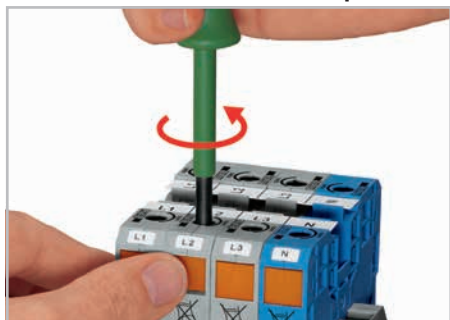


High-Current, Rail-Mounted Terminal Blocks 35 mm² 285 Series

Conductor termination – Step 1



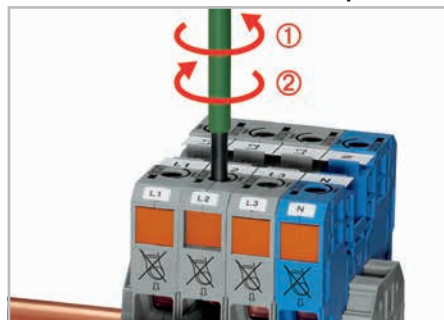
Insert operating tool and turn counterclockwise. Then push in orange locking tab for handsfree wiring.

Conductor termination – Step 2



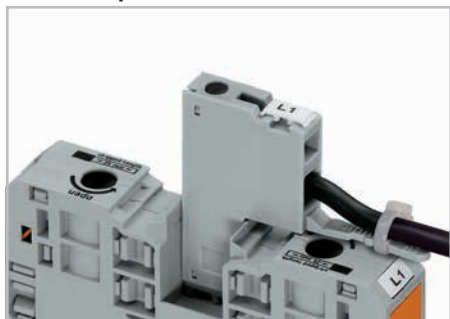
Insert stripped conductor into the clamping unit until it hits backstop; hold conductor in position.

Conductor termination – Step 3

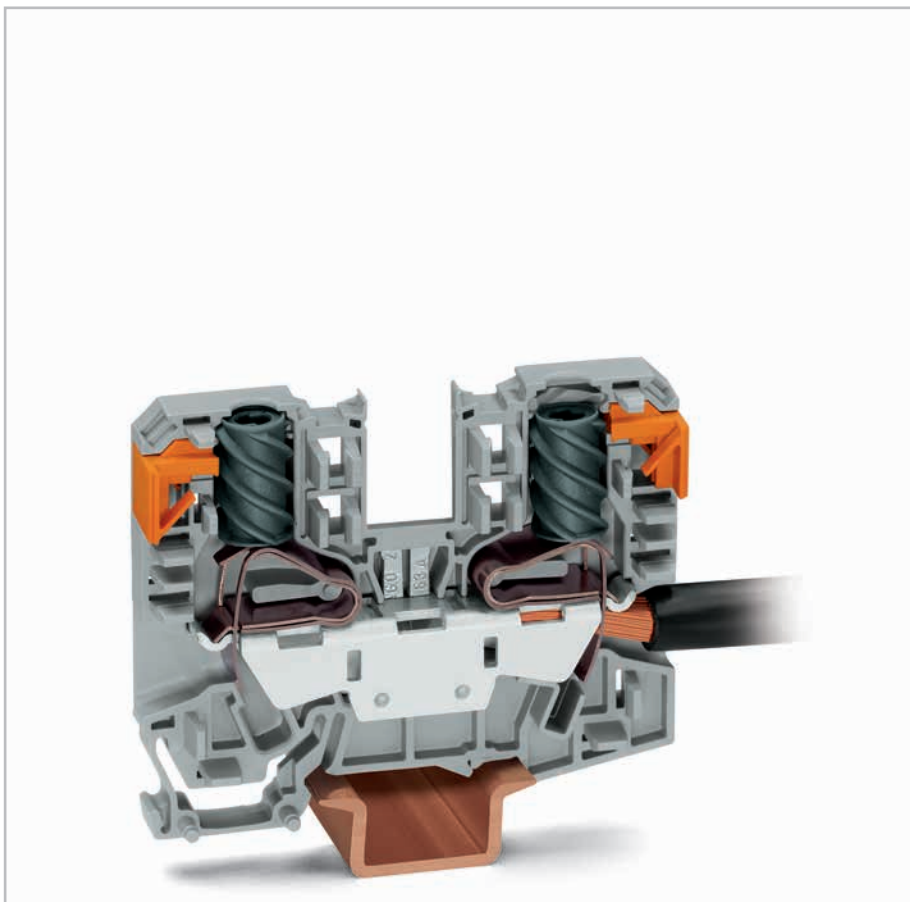


Unlock the locking tab with a short counterclockwise turn of the operating tool ①, when unlocked allow operating tool to rotate clockwise ② to securely terminate the conductor.

Power tap



The power tap is inserted into the jumper contact slot. It can be fitted with a strain relief plate.



Rail-mounted, high-current terminal blocks 35 mm²/AWG 2 and 50 mm²/AWG 1



POWER CAGE CLAMP clamps the following copper conductors: * solid



stranded



fine-stranded, also with tinned single strands

* For aluminum conductors, see notes in Section 14.

- Description and Handling -

Commoning



Commoning adjacent terminal blocks using centrally positioned adjacent jumpers.



Slide the marking strip laterally to remove the jumper.

Commoning with step-down jumpers

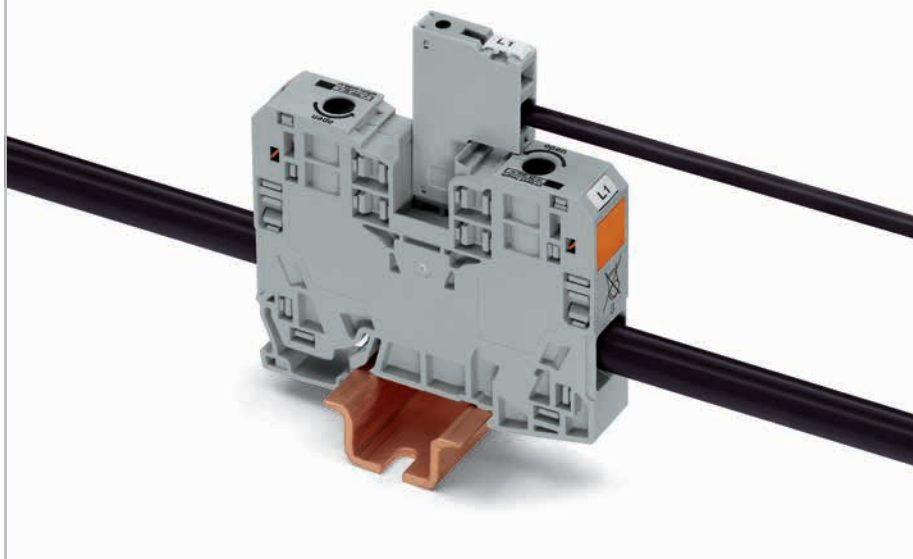


Commoning from 35 mm²/AWG 2 POWER CAGE CLAMP terminal blocks to 10/16 mm² (AWG 8/10) TOPJOB® S terminal blocks (2010 and 2016 Series)

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, similar to adjacent 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 adjacent jumpers.

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



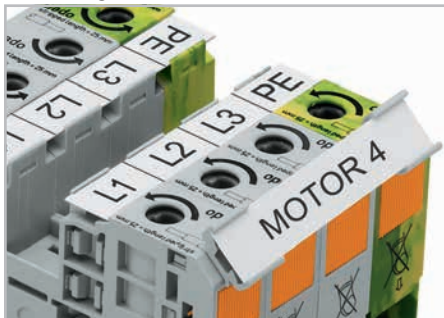
Side-entry wiring means that even larger conductors, which offer limited flexibility, can be easily connected.

Marking



In addition to the WMB marking system, custom marking strips can also be used.

Marking



Adapter for marking strips or 2 x WMB

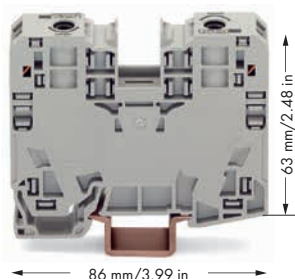


fine-stranded,
with ferrule
(gastight crimped)

High-Current, Through and Ground Conductor Terminal Blocks 35 mm² 285 Series

POWER
CAGE CLAMP®

6 ... 35 mm ² 1000 V/8 kV/3 ① I _N 125 A	AWG 10 ... 2 600 V, 115 A ② 600 V, 115 A ③	0.2 ... 6 mm ² 800 V/8 kV/3 ② I _N 32 A	AWG 24 ... 10 600 V, 30 A ② 600 V, 32 A ③
Terminal block width 16 mm / 0.63 in. 25 mm / 0.98 in. ③		Module width 8 mm / 0.315 in. 12 ... 13 mm / 0.49 in. ③	



- ① 1000 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(see Section 14)
- ② 800 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(see Section 14)
- ③ Strip length, see packaging or instructions.
- ④ See application notes for:
Step-down jumper, page 167

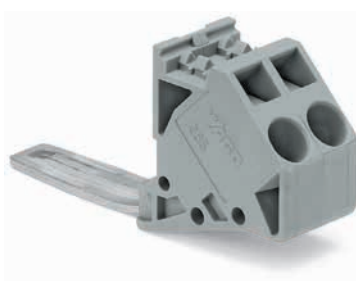
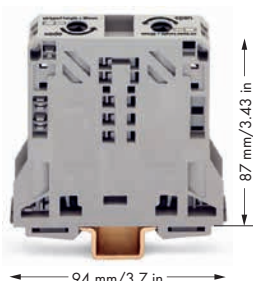
Item No.	Pack. Unit	Item No.	Pack. Unit
2-conductor through terminal block , to be used exclusively on DIN 35 x 15 rail		Power tap , for 35 mm ² high-current terminal blocks	
gray 285-135	15	gray 285-427	5
blue 285-134	15		
2-conductor ground terminal block , to be used exclusively on DIN 35 x 15 rail; 2.3 mm thick			
green-yellow 285-137	15		
Item-Specific Accessories		Item-Specific Accessories	
Adjacent jumper , insulated, I _N 85 A		Strain relief plate , gray	
gray 285-435	50 (2x25)	1-pole 769-410	100 (4x25)
Step-down jumper , insulated, I _N 90 A		Test plug , with 500 mm cable,	
gray 285-430	50 (2x25)	2 mm Ø	
Protective warning marker , with high-voltage symbol, black		red 210-136	50
yellow 285-420	100 (4x25)	WMB Multi marking system , 10 strips with 10 markers per card, for terminal widths 5 ... 17.5 mm	
Finger guard , touchproof cover protects unused conductor entries		plain 793-501	5
yellow 285-421	100 (4x25)	WMB Multi marking system , 10 strips with 10 markers per card, stretchable 5 ... 5.2 mm	
Test plug adapter , 11.6 mm wide, for 1.5 ... 16 mm ² terminal blocks, for 4 mm Ø test plug		plain 793-5501	5
gray 283-404	25		
Operating tool with partially insulated shaft , type 3, (5.5 x 0.8) mm blade			
210-721	1		
Three-phase set , with 35mm ² high-current terminal blocks			
285-139	1		
Power tap , I _N 24 A, with 500 mm cable, for terminal blocks 16 mm ² (283/783 Series) and 35 mm ² (285/785 Series)			
gray 283-407	25		
Marking strip , plain, 11 mm wide, 50 m roll			
white 2009-110	1		
Copper carrier rail , acc. to EN 60715, 35 x 15 mm, 2.3 mm, 2 m/6'6" long			
unslotted 210-198	10		



Always push power tap (283-407) down into the terminal block until fully inserted!

High-Current, Through and Ground Conductor Terminal Blocks 50 (70 "f-st") mm² 285 Series

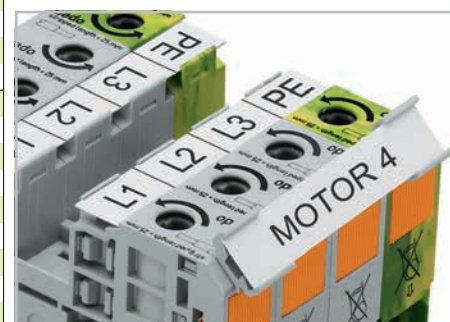
10 ... 50 (70 "f-st") mm ² 1000 V/8 kV/3 ① I _N 150 A	AWG 8 ... 1/0 600 V, 150 A ② 600 V, 150 A ③	0.2 ... 6 mm ² 1000 V/8 kV/3 ① I _N 41 A	AWG 24 ... 10 600 V, 30 A ② 600 V, 41 A ③
Terminal block width 20 mm / 0.787 in. 30 mm / 1.18 in. ②		Module width 16 mm / 0.63 in. 12 ... 13 mm / 0.49 in. ②	



- ① 1000 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(see Section 14)
- ② Strip length, see packaging or instructions.
- ③ Jumper can only be removed or inserted when the clamp is in closed position.

Item No.	Pack. Unit	Item No.	Pack. Unit
2-conductor through terminal block , to be used exclusively on DIN 35 x 15 rail		Power tap , for 50 mm ² high-current terminal blocks	
gray	285-150 5	gray	285-447 5
blue	285-154 5		
2-conductor ground terminal block , to be used exclusively on DIN 35 x 15 rail; 2.3 mm thick, copper			
green-yellow	285-157 5		
Item-Specific Accessories		Item-Specific Accessories	
Adjacent jumper , insulated, ③ I _N 150 A for 1 jumper, I _N 130 A for 2 ... 4 jumpers gray		Protective warning marker , with high-voltage symbol, black, for 5 terminal blocks yellow	
	285-450 100 (4x25)		282-415 50 (2x25)
Protective warning marker , with high-voltage symbol, black yellow		WMB Multi marking system , 10 strips with 10 markers per card, for terminal widths 5 ... 17.5 mm plain	
	285-440 50 (2x25)		793-501 5
Finger guard , touchproof cover protects unused conductor entries and jumper slots yellow		WMB Multi marking system , 10 strips with 10 markers per card, stretchable 5 ... 5.2 mm plain	
	285-441 100 (4x25)		793-5501 5
Allen wrench with partially insulated shaft			
	285-172 1		
Three-phase set , with 50 mm ² high-current terminal blocks			
	285-159 1		
WMB Multi marking system , 10 strips with 10 markers per card, for terminal widths 5 ... 17.5 mm plain			
	793-501 5		
WMB Multi marking system , 10 strips with 10 markers per card, stretchable 5 ... 5.2 mm plain			
	793-5501 5		
Marking strip , plain, 11 mm wide, 50 m roll white			
	2009-110 1		
Marker carrier , for POWER CAGE CLAMP 35/50/95 mm ² , 10.4 mm wide gray			
	285-442 25		
Copper carrier rail , acc. to EN 60715, 35 x 15 mm, 2.3 mm, 2 m/6'6" long unslotted			
	210-198 10		

Description and handling see page 170



Adapter for marking strips or 2 x WMB

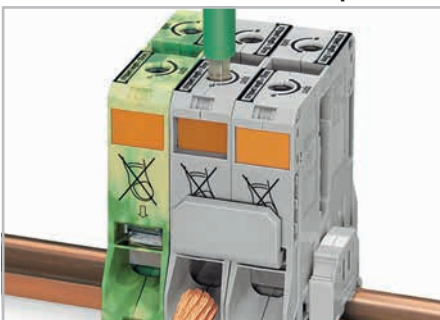
High-Current, Rail-Mounted Terminal Blocks 50 mm² ... 185 mm² 285 Series

Conductor termination – Step 1



Rotate Allen wrench counterclockwise to the stop ①. Then, push in orange locking tab for hands-free wiring.

Conductor termination – Step 2



Insert stripped conductor until it hits backstop; hold this in position.

Conductor termination – Step 3



Unlock the locking tab with a short counter-clockwise turn ② of the Allen wrench to securely terminate the conductor.

Safety notes



For an optimum clamping force:
1. Bend conductor
2. Cut conductor to length (Conductor end must be straight!)
3. Strip conductor



Always observe the printed strip length!

Grounding foot

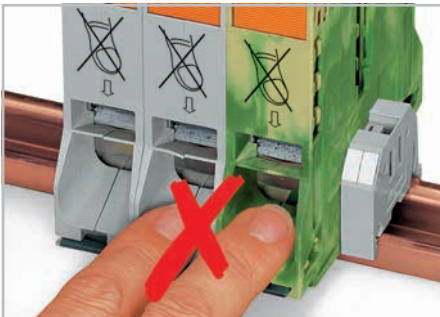


Ground conductor terminal blocks (limited to max. 120 mm²/250 MCM acc. to EN 60947-7-2) must be snapped onto a 2.3 mm thick copper carrier rail.

Safety notes



Protective warning marker may indicate:
Caution! Power is still on even after switching off the main switch!



Caution! Health hazard!
Keep your fingers out of the conductor entry hole!

Touchproof protection



Yellow, detachable covers provide touchproof safety by shielding jumper contact slots and/or unused conductor entries.



POWER CAGE CLAMP
clamps the following
copper conductors: *
solid

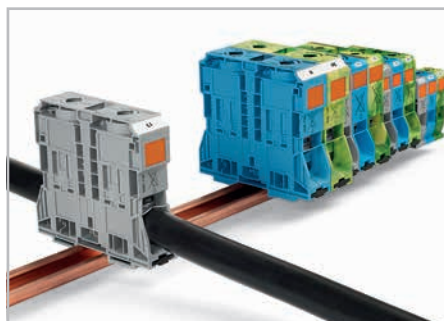


stranded



fine-stranded,
also with tinned
single strands

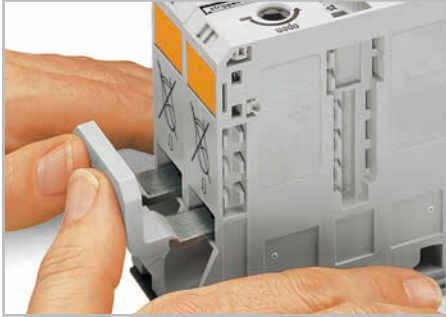
* For aluminum conductors, see notes in Section 14.



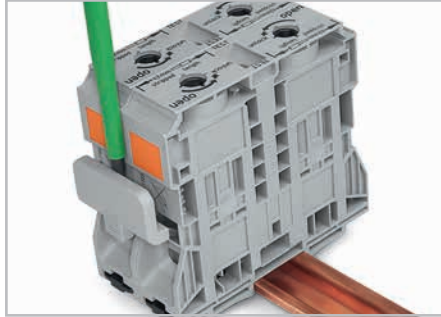
Rail-mounted, high-current terminal blocks 35 mm²/AWG 2, 50 mm²/AWG 1, 95 mm²/AWG 4/0 and 185 mm²/350 kcmil

- Description and Handling -

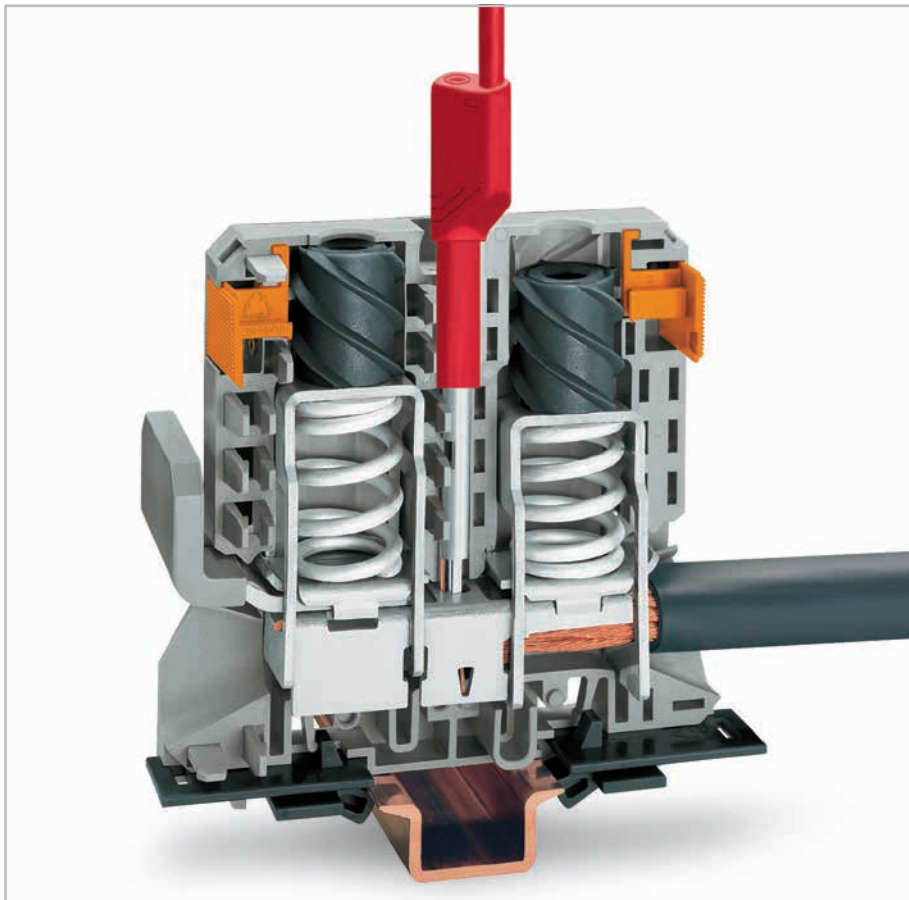
Commoning



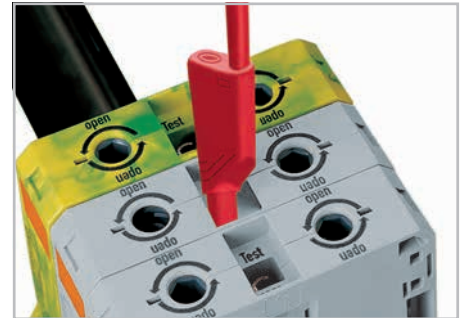
Commoning with adjacent jumper: Inserting the jumper above the conductor entry hole - prior to conductor termination. The nominal cross section remains unchanged.



Removing jumper via operating tool.

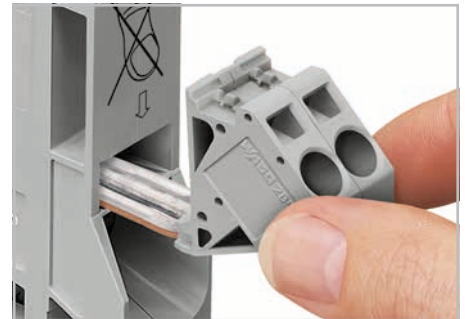


Testing



Testing with touch-proof test sockets 4 mm Ø.
(not offered by WAGO - e.g., mfd by Multi-Contact Deutschland GmbH)

Power tap

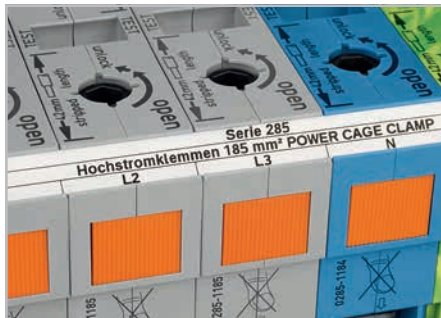


Reliably and easily tap directly onto the power supply.
Insert the unwired tap before opening the pressure spring.

Marking



WMB markers or self-adhesive, printable marking strips can be accommodated on 35, 50 and 95 mm² high-current terminal blocks.



Besides WMB markers, marking strips can also be directly accommodated on the 185 mm² (350 MCM) terminal block.



fine-stranded,
with ferrule
(gastight crimped)

High-Current Through/Ground Conductor and Ex Terminal Blocks

95 mm²

285 Series

POWER
CAGE CLAMP®

25 ... 95 mm²
1000 V/8 kV/3 ②
I_N 232 A

AWG 4 ... 4/0
600 V, 200 A ②
600 V, 210 A ③

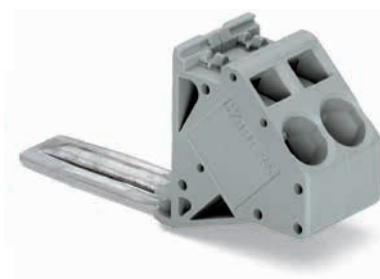
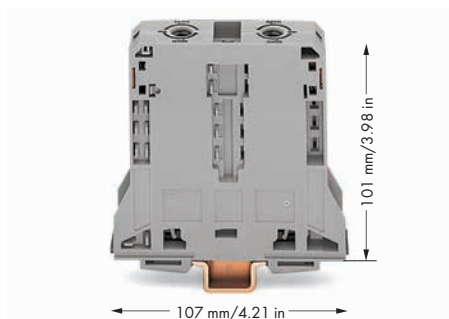
Terminal block width 25 mm / 0.984 in.
35 mm / 1.38 in. ③

0.2 ... 10 mm² ①
1000 V/8 kV/3 ②
I_N 57 A

AWG 24 ... 8
600 V, 50 A ②

Module width 20 mm / 0.787 in.

12 ... 13 mm / 0.49 in. ③



① Max. connector size: 16 mm²

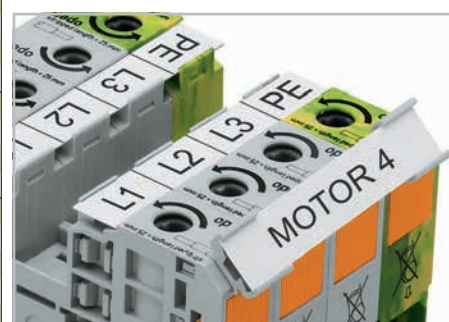
② 1000 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree

(see Section 14)

③ Strip length, see packaging or instructions.

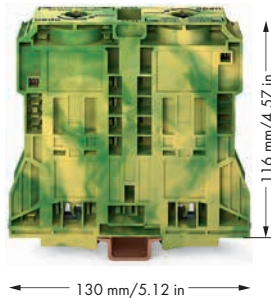
④ Suitable for Ex e II applications
25 ... 95 mm²/AWG 4 ... 4/0
880 V, 211 A
1 jumper 211 A
2 ... 4 jumpers 175 A
35 ... 70 mm²/AWG 2 ... 2/0
for ground conductor terminal blocks
(see Section 14)

Item No.	Pack. Unit	Item No.	Pack. Unit
2-conductor through terminal block, to be used exclusively on DIN 35 x 15 rail		Power tap, for 95 mm² high-current terminal blocks	
gray 285-195	5	gray 285-407	5
blue 285-194	5		
light gray ④ 285-995	5		
2-conductor ground terminal block, to be used exclusively on DIN 35 x 15 rail; 2.3 mm thick, copper			
green-yellow 285-197	5		
green-yellow ④ 285-197/999-950	5		
Item-Specific Accessories		Item-Specific Accessories	
Adjacent jumper, insulated, I _N 232 A for 1 jumper, I _N 130 A for 2 ... 4 jumpers		Protective warning marker, with high-voltage symbol, black, for 5 terminal blocks	
gray 285-495	25	yellow 284-415	50 (2x25)
Protective warning marker, with high-voltage symbol, black		WMB Multi marking system, 10 strips with 10 markers per card, for terminal widths 5 ... 17.5 mm	
yellow 285-170	50 (2x25)	plain 793-501	5
Finger guard, touchproof cover protects unused conductor entries and jumper slots		WMB Multi marking system, 10 strips with 10 markers per card, stretchable 5 ... 5.2 mm	
yellow 285-169	25	plain 793-5501	5
Allen wrench with partially insulated shaft			
285-172	1		
Three-phase set, with 95 mm ² high-current terminal blocks			
285-199	1		
Steel carrier rail, acc. to EN 60715, 35 x 15 mm, 2.3 mm, 2 m/6'6" long			
unslotted 210-118	10		
Copper carrier rail, acc. to EN 60715, 35 x 15 mm, 2.3 mm, 2 m/6'6" long			
unslotted 210-198	10		
WMB Multi marking system, 10 strips with 10 markers per card, for terminal widths 5 ... 17.5 mm			
plain 793-501	5		
Marker carrier, for POWER CAGE CLAMP 35/50/95 mm ² , 10.4 mm wide			
gray 285-442	25		

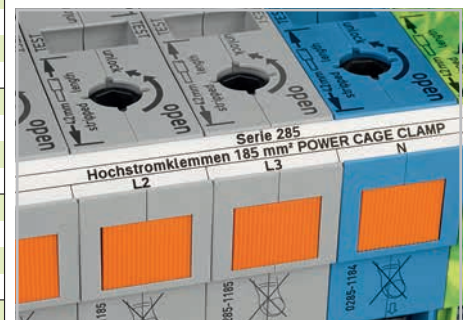


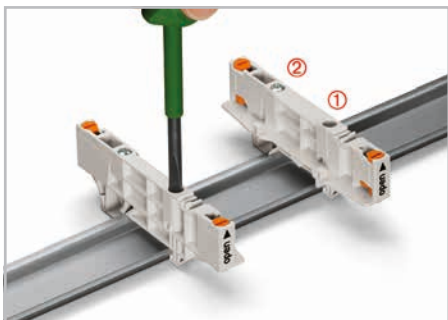
Adapter for marking strips or 2 x WMB

**POWER
CAGE CLAMP®**

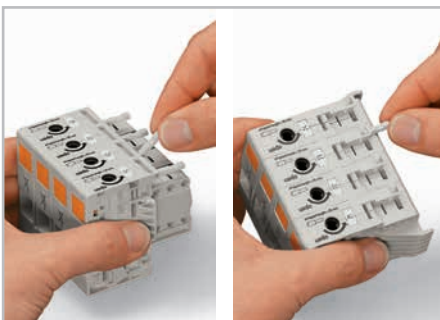


- 4

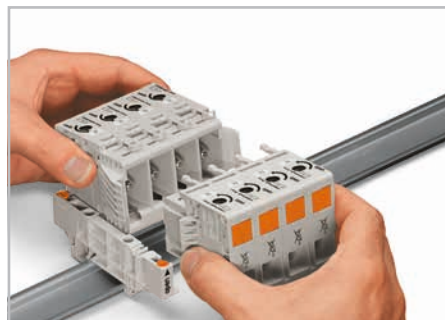
[illegible]



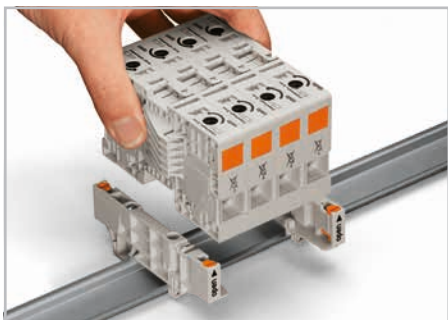
Position the mounting adapter and secure it using locking screw ①.
Screw down locking device ② to the stop.



Coding male and female connectors:
Coding pins removed from the female connector can be used to code the male connector.



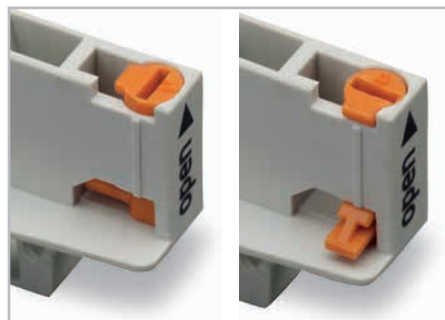
Connecting:
Secure the male connector to the mounting adapters.
Tilt the male connector to plug the female connector.



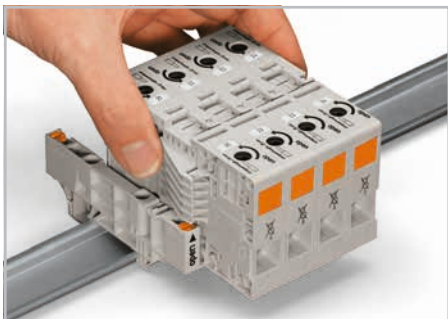
Mounting a male and female connector assembly:
Fit the assembly between the mounting adapters.



Fixing the assembly:
Turn the latch on the mounting adapters from the **open** to the **closed** position using an operating tool.



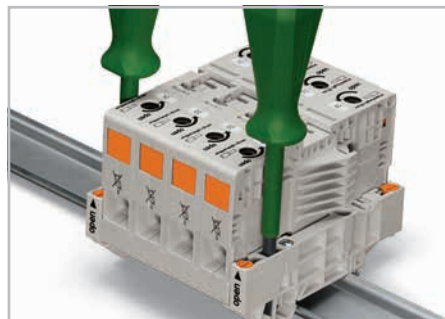
Latch in **open** position (left)
Latch in **closed** position (right)



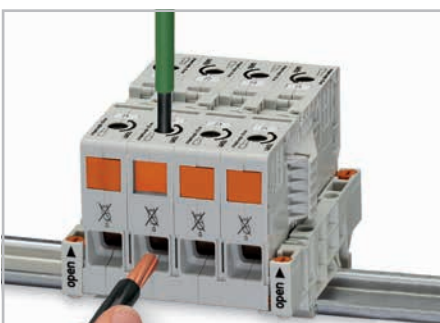
Removing the assembly:
Turn the mounting adapter latches to the **open** position.
Lift the assembly between the mounting adapters and remove it.



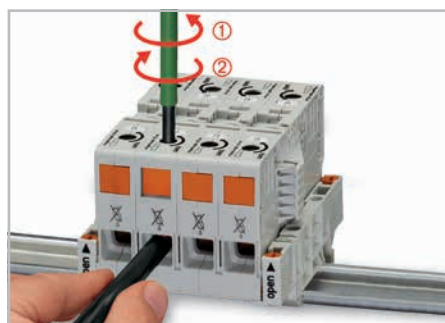
Removing the assembly:
Insert two operating tools into the separator slots between male and female connectors and unlatch the assembly.



Insert operating tool and turn counterclockwise. Then push in orange locking tab for handsfree wiring.



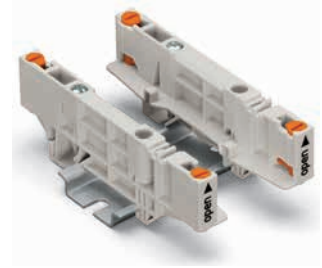
Conductor termination:
Insert stripped conductor until it hits backstop; hold this in position.



Unlock the locking tab with a short counterclockwise turn of the operating tool ①, when unlocked allow operating tool to rotate clockwise ② to securely terminate the conductor.

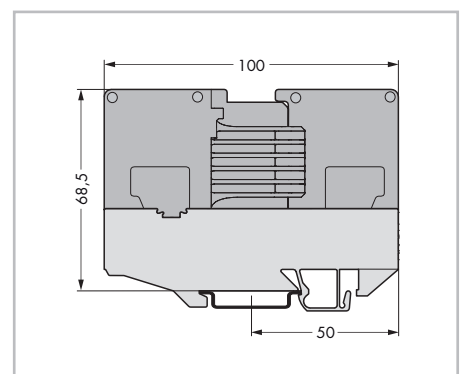
**POWER
CAGE CLAMP®**

175

4

Appropriate marking system: WMB
(see Section 13)

Operating tool with partially insulated shaft,
type 3, (5.5 x 0.8) mm blade
210-721



Dimensions in mm

