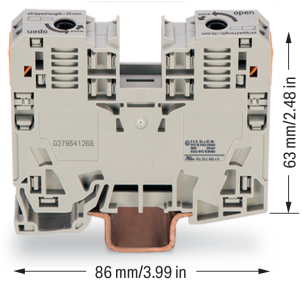
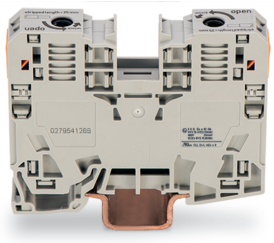
Data Sheet | Item Number: 285-935

2-conductor through terminal block; 35 mm²; suitable for Ex e II applications; lateral marker slots; only for DIN 35 x 15 rail; POWER CAGE CLAMP; 35,00 mm²; light gray

https://www.wago.com/285-935





Color: light gray

High-current terminal block, 285 Series, power cage clamp

Our through terminal block (item number 285-935) makes connections quick and easy. Conductors should only be connected to this through terminal block if their strip length is 25 mm . This product features conductor terminals and utilizes POWER CAGE CLAMP. Our POWER CAGE CLAMP connection technology is the perfect choice for 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 through terminal block is suitable for conductor cross sections ranging from 6 mm² to 35 mm².

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

Electrical data

Ratings per	IEC/EN 60947-7-1		
Overvoltage category	III	III	II
Pollution degree	3	2	2
Nominal voltage	-	-	-
Rated impulse withstand voltage	-	-	-
Rated current	-	-	-

Approvals per	UL 1059		
Use group	B	C	D
Rated voltage	600 V	600 V	-
Rated current	115 A	115 A	-

Approvals per	CSA 22.2 No 158		
Use group	B	C	D
Rated voltage	600 V	-	600 V
Rated current	115 A	-	115 A

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)	101 A
Rated current (Ex e II) with jumper	75 A

Power Loss

Power loss, per pole (potential)	2.6523 W
Rated current I_N for power loss specification	101 A
Resistance value for specified, current-dependent power loss	0.00026 Ω

General information

Wiring direction	Side-entry wiring

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	Operating tool
Connectable conductor materials	Copper
Nominal cross-section	35 mm²
Solid conductor	6 … 35 mm² / 8 … 2 AWG
Stranded conductor	6 … 35 mm² / 8 … 2 AWG
Fine-stranded conductor	6 … 35 mm² / 8 … 2 AWG
Fine-stranded conductor; with insulated ferrule	6 … 35 mm² / 8 … 2 AWG
Fine-stranded conductor; with uninsulated ferrule	6 … 35 mm² / 8 … 2 AWG
Strip length	25 mm / 0.98 inches
Wiring direction	Side-entry wiring

Physical data

Width	16 mm / 0.63 inches
Height	86 mm / 3.386 inches
Depth from upper-edge of DIN-rail	63 mm / 2.48 inches

Mechanical data

Mounting type	DIN-35 x 15 rail
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	light gray
Material group	I
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	1.094 MJ
Weight	79.2 g

Continued on next page

Environmental requirements

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

Commercial data

PU (SPU)	15 pcs
Packaging type	Box
Country of origin	PL
GTIN	4066966253085
Customs tariff number	85369010000

Product Classification

UNSPSC	39121410
eCl@ss 10.0	27-14-11-20
eCl@ss 9.0	27-14-11-20
ETIM 9.0	EC000897
ETIM 10.0	EC000897
ECCN	NO US CLASSIFICATION

Environmental Product Compliance

RoHS Compliance Status	Compliant,No Exemption

Approvals / Certificates

General approvals

Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60947	NTR NL-7707
CSA CSA Group	C22.2	1151144
UL Underwriters Laboratories Inc.	UL 1059	20190731-E45172

Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
ATEX-Attestation of Conformity WAGO GmbH & Co. KG	-	-
EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Approvals for hazardous areas

Approval	Standard	Certificate Name
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)
CCC CNEX	GB/T 3836.3	2020312313000177 (Ex eb IIC Gb, Ex eb I Mb)
IECEx Physikalisch Technische Bundesanstalt	IEC 60079-0	IECEx PTB 16.0001U (Ex eb IIC Gb or Ex eb I Mb)

Continued on next page

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 285-935

Documentation

Bid Text

285-935	19.02.2019	xml 3.22 KB
285-935	04.01.2018	doc 23.50 KB

CAD/CAE-Data

CAD data

2D/3D Models 285-935

CAE data

EPLAN Data Portal 285-935

1 Compatible Products

1.1 Optional Accessories

1.1.1 Cover

1.1.1.1 Cover



Item No.: 285-421
Finger guard; touchproof cover protects unused conductor entries; for 35 mm² high-current tbs; yellow

1.1.2 DIN-rail

1.1.2.1 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



Item No.: 210-118
Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored

Continued on next page

1.1.3 Ferrule

1.1.3.1 Ferrule



Item No.: 216-413
Ferrule; Sleeve for 25 mm² / AWG 4; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92; silver-colored



Item No.: 216-414
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

1.1.4 Installation

1.1.4.1 Mounting accessories



Item No.: 249-117
Screwless end stop; 10 mm wide; for DIN-rail 35 x 15 and 35 x 7.5; gray



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.: 285-435
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

Continued on next page

1.1.6.2 Marker



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

1.1.6.3 Marker carrier



Item No.: 285-442
Adaptor; gray

1.1.6.4 Marking strip



Item No.: 2009-110
Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white

1.1.7 Power tap

1.1.7.1 Power tap



Item No.: 285-427
Power tap; for 35 mm² high-current tbs; Module width 8 mm; 6,00 mm²; gray

Item No.: 283-407
Power tap; with 500 mm cable; for 16 mm² (283/783 Series) and 35 mm²; gray

1.1.8 Protective warning marker

1.1.8.1 Cover



Item No.: 285-420
Protective warning marker; with high-voltage symbol, black; yellow

Continued on next page

1.1.9 Tool

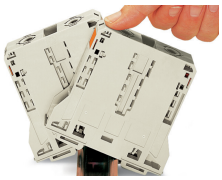
1.1.9.1 Operating tool



Item No.: 210-721
Operating tool; Blade: 5.5 x 0.8 mm; with a partially insulated shaft; multicoloured

Installation Notes

Installation

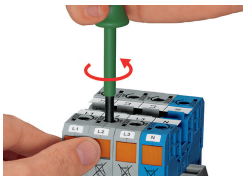


Snapping a terminal block onto DIN-rail (to the left or to the right).

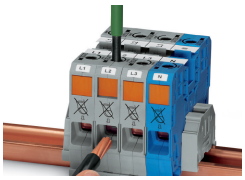


Removing a terminal block from the assembly (to the left or to the right).

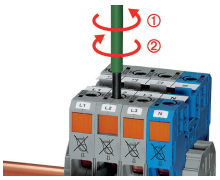
Conductor termination



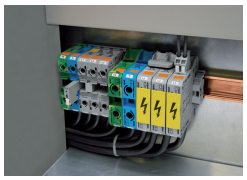
Conductor termination – step 1:
Rotate the operating tool (5.5 mm blade width) counter-clockwise. Next, push in the orange locking tab. The clamp is locked open for hands-free wiring.



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

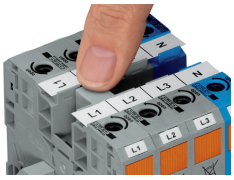


Conductor termination – step 3:
A short counter-clockwise rotation closes the clamp, securing the conductor . When unlocked, allow the operating tool to rotate clockwise to securely terminate the conductor.

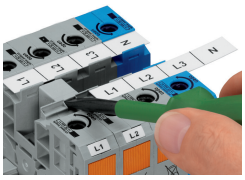


Side-entry wiring means that even larger conductors, which have limited flexibility, can be easily connected.

Commoning

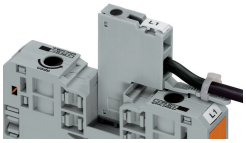


Commoning adjacent terminal blocks using a centrally positioned push-in jumper.

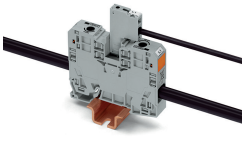


Slide the marking strip laterally to remove the jumper.

Power tap



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



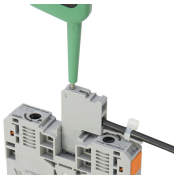
Power tap inserted in a jumper contact slot



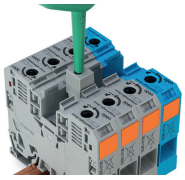
Always push voltage tap (Item No. 283-407) down into the terminal block until fully inserted!

Continued on next page

Testing

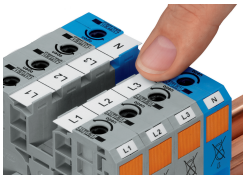


Testing
Voltage measurements can be performed, e. g., using a 2-pole voltage tester (Item No. 206-707).

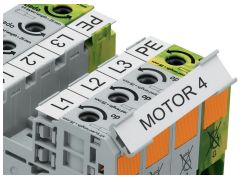


Testing with test plug adapter (Item No. 283-404).

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