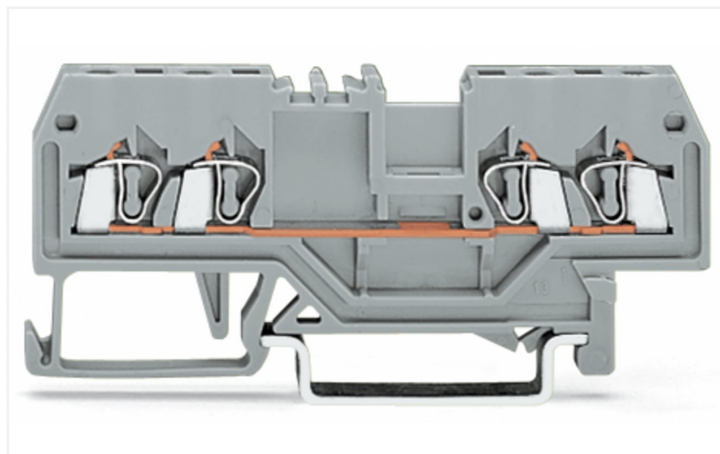
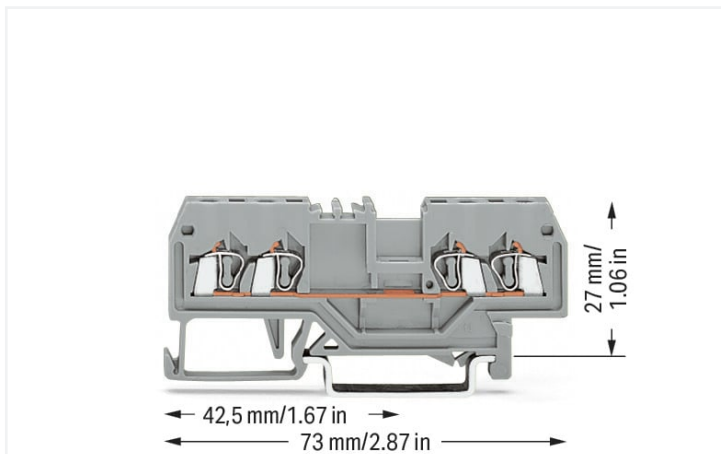


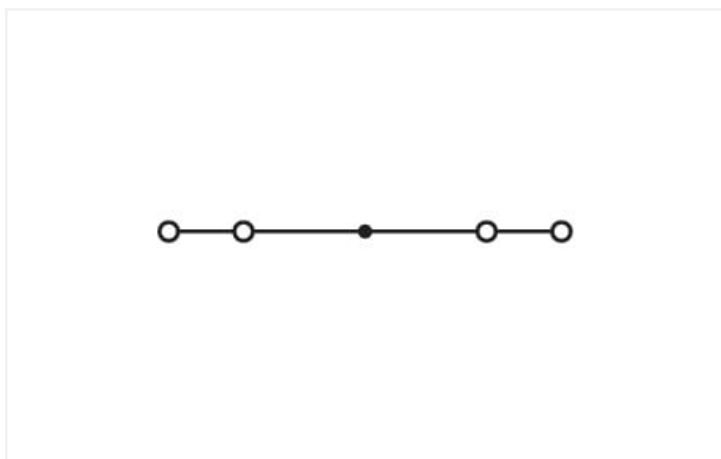
# Data Sheet | Item Number: 279-831

4-conductor through terminal block; 1.5 mm<sup>2</sup>; center marking; for DIN-rail 35 x 15 and 35 x 7.5; CAGE CLAMP®; 1,50 mm<sup>2</sup>; gray

<https://www.wago.com/279-831>



Color: ■ gray



Similar to illustration

Electrical data							
Ratings per	IEC/EN 60947-7-1			Approvals per	UL 1059		
Overvoltage category	III	III	II	Use group	B	C	D
Pollution degree	3	2	2	Rated voltage	-	600 V	-
Nominal voltage	800 V	-	-	Rated current	-	10 A	-
Rated surge voltage	8 kV	-	-				
Rated current	18 A	-	-				
Approvals per	CSA 22.2 No 158			Power Loss			
Use group	B	C	D	Power loss, per pole (potential)	0.5929 W		
Rated voltage	-	600 V	-	Rated current I <sub>N</sub> for specified power loss	18 A		
Rated current	-	10 A	-	Resistance value for specified, current-dependent power loss	0.00183 Ω		

### Connection data

Clamping units	4	<b>Connection 1</b>	
Total number of potentials	1	Connection technology	CAGE CLAMP®
Number of levels	1	Actuation type	Operating tool
		Connectable conductor materials	Copper
		Solid conductor	0.08 ... 1.5 mm <sup>2</sup> / 28 ... 16 AWG
		Fine-stranded conductor	0.08 ... 1.5 mm <sup>2</sup> / 28 ... 16 AWG
		Strip length	8 ... 9 mm / 0.31 ... 0.35 inches
		Wiring direction	Front-entry wiring

### Physical data

Width	4 mm / 0.157 inches
Height	73 mm / 2.874 inches
Depth from upper-edge of DIN-rail	27 mm / 1.063 inches

### Mechanical data

Mounting type	DIN-35 rail
Marking level	Center marking

### Material data

Note (material data)	<a href="#">Information on material specifications can be found here</a>
Color	gray
Material group	I
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.116 MJ
Weight	6.3 g

### 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)	100 pcs
Packaging type	Box
Country of origin	DE
GTIN	4044918520423
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-7081
CSA DEKRA Certification B.V.	C22.2 No. 158	70133738
KEMA/KEUR DEKRA Certification B.V.	EN 60947	2160584.04
UL Underwriters Laboratories Inc.	UL 1059	E45172

Approval	Standard	Certificate Name
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 Shipping	-	20-HG1941090-PDA
BV Bureau Veritas S.A.	EN 60947	07436/F0 BV
DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE00001V2
LR Lloyds Register	EN 60947	91/20112 (E9)

**Downloads**

**Environmental Product Compliance**

<b>Compliance Search</b>
Environmental Product Compliance 279-831 <a href="#">↓</a>

**Documentation**

<b>Additional Information</b>
Technical Section <span style="float: right;">pdf 2246.92 KB</span> <a href="#">↓</a>

<b>Bid Text</b>
279-831 <span style="float: right;">xml 3.19 KB</span> <a href="#">↓</a>
279-831 <span style="float: right;">doc 23.50 KB</span> <a href="#">↓</a>

CAD/CAE-Data

CAD data	CAE data
2D/3D Models 279-831	EPLAN Data Portal 279-831
	WSCAD Universe 279-831
	ZUKEN Portal 279-831

1 Compatible Products

1.1 Required Accessories

1.1.1 End plate

1.1.1.1 End plate

<b>Item No.: 279-344</b> End and intermediate plate; 2 mm thick; gray	<b>Item No.: 279-346</b> End and intermediate plate; 2 mm thick; orange	<b>Item No.: 279-345</b> Separator plate; 2 mm thick; oversized; gray	<b>Item No.: 279-347</b> Separator plate; 2 mm thick; oversized; orange
<b>Item No.: 284-336</b> Step-down cover plate; 1 mm thick; for 4-conductor 279-831, 280-833 and 281-652 terminal blocks; gray	<b>Item No.: 284-346</b> Step-down cover plate; 1 mm thick; for 4-conductor 279-831, 280-833 and 281-652 terminal blocks; orange		

1.2 Optional Accessories

1.2.1 DIN-rail

1.2.1.1 Mounting accessories

<b>Item No.: 210-196</b> Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored	<b>Item No.: 210-198</b> Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; copper-colored	<b>Item No.: 210-508</b> Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715; silver-colored	<b>Item No.: 210-197</b> Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715; silver-colored
<b>Item No.: 210-506</b> Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715; silver-colored	<b>Item No.: 210-114</b> Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored	<b>Item No.: 210-118</b> Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored	<b>Item No.: 210-115</b> Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; \"Hole width 18 mm; silver-colored
<b>Item No.: 210-112</b> Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; \"Hole width 25 mm; silver-colored	<b>Item No.: 210-504</b> Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715; silver-colored	<b>Item No.: 210-113</b> Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored	<b>Item No.: 210-505</b> Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; according to EN 60715; silver-colored

## 1.2.2 End plate

### 1.2.2.1 End plate



**Item No.: 284-334**

Step-down cover plate; 1 mm thick; for 2-, 3- and 4-conductor terminal blocks; gray



**Item No.: 284-344**

Step-down cover plate; 1 mm thick; for 2-, 3- and 4-conductor terminal blocks; orange

## 1.2.3 Ferrule

### 1.2.3.1 Ferrule



**Item No.: 216-301**

Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow



**Item No.: 216-302**

Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise



**Item No.: 216-201**

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; white



**Item No.: 216-101**

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / AWG 22; un-insulated; electro-tin plated; silver-colored



**Item No.: 216-202**

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray



**Item No.: 216-102**

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / AWG 20; un-insulated; electro-tin plated; silver-colored



**Item No.: 216-203**

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; red



**Item No.: 216-103**

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; un-insulated; electro-tin plated

## 1.2.4 Installation

### 1.2.4.1 Cover



**Item No.: 709-153**

Cover; Type 1; suitable for cover carrier, type 1; 1 m long; transparent

### 1.2.4.2 Cover carrier



**Item No.: 709-167**

Cover carrier; Type 1; incl. fixing/retaining screws and knurled nut; suitable for 279 to 282 and 880 Series rail-mounted terminal blocks; suitable for 264 Series miniature rail-mounted terminal blocks; suitable for 270 Series sensor and actuator terminal blocks; gray

### 1.2.4.3 Mounting accessories



**Item No.: 209-106**

Mounting carrier; for isolated mounting on DIN 35 rails; gray



**Item No.: 249-116**

Screwless end stop; 6 mm wide; for DIN-rail 35 x 15 and 35 x 7.5; gray

1.2.5 Insulation stop

1.2.5.1 Insulation stop



[Item No.: 279-470](#)

Insulation stop; 0.08 - 0.2 mm<sup>2</sup> "s" (0.14 mm<sup>2</sup> "f-st"); 5 pieces/strip; white

[Item No.: 279-471](#)

Insulation stop; 0.25 mm<sup>2</sup>; 5 pieces/strip; dark gray

1.2.6 Jumper

1.2.6.1 Jumper



[Item No.: 279-490](#)

Jumper; 10-way; insulated; gray

[Item No.: 279-482](#)

Jumper; 2-way; insulated; gray

[Item No.: 279-492](#)

Jumper; 2-way; insulated; gray

[Item No.: 279-483](#)

Jumper; 3-way; insulated; gray



[Item No.: 279-402](#)

Jumper; insulated; gray

[Item No.: 279-409](#)

Jumper; insulated; gray

[Item No.: 279-422](#)

Jumper; insulated; yellow-green

[Item No.: 284-414](#)

Step-down jumper; from 284/282 to 281/280/279 series; insulated; gray

1.2.7 Marking

1.2.7.1 Double marker carrier



[Item No.: 209-128](#)

Adaptor; gray

1.2.7.2 Group marker carrier



[Item No.: 209-140](#)

Group marker carrier; gray

[Item No.: 209-141](#)

Group marker carrier; gray

[Item No.: 209-142](#)

Group marker carrier; gray

[Item No.: 249-105](#)

Group marker carrier; gray

1.2.7.3 Marker



[Item No.: 793-4501/000-006](#)

WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; blue

[Item No.: 793-4501/000-014](#)

WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; brown

[Item No.: 793-4501/000-007](#)

WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; gray

[Item No.: 793-4501/000-023](#)

WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; green



[Item No.: 793-4501/000-017](#)

WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; light green

[Item No.: 793-4501/000-012](#)

WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; orange

[Item No.: 793-4501/000-005](#)

WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; red

[Item No.: 793-4501/000-024](#)

WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; violet



[Item No.: 793-4501](#)

WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; white

[Item No.: 793-4501/000-002](#)

WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; yellow

[Item No.: 2009-114/000-006](#)

WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; blue

[Item No.: 2009-114/000-007](#)

WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; gray

1.2.7.3 Marker



**Item No.: 2009-114/000-023**

WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; green



**Item No.: 2009-114/000-012**

WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; orange



**Item No.: 2009-114/000-005**

WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; red



**Item No.: 2009-114/000-024**

WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; violet



**Item No.: 2009-114**

WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; white



**Item No.: 2009-114/000-002**

WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; yellow

1.2.8 Protective warning marker

1.2.8.1 Cover



**Item No.: 279-415**

Protective warning marker; 5-pole; with high-voltage symbol, black; yellow

1.2.9 Push-in type wire jumper

1.2.9.1 Jumper



**Item No.: 249-126**

Push-in type wire jumper; 0.75 mm<sup>2</sup>; insulated; 110 mm long; black



**Item No.: 249-123**

Push-in type wire jumper; 0.75 mm<sup>2</sup>; insulated; 180 mm long; black



**Item No.: 249-127**

Push-in type wire jumper; 0.75 mm<sup>2</sup>; insulated; 250 mm long; black



**Item No.: 249-125**

Push-in type wire jumper; insulated; 60 mm long; black

1.2.10 Test and measurement

1.2.10.1 Testing accessories



**Item No.: 280-404**

Test plug adapter; 5 mm wide; for test plug (2.3 mm Ø); suitable for 1.5 mm<sup>2</sup> - 4 mm<sup>2</sup> tbs; gray



**Item No.: 209-170**

Test plug adapter; 8.3 mm wide; for 4 mm Ø test plugs; suitable for 1.5 mm<sup>2</sup> - 10 mm<sup>2</sup> tbs; gray

1.2.11 Tool

1.2.11.1 Operating tool



**Item No.: 210-719**

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft



**Item No.: 210-648**

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; angled; short

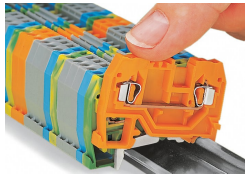


**Item No.: 210-647**

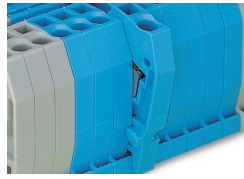
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; multicoloured

## Installation Notes

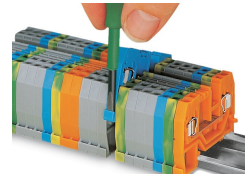
### Installation



Snapping a terminal block onto the DIN-rail.



Quick assembly keys prevent reverse mounting.

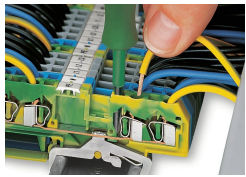


Removing a terminal block from the assembly.

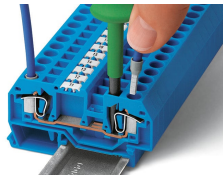


Steel DIN-rails are not suited for PEN (ground and N-conductor) applications per EN 60947-7-2 (VDE 0611, Part 3).

### Conductor termination



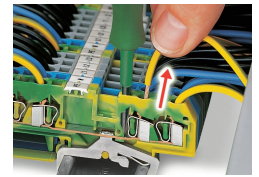
**CAGE CLAMP® connection**  
Inserting a conductor.



**CAGE CLAMP® connection**  
Inserting a conductor.  
With ferruled conductors, it is necessary to use a terminal block one size larger than the conductor's nominal cross-section.

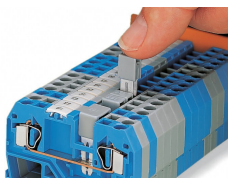


Inserting insulation stops.

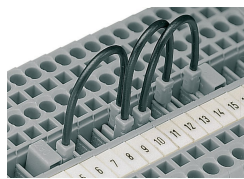


**CAGE CLAMP® connection**  
Removing a solid conductor.

### Commoning



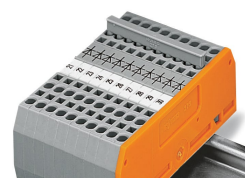
Commoning using an adjacent jumper.  
Push jumper down until fully inserted!



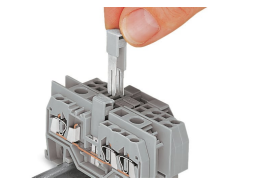
**Push-In Type Wire Jumpers**  
When installing machines or control systems, it is often necessary to make an additional connection between two terminal blocks that are not next to each other on the rail. In such cases, WAGO's touch-proof, push-in type wire jumpers are the ideal solution.

These jumpers are compatible with the following rail-mount terminal blocks:  
- 279 Series (1.5 mm<sup>2</sup>/16 AWG),  
- 280/775/780 Series (2.5 mm<sup>2</sup>/14 AWG)  
- 281/769/776/777/781 and 880 Series (4 mm<sup>2</sup>/12 AWG)  
They are available in three conductor lengths (60, 110 and 250 mm), allowing up to 60 terminal blocks to be commoned depending on their width (see table on the right).

The 280/775/780 and 281/776/777/781 Series Terminal Blocks accept two wire jumpers, allowing the use of commoning chains. Furthermore, the 280/769/775/780/880 and 281/776/777/781 Series allow both wire jumper and adjacent jumper to be simultaneously plugged into a same terminal block.

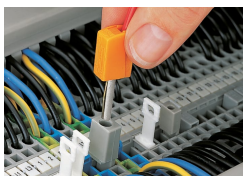


Commoning using comb-style jumper bars:  
Push comb-style jumper bars down until fully inserted.



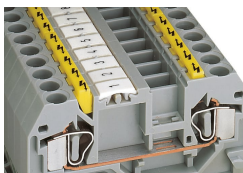
Commoning terminal blocks of different sizes via step-down jumpers.

## Testing



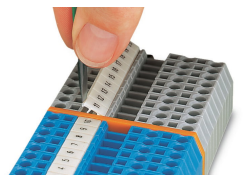
Testing with a test plug.  
Picture shows a test plug adapter  
(209-170).

## Cover



Protective warning markers inserted into  
the operating slots

## Marking



Labeling via WMB Multi Marking System.