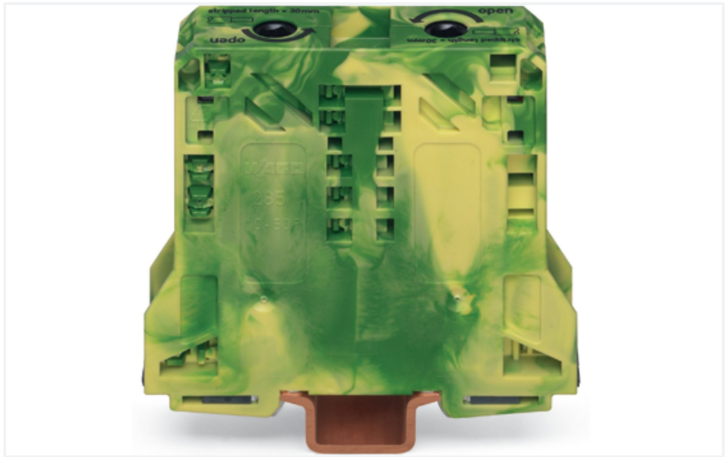
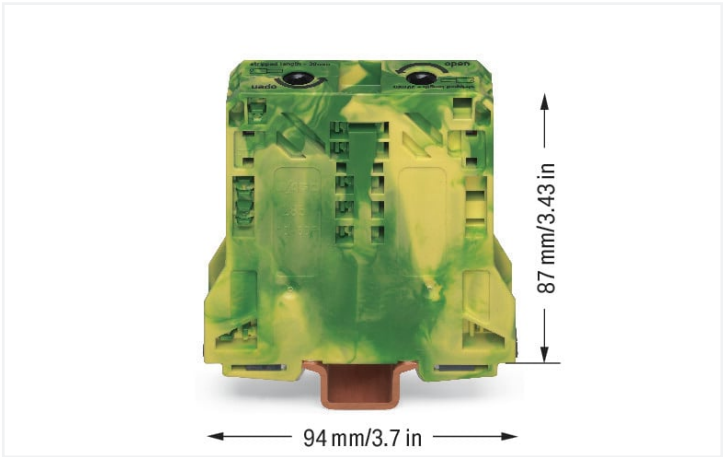


Data Sheet | Item Number: 285-157

2-conductor ground terminal block; 50 mm²; lateral marker slots; only for DIN 35 x 15 rail; 2.3 mm thick; copper; POWER CAGE CLAMP; 50,00 mm²; green-yellow

<https://www.wago.com/285-157>



Color: ■ green-yellow

Ground terminal block, 285 Series, green-yellow

Connecting conductors is quick and easy with this ground terminal block (item number 285-157). Conductors can only be connected to this ground terminal block if their strip length is 30 mm. Featuring conductor terminals along with POWER CAGE CLAMP, this product outperforms the competition. Our POWER CAGE CLAMP connection technology is the perfect choice when it comes to securely connecting large conductor cross-sections. This universal connector is reliable and maintenance-free. Unlike other connections methods, you do not need to crimp the ferrule or use a torque wrench. This makes it nice and easy to use. This ground terminal block is suitable for conductor cross sections ranging from 10 mm² to 50 mm². It has one level. You can connect a single potential using the two clamping points. The green-yellow housing is made of polyamide (PA66) for insulation. These high-current terminal blocks are mounted using DIN-rails 35 x 15..

Connection data			
Clamping units	2	Connection 1	
Total number of potentials	1	Connection technology	POWER CAGE CLAMP
Number of levels	1	Actuation type	T-wrench; 8 mm
Number of jumper slots	2	Connectable conductor materials	Copper
		Nominal cross-section	50 mm ²
		Solid conductor	10 ... 50 mm ² / 8 ... 1/0 AWG
		Stranded conductor	10 ... 50 mm ² / 8 ... 1/0 AWG
		Fine-stranded conductor	10 ... 70 mm ² / 8 ... 2/0 AWG
		Fine-stranded conductor; with insulated ferrule	10 ... 50 mm ² / 8 ... 1/0 AWG
		Fine-stranded conductor; with uninsulated ferrule	10 ... 50 mm ² / 8 ... 1/0 AWG
		Strip length	30 mm / 1.18 inches
		Wiring direction	Side-entry wiring

Physical data	
Width	20 mm / 0.787 inches
Height	94 mm / 3.701 inches
Depth from upper-edge of DIN-rail	87 mm / 3.425 inches



Mechanical data	
Mounting type	DIN-rail 35 x 15
Mounting (note)	only suitable for DIN 35 x 15 rail
Marking level	Side marking

Material data	
Note (material data)	Information on material specifications can be found here
Color	green-yellow
Material group	I
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	1.986 MJ
Weight	186.5 g

Environmental requirements	
Processing temperature	-35 ... +85 °C
Continuous operating temperature	-60 ... +105 °C
Environmental Testing (Environmental Conditions)	
Test specification Railway applications – Rolling stock – Electronic equipment	DIN EN 50155 (VDE 0115-200):2022-06
Test procedure Railway applications – Rolling stock equipment – Shock and vibration tests	DIN EN 61373 (VDE 0115-0106):2011-04
Spectrum/Installation location	Service life test, Category 1, Class A/B
Function test with noise-like vibration	Test passed according to Section 8 of the standard
Frequency	f ₁ = 5 Hz to f ₂ = 150 Hz f ₁ = 5 Hz to f ₂ = 150 Hz
Acceleration	0.101g (highest test level used for all axes) 0.572g (highest test level used for all axes) 5g (highest test level used for all axes)
Test duration per axis	10 min. 5 h
Test directions	X, Y and Z axes X, Y and Z axes X, Y and Z axes
Monitoring for contact faults/interruptions	Passed
Voltage drop measurement before and after each axis	Passed
Simulated service life test through increased levels of noise-like vibration	Test passed according to Section 9 of the standard
Extended test scope: Monitoring for contact faults/interruptions	Passed Passed
Extended test scope: Voltage drop measurement before and after each axis	Passed Passed
Shock test	Test passed according to Section 10 of the standard
Shock form	Half sine
Shock duration	30 ms
Number of shocks per axis	3 pos. und 3 neg.
Vibration and shock stress for rolling stock equipment	Passed



Commercial data		
Product Group	1 (Rail Mounted Terminal Blocks)	
eCl@ss 10.0	27-14-11-41	
eCl@ss 9.0	27-14-11-41	
ETIM 9.0	EC000901	
ETIM 8.0	EC000901	
PU (SPU)	5 pcs	
Packaging type	Box	
Country of origin	PL	
GTIN	4045454507435	
Customs tariff number	85369010000	

Environmental Product Compliance		
RoHS Compliance Status	Compliant, No Exemption	

Approvals / Certificates		
General approvals		Declarations of conformity and manufacturer's declarations
Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60947	NTR NL-7707
CSA DEKRA Certification B.V.	C22.2 No. 158	154112
KEMA/KEUR DEKRA Certification B.V.	EN 60947	71-105562
UL Underwriters Laboratories Inc.	UL 1059	E45172
Approval	Standard	Certificate Name
EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
Railway WAGO GmbH & Co. KG	-	Z00004420.000
UK-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-

Approvals for hazardous areas		
Approval	Standard	Certificate Name
AEx Underwriters Laboratories Inc.	-	E185892 (AEx eb II C resp. Ex eb II C)

Downloads	
Environmental Product Compliance	
Compliance Search	
Environmental Product Compliance 285-157	



Documentation				
Additional Information			Bid Text	
Technical Section	pdf	2246.92 KB	↓	
			285-157	19.02.2019
			xml	3.13 KB
			↓	
			285-157	04.01.2018
			doc	23.50 KB
			↓	

CAD/CAE-Data	
CAD data	CAE data
2D/3D Models 285-157	EPLAN Data Portal 285-157
↓	↓
	WSCAD Universe 285-157
	↓
	ZUKEN Portal 285-157
	↓

1 Compatible Products
1.1 Optional Accessories
1.1.1 Cover
1.1.1.1 Cover



Item No.: 285-441
Finger guard; touchproof cover protects unused conductor entries and jumper slots; for 50 mm² high-current tbs; yellow

1.1.2 Current and voltage tap
1.1.2.1 Current and voltage tap



Item No.: 855-501/150-000
Current and voltage tap up to 50 mm²; Primary rated current: 150 A; Secondary rated current: 1 A; Rated power: 0.2 VA; Accuracy class: 0.5; fused

1.1.3 DIN-rail

1.1.3.1 Mounting accessories



Item No.: 210-198
Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; copper-colored

1.1.4 Ferrule

1.1.4.1 Ferrule



Item No.: 216-424
Ferrule; Sleeve for 35 mm² / AWG 2; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92; silver-colored



Item No.: 216-425
Ferrule; Sleeve for 50 mm² / AWG 1; uninsulated; electro-tin plated; electrolytic copper; acc. to DIN 46228, Part 1/08.92

1.1.5 Installation

1.1.5.1 Mounting accessories



Item No.: 285-448
Fixing element; for 50 mm² high-current terminal blocks; orange



Item No.: 249-197
Screwless end stop; 14 mm wide; for DIN-rail 35 x 15 and 35 x 7.5; gray

1.1.6 Jumper

1.1.6.1 Jumper



Item No.: 285-450
Jumper; insulated; gray

1.1.7 Marking

1.1.7.1 Group marker carrier



Item No.: 249-105
Group marker carrier; gray



1.1.7.2 Marker



[Item No.: 793-5501/000-006](#)
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; blue



[Item No.: 793-5501/000-014](#)
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; brown



[Item No.: 793-5501/000-007](#)
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; gray



[Item No.: 793-5501/000-023](#)
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; green



[Item No.: 793-5501/000-017](#)
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; light green



[Item No.: 793-5501/000-012](#)
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; orange



[Item No.: 793-5501/000-005](#)
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; red



[Item No.: 793-5501/000-024](#)
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; violet



[Item No.: 793-5501](#)
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; white



[Item No.: 793-5501/000-002](#)
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; yellow



[Item No.: 793-501/000-006](#)
WMB marking card; as card; not stretchable; plain; snap-on type; blue



[Item No.: 793-501/000-007](#)
WMB marking card; as card; not stretchable; plain; snap-on type; gray



[Item No.: 793-501/000-023](#)
WMB marking card; as card; not stretchable; plain; snap-on type; green



[Item No.: 793-501/000-017](#)
WMB marking card; as card; not stretchable; plain; snap-on type; light green



[Item No.: 793-501/000-012](#)
WMB marking card; as card; not stretchable; plain; snap-on type; orange



[Item No.: 793-501/000-005](#)
WMB marking card; as card; not stretchable; plain; snap-on type; red



[Item No.: 793-501/000-024](#)
WMB marking card; as card; not stretchable; plain; snap-on type; violet



[Item No.: 793-501](#)
WMB marking card; as card; not stretchable; plain; snap-on type; white



[Item No.: 793-501/000-002](#)
WMB marking card; as card; not stretchable; plain; snap-on type; yellow



[Item No.: 2009-115/000-006](#)
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue



[Item No.: 2009-115/000-007](#)
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray



[Item No.: 2009-115/000-023](#)
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green



[Item No.: 2009-115/000-017](#)
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; light green



[Item No.: 2009-115/000-012](#)
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange



[Item No.: 2009-115/000-005](#)
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; red



[Item No.: 2009-115/000-024](#)
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet



[Item No.: 2009-115](#)
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white



[Item No.: 2009-115/000-002](#)
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow

1.1.7.3 Marker carrier



[Item No.: 285-442](#)
Adaptor; gray

1.1.8 Power tap

1.1.8.1 Power tap



[Item No.: 285-447](#)
Power tap; for 50 mm² high-current tbs; Module width 16 mm; gray

1.1.9 Protective warning marker

1.1.9.1 Cover



Item No.: 285-440
Protective warning marker; with high-voltage symbol, black; yellow



Item No.: 285-449
Protective warning marker; yellow

1.1.10 Tool

1.1.10.1 Operating tool



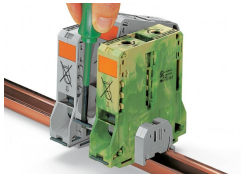
Item No.: 285-172
Allen wrench; with a partially insulated shaft; green



Item No.: 285-173
Allen wrench; with a partially insulated shaft; with anti-rotation protection; green

Installation Notes

Installation



Removing a terminal block from the assembly (to the left or to the right).



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 DIN-rail.

Conductor termination

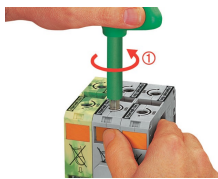


For the optimal clamping force:

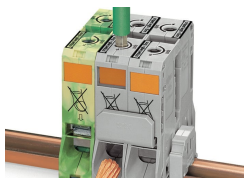
- Bend conductor
- Cut conductor to length (conductor end must be straight)
- Strip conductor



Always observe the on-unit printed strip length guide!



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

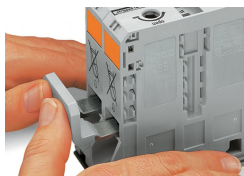


Conductor termination – step 2:
Insert a stripped conductor into the clamping unit until it hits the backstop. Hold in this position.

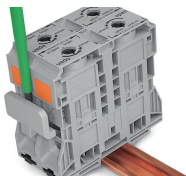


Conductor termination – step 3:
A short counter-clockwise rotation releases the tab. When unlocked, the T-wrench rotates clockwise, securely clamping the conductor.

Commoning



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

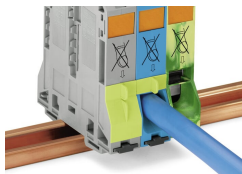


Removing jumper via operating tool.

Cover

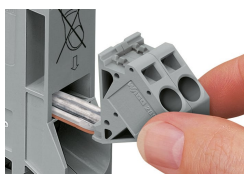


Protective warning marker may indicate: Notice: Power is still on even after switching off the main switch!

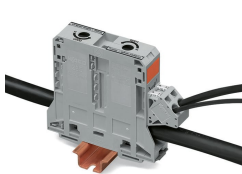


Yellow, detachable finger guards provide touch-proof safety by shielding jumper contact slots and/or unused conductor entries.

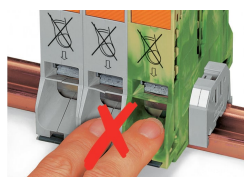
Power tap



Easily and consistently tap directly into the power supply. Insert the unwired tap before opening the clamping unit.



Security

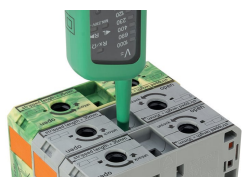


Risk of Injury!
Do not insert fingers in the conductor entry!

Testing

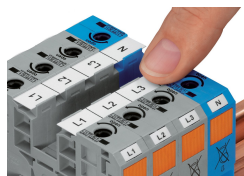


Testing via touch-proof 4 mm Ø test plugs (not available from WAGO, but offered by industry suppliers such as, Multi-Contact Deutschland GmbH).

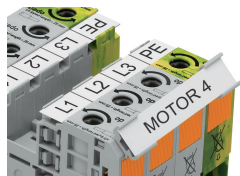


Testing
Voltage measurements can be performed, e.g., using a 2-pole voltage tester (Item No. 206-707).

Marking



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



Marker carrier (Item No. 285-442) for marking strips (Item No. 2009-110) or 2 WMB markers for 285-13x, 285-15x and 285-19x Terminal Blocks