

Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715



Item no.: 210-196

Aluminum carrier rail; 35×8.2 mm; 1.6 mm thick; 2 m long; unslotted; 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



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

End plate





Item no.: 2002-1493

Separator plate; 2 mm thick; oversized; gray



Item no.: 2002-1494

Separator plate; 2 mm thick; oversized; orange



Item no.: 209-191

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

Marking accessories



Item no.: 2009-110

Marking strips; on reel; not stretchable; plain; snap-on type; white



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; snap-on type; yellow



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.: 2009-114/000-006

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



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.: 2009-114/000-023

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



Item no.: 2009-114/000-024

WMB-Inline; for Smart Printer; 2000 pieces on roll; 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.: 793-4501/000-005

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



	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.: 793-4501/000-012 WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; orange
	Item no.: 793-4501/000-017 WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; green
	Item no.: 793-4501/000-023 WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; light green
	Item no.: 793-4501/000-024 WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; violet
MINIMA	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.: 793-501/000-005 WMB marking card; as card; not stretchable; plain; snap-on type; red
	Item no.: 793-501/000-006 WMB marking card; as card; not stretchable; plain; snap-on type; blue
	Item no.: 793-501/000-007 WMB marking card; as card; not stretchable; plain; snap-on type; gray
	Item no.: 793-501/000-012 WMB marking card; as card; not stretchable; plain; snap-on type; orange
	Item no.: 793-501/000-017 WMB marking card; as card; not stretchable; plain; snap-on type; light green





Item no.: 793-501/000-023

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



Item no.: 793-501/000-024

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

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

Protective W	arning Marker	
iiiiii	Item no.: 2001-115 Protective warning marker; with high-voltage symbol, black; for 5 terminal blocks; yellow	
ferrule		
1	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	
	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	_
tools		
	Item no.: 210-647 Operating tool; Blade: 2.5×0.4 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.: 210-719 Operating tool; Blade: 2.5×0.4 mm; with a partially insulated shaft	-
Insulation sto	pp	
am	Item no.: 2001-171 Insulation stop; 0.25 - 0.5 mm²; 5 pieces/strip; light gray	
Jumper		
411	Item no.: 2001-402 Jumper; 2-way; insulated; light gray	
All	Item no.: 2001-403 Jumper; 3-way; insulated; light gray	_
411	Item no.: 2001-404 Jumper; 4-way; insulated; light gray	_
	Item no.: 2001-405 Jumper; 5-way; insulated; light gray	_

Web: https://www.bolenscontrol.com/ - Phone: (800) 658-5241 - Email: sales@bolenscontrol.com



111	
丽	Item no.: 2001-405/011-000 Star point jumper; 3-way; insulated; light gray
1111	Item no.: 2001-406 Jumper; 6-way; insulated; light gray
HIH	Item no.: 2001-406/020-000 Delta jumper; insulated; light gray
111	Item no.: 2001-407 Jumper; 7-way; insulated; light gray
411	Item no.: 2001-408 Jumper; 8-way; insulated; light gray
411	Item no.: 2001-409 Jumper; 9-way; insulated; light gray
411	Item no.: 2001-410 Jumper; 10-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
1	Item no.: 2001-435 Jumper; from 1 to 5; 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 Jumper; from 1 to 9; insulated; light gray
	Item no.: 2001-440 Jumper; from 1 to 10; insulated; light gray
TT	Item no.: 2006-499 Step-down jumper; insulated; light gray



| Item no.: 210-103

Wire commoning chain; insulated; black

Wire commoning chain; insulated; blue

Downloads CAD/CAE-Data

CAD data

2D/3D Models 2001-1401

CAE data

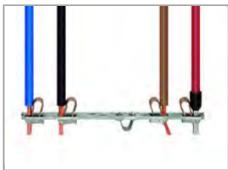
EPLAN Data Portal 2001-1401

WSCAD Universe 2001-1401

ZUKEN Portal 2001-1401

Installation Notes

Conductor termination



All conductor types at a glance



Terminating solid and ferruled conductors via push-in connection.

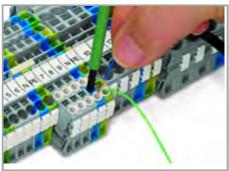


Inserting conductors via push-in termination.

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.

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.

The smart feature:

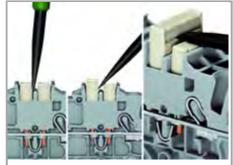
To open the clamp, the operating tool is inserted vertically. The conductor entry is less than 15 degrees for easier wiring.

Commoning





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).

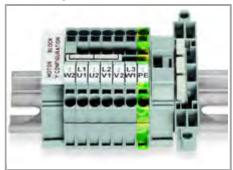


Removing a push-in type jumper bar.

Insert the operating tool between the jumper and and partition wall of the dual jumper slots, then lift up the jumper.

Place the operating tool in the center of jumpers up to five contacts (see above), or alternately on both sides for jumpers with more than five contacts.

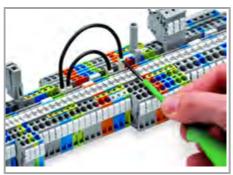
Commoning



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



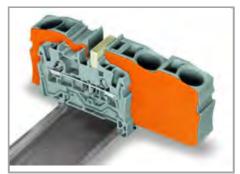
This delta jumper has been specially developed to create a delta configuration and is used on motor terminal boards equipped with TOPJOB® S rail-mount terminal blocks.



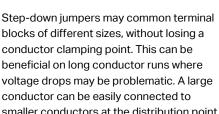
Push down the wire jumper until fully inserted. Lift the jumper with an operating tool for rewiring.

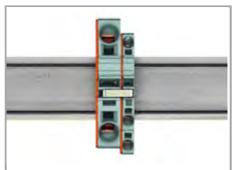
Commoning



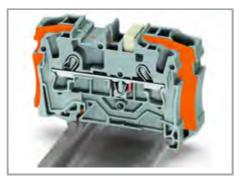


blocks of different sizes, without losing a conductor clamping point. This can be beneficial on long conductor runs where voltage drops may be problematic. A large conductor can be easily connected to smaller conductors at the distribution point.





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 (12/14/16 AWG) terminal blocks (2004/2002/2001 Series).

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.

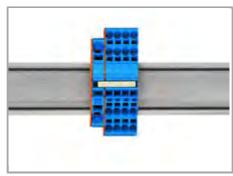




Step-down jumper (2016-499) commons 16 /10 mm² (16/8 AWG) terminal blocks (2016 /2010 Series) with 10/6/4/2.5 mm² (8/10/12 /14 AWG) terminal blocks (2010/2006/2004 /2002 Series).



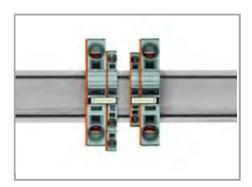
Stepping down via push-in type jumper bar.



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).

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 shall 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

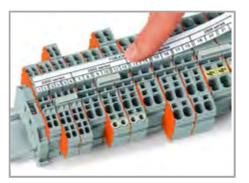


Testing tap (2009-182) for tool-free connection of test cables up to 2.5 mm² (12 AWG) – compatible with 2000 to 2016 Series

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!





Through terminal blocks with a blue insulated housing are suitable for Ex i applications.



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





Separator for Ex e/Ex applications

separator plate.

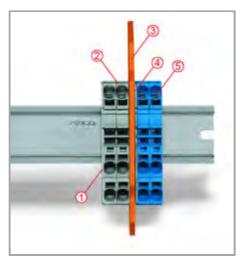
An end plate must be applied to the terminal block located directly behind an Ex e/Ex i



Ex e II/Ex i terminal strip

Notice:

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



Separator located between Ex e II and Ex i terminal strip

End plate

Ex e II terminal blocks

Separator 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 carrier rail.

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.

Show all products from the family