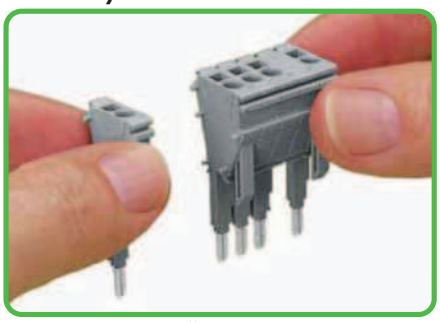
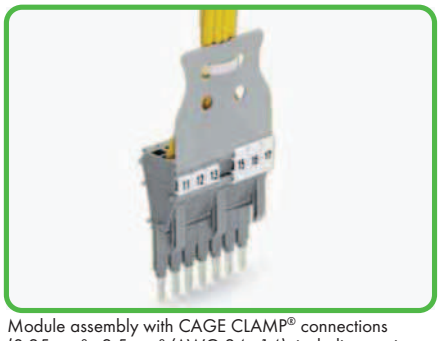
Tap-Off Modules, 870 Series
– Description and Handling –

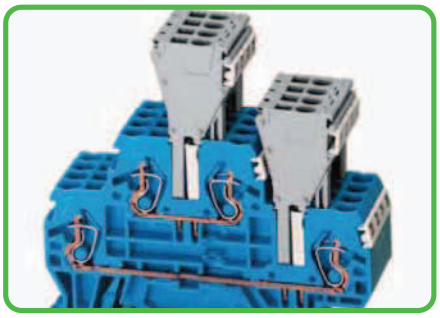
Assembly



Snapping together tap-off and spacer modules to create a module assembly (max. 10 poles).

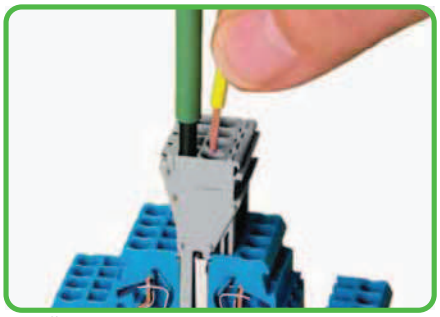


Module assembly with CAGE CLAMP® connections (0.25 mm² - 2.5 mm²/AWG 24 - 14), including strain relief plate and marker slots for miniature WSB or WMB markers.

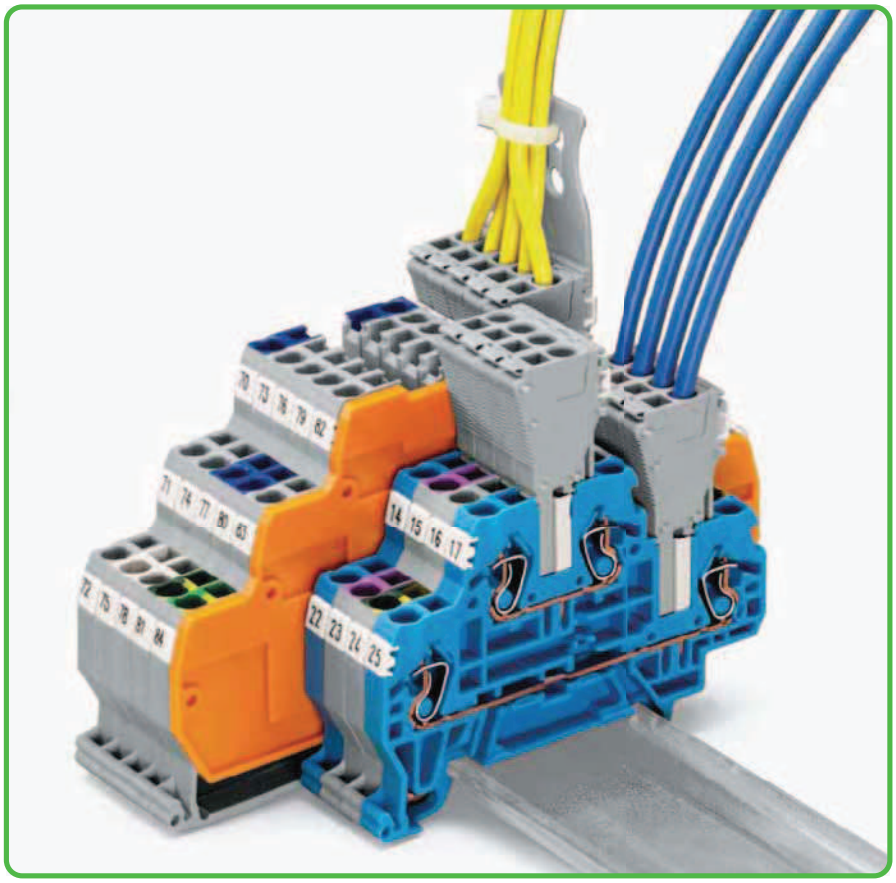


The module assembly can be directly inserted into jumper contact slots of the terminal blocks. The terminal blocks can also be commoned via push-in type jumper bars parallel to the jumper slots being used by the modules.

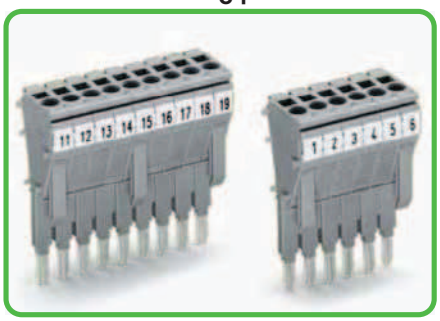
CAGE CLAMP® connection



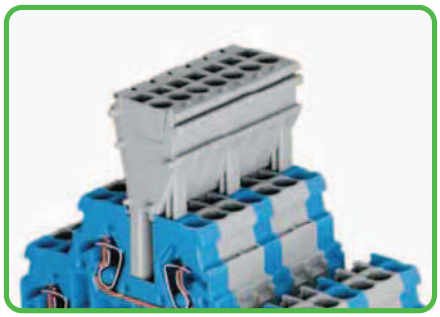
Tap-off modules are used when additional or removable connections are required (can be used as a permanent connection or a test plug).
Wiring is possible whether the modules are plugged into the assembly or not.



Anti-reverse mating protection

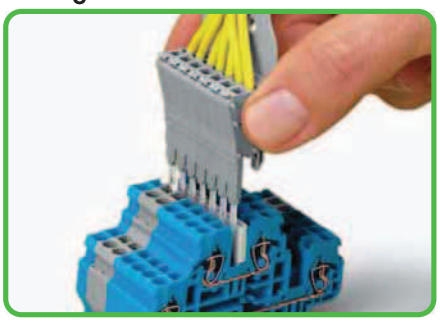


Using anti-reverse mating modules at both ends of a module assembly prevents reverse mating.



Three anti-reverse mating modules are necessary when snapping more than 7 modules together.

Testing



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



CAGE CLAMP® clamps the following copper conductors:*

solid



stranded



fine-stranded, also with tinned single strands

* For aluminum conductors, see notes in Section 14.

Tap-Off Modules
870 Series

0.25 - 2.5 mm² | AWG 22 - 14 500 V/6 kV/3 ❶ I_N 18 A module width 5 mm / 0.197 in 10 mm / 0.38 in ❷	0.25 - 2.5 mm² | AWG 22 - 14 500 V/6 kV/3 ❶ I_N 10 A module width 5 mm / 0.197 in 10 mm / 0.38 in ❷







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

❷ Strip length, see packaging or instructions.

	Item No.	Pack. Unit
Tap-off module with CAGE CLAMP® and with anti-reverse mating protection, can be snapped together, suitable for 870 Series terminal blocks with jumper slots, module width 5 mm		
gray	**870-425**	100 (4x25)

	Item No.	Pack. Unit
Tap-off module with CAGE CLAMP®, can be snapped together, suitable for 870 Series terminal blocks with jumper slots, module width 5 mm		
gray	**870-426**	100 (4x25)
Spacer module, can be snapped together, e.g., for bridging commoned terminal blocks, module width 5 mm		
gray	**870-427**	100 (4x25)

For additional wire connections, as well as serial testing on terminal block assemblies, WAGO has developed special tap-off modules.
The tap-off modules readily adapt to terminal block assemblies using spacer modules, if necessary (see left).
It is possible to connect the modules is performed directly in the jumper contact positions of the terminal blocks to be tested/tapped, even though a push-in type jumper bar is already being used.

Accessories

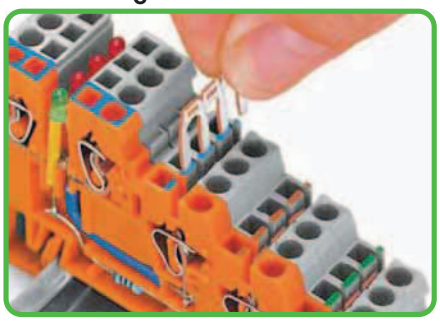
Miniature WSB Quick marking system, 10 strips with 10 markers per card, 5 mm wide markers			
plain	**248-501**		5
WMB Multi marking system, 10 strips with 10 markers per card, stretchable 5 - 5.2 mm			
plain	**793-5501**		5
WMB Multi marking system, 10 strips with 10 markers per card, for terminal widths 5 - 17.5 mm			
plain	**793-501**		5
Strain relief plate, gray			
35 mm width	**734-326**	100 (4x25)	
6 mm wide	**734-327**	100 (4x25)	
12.5 mm width	**734-328**	100 (4x25)	
25 mm wide	**734-329**	100 (4x25)	

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

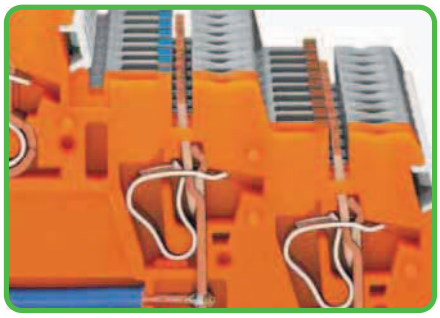
Sensor and Actuator Terminal Blocks, 270 Series – Description and Handling –

CAGE CLAMP®

Commoning



Inserting a jumper.

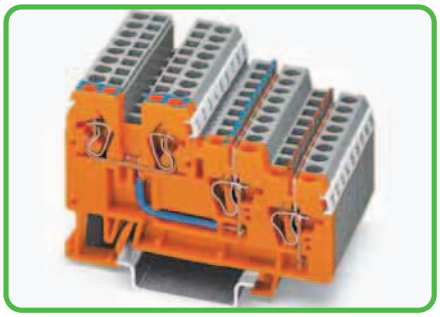


Commoning a supply voltage using uninsulated push-in type jumper bars, 2- to 9-way or 17-way (2 x 8 bits), depending on application.

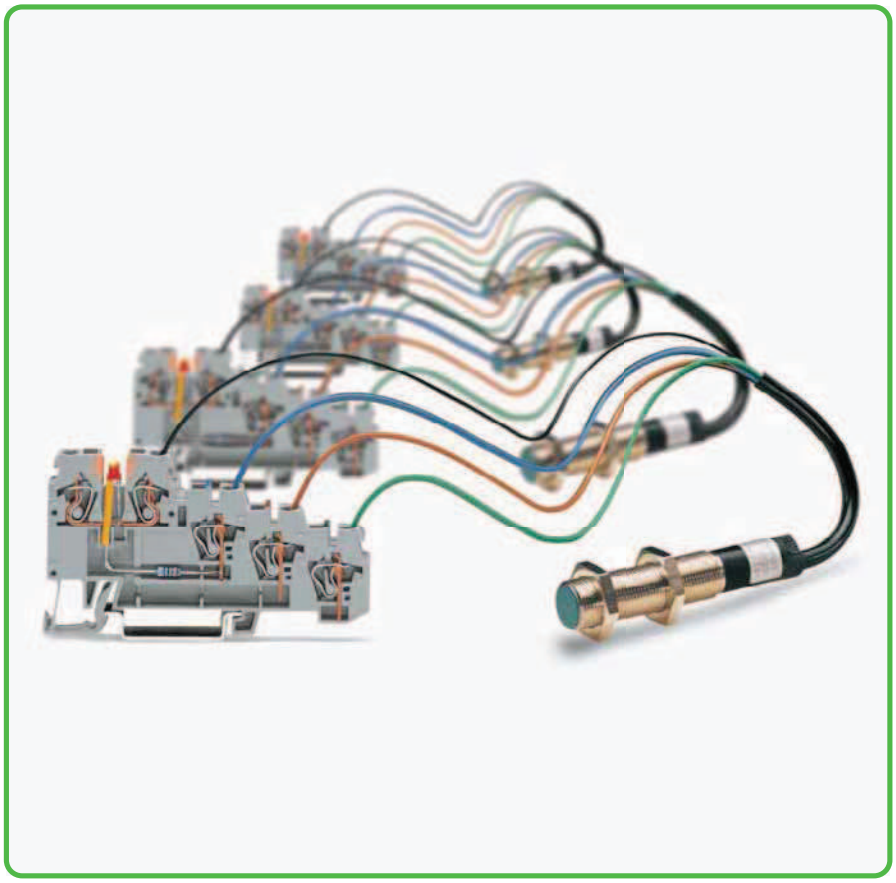


Commoning signal level voltage via insulated 870 Series push-in type jumper bars, 2- to 9-way, depending on application.
Sensor LED terminal blocks cannot be commoned on the signal level.

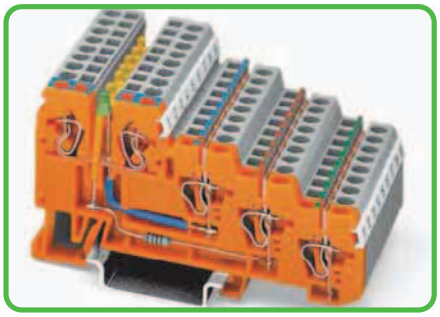
Sensor terminal blocks



Terminal block assembly:
Sensor terminal blocks



Sensor LED terminal blocks

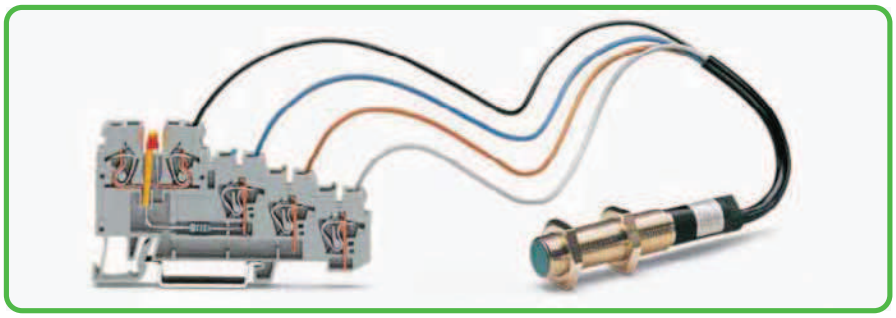


Terminal block assembly:
Sensor LED terminal blocks

Marking Strips



Marking strips
Item No. 709-196
Not suitable for LED terminal blocks!



Sensor LED terminal block

CAGE CLAMP® clamps the following copper conductors:*

solid	stranded	fine-stranded, also with tinned single strands	fine-stranded, tip-bonded	fine-stranded, with ferrule ❶ (gastight crimped)	fine-stranded, with pin terminal (gastight crimped)

* 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.

4-Conductor Sensor Terminal Blocks and 4-Conductor Sensor LED Terminal Blocks 270 Series

0.08 - 2.5 mm² / AWG 28 - 12 *	0.08 - 2.5 mm² / AWG 28 - 12 *
250 V/4 kV/3 ❶	24 VDC ❸
I_N 18 A ❷	
300 V, 20 A	
300 V, 10 A	
Terminal block width 5 mm / 0.197 in	Terminal block width 5 mm / 0.197 in
6 - 7 mm / 0.26 in ❹	6 - 7 mm / 0.26 in ❹

* AWG 12: THHN, THWN

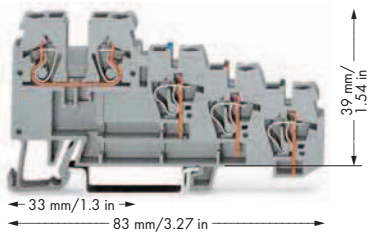
❶ 250 V = rated voltage
4 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

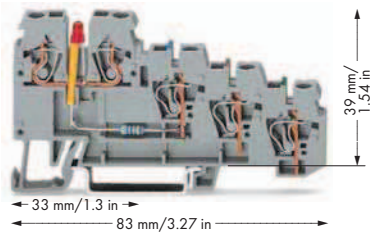
❷ Internal bridge: 9 A

❸ Other voltages upon request.
LED power consumption: 4.8 mA

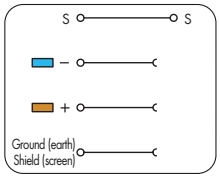
❹ Strip length, see packaging or instructions.

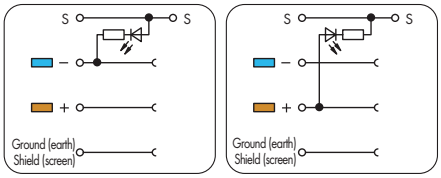
❺ See application notes for:
Insulation stop, page 199





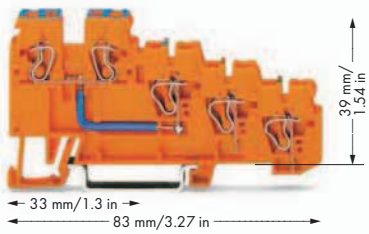
Circuit I Circuit II

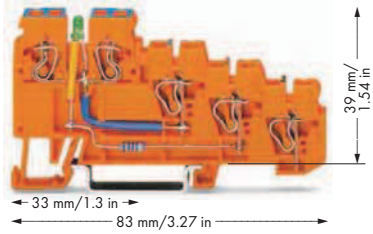


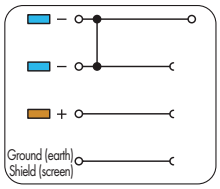


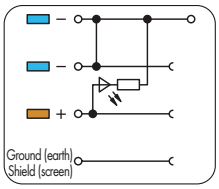
	Item No.	Pack. Unit
4-conductor sensor terminal block,		
for DIN 35 rail		
gray	**270-570**	50

	Item No.	Pack. Unit
4-conductor sensor LED terminal block,		
for DIN 35 rail,		
for PNP (positive) switching sensors, red LED		
Circuit I	**270-570/281-434**	50
4-conductor sensor LED terminal block,		
for DIN 35 rail,		
for NPN (negative) switching sensors, yellow LED		
Circuit II	**270-570/281-507**	50









	Item No.	Pack. Unit
4-conductor sensor supply terminal block,		
for DIN 35 rail,		
internal bridge 9 A		
orange	**270-574**	10

	Item No.	Pack. Unit
4-conductor sensor LED supply terminal block,		
for DIN 35 rail		
green LED	**270-574/281-483**	10

Accessories for 4-Conductor Terminal Blocks

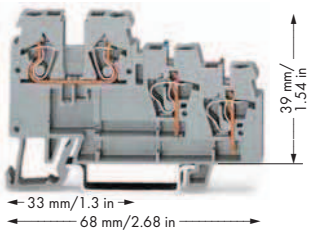
WMB/Miniature WSB (see Section 13)

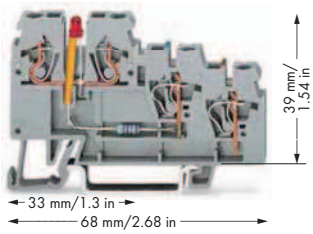
End and intermediate plate, 1 mm thick,			
	for quadruple-deck terminal blocks		
	orange	**270-322**	100 (4x25)
	gray	**270-320**	100 (4x25)
Insulation stop, ❺			
	5 pcs/strip,		
	0.08 - 0.2 mm² "s" (0.14 mm² "f-st")		
	white	**280-470**	200 (8x25)
Insulation stop, ❺			
	5 pcs/strip,		
	0.25 - 0.5 mm²		
	light gray	**280-471**	200 (8x25)
Insulation stop, ❺			
	5 pcs/strip,		
	0.75 - 1 mm²		
	dark gray	**280-472**	200 (8x25)
Jumper, uninsulated,			
	I_N 18 A,		
	Jumpers can be shortened using an electronic side cutter		
	9-way	**270-409**	100 (4x25)
	17-way	**270-417**	100 (4x25)
	80-way	**270-480**	10
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)
Operating tool with partially insulated shaft,			
	type 2, (3.5 x 0.5) mm blade		
		210-720	1
Miniature WSB Quick marking system,			
	10 strips with 10 markers per card,		
	5 mm wide markers		
	plain	**248-501**	5
WMB Multi marking system,			
	10 strips with 10 markers per card,		
	stretchable 5 - 5.2 mm		
	plain	**793-5501**	5

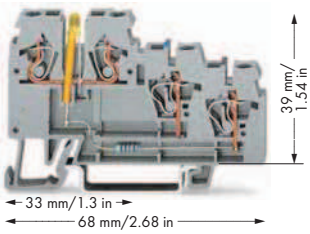
For list of approvals and user guide, see pages 634 to 637.

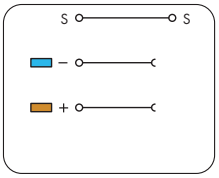
3-Conductor Sensor Terminal Blocks and 3-Conductor Sensor LED Terminal Blocks 270 Series

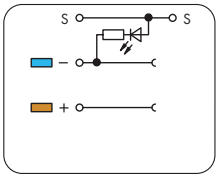
0.08 - 2.5 mm² | AWG 28 - 12 * 250 V/4 kV/3 ❶ | 300 V, 20 A I_N 18 A | 300 V, 10 A	0.08 - 2.5 mm² | AWG 28 - 12 * 24 VDC ❷	0.08 - 2.5 mm² | AWG 28 - 12 * 24 VDC ❷
Terminal block width 5 mm / 0.197 in 6 - 7 mm / 0.26 in ❸	Terminal block width 5 mm / 0.197 in 6 - 7 mm / 0.26 in ❸	Terminal block width 5 mm / 0.197 in 6 - 7 mm / 0.26 in ❸

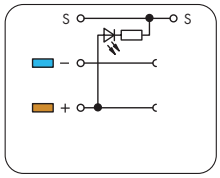








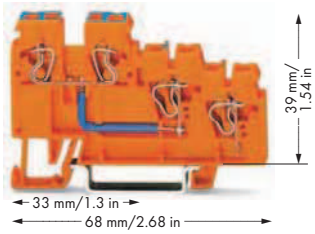


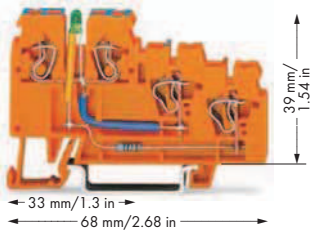


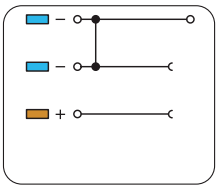
Item No.		Pack. Unit
3-conductor sensor terminal block,		
for DIN 35 rail		
gray	**270-560**	50

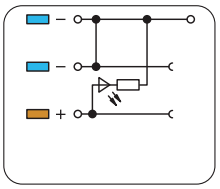
Item No.		Pack. Unit
3-conductor sensor LED terminal block,		
for DIN 35 rail,		
for PNP (positive) switching sensors		
red LED	**270-560/281-434**	50

Item No.		Pack. Unit
3-conductor sensor LED terminal block,		
for DIN 35 rail,		
for NPN (negative) switching sensors		
yellow LED	**270-560/281-507**	50









Item No.		Pack. Unit
3-conductor sensor supply terminal block,		
for DIN 35 rail,		
internal bridge 9 A		
orange	**270-564**	50

Item No.		Pack. Unit
3-conductor sensor LED supply terminal block,		
for DIN 35 rail		
green LED	**270-564/281-483**	10

Tap-off modules (870-425, 870-426, 870-427) also suitable for signal level.

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