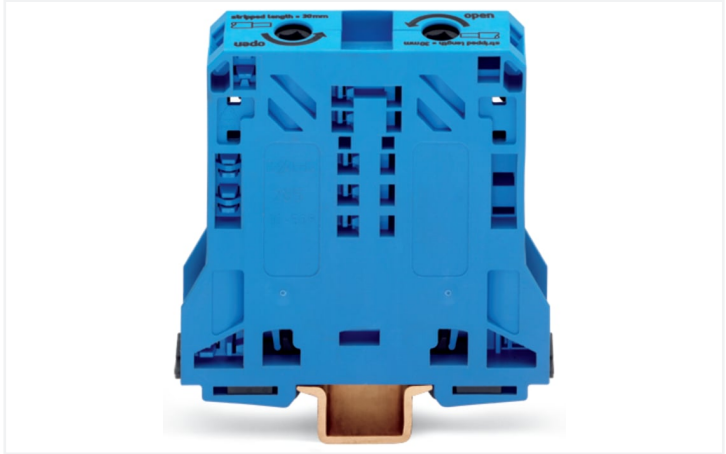
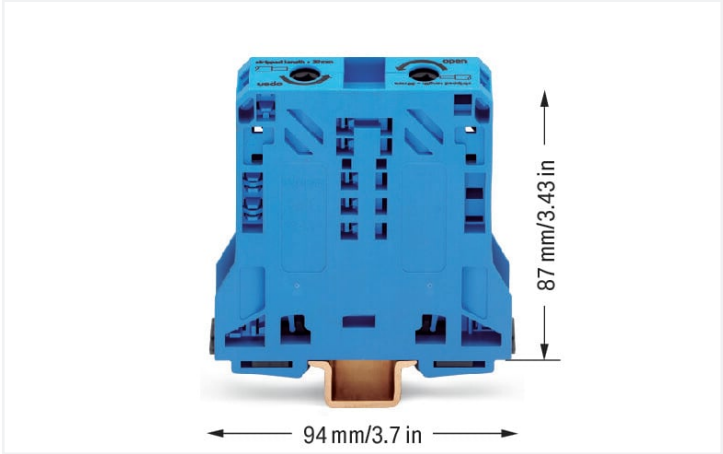




Color: ■ blue

Electrical data				
Ratings per		IEC/EN 60947-7-1		
Overvoltage category		III	III	II
Pollution degree		3	2	2
Nominal voltage		1000 V	-	-
Rated surge voltage		8 kV	-	-
Rated current		150 A	-	-
Approvals per		UL 1059		
Use group		B	C	D
Rated voltage		600 V	600 V	-
Rated current		150 A	150 A	-
Approvals per		CSA 22.2 No 158		
Use group		B	C	D
Rated voltage		600 V	600 V	-
Rated current		150 A	-	-
Power Loss				
Power loss, per pole (potential)		4.725 W		
Rated current I _N for specified power loss		150 A		
Resistance value for specified, current-dependent power loss		0.0001 Ω		

Connection data		
Clamping units	2	
Total number of potentials	1	
Number of levels	1	
Number of jumper slots	2	
Connection 1		
Connection technology		POWER CAGE CLAMP
Actuation type		T-wrench; 8 mm
Connectable conductor materials		Copper
Nominal cross-section		50 mm²
Solid conductor		10 ... 50 mm² / 8 ... 1/0 AWG
Stranded conductor		10 ... 50 mm² / 8 ... 1/0 AWG
Fine-stranded conductor		10 ... 70 mm² / 8 ... 2/0 AWG
Fine-stranded conductor; with insulated ferrule		10 ... 50 mm² / 8 ... 1/0 AWG
Fine-stranded conductor; with uninsulated ferrule		10 ... 50 mm² / 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	blue
Material group	I
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	2.168 MJ
Weight	159.1 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.



Environmental Testing (Environmental Conditions)

Vibration and shock stress for rolling stock equipment Passed

Commercial data

Product Group	1 (Rail Mounted Terminal Blocks)
eCl@ss 10.0	27-14-11-20
eCl@ss 9.0	27-14-11-20
ETIM 9.0	EC000897
ETIM 8.0	EC000897
PU (SPU)	5 pcs
Packaging type	Box
Country of origin	PL
GTIN	4045454507428
Customs tariff number	85369010000

Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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Approvals / Certificates

General approvals



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

Declarations of conformity and manufacturer's declarations



Approval	Standard	Certificate Name
EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
Railway WAGO GmbH & Co. KG	-	Z00004420.000
UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Approvals for marine applications



Approval	Standard	Certificate Name
ABS American Bureau of Ship-ping	EN 60947	20-HG1941090-PDA
DNV GL Det Norske Veritas, Ger-manischer Lloyd	-	TAE00001V2



Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 285-154 

Documentation

Additional Information
Technical Section pdf 2246.92 KB 

Bid Text
285-154 19.02.2019 xml 3.25 KB 
285-154 04.01.2018 doc 23.50 KB 

CAD/CAE-Data

CAD data
2D/3D Models 285-154 

CAE data
EPLAN Data Portal 285-154 
WSCAD Universe 285-154 
ZUKEN Portal 285-154 

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



Item No.: 210-508
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715; silver-colored



Item No.: 210-197
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715; silver-colored



Item No.: 210-506
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715; silver-colored



Item No.: 210-114
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715; silver-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; gastight crimped; 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



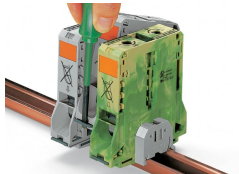
Item No.: 285-173
Allen wrench; with a partially insulated shaft; with anti-rotation protection; green

Installation Notes

Installation



Snapping a terminal block onto DIN-rail (to the left or to the right).



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

Conductor termination

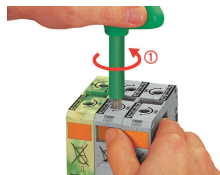


For the optimal clamping force:

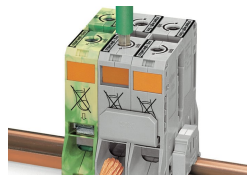
- Bend conductor
- Cut conductor to length (conductor end must be straight)
- Strip conductor



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.

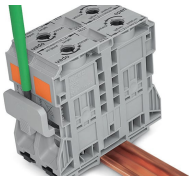
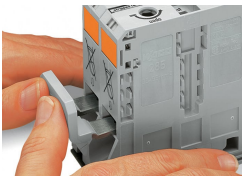


Conductor termination – step 2:
Insert a stripped conductor into the clamping unit until it hits the backstop. Hold in this position.



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

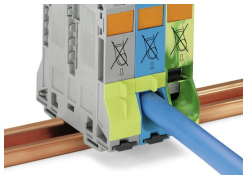
Commoning



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.

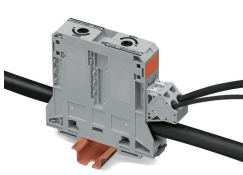
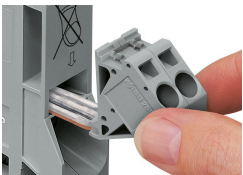
Cover



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

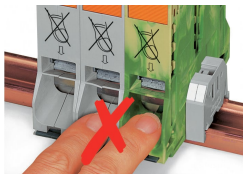
Yellow, detachable finger guards provide touch-proof safety by shielding jumper contact slots and/or unused conductor entries.

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!

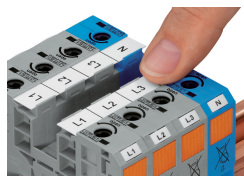
Testing



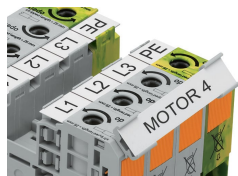
Testing via touch-proof 4 mm Ø test plugs (not available from WAGO, but offered by industry suppliers such as, Multi-Contact Deutschland GmbH).

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