

Data Sheet | Item Number: 285-143

2-conductor through terminal block; 50 mm²; suitable for Ex e II applications; lateral marker slots; with fixing flanges; POWER CAGE CLAMP; 50,00 mm²; light gray

<https://www.wago.com/285-143>



Color: ■ light gray



High-current terminal block, 285 Series, light gray

Our through terminal block (item number 285-143) ensures effortless electrical installations. Ensure that the strip lengths are 32 mm when connecting conductors to this through terminal block. This product incorporates conductor terminals and utilizes POWER CAGE CLAMP. The POWER CAGE CLAMP is perfect for connecting large conductor cross-sections. This universal connector is both reliable and maintenance-free. What's more, you can use it to connect all types of conductors and the clamping point can be locked open, making it easier to use. You do not need to use a torque wrench or prepare the conductor. For example, crimping ferrules is not necessary. Depending on the type of conductor, this through terminal block is designed for conductor cross sections ranging from 10 mm² to 50 mm².

This product is designed for specific Ex applications (please refer to the product datasheet).

Electrical data

Ratings per IEC/EN

Ratings per IEC/EN 60947-7-1

Ratings per UL

Approvals per UL 1059

Rated voltage UL (Use Group B) 600 V

Rated current UL (Use Group B) 150 A

Rated voltage UL (Use Group C) 600 V

Rated current UL (Use Group C) 150 A

Ratings per CSA

Approvals per	CSA 22.2 No 158
Rated voltage CSA (Use Group B)	600 V
Rated current CSA (Use Group B)	150 A
Rated voltage CSA (Use Group D)	600 V
Rated current CSA (Use Group D)	150 A

Power Loss

Power loss, per pole (potential)	4.725 W
Rated current I_N for power loss specification	150 A
Resistance value for specified, current-dependent power loss	0.0001 Ω

Ex information

Reference to hazardous areas	See "Downloads – Documentation – Additional Information: Technical Section; Technical Explications"
Ratings per	ATEX: PTB 98 ATEX 3134 U (Ex eb IIC Gb)
Rated voltage EN (Ex e II)	880 V
Rated current (Ex e II)	134 A

General information

Wiring direction	Side-entry wiring
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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 mm ²
Solid conductor	10 ... 50 mm ² / 8 ... 1/0 AWG
Stranded conductor	10 ... 70 mm ² / 8 ... 2/0 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	32 mm / 1.26 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	Mounting flange
Mounting type	Panel mounting
Marking level	Side marking

Material data

Note (material data)	Information on material specifications can be found here
Color	light gray
Material group	I
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	2.036 MJ
Weight	164.6 g

Environmental requirements

Processing temperature	-35 ... +85 °C
Continuous operating temperature	-60 ... +105 °C

Commercial data

PU (SPU)	5 pcs
Packaging type	Box
Country of origin	PL
GTIN	4066966619942
Customs tariff number	85369010000

Product Classification

UNSPSC	39121410
ETIM 9.0	EC000897
ETIM 10.0	EC000897
ECCN	NO US CLASSIFICATION

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 CSA Group	C22.2	1151144
KEMA/KEUR DEKRA Certification B.V.	EN 60947	71-105562

Approvals for marine applications



Approval	Standard	Certificate Name
ABS American Bureau of Ship-ping	EN 60947	24-0152298-PDA

Approvals for hazardous areas



Approval	Standard	Certificate Name
AEx Underwriters Laboratories Inc.	-	E185892 (AEx eb II C resp. Ex eb II C)
ATEX Physikalisch Technische Bundesanstalt	EN 60079-0	PTB 98 ATEX 3134 U (II 2 G Ex eb IIC Gb or I M 2 Ex eb I Mb)
IECEX Physikalisch Technische Bundesanstalt	IEC 60079-0	IECEX PTB 16.0001U (Ex eb IIC Gb or Ex eb I Mb)

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 285-143



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 Ferrule

1.1.3.1 Ferrule



[Item No.: 216-3427](#)

Ferrule; Sleeve for 25 mm² / AWG 4; un-insulated; electro-tin plated; electrolytic copper; acc. to DIN 46228, Part 1/08.92



[Item No.: 216-3112](#)

Ferrule; Sleeve for 35 mm² / AWG 2; un-insulated; electro-tin plated; electrolytic copper; acc. to DIN 46228, Part 1/08.92



[Item No.: 216-424](#)

Ferrule; Sleeve for 35 mm² / AWG 2; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92; silver-colored



[Item No.: 216-3113](#)

Ferrule; Sleeve for 50 mm² / AWG 1; un-insulated; electro-tin plated; electrolytic copper; acc. to DIN 46228, Part 1/08.92



[Item No.: 216-425](#)

Ferrule; Sleeve for 50 mm² / AWG 1; un-insulated; electro-tin plated; electrolytic copper; acc. to DIN 46228, Part 1/08.92

1.1.4 Installation

1.1.4.1 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

1.1.5 Jumper

1.1.5.1 Jumper



Item No.: 285-450

Jumper; insulated; gray

1.1.6 Marking

1.1.6.1 Group marker carrier



Item No.: 249-105

Group marker carrier; gray

1.1.6.2 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

1.1.6.2 Marker



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

1.1.6.3 Marker carrier



Item No.: 285-442

Adaptor; gray

1.1.7 Power tap

1.1.7.1 Power tap



Item No.: 285-447

Power tap; for 50 mm² high-current tbs; Module width 16 mm; gray

1.1.8 Protective warning marker

1.1.8.1 Cover



Item No.: 285-440

Protective warning marker; with high-voltage symbol, black; yellow

Item No.: 285-449

Protective warning marker; yellow

1.1.9 Tool

1.1.9.1 Operating tool



Item No.: 285-172

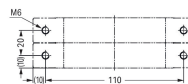
Allen wrench; with a partially insulated shaft; green

Item No.: 285-173

Allen wrench; with a partially insulated shaft; with anti-rotation protection; green

Installation Notes

Installation



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

Optionally, insert block-to-block connector (285-448) into housing slot.

Conductor termination

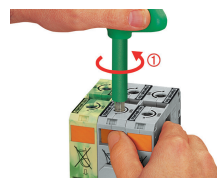


For the optimal clamping force:

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



Always observe the on-unit printed strip length guide!

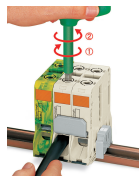


Conductor termination – step 1:

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.

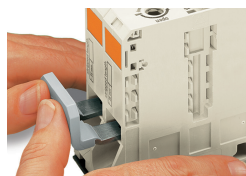


Insert a stripped conductor into the clamping unit until it hits the backstop. Hold in this position.

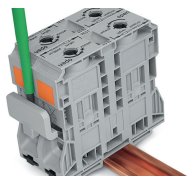


A short counter-clockwise rotation releases the tab. When unlocked, the T-wrench rotates clockwise, securely clamping the conductor.

Commoning

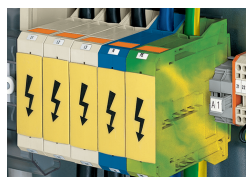


Commoning with an adjacent jumper: insert the jumper above the conductor entry hole – prior to conductor termination. The nominal cross-section remains unchanged.

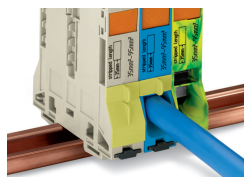


Removing jumper via operating tool.

Cover

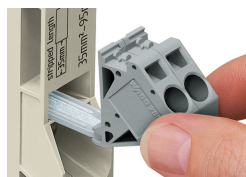


Protective warning marker may indicate: Notice: Power is still on even after switching off the main switch!



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

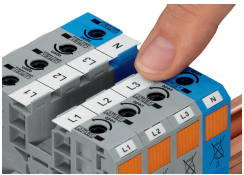


Testing via touch-proof 4 mm Ø test plugs (not available from WAGO, but offered by industry suppliers such as, Multi-Contact Deutschland GmbH).

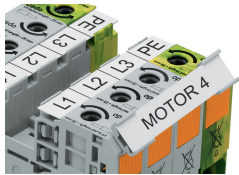


Testing
Voltage measurements can be performed, e.g., using a 2-pole voltage tester (206-707).

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