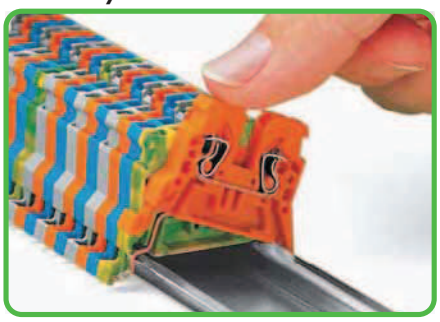
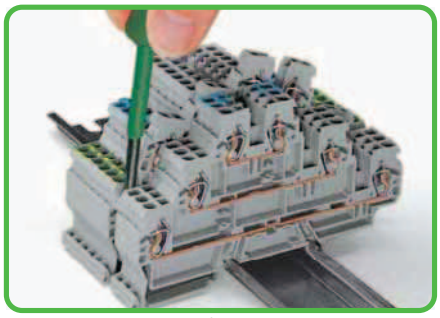
Compact Rail-Mounted Terminal Blocks for DIN 15 and DIN 35 Rails
870 Series

Assembly



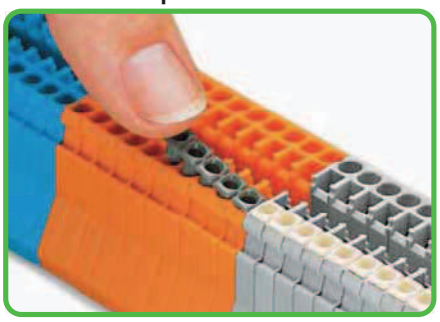
Snapping a rail-mount terminal block onto DIN 35 carrier rail.

Removal



Removing a terminal block from the assembly.

Insulation stop



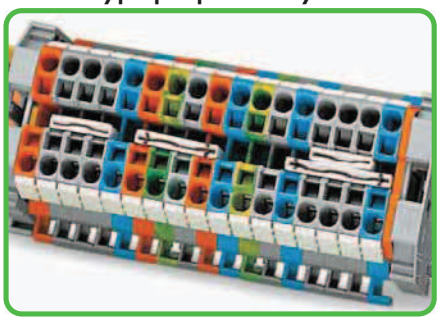
Inserting an insulation stop.

Push-in type jumper bar system

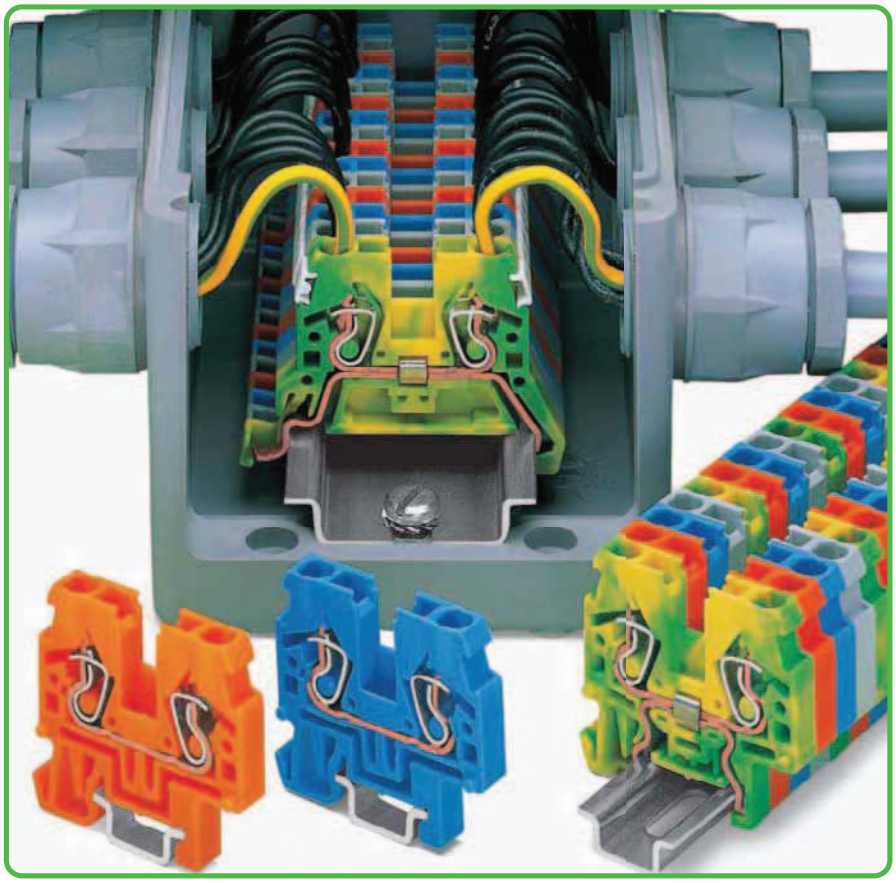


Push jumper bars down firmly until fully inserted. When using multipole bars, push alternately on right and then left side, until installed.
Push-in type jumper bars 1 – 3 – 5 – 7 or 1 – – 4 – – 7 upon request.

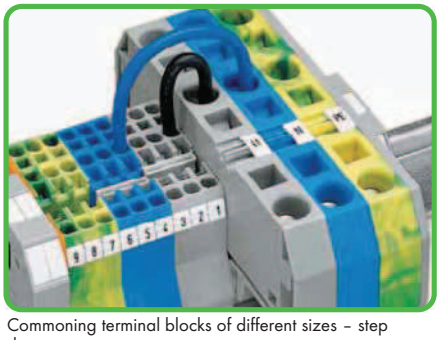
Push-in type jumper bar system



Two parallel jumper receptacles are accommodated in one terminal block.

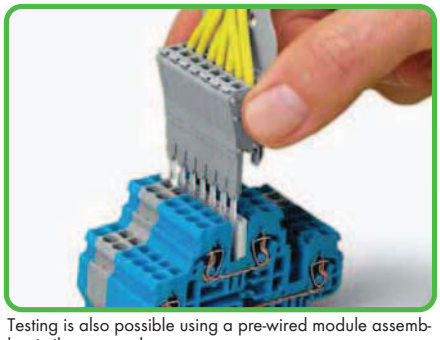


Commoning with step-down jumpers



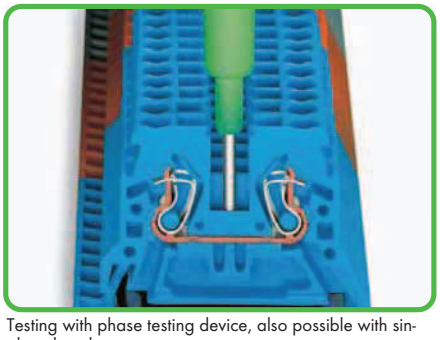
Commoning terminal blocks of different sizes – step down.

Testing



Testing is also possible using a pre-wired module assembly, similar to test plugs.

Testing



Testing with phase testing device, also possible with single-pole voltage tester.



CAGE CLAMP® clamps the following copper conductors:*

solid



stranded



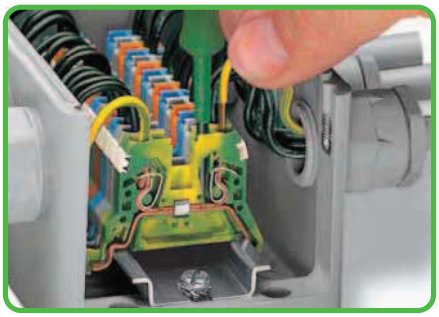
fine-stranded, also with tinned single strands

* For aluminum conductors, see notes in Section 14.

❶ When using ferrules, the max. conductor cross section accommodated is one size smaller than max. rating of terminal block.

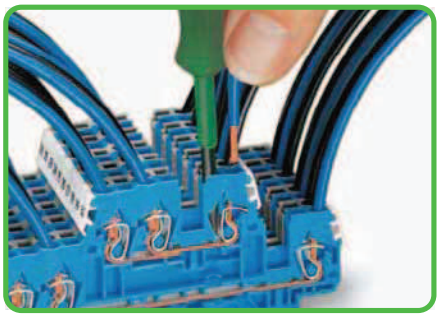
– Description and Handling –

CAGE CLAMP® connection

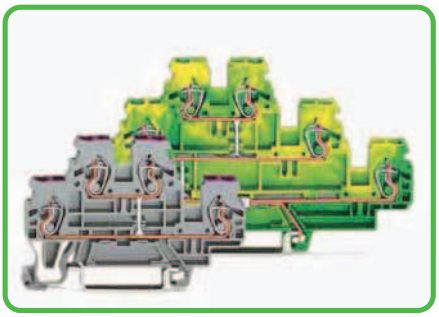


Terminating fine-stranded conductors ranging from 0.08 to 4 mm² (AWG 28 – 12).

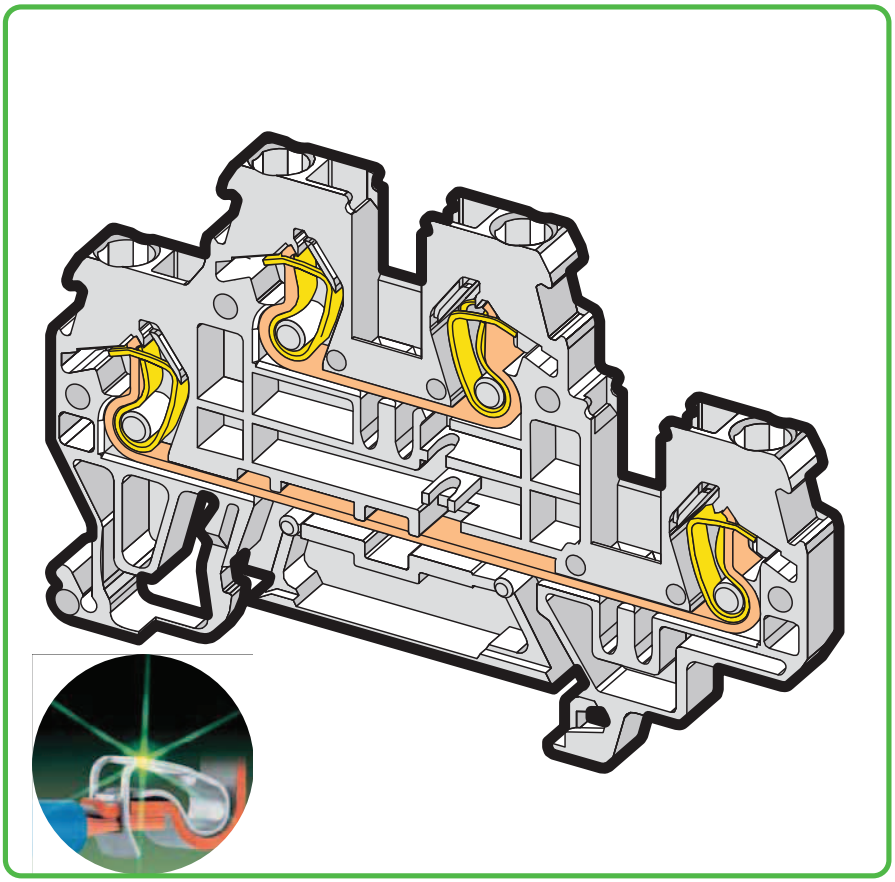
CAGE CLAMP® connection



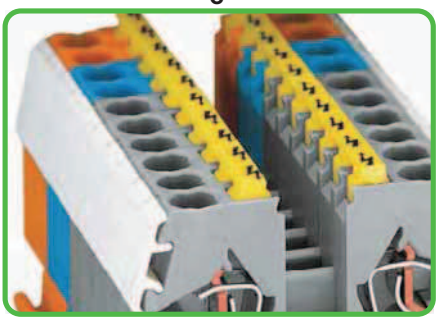
Multilevel terminal blocks



Double- and triple-deck terminal blocks with internal commoning acting as 4- and 6-conductor terminal blocks.

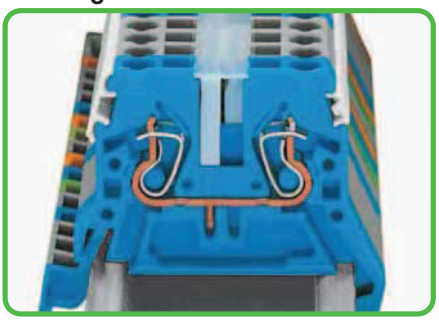


Protective warning marker



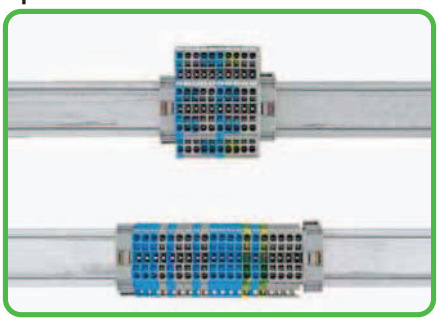
Protective warning markers (280-405), with black high-voltage symbols.

Marking



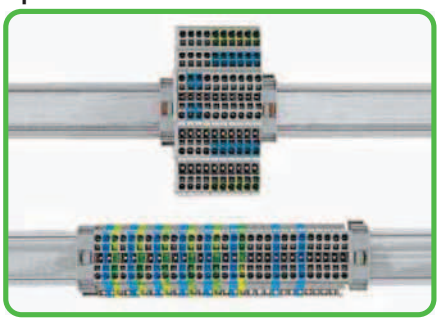
Marking the clamping unit via WMB Multi marking system or miniature WSB Quick marking system.

Space saver



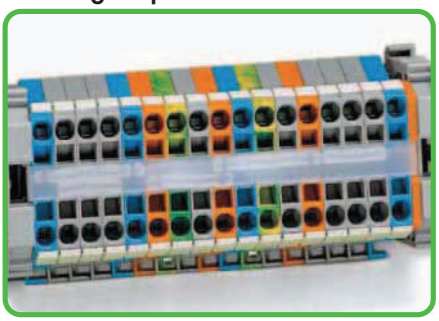
Save 50% of rail space when using double-deck terminal blocks.

Space saver



Save 67% of rail space when using triple-deck terminal blocks.

Marking Strips



Transparent marker strips (note: Jumpers below may be visible).



fine-stranded, tip-bonded



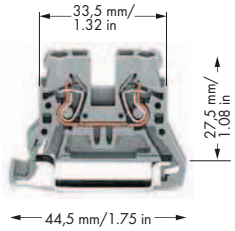
fine-stranded, with ferrule ❶ (gastight crimped)

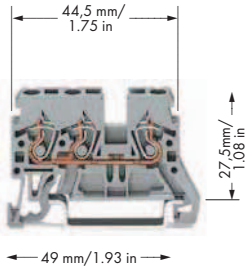


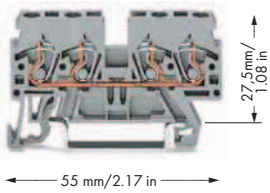
fine-stranded, with pin terminal (gastight crimped)

Through/Ground Conductor and Ex Terminal Blocks 2.5 mm² (4 mm² "f-st") for DIN 35 and DIN 15 Rails
870 Series

0.08 - 2.5 (4"f-st")mm² ❶ / 500 V/6 kV/3 ❷ / I_N 24 A	AWG 28 - 12 / 300 V, 20 A	
Terminal block width 5 mm / 0.197 in / 6 - 7 mm / 0.26 in ❸		







Item No.		Pack. Unit
2-conductor through terminal block, for DIN 35 rail		
gray	**870-901**	100
blue	**870-904** ❹	100
orange	**870-902**	100
light gray Ex	**870-909** ❺	100
2-conductor ground terminal block, for DIN 35 rail, Notice: This ground conductor terminal block cannot be commoned with push-in type jumper bars.		
green-yellow	**870-907**	100
green-yellow Ex	**870-907/999-950** ❺	100

Item No.		Pack. Unit
3-conductor through terminal block, for DIN 35 rail		
gray	**870-681**	100
blue	**870-684** ❹	100
orange	**870-682**	100
3-conductor ground terminal block, for DIN 35 rail, Notice: This ground conductor terminal block cannot be commoned with push-in type jumper bars.		
green-yellow	**870-687**	100

Item No.		Pack. Unit
4-conductor through terminal block, for DIN 35 rail		
gray	**870-831**	100
blue	**870-834** ❹	100
orange	**870-832**	100
4-conductor ground terminal block, for DIN 35 rail, Notice: This ground conductor terminal block cannot be commoned with push-in type jumper bars.		
green-yellow	**870-837**	100
Other terminal blocks with the same profile:		
Double-potential	**870-826** Page 277	

Item-Specific Accessories

End and intermediate plate, 2 mm thick			
	orange	**870-924**	100 (4x25)
	gray	**870-923**	100 (4x25)
	light gray	**870-925**	100 (4x25)
Separator, oversized, 2 mm thick			
	orange	**870-929**	100 (4x25)
	gray	**870-928**	100 (4x25)
End and intermediate plate, 2 mm thick, for 2-conductor ground conductor Ex terminal blocks only			
	green-yellow	**870-926**	100 (4x25)
Ex e/Ex i separator, orange, 3 mm thick			
	90 mm	**209-190**	50 (2x25)
	120 mm	**209-191**	50 (2x25)

Item-Specific Accessories

End and intermediate plate, 1 mm thick			
	orange	**870-934**	100 (4x25)
	gray	**870-933**	100 (4x25)
Separator, oversized, 1 mm thick			
	orange	**870-947**	100 (4x25)
	gray	**870-946**	100 (4x25)

Item-Specific Accessories

End and intermediate plate, 1 mm thick			
	orange	**870-944**	100 (4x25)
	gray	**870-943**	100 (4x25)
Separator, oversized, 1 mm thick			
	orange	**870-949**	100 (4x25)
	gray	**870-948**	100 (4x25)

870 Series Accessories

Appropriate marking systems: WMB/Miniature WSB (see Section 13)

Insulation stop, ❻			
	5 pcs/strip, 0.08 - 0.2 mm² "s" (0.14 mm² "f-st")		
	white	**280-470**	200 (8x25)
Insulation stop, ❻			
	5 pcs/strip, 0.25 - 0.5 mm²		
	light gray	**280-471**	200 (8x25)
Insulation stop, ❻			
	5 pcs/strip, 0.75 - 1 mm²		
	dark gray	**280-472**	200 (8x25)

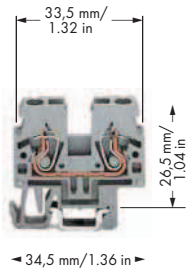
Push-in type jumper bar, insulated,			
	I_N 18 A, light gray		
	2-way	**870-402**	200 (8x25)
	3-way	**870-403**	200 (8x25)
	4-way	**870-404**	200 (8x25)
	5-way	**870-405**	100 (4x25)
	6-way	**870-406**	100 (4x25)
	7-way	**870-407**	100 (4x25)
	8-way	**870-408**	100 (4x25)
	9-way	**870-409**	100 (4x25)
	10-way	**870-410**	100 (4x25)

Push-in type jumper bar, insulated,			
	I_N 18 A, light gray		
	from 1 to 3	**870-433**	200 (8x25)
	from 1 to 4	**870-434**	200 (8x25)
	from 1 to 5	**870-435**	100 (4x25)
	from 1 to 6	**870-436**	100 (4x25)
	from 1 to 7	**870-437**	100 (4x25)
	from 1 to 8	**870-438**	100 (4x25)
	from 1 to 9	**870-439**	100 (4x25)
	from 1 to 10	**870-440**	100 (4x25)

For list of approvals and user guide, see pages 634 to 637.

0.08 - 2.5 (4"f-st")mm² ❶ | AWG 28 - 12
500 V/6 kV/3 ❷ | 300 V, 20 A
I_N 24 A

Terminal block width 5 mm / 0.197 in
6 - 7 mm / 0.26 in ❸





Assembly:
Snap individual terminal blocks onto DIN 15 carrier rail and slide together.
Removal:
Open assembly by laterally sliding terminal blocks with an operating tool and remove them from the rail.

❶ Max. insulation diameter: 4.4 mm

❷ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

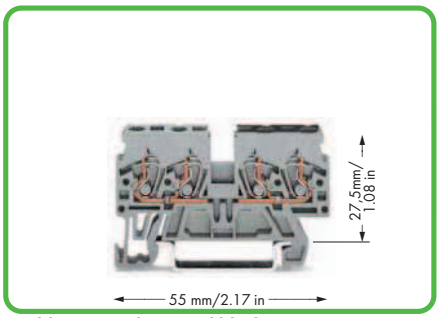
❸ Strip length, see packaging or instructions.

❹ Suitable for Ex i applications

❺ Suitable for Ex e II applications
0.2 mm² - 2.5 (4 "f-st") mm²/AWG 24 - 12
440 V, 22 A
Using push-in type jumper bars 1 to X, the maximum rated voltage is reduced to 275 V and the rated current to 13.5 A
(also see Section 14)

❻ See application notes for:
Insulation stop, page 199
Tap-off module, page 283

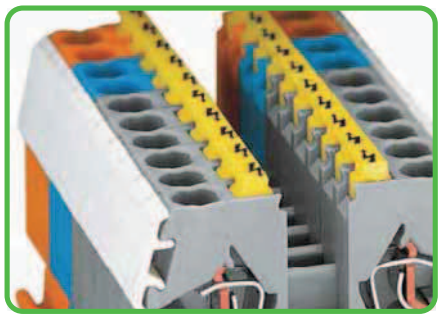
	Item No.	Pack. Unit
2-conductor through terminal block,		
for DIN 15 rail		
gray	**870-911**	100
blue	**870-914** ❹	100
orange	**870-912**	100
light gray	**870-919** ❺	100
2-conductor ground terminal block,		
for DIN 15 rail,		
Notice: This ground conductor terminal block cannot be commoned with push-in type jumper bars.		
green-yellow	**870-917**	100



Double-potential terminal block
with integrated marking position.
gray 870-826
Packing unit: 100 pcs

Notice: This double-potential terminal block cannot be commoned with push-in type jumper bars!

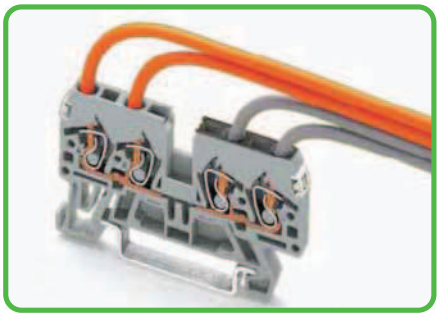
For technical data and accessories, see www.wagocatalog.com



Protective warning markers inserted into the operating slots.

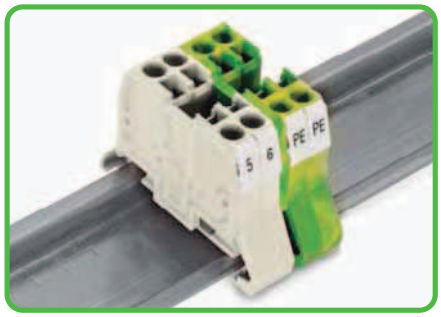
Item-Specific Accessories

End and intermediate plate, 2 mm thick			
	orange	**870-924**	100 (4x25)
	gray	**870-923**	100 (4x25)
	light gray	**870-925**	100 (4x25)
Separator, oversized, 2 mm thick			
	orange	**870-929**	100 (4x25)
	gray	**870-928**	100 (4x25)
Protective warning marker,			
	with high-voltage symbol, black, for 5 terminal blocks		
	yellow	**280-405**	100 (4x25)
Tap-off module with anti-reverse mating protection,			
❻ 	can be snapped together, 5 mm wide		
	gray	**870-425**	100 (4x25)
Miniature WSB Quick marking system,			
	10 strips with 10 markers per card, 5 mm wide markers		
	plain	**248-501**	5



Miniature WSB or WMB markers provide marking directly on terminal block.

WAGO front-entry double-potential terminal blocks are space savers.
Two independent feedthrough circuits are placed in one insulated housing on one level in just 5 mm/0.197 in. This achieves a width of just 2.5 mm/0.098 in is achieved versus standard through terminal blocks for a total height of only 27.5 mm/1.08 in from the upper edge of the carrier rail.
Input and output contacts of one circuit are placed on the same side of the terminal block. Both circuits can be individually marked according to input and output.



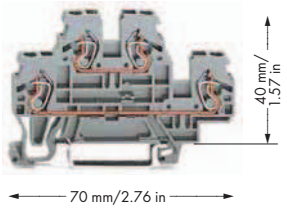
In order to meet creepage and clearance requirements for Ex e applications, it is necessary to insert an end or intermediate plate between a through and a ground conductor terminal block.
End plates 870-923 (gray), 870-924 (orange) and 870-925 (light gray), as well as separator plates 870-928 (gray) and 870-929 (orange) cannot be assembled to 870-907/999-950 2-conductor ground Ex terminal blocks.

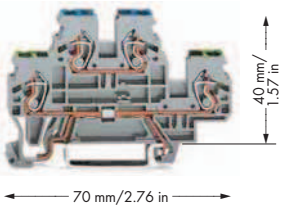
Double-Deck Terminal Blocks 2.5 mm² (4 mm² "f-st")
870 Series

CAGE CLAMP®

0.08 - 2.5 (4"f-st")mm² ❶	AWG 28 - 12
500 V/6 kV/3 ❷	300 V, 20 A
I_N 24 A	
Terminal block width 5 mm / 0.197 in	
6 - 7 mm / 0.26 in ❸	

0.08 - 2.5 (4"f-st")mm² ❶	AWG 28 - 12
500 V/6 kV/3 ❷	
I_N 24 A	
Terminal block width 5 mm / 0.197 in	
6 - 7 mm / 0.26 in ❸	





❶ Max. insulation diameter: 4.4 mm

❷ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❸ Strip length, see packaging or instructions.

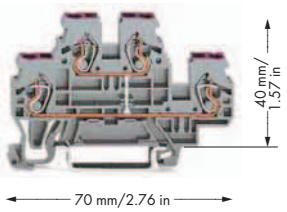
❹ Suitable for Ex i applications

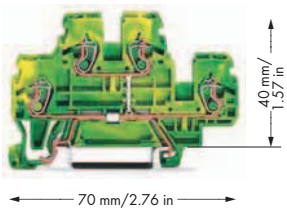
❺ Suitable for Ex e II applications
0.2 mm² - 2.5 (4 "f-st") mm²/AWG 24 - 12
440 V, 18 A
Using push-in type jumper bars 1 to X, the maximum rated voltage is reduced to 275 V and the rated current to 13.5 A
(also see Section 14)

❻ See application notes for:
Insulation stop, page 199

	Item No.	Pack. Unit
Through/through terminal block,		
gray housing		
L/L	**870-501**	50
N/L	**870-502**	50
L/N	**870-503**	50
Through/through terminal block,		
blue housing		
N/N	**870-504** ❹	50
Through/through terminal block,		
light gray housing		
L/L	**870-961** ❺	50
Other terminal blocks with the same profile:		
Diode	**870-540/281-410** Page 288	
LED	**870-543/281-434** Page 288	

	Item No.	Pack. Unit
Ground conductor/through terminal block,		
gray housing		
PE/N	**870-517**	50
PE/L	**870-527**	50
Ground conductor/through terminal block,		
light gray housing		
PE/L	**870-967/999-950** ❺	50





	Item No.	Pack. Unit
4-conductor through terminal block, internal		
commoning, conductor entry position colored in violet,		
gray housing		
L	**870-508**	50
4-conductor through terminal block, internal		
commoning, conductor entry position colored in violet,		
blue housing		
N	**870-509** ❹	50

	Item No.	Pack. Unit
4-conductor ground terminal block, internal		
commoning,		
green-yellow housing		
PE	**870-507**	50

Accessories

WMB/Miniature WSB
(see Section 13)

End and intermediate plate, 2 mm thick			
	orange	**870-519**	100 (4x25)
	gray	**870-518**	100 (4x25)
Ex e/Ex i separator, orange,			
	3 mm thick		
	125.5 mm	**209-192**	50 (2x25)
Insulation stop, ❻			
	5 pcs/strip,		
	0.08 - 0.2 mm² "s" (0.14 mm² "f-st")		
	white	**280-470**	200 (8x25)
Insulation stop, ❻			
	5 pcs/strip,		
	0.25 - 0.5 mm²		
	light gray	**280-471**	200 (8x25)
Insulation stop, ❻			
	5 pcs/strip,		
	0.75 - 1 mm²		
	dark gray	**280-472**	200 (8x25)
Push-in type jumper bar, insulated,			
	I_N 18 A,		
	light gray		
	2-way	**870-402**	200 (8x25)
	3-way	**870-403**	200 (8x25)
	4-way	**870-404**	200 (8x25)
	5-way	**870-405**	100 (4x25)
	6-way	**870-406**	100 (4x25)
	7-way	**870-407**	100 (4x25)
	8-way	**870-408**	100 (4x25)
	9-way	**870-409**	100 (4x25)
	10-way	**870-410**	100 (4x25)
Push-in type jumper bar, insulated,			
	I_N 18 A,		
	light gray		
	from 1 to 3	**870-433**	200 (8x25)
	from 1 to 4	**870-434**	200 (8x25)
	from 1 to 5	**870-435**	100 (4x25)
	from 1 to 6	**870-436**	100 (4x25)
	from 1 to 7	**870-437**	100 (4x25)
	from 1 to 8	**870-438**	100 (4x25)
	from 1 to 9	**870-439**	100 (4x25)
	from 1 to 10	**870-440**	100 (4x25)
Protective warning marker,			
	with high-voltage symbol, black,		
	for 5 terminal blocks		
	yellow	**280-405**	100 (4x25)

For list of approvals and user guide, see pages 634 to 637.