2-conductor through terminal block;  $185 \, \text{mm}^2$ ; suitable for Ex e II applications; lateral marker slots; only for DIN  $35 \, x \, 15$  rail; POWER CAGE CLAMP;  $185,00 \, \text{mm}^2$ ; light gray



https://www.wago.com/285-1189



Color: ■ light gray

Similar to illustration

# Through terminal block, 285 Series, t-wrench und 8 mm

Our through terminal block (item number 285-1189) is the perfect way to connect conductors quickly and securely. Strip lengths must be between 45 mm and 47 mm when connecting conductors to this through terminal block. Featuring conductor terminals along with POWER CAGE CLAMP, this product is highly versatile. The POWER CAGE CLAMP is a reliable, maintenance-free, and universal way to connect large conductor cross-sections. You can also use it with all conductor types. The clamping point can be locked open and you do not need to use a torque wrench or prepare the conductor in any way, e.g., by crimping the ferrule. This through terminal block is suitable for conductor cross sections ranging from 50 mm² to 185 mm². It has one level. The single potential can connect using the two clamping points The light gray housing is made of polyamide (PA66) for insulation. These high-current terminal blocks are mounted using DIN-rails 35 x 15.. 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 surge voltage	-	-	-	
Rated current	-	-	-	

Approvals per		UL 1059	
Use group	В	С	D
Rated voltage	600 V	600 V	-
Rated current	310 A	310 A	-

Approvals per	CSA 22.2 No 158		
Use group	В	С	D
Rated voltage	1000 V	-	1000 V
Rated current	310 A	-	310 A

Ex information	
Reference 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)	1000 V
Rated current (Ex e II)	250 A
Rated current (Ex e II) with jumper	236 A

Power Loss	
Power loss, per pole (potential)	11.2148 W
Rated current $I_N$ for specified power loss	353 A
Resistance value for specified, current- dependent power loss	9e-005 Ω



on data				
ig units	2		Connection 1	
nber of potentials	1		Connection technology	POWER CAGE CLAMP
flevels	1		Actuation type	T-wrench; 8 mm
Number of jumper slots 2	Connectable conductor materials	Copper		
	Nominal cross-section	185 mm² / 350 kcmil		
		Solid conductor	50 185 mm² / 1/0 AWG 350 kcmi	
	Stranded conductor	50 185 mm² / 1/0 AWG 350 kcmi		
			Fine-stranded conductor	50 185 mm² / 1/0 AWG 350 kcmi
	Fine-stranded conductor; with insulated ferrule	50 150 mm² / 1/0 AWG 300 kcmi		
	Fine-stranded conductor; with uninsulated ferrule	50 185 mm² / 1/0 AWG 350 kcmi		
	Strip length	45 47 mm / 1.77 1.85 inches		
			Wiring direction	Side-entry wiring

Physical data	
Width	32 mm / 1.26 inches
Height	130 mm / 5.118 inches
Depth from upper-edge of DIN-rail	116 mm / 4.567 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)	
	<u>Information on material specifications can be found here</u>
Color	light gray
Material group	1
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	VO
Fire load	1.544 MJ
Weight	534.9 q

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

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	DE
GTIN	4055143067089
Customs tariff number	85369010000



# **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 7965
CSA DEKRA Certification B.V.	C22.2 No. 158	154112
KEMA/KEUR DEKRA Certification B.V.	EN 60947	71-126013
UL Underwriters Laboratories	UL 1059	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 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

# 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)
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)

# Downloads

# **Environmental Product Compliance**

# Compliance Search

Environmental Product Compliance 285-1189



https://www.wago.com/285-1189



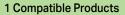
#### **Documentation**

# **Additional Information**

**Technical Section** 

pdf 2246.92 KB

.



#### 1.1 Optional Accessories

#### 1.1.1 Cover

# 1.1.1.1 Cover



#### Item No.: 285-1178

Finger guard; touchproof cover protects unused conductor entries and jumper slots; for 185 mm² high-current terminal blocks; 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.: 210-118

Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored

#### 1.1.3 Installation

# 1.1.3.1 Mounting accessories





# <u>Item No.: 285-1179</u>

Fixing element; for 185 mm² high-current terminal blocks; orange

#### Item No.: 249-197

Screwless end stop; 14 mm wide; for DINrail 35 x 15 and 35 x 7.5; gray

### 1.1.4 Jumper

# 1.1.4.1 Jumper



Item No.: 285-1171 Jumper; insulated; gray

https://www.wago.com/285-1189



#### 1.1.5 Marking

#### 1.1.5.1 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.: 793-5501/000-017

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

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.: 793-501/000-023

WMB marking card; as card; not stretchable; plain; snap-on type; green



#### Item No.: 793-501/000-024

WMB marking card; as card; not stretchable; plain; snap-on type; violet



#### 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.: 2009-115/000-005

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; red

ces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet

# 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.: 793-5501/000-012

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.: 793-5501/000-002

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.: 793-501/000-017

WMB marking card; as card; not stretchable; plain; snap-on type; light green



WMB marking card; as card; not stretchable; plain; snap-on type; white



# 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.: 2009-115/000-024

WMB-Inline; for Smart Printer; 1500 pie-

#### 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.: 793-5501/000-005

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.: 793-501/000-006

Item No.: 793-501/000-012

Item No.: 793-501/000-002

ble; plain; snap-on type; yellow

Item No.: 2009-115/000-017

snap-on type; light green

Item No.: 2009-115

snap-on type; white

ble; plain; snap-on type; orange

WMB marking card; as card; not stretchable; plain; snap-on type; blue

WMB marking card; as card; not stretcha-

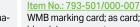
WMB marking card; as card; not stretcha-

WMB-Inline; for Smart Printer; 1500 pie-

ces on roll; stretchable 5 - 5.2 mm; plain;

WMB-Inline; for Smart Printer; 1500 pie-

ces on roll; stretchable 5 - 5.2 mm; plain;



# WMB marking card; as card; not stretcha-

Item No.: 793-5501/000-023

Item No.: 793-5501/000-024

WMB marking card; as card; for terminal

block width 5 - 17.5 mm; stretchable 5 -

WMB marking card; as card; for terminal

block width 5 - 17.5 mm; stretchable 5 -

5.2 mm; plain; snap-on type; violet

5.2 mm; plain; snap-on type; green

ble; plain; snap-on type; gray



#### Item No.: 793-501/000-005

WMB marking card; as card; not stretchable; plain; snap-on type; red



# 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.: 2009-115/000-012

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange



# Item No.: 2009-115/000-002

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow

# 1.1.5.2 Marking strip



# Item No.: 2009-110

Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white

https://www.wago.com/285-1189



# 1.1.6 Power tap

# 1.1.6.1 Power tap



Item No.: 285-1175

Power tap; for 185 mm² high-current terminal blocks; gray

#### 1.1.7 Protective warning marker

#### 1.1.7.1 Cover





Item No.: 285-1177

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

Item No.: 285-1176

Protective warning marker; yellow

# 1.1.8 Tool

# 1.1.8.1 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

Rotate the 1-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.

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#### Conductor termination



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

## 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!

https://www.wago.com/285-1189



#### 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

# Marking



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

Subject to changes. Please also observe the further product documentation!