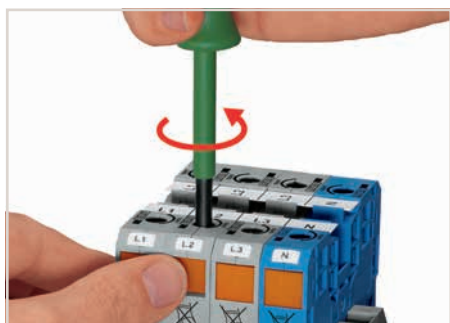
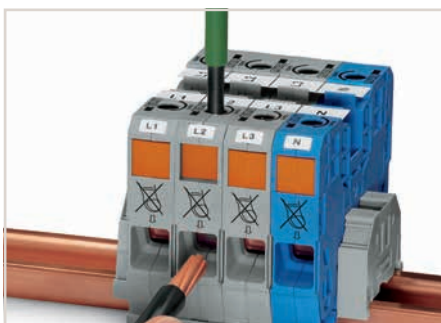


High-Current, Rail-Mount Terminal Blocks, 35 mm², 285 Series

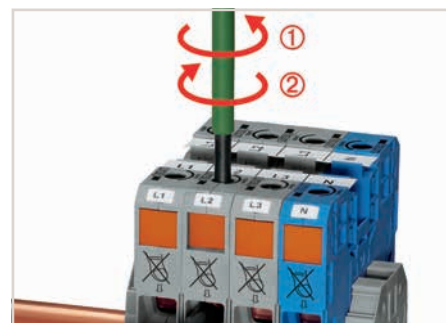
Description and Installation



Conductor termination – step 1
Rotate the operating tool (5.5 mm blade width) counter-clockwise. Next, push in the orange locking tab. The clamp is locked open for hands-free wiring.



Conductor termination – step 2
Insert a stripped conductor into the clamping unit until it hits backstop. Hold in this position.



Conductor termination – step 3
A small counter-clockwise rotation closes the clamp, securing conductor ①. When unlocked, allow operating tool to rotate clockwise ② to securely terminate the conductor.



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



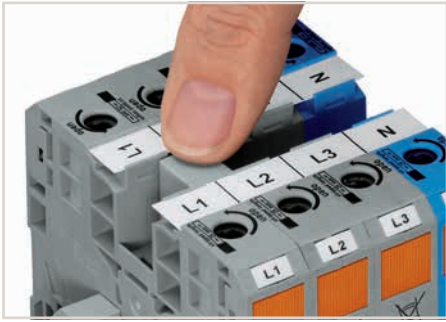
Testing



Testing with test plug adapter (283-404)



High-Current, Rail-Mount Terminal Blocks, 35 mm² (2 AWG) and 50 mm² (2/0 AWG)



Commoning adjacent terminal blocks using a centrally positioned push-in jumper.



Slide the marking strip laterally to remove the jumper.



Commoning 35 mm² (2 AWG) POWER CAGE CLAMP Terminal Blocks with 10/16 mm² (8/6 AWG) 2010 and 2016 Series TOPJOP® S Terminal Blocks using step-down jumpers (not valid for 2016-76xx and 2016-77xx).



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 drops may be problematic. 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. Additional through terminal blocks having a smaller cross-section may be commoned using adjacent jumpers.

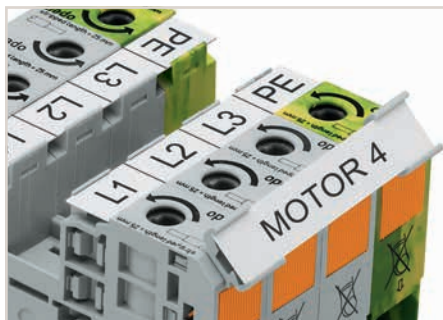
In this case, pay attention that:
The total current of the outgoing circuits does not exceed the nominal current of the step-down jumper.



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



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



Marker carrier for marking strip or 2 x WMB markers for 285-13x, 285-15x and 285-19x terminal blocks

High-Current, Through/Ground Conductor and Ex Terminal Blocks

35 mm², 285 Series

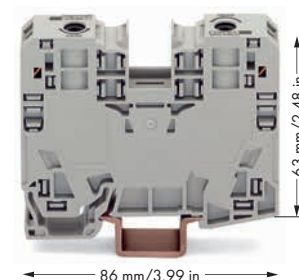


Step-down jumpers may common terminal blocks of different sizes, without losing a conductor clamping point. This can be beneficial on long conductor runs where voltage drops may be problematic. A large conductor can be easily connected to smaller conductors at the distribution point.

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. Additional through terminal blocks having a smaller cross-section may be commoned using adjacent jumpers.

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

Rail-mount terminal blocks with Ex mark are suitable for Ex e II applications.
800 V, 101 A



2-conductor through terminal block

Color	Item No.	Pack. Unit
gray	285-135	15
blue	285-134	15
light gray	285-935	15



Technical Data

Ratings per	IEC/EN 60947-7-1
Rated voltage (III / 3)	1000 V
Rated surge voltage (III / 3)	8 kV
Rated current	125 A
Approval	600 V, 115 A ; 600 V, 115 A

Connection Data

Connection technology	POWER CAGE CLAMP
Solid conductor	6 ... 35 mm ² / 10 ... 2 AWG
Fine-stranded conductor	6 ... 35 mm ² / 10 ... 2 AWG
Strip length	25 mm / 0.98 inch
Terminal block width	16 mm / 0.63 inch

Module width	
Insulation material	Polyamide 66 (PA 66)
Note:	only on DIN 35 x 15 rail

Accessories (Selection)

Adjacent jumper, insulated, I _n 85 A
WMB Inline, plain, 1,500 WMB markers (5 mm) per reel, 5 ... 5.2 mm stretchable
WMB Multi marking system, white, 10 strips with 10 markers per card, 5 ... 5.2 mm stretchable
Marking strip, plain, 11 mm wide, 50 m reel
Marker carrier, for 35 / 50 / 95 mm ² POWER CAGE CLAMP
Width 10.4 mm
Test plug adapter, 11.6 mm wide, for 4 mm Ø test plug, for 1.5 ... 16 mm ² terminal blocks
Strain relief plate, gray

	Item No.	Page
gray	285-435	274
white	2009-115	780
plain	793-5501	780
white	2009-110	783
gray	285-442	783
gray	283-404	274

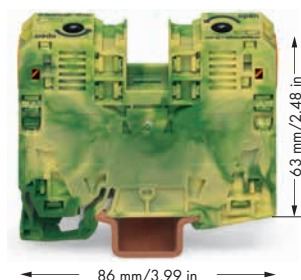
Accessories (jumpers, etc.),
see page 274

Carrier rails and tools,
see Section 13

Appropriate marking system,
WMB/WMB Inline/marketing strips,
see Full Line Catalog, Volume 6

Information on hazardous locations,
see Section 14

Approvals and corresponding ratings,
visit www.wago.com



2-conductor ground terminal block		
Color	Item No.	Pack. Unit
green-yellow	285-137	15
green-yellow	285-137/999-950	15



IEC/EN 60947-7-2
POWER CAGE CLAMP
6 ... 35 mm ² / 10 ... 2 AWG
6 ... 35 mm ² / 10 ... 2 AWG
25 mm / 0.98 inch
16 mm / 0.63 inch
Polyamide 66 (PA 66)
only on DIN 35 x 15 rail; 2.3 mm thick

	Item No.	Page
gray	285-435	274
white	2009-115	780
plain	793-5501	780
white	2009-110	783
gray	285-442	783
gray	283-404	274



Power tap, for 35 mm ² high-current terminal blocks		
Color	Item No.	Pack. Unit
gray	285-427	5



IEC/EN 60947-7-1
800 V
8 kV
32 A
600 V, 30 A; 600 V, 30 A
CAGE CLAMP®
0.2 ... 6 mm ² / 24 ... 10 AWG
0.2 ... 6 mm ² / 24 ... 10 AWG
12 ... 13 mm / 0.47 ... 0.51 inch
8 mm / 0.315 inch

	Item No.	Page
plain	793-5501	780
1-pole	769-410	274



Power tap, with 500 mm cable, for 16 mm ² (283/783 Series) and 35 mm ² (285/785 Series) rail-mount terminal blocks		
Color	Item No.	Pack. Unit
gray	283-407	25

800 V
8 kV
24 A

	Item No.	Page

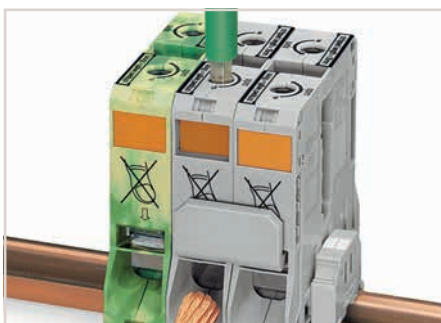
High-Current, Rail-Mount Terminal Blocks, 50 ... 185 mm², 285 Series

Description and Installation



Conductor termination – step 1

Rotate the T-wrench counter-clockwise to the stop ①. Next, push in the orange locking tab. The clamp is locked open for hands-free wiring.



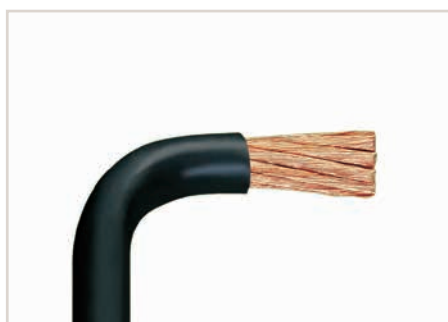
Conductor termination – step 2

Insert a stripped conductor into the clamping unit until it hits backstop. Hold in this position.



Conductor termination – step 3

A short counter-clockwise rotation ② releases the locking tab. When unlocked, the T-wrench rotates clockwise, securely clamping the conductor.



For the optimal clamping force:

- Bend conductor.
- Cut conductor to length (conductor end must be straight).
- Strip conductor.



Always observe the printed strip length!



Grounding foot

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



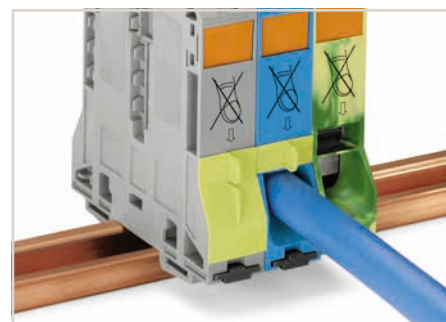
Protective warning marker may indicate:

Notice: Power is still on even after switching off the main switch!

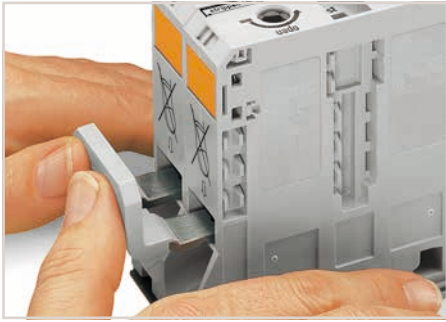


Risk of Injury!

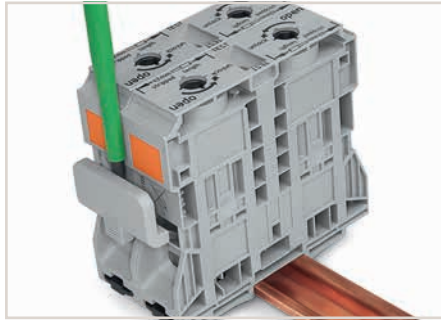
Do not insert fingers in the conductor entry!



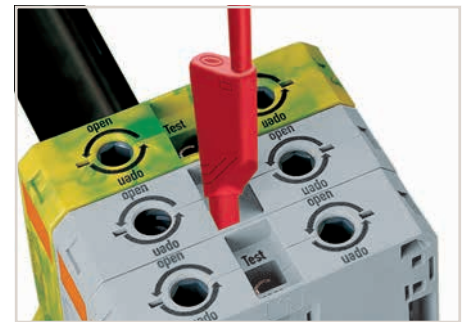
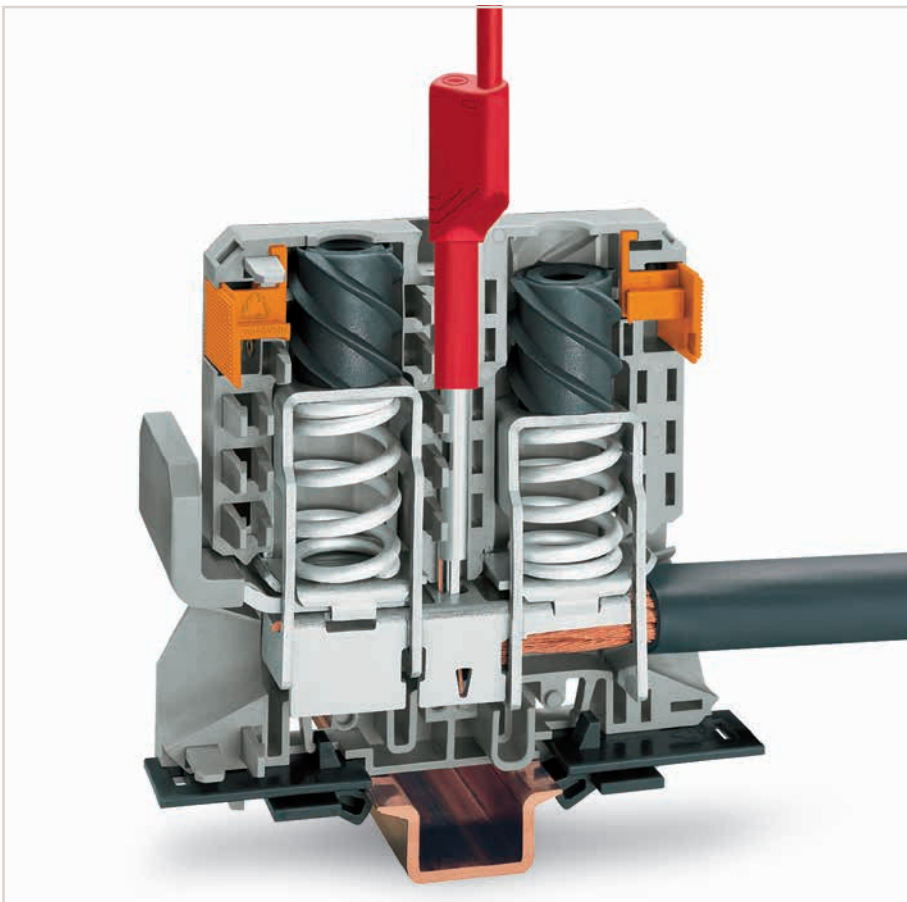
Yellow, detachable finger guards provide touch-proof safety by shielding jumper contact slots and/or unused conductor entries.



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



Removing jumper via operating tool.



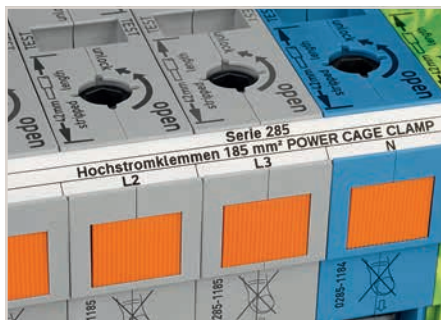
Testing via touch-proof 4 mm Ø test plugs (not available from WAGO, but offered by industry suppliers such as, Multi-Contact Deutschland GmbH).



Prüfen



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



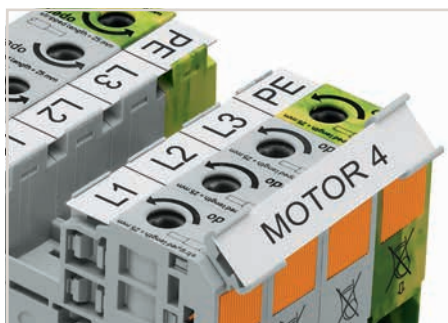
In addition to WMB markers, marking strips can be directly applied to 185 mm² (350 kcmil) high-current terminal blocks.



Reliably and easily tap directly into the power supply. Insert the unwired tap before opening the clamping unit.

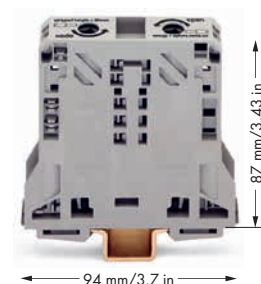
High-Current, Through/Ground Conductor and Ex Terminal Blocks

50 (70 "f-st") mm², 285 Series



High-current, rail-mount terminal blocks for conductors rated 35 mm² (2 AWG), 50 mm² (1/0 AWG), 95 mm² (4/0 AWG) and 185 mm² (350 kcmil)

Rail-mount terminal blocks with an Ex mark are suitable for Ex e II applications.
800 V, 134 A



2-conductor through terminal block

Color	Item No.	Pack. Unit
gray	285-150	5
blue	285-154	5
light gray ☺	285-950	5



Technical Data

Ratings per	IEC/EN 60947-7-1
Rated voltage (III / 3)	1000 V
Rated surge voltage (III / 3)	8 kV
Rated current	150 A
Approval	600 V, 150 A ; 600 V, 150 A

Connection Data

Connection technology	POWER CAGE CLAMP
Solid conductor	10 ... 50 mm ² / 8 ... 1/0 AWG
Fine-stranded conductor	10 ... 70 mm ² / 8 ... 2/0 AWG
Strip length	30 mm / 1.18 inch
Terminal block width	20 mm / 0.787 inch
Module width	
Insulation material	Polyamide 66 (PA 66)
Note:	only on DIN 35 x 15 rail

Accessories (Selection)

Adjacent jumper, insulated, I _N 150 A	gray	285-450	275
WMB Inline, plain, 1,500 WMB markers (5 mm) per reel, 5 ... 5.2 mm stretchable	white	2009-115	780
WMB Multi marking system, white, 10 strips with 10 markers per card, 5 ... 5.2 mm stretchable	plain	793-5501	780
Marking strip, plain, 11 mm wide, 50 m reel	white	2009-110	783
Marker carrier, for 35 / 50 / 95 mm ² POWER CAGE CLAMP	gray	285-442	783
Width 10.4 mm			
Protective warning marker, with black high-voltage symbol, for 5 terminal blocks			

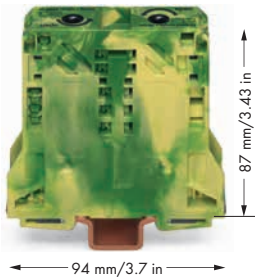
Accessories (jumpers, etc.), see page 275

Carrier rails and tools, see Section 13

Appropriate marking system, WMB/WMB Inline/marketing strips, see Full Line Catalog, Volume 6

Information on hazardous locations, see Section 14

Approvals and corresponding ratings, visit www.wago.com

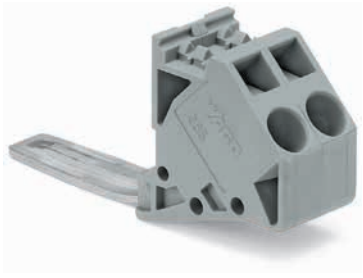


2-conductor ground terminal block		
Color	Item No.	Pack. Unit
green-yellow	285-157	5
green-yellow	285-157/999-950	5



IEC/EN 60947-7-2
POWER CAGE CLAMP
10 ... 50 mm ² / 8 ... 1/0 AWG
10 ... 70 mm ² / 8 ... 2/0 AWG
30 mm / 1.18 inch
20 mm / 0.787 inch
Polyamide 66 (PA 66)
only on DIN 35 x 15 rail; 2.3 mm thick

	Item No.	Page
gray	285-450	275
white	2009-115	780
plain	793-5501	780
white	2009-110	783
gray	285-442	783



Power tap, for 50 mm ² high-current terminal blocks		
Color	Item No.	Pack. Unit
gray	285-447	5

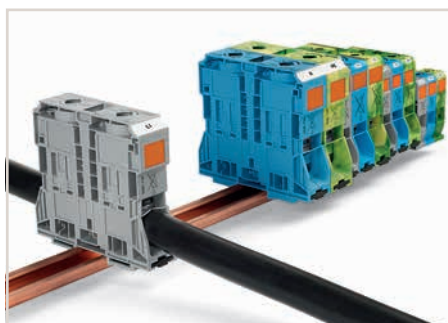


IEC/EN 60947-7-1
1000 V
8 kV
41 A
600 V, 30 A ; 600 V, 30 A
CAGE CLAMP®
0.2 ... 6 mm ² / 24 ... 10 AWG
0.2 ... 6 mm ² / 24 ... 10 AWG
12 ... 13 mm / 0.47 ... 0.51 inch
16 mm / 0.63 inch

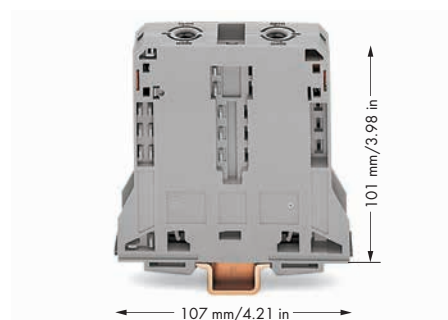
	Item No.	Page
plain	793-5501	780
yellow	282-415	275

High-Current, Through/Ground Conductor and Ex Terminal Blocks

95 mm², 285 Series



Rail-mount terminal blocks with an Ex mark are suitable for Ex e II applications.
 25 ... 95 mm² / 4 ... 4/0 AWG
 880 V, 211 A
 1 jumper, 211 A
 2 ... 4 jumpers, 175 A
 35 ... 70 mm² / 2 ... 2/0 AWG ground conductor terminal blocks



2-conductor through terminal block

Color	Item No.	Pack. Unit
gray	285-195	5
blue	285-194	5
light gray ☺	285-995	5



Technical Data

Ratings per	IEC/EN 60947-7-1
Rated voltage (III / 3)	1000 V
Rated surge voltage (III / 3)	8 kV
Rated current	232 A
Approval	600 V, 115 A ; 600 V, 115 A

Connection Data

Connection technology	POWER CAGE CLAMP
Solid conductor	25 ... 95 mm ² / 4 ... 4/0 AWG
Fine-stranded conductor	

Connection Data (2)

Solid conductor (2)	
Fine-stranded conductor (2)	

Strip length	35 mm / 1.38 inch
Terminal block width	25 mm / 0.984 inch
Module width	
Insulation material	Polyamide 66 (PA 66)

Note:

only on DIN 35 x 15 rail

Accessories (Selection)

Adjacent jumper, insulated, I _n 232 A	
WMB Inline, plain, 1,500 WMB markers (5 mm) per reel, 5 ... 5.2 mm stretchable	
WMB Multi marking system, white, 10 strips with 10 markers per card, 5 ... 5.2 mm stretchable	
Marking strip, plain, 11 mm wide, 50 m reel	
Marker carrier, for 35 / 50 / 95 mm ² POWER CAGE CLAMP	
Width 10.4 mm	
Protective warning marker, with black high-voltage symbol, for 5 terminal blocks	

	Item No.	Page
gray	285-495	276
white	2009-115	780
plain	793-5501	780
white	2009-110	783
gray	285-442	783

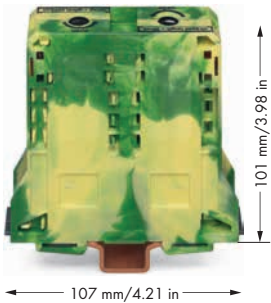
Accessories (jumpers, etc.), see page 276

Carrier rails and tools, see Section 13

Appropriate marking system, WMB/WMB Inline/marketing strips, see Full Line Catalog, Volume 6

Information on hazardous locations, see Section 14

Approvals and corresponding ratings, visit www.wago.com

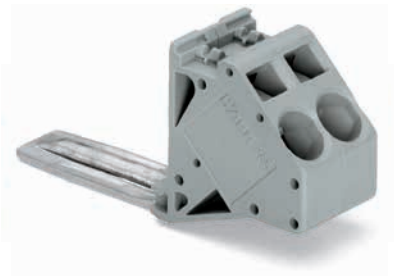


2-conductor ground terminal block		
Color	Item No.	Pack. Unit
green-yellow	285-197	5
green-yellow	285-197/999-950	5



IEC/EN 60947-7-2
POWER CAGE CLAMP
25 ... 95 mm ² / 4 ... 3/0 AWG
35 mm / 1.38 inch
25 mm / 0.984 inch
Polyamide 66 (PA 66)
only on DIN 35 x 15 rail; 2.3 mm thick, copper

	Item No.	Page
gray	285-495	276
white	2009-115	780
plain	793-5501	780
white	2009-110	783
gray	285-442	783



Power tap, for 95 mm ² high-current terminal blocks		
Color	Item No.	Pack. Unit
gray	285-407	5

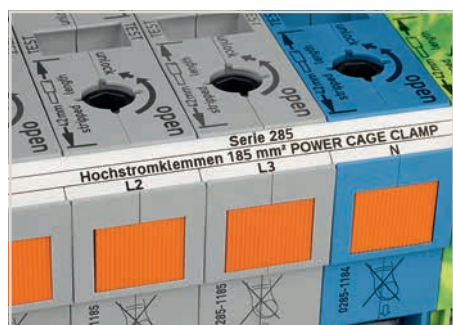


IEC/EN 60947-7-1
1000 V
8 kV
57 A
600 V, 50 A
CAGE CLAMP®
0.2 ... 10 mm ² / 24 ... 8 AWG
0.2 ... 10 mm ² / 24 ... 8 AWG
0.2 ... 16 mm ² / 24 ... 8 AWG
0.2 ... 16 mm ² / 24 ... 8 AWG
12 ... 13 mm / 0.47 ... 0.51 inch
20 mm / 0.787 inch
Polyamide 66 (PA 66)

	Item No.	Page
plain	793-5501	780
yellow	284-415	276

High-Current, Through and Ground Conductor Terminal Blocks

185 mm², 285 Series

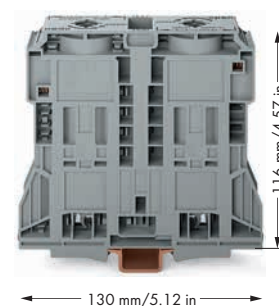


In addition to WMB markers, marking strips can be directly applied to 185 mm² (350 kcmil) high-current terminal blocks.



Tapping directly into the power supply.

Rail-mount terminal blocks with an Ex mark are suitable for Ex e II applications. 800 V, 101 A



2-conductor through terminal block

Color	Item No.	Pack. Unit
gray	285-1185	5
blue	285-1184	5



Technical Data

Ratings per	IEC/EN 60947-7-1
Voltage type	AC/DC
Rated voltage (III / 3)	1000 V
Rated surge voltage (III / 3)	12 kV
Voltage type (2)	DC
Rated voltage (III / 3) (2)	1500 V
Rated surge voltage (III / 3) (2)	12 kV
Rated current	353 A
Approval	1000 V, 310 A®

Connection Data

Connection technology	POWER CAGE CLAMP
Solid conductor	50 ... 185 mm ² / 1/0 AWG ... 350 kcmil
Stranded conductor	50 ... 185 mm ² / 1/0 AWG ... 350 kcmil
Fine-stranded conductor	50 ... 185 mm ² / 1/0 AWG ... 350 kcmil
Fine-stranded conductor with insulated ferrule	50 ... 150 mm ² / 1/0 AWG ... 300 kcmil, 45 mm
Fine-stranded conductor with uninsulated ferrule	50 ... 185 mm ² / 1/0 AWG ... 350 kcmil

Connection Data (2)

Solid conductor (2)	
Fine-stranded conductor (2)	
Strip length	45 ... 47 mm / 1.77 ... 1.85 inch
Terminal block width	32 mm / 1.26 inch
Module width	
Insulation material	Polyamide 66 (PA 66)

Note:

only on DIN 35 x 15 rail

Accessories (Selection)

Adjacent jumper, insulated, I _n 309 A
WMB Inline, plain, 1,500 WMB markers (5 mm) per reel, 5 ... 5.2 mm stretchable
WMB Multi marking system, white, 10 strips with 10 markers per card, 5 ... 5.2 mm stretchable
Marking strip, plain, 11 mm wide, 50 m reel
Protective warning marker, with black high-voltage symbol, for 5 terminal blocks

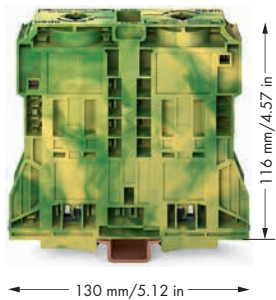
	Item No.	Page
gray	285-1171	277
white	2009-115	780
plain	793-5501	780
white	2009-110	783

Accessories (jumpers, etc.), see page 277

Carrier rails and tools, see Section 13

Appropriate marking system, WMB/WMB Inline/marketing strips, see Full Line Catalog, Volume 6

Approvals and corresponding ratings, visit www.wago.com



2-conductor ground terminal block		
Color	Item No.	Pack. Unit
● green-yellow	285-1187	5



Power tap, for 95 mm² high-current terminal blocks		
Color	Item No.	Pack. Unit
● gray	285-1175	5



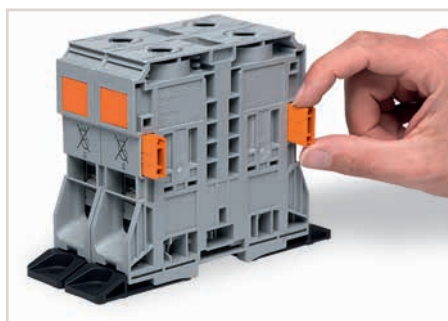
IEC/EN 60947-7-2
POWER CAGE CLAMP
50 ... 120 mm² / 1/0 AWG ... 250 kcmil
50 ... 120 mm² / 1/0 AWG ... 250 kcmil
50 ... 120 mm² / 1/0 AWG ... 250 kcmil
50 ... 120 mm² / 1/0 AWG ... 250 kcmil, 45 mm
50 ... 120 mm² / 1/0 AWG ... 250 kcmil
45 ... 47 mm / 1.77 ... 1.85 inch
32 mm / 1.26 inch
Polyamide 66 (PA 66)
only on DIN 35 x 15 rail; 2.3 mm thick, copper

	Item No.	Page
gray	285-1171	277
white	2009-115	780
plain	793-5501	780
white	2009-110	783

IEC/EN 60947-7-1
1000 V
8 kV
57 A
CAGE CLAMP®
0.2 ... 10 mm² / 24 ... 8 AWG
0.2 ... 10 mm² / 24 ... 8 AWG
0.2 ... 16 mm² / 24 ... 8 AWG
0.2 ... 16 mm² / 24 ... 8 AWG
12 ... 13 mm / 0.47 ... 0.51 inch
20 mm / 0.787 inch
Polyamide 66 (PA 66)

	Item No.	Page
plain	793-5501	780
yellow	284-415	277

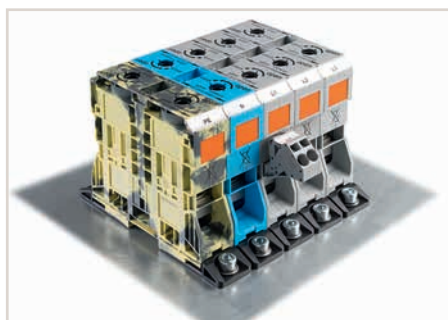
High-Current, Through Terminal Blocks with Screw Flanges 185 mm², 285 Series



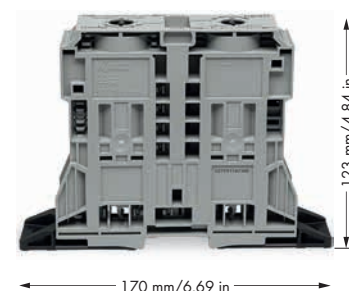
Optionally, insert block-to-block connector (285-1179) into housing slot.



Align and snap high-current, through terminal blocks together.



Secure the terminal block to a mounting plate using two M8 cylinder-head screws and appropriate washers.



2-conductor through terminal block with screw flanges

Color	Item No.	Pack. Unit
gray	285-1161	4
blue	285-1164	4

Technical Data

Ratings per	IEC/EN 60947-7-1
Voltage type	AC/DC
Rated voltage (III / 3)	1000 V
Rated surge voltage (III / 3)	12 kV
Voltage type (2)	DC
Rated voltage (III / 3) (2)	1500 V
Rated surge voltage (III / 3) (2)	12 kV
Rated current	353 A

Connection Data

Solid conductor	50 ... 185 mm ² / 1/0 AWG ... 350 kcmil
Stranded conductor	50 ... 185 mm ² / 1/0 AWG ... 350 kcmil
Fine-stranded conductor	50 ... 185 mm ² / 1/0 AWG ... 350 kcmil
Fine-stranded conductor with insulated ferrule	50 ... 150 mm ² / 1/0 AWG ... 300 kcmil, 45 mm
Fine-stranded conductor with uninsulated ferrule	50 ... 185 mm ² / 1/0 AWG ... 350 kcmil
Strip length	45 ... 47 mm / 1.77 ... 1.85 inch
Terminal block width	32 mm / 1.26 inch
Insulation material	Polyamide 66 (PA 66)
Note:	only on DIN 35 x 15 rail

Accessories (Selection)

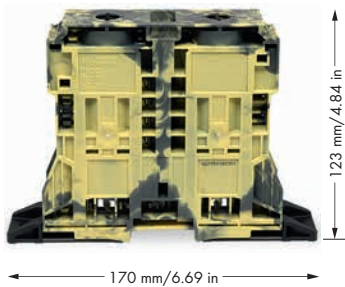
Adjacent jumper, insulated, I _n 309 A
Block-to-block connector, for 185 mm ² high-current terminal blocks
WMB Inline, plain, 1,500 WMB markers (5 mm) per reel, 5 ... 5.2 mm stretchable
WMB Multi marking system, white, 10 strips with 10 markers per card, 5 ... 5.2 mm stretchable
Marking strip, plain, 11 mm wide, 50 m reel

	Item No.	Page
gray	285-1171	277
orange	285-1179	277
white	2009-115	780
plain	793-5501	780
white	2009-110	783

Accessories (jumpers, etc.), see page 277

Appropriate marking system, WMB/WMB Inline/marketing strips, see Full Line Catalog, Volume 6

Approvals and corresponding ratings, visit www.wago.com



2-conductor ground terminal block with screw flanges		
Color	Item No.	Pack. Unit
dark gray/yellow	285-1167	4

IEC/EN 60947-7-2
AC/DC
1000 V
12 kV
DC
1500 V
12 kV
353 A
50 ... 185 mm² / 1/0 AWG ... 350 kcmil
50 ... 185 mm² / 1/0 AWG ... 350 kcmil
50 ... 185 mm² / 1/0 AWG ... 350 kcmil
50 ... 150 mm² / 1/0 AWG ... 300 kcmil, 45 mm
50 ... 185 mm² / 1/0 AWG ... 350 kcmil
45 ... 47 mm / 1.77 ... 1.85 inch
32 mm / 1.26 inch
Polyamide 66 (PA 66)
only on DIN 35 x 15 rail; 2.3 mm thick, copper

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