

Adjacent Jumpers for Continuous Commoning and Colored Push-In Type Jumper Bars, 2002 Series

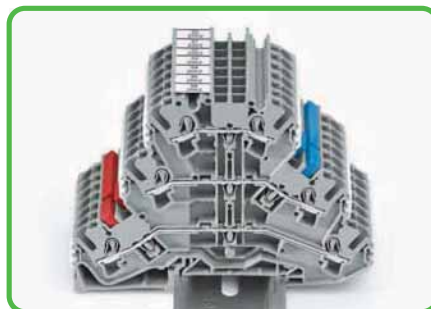
Adjacent jumper for continuous commoning	Push-in type jumper bar	Push-in type jumper bar
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Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
Adjacent jumper for continuous commoning, insulated, I _N 25 A, light gray		Push-in type jumper bar, insulated, I _N 25 A, red		Push-in type jumper bar, insulated, I _N 25 A, blue	
○ 2-way	2002-400 100 (4x25)	● 2-way	2002-402/000-005	● 2-way	2002-402/000-006
		● 3-way	2002-403/000-005	● 3-way	2002-403/000-006
		● 4-way	2002-404/000-005	● 4-way	2002-404/000-006
			200 (8x25)		200 (8x25)
		● 5-way	2002-405/000-005	● 5-way	2002-405/000-006
		● 6-way	2002-406/000-005	● 6-way	2002-406/000-006
		● 7-way	2002-407/000-005	● 7-way	2002-407/000-006
		● 8-way	2002-408/000-005	● 8-way	2002-408/000-006
		● 9-way	2002-409/000-005	● 9-way	2002-409/000-006
		● 10-way	2002-410/000-005	● 10-way	2002-410/000-006
			100 (4x25)		100 (4x25)



Adjacent jumpers for continuous commoning



Colored push-in type jumper bars are used with sensor terminal blocks.

TOPJOB® Push-In Type Wire Jumpers Star Point Jumpers and Delta Jumpers

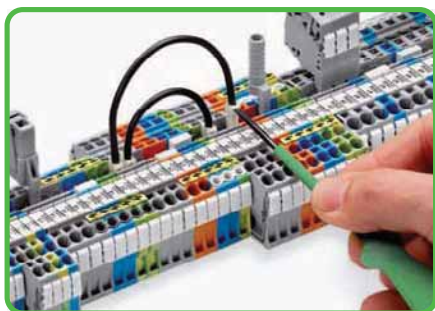
Push-in type wire jumper
 I_N 16 A
Conductor size 1.5 mm²

Star point jumper
800 V/8 kV/3
 $I_N = I_N$ terminal block

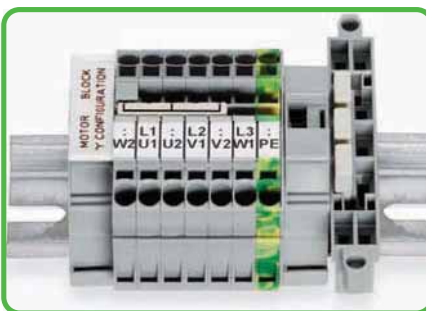
Delta jumper
800 V/8 kV/3
 $I_N = I_N$ terminal block



Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
Push-in type wire jumper , insulated, conductor cross section 1.5 mm ² , suitable for 2001, 2002 and 2003 Series rail-mounted terminal blocks		Star point jumper , insulated, 1-3-5, light gray		Delta jumper , insulated, 1-2 3-4 5-6, light gray	
L = 60 mm	2009-412 100 (10x10)	○	2000-405/011-000	○	2000-406/020-000
L = 110 mm	2009-414 100 (10x10)	○	2001-405/011-000	○	2001-406/020-000
L = 250 mm	2009-416 100 (10x10)	○	2002-405/011-000	○	2002-406/020-000
		○	2004-405/011-000	○	2004-406/020-000
			100 (4x25)		100 (4x25)
		○	2006-405/011-000		
		○	2010-405/011-000		
		○	2016-405/011-000		
			50 (2x25)		



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



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

TOPJOB®

Staggered Jumpers

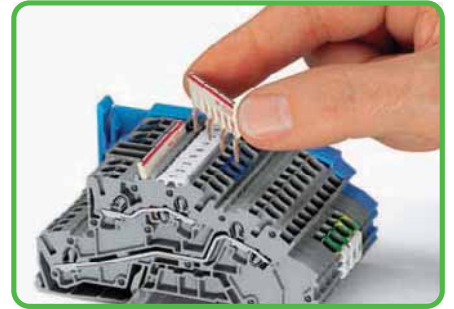
2002 Series

Staggered jumper
400 V/6 kV/3
I_N 25 A



Staggered jumper with 7 contacts

Breaking off contact lugs - Individual jumper contacts can be broken off by bending them. The remaining piece of insulation will meet requirements for clearances and creepage distances.



Insert staggered jumper

Push staggered jumper down until fully inserted.

Item No.	Pack. Unit
Staggered jumper, insulated, suitable for 2002 and 2003 Series rail-mounted terminal blocks, light gray	
○ 2-way	2002-472 100 (4x25)
○ 3-way	2002-473 100 (4x25)
○ 4-way	2002-474 100 (4x25)
○ 5-way	2002-475 50 (2x25)
○ 6-way	2002-476 50 (2x25)
○ 7-way	2002-477 50 (2x25)
○ 8-way	2002-478 50 (2x25)
○ 9-way	2002-479 50 (2x25)
○ 10-way	2002-480 50 (2x25)
○ 11-way	2002-481 50 (2x25)
○ 12-way	2002-482 50 (2x25)



Staggered jumper 1 - 3 - 5 - 7

Marking with a felt-tip pen.



Locate red stripes of the staggered jumpers on the inside

Commoning using staggered jumpers

Individual jumper contacts can be broken off by bending them. The remaining piece of insulation will meet the requirements for clearances and creepage distances.

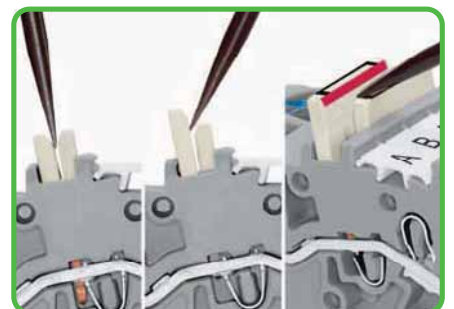
This makes it possible to create custom staggered jumpers, e.g. for bridging over a terminal block with a different potential. When creating the jumpers, ensure only one contact lug is in contact with the terminal block.

The contact lugs of the customized staggered jumpers contact the terminal blocks via the gaps created in the second jumper. Insert and press jumper into the jumper slot until it hits the backstop.



Jumpers staggered in a jumper slot

Custom staggered jumpers can be created, e.g., for bridging over a terminal block with a different potential. Make sure only one contact lug is in contact with the terminal block.



Staggered jumper removal

Insert the operating tool between the jumpers and lift up the jumper.



Staggered jumpers for sophisticated circuit requirements.

That way, staggered jumpers are created with contact lugs that will make contact to the terminal block in the gaps of the second jumper. Insert the ready-made jumper assembly into the jumper slot until it hits the stop.

- Simply Jumpered - Commoning via Step-Down Jumpers and Push-In Type Jumper Bars

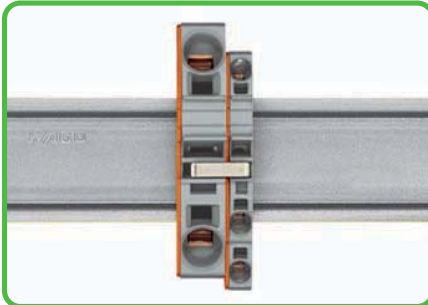


Commoning from 35 mm²/AWG 2
POWER CAGE CLAMP terminal blocks
to 10/16 mm² (AWG 8/10) TOPJOB'S terminal blocks

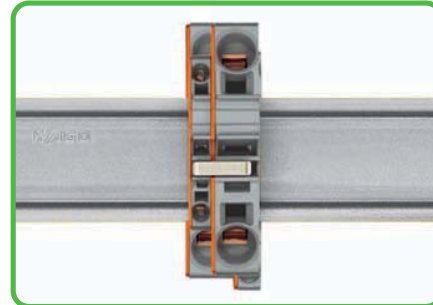
Step-down jumpers may common terminal blocks of different sizes, without losing a conductor clamping point. This can be beneficial on long conductor runs where voltage drop can be a problem. A large conductor can be easily connected to smaller conductors at the distribution point.

Step-down jumpers are simply pushed down for full insertion, in the same way as all other push-in jumpers. Commoning may be made in either direction using the special thin end plate to cover the open side. Further terminal blocks of the smaller cross section may be commoned using standard push-in type jumper bars.

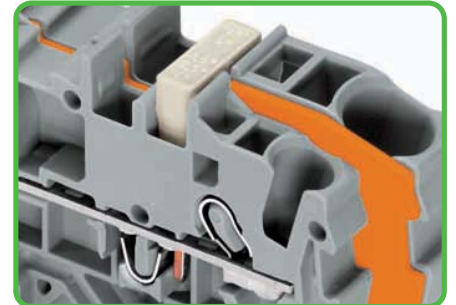
In this case, pay attention that:
The total current flowing does not exceed the rating of the step-down jumper.



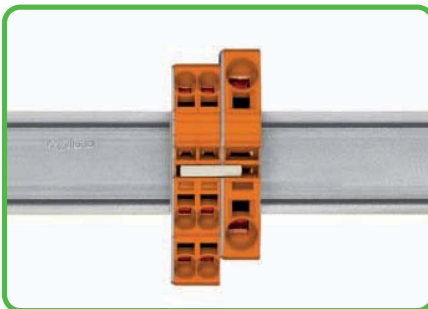
Using step-down jumpers, an end plate must be inserted between the terminal blocks to be commoned.



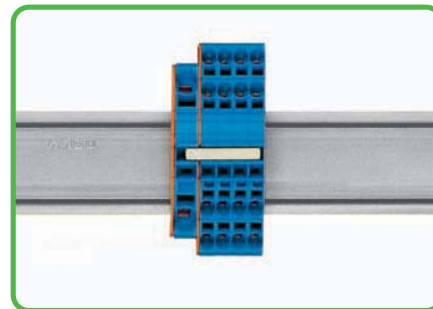
Step-down jumper 2016-499 commons 16/10 mm² (AWG 16/8) terminal blocks with 10/6/4/2.5 mm² (AWG 8/10/12/14) terminal blocks.
Step-down jumper 2006-499 commons 6/4 mm² (AWG 10/12) terminal blocks with 4/2.5/1.5 mm² (AWG 12/14/16) terminal blocks.



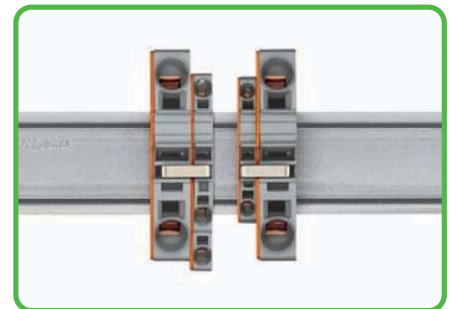
Commoning with step-down jumpers
An end plate must be inserted between the terminal blocks to be jumpered. Step-down jumper 2006-499 commons 16/10 mm² (AWG 16/8) terminal blocks with 10/6/4/2.5 mm² (AWG 8/10/12/14) terminal blocks. Step-down jumpers are simply pushed down for full insertion, similar to other push-in type jumper bars.



Commoning with push-in type jumper bars
Commoning via open terminal side with end plate allows jumpering over two cross section sizes for 16 mm²/AWG 6 and 10 mm²/AWG 8 and one cross section size for 6/4/2.5 mm² (AWG 10/12/14); e.g., from 16 mm²/AWG 6 to 6 mm²/AWG 10 (see illustration above) or from 10 mm²/AWG 8 to 4 mm²/AWG 12.



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



Note:
The total current flowing shall not exceed the rating of the step-down jumper/push-in type jumper bar.