

Color:  gray

## Double-deck terminal block, 870 Series, operating tool

Our double-deck terminal block (item number 870-1131) is designed for seamless electrical installations. Pluggable rail-mount terminal blocks are mainly used in switchgear units and control systems (e.g., in railroad technology). They are essentially a combination of rail-mount terminal blocks and pluggable connectors. You can also pre-assemble installations thanks to the variable wiring system. This saves both time and money during manufacture, installation, operation, and maintenance. The double-deck terminal block also functions as a through terminal block. Our pluggable rail-mount terminal block is rated for 500 V and is designed for use with a rated current of up to 16 A. Strip lengths must be between 6 mm and 7 mm when connecting conductors to this double-deck terminal block. This product features conductor terminals and utilizes CAGE CLAMP®. Our CAGE CLAMP® connection offers a safe and maintenance-free way to connect all types of conductors. You do not need to prepare the conductor in any way, such as crimping ferrules. This double-deck terminal block is suitable for conductor cross sections ranging from 0.08 mm<sup>2</sup> to 2.5 mm<sup>2</sup>. It features two levels and six clamping points that you can use to connect two potentials. The gray housing is made of polyamide (PA66) for insulation. This pluggable rail-mount terminal block is operated with an operating tool. These pluggable rail-mount terminal blocks are mounted using DIN-35 rails.. The front-entry wiring means you can connect copper conductors.

## Notes

Safety Information

Max. insulation diameter: 4.4 mm

Safety information 2

2-conductor female plugs cannot be used.

## Electrical data

## Ratings per IEC/EN

Nominal voltage (III/3)	500 V
Rated impulse withstand voltage (III / 3)	6 kV
Rated current	16 A
Legend (ratings)	(III / 3) ▲ Overvoltage category III / Pollution degree 3

## Power Loss

Power loss, per pole (potential)	0.3405 W
Rated current I <sub>N</sub> for specified power loss	16 A
Resistance value for specified, current-dependent power loss	0.00133 Ω

**Connection data**

Clamping units	6
Total number of potentials	2
Number of levels	2

**Connection 1**

Connection technology	CAGE CLAMP®
Actuation type	Operating tool
Connectable conductor materials	Copper
Solid conductor	0.08 ... 2.5 mm <sup>2</sup> / 28 ... 12 AWG
Fine-stranded conductor	0.08 ... 4 mm <sup>2</sup> / 28 ... 12 AWG
Fine-stranded conductor; with insulated ferrule	0.08 ... 1.5 mm <sup>2</sup> / 28 ... 14 AWG
Strip length	6 ... 7 mm / 0.24 ... 0.28 inches
Wiring direction	Front-entry wiring

**Physical data**

Width	5 mm / 0.197 inches
Height	91 mm / 3.583 inches
Depth from upper-edge of DIN-rail	39.8 mm / 1.567 inches

**Mechanical data**

Potential marking	L/L
Design	horizontal type
Mounting type	DIN-35 rail
Marking level	Side 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	0.22 MJ
Weight	13.5 g

**Environmental requirements**

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

**Commercial data**

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)	50 pcs
Packaging type	Box
Country of origin	DE
GTIN	4055143343251
Customs tariff number	85366990990

## 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 7468
CCA DEKRA Certification B.V.	EN 60947	2189801.01
cURus UL International Germany GmbH	UL 1059	E45172

## Declarations of conformity and manufacturer's declarations

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

## Downloads

## Environmental Product Compliance

## Compliance Search

Environmental Product  
Compliance 870-1131

## Documentation

## Additional Information

Technical Section

pdf  
2246.92 KB

## Bid Text

870-1131

19.02.2019

xml  
3.31 KB

870-1131

04.01.2018

doc  
25.00 KB

## CAD/CAE-Data

## CAD data

2D/3D Models  
870-1131

## CAE data

EPLAN Data Portal  
870-1131ZUKEN Portal  
870-1131

## 1 Compatible Products

## 1.1 System counterpart

## 1.1.1 Female connector/socket

[Item No.: 769-101/022-000](#)1-conductor female connector, angled; CAGE CLAMP®, 4 mm<sup>2</sup>; Pin spacing 5 mm; 1-pole; coding finger; 4,00 mm<sup>2</sup>; gray[Item No.: 769-110/145-000](#)1-conductor female connector; CAGE CLAMP®, 4 mm<sup>2</sup>; Pin spacing 5 mm; 10-pole; coding finger; Centered locking levers; Strain relief plate; 4,00 mm<sup>2</sup>; gray[Item No.: 769-111/145-000](#)1-conductor female connector; CAGE CLAMP®, 4 mm<sup>2</sup>; Pin spacing 5 mm; 11-pole; coding finger; Centered locking levers; Strain relief plate; 4,00 mm<sup>2</sup>; gray[Item No.: 769-112/145-000](#)1-conductor female connector; CAGE CLAMP®, 4 mm<sup>2</sup>; Pin spacing 5 mm; 12-pole; coding finger; Centered locking levers; Strain relief plate; 4,00 mm<sup>2</sup>; gray[Item No.: 769-113/145-000](#)1-conductor female connector; CAGE CLAMP®, 4 mm<sup>2</sup>; Pin spacing 5 mm; 13-pole; coding finger; Centered locking levers; Strain relief plate; 4,00 mm<sup>2</sup>; gray[Item No.: 769-114/145-000](#)1-conductor female connector; CAGE CLAMP®, 4 mm<sup>2</sup>; Pin spacing 5 mm; 14-pole; coding finger; Centered locking levers; Strain relief plate; 4,00 mm<sup>2</sup>; gray[Item No.: 769-115/145-000](#)1-conductor female connector; CAGE CLAMP®, 4 mm<sup>2</sup>; Pin spacing 5 mm; 15-pole; coding finger; Centered locking levers; Strain relief plate; 4,00 mm<sup>2</sup>; gray[Item No.: 769-101](#)1-conductor female connector; CAGE CLAMP®, 4 mm<sup>2</sup>; Pin spacing 5 mm; 1-pole; coding finger; 4,00 mm<sup>2</sup>; gray[Item No.: 769-101/141-000](#)1-conductor female connector; CAGE CLAMP®, 4 mm<sup>2</sup>; Pin spacing 5 mm; 1-pole; coding finger; Centered locking levers; Strain relief plate; 4,00 mm<sup>2</sup>; gray[Item No.: 769-102/142-000](#)1-conductor female connector; CAGE CLAMP®, 4 mm<sup>2</sup>; Pin spacing 5 mm; 2-pole; coding finger; Centered locking levers; Strain relief plate; 4,00 mm<sup>2</sup>; gray[Item No.: 769-103/142-000](#)1-conductor female connector; CAGE CLAMP®, 4 mm<sup>2</sup>; Pin spacing 5 mm; 3-pole; coding finger; Centered locking levers; Strain relief plate; 4,00 mm<sup>2</sup>; gray[Item No.: 769-104/143-000](#)1-conductor female connector; CAGE CLAMP®, 4 mm<sup>2</sup>; Pin spacing 5 mm; 4-pole; coding finger; Centered locking levers; Strain relief plate; 4,00 mm<sup>2</sup>; gray[Item No.: 769-105/143-000](#)1-conductor female connector; CAGE CLAMP®, 4 mm<sup>2</sup>; Pin spacing 5 mm; 5-pole; coding finger; Centered locking levers; Strain relief plate; 4,00 mm<sup>2</sup>; gray[Item No.: 769-106/144-000](#)1-conductor female connector; CAGE CLAMP®, 4 mm<sup>2</sup>; Pin spacing 5 mm; 6-pole; coding finger; Centered locking levers; Strain relief plate; 4,00 mm<sup>2</sup>; gray[Item No.: 769-107/144-000](#)1-conductor female connector; CAGE CLAMP®, 4 mm<sup>2</sup>; Pin spacing 5 mm; 7-pole; coding finger; Centered locking levers; Strain relief plate; 4,00 mm<sup>2</sup>; gray[Item No.: 769-108/144-000](#)1-conductor female connector; CAGE CLAMP®, 4 mm<sup>2</sup>; Pin spacing 5 mm; 8-pole; coding finger; Centered locking levers; Strain relief plate; 4,00 mm<sup>2</sup>; gray[Item No.: 769-109/144-000](#)1-conductor female connector; CAGE CLAMP®, 4 mm<sup>2</sup>; Pin spacing 5 mm; 9-pole; coding finger; Centered locking levers; Strain relief plate; 4,00 mm<sup>2</sup>; gray

## 1.2 Required Accessories

### 1.2.1 End plate



#### [Item No.: 870-1148](#)

End and intermediate plate; 1 mm thick; gray

#### [Item No.: 870-1149](#)

End and intermediate plate; 1 mm thick; orange

## 1.3 Optional Accessories

### 1.3.1 Coding



#### [Item No.: 769-435](#)

Coding pin; for coding of female plugs; for carrier terminal blocks / male connectors; orange

### 1.3.2 Cover

#### 1.3.2.1 Cover



#### [Item No.: 769-438](#)

Pin cover; with marker slot for miniature WSB; gray

#### [Item No.: 769-439](#)

Pin cover; with marker slot for miniature WSB; orange

## 1.3.3 DIN-rail

### 1.3.3.1 Mounting accessories



#### [Item No.: 210-196](#)

Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored

#### [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

#### [Item No.: 210-115](#)

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



#### [Item No.: 210-112](#)

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

#### [Item No.: 210-504](#)

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715; silver-colored

#### [Item No.: 210-113](#)

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored

#### [Item No.: 210-505](#)

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; according to EN 60715; silver-colored

### 1.3.4 Ferrule

#### 1.3.4.1 Ferrule

			
<a href="#">Item No.: 216-321</a> Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow	<a href="#">Item No.: 216-131</a> Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated; silver-colored	<a href="#">Item No.: 216-322</a> Ferrule; Sleeve for 0.34 mm <sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise	<a href="#">Item No.: 216-132</a> Ferrule; Sleeve for 0.34 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated
			
<a href="#">Item No.: 216-221</a> Ferrule; Sleeve for 0.5 mm <sup>2</sup> / 20 AWG; insulated; electro-tin plated; white	<a href="#">Item No.: 216-121</a> Ferrule; Sleeve for 0.5 mm <sup>2</sup> / AWG 22; uninsulated; electro-tin plated; silver-colored	<a href="#">Item No.: 216-222</a> Ferrule; Sleeve for 0.75 mm <sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray	<a href="#">Item No.: 216-122</a> Ferrule; Sleeve for 0.75 mm <sup>2</sup> / AWG 20; uninsulated; electro-tin plated; silver-colored
			
<a href="#">Item No.: 216-223</a> Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; insulated; electro-tin plated; red	<a href="#">Item No.: 216-123</a> Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; uninsulated; electro-tin plated; silver-colored	<a href="#">Item No.: 216-224</a> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated; black	<a href="#">Item No.: 216-124</a> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; uninsulated; electro-tin plated

### 1.3.5 Installation

#### 1.3.5.1 Mounting accessories

	
<a href="#">Item No.: 209-106</a> Mounting carrier; for isolated mounting on DIN 35 rails; gray	<a href="#">Item No.: 249-116</a> Screwless end stop; 6 mm wide; for DIN-rail 35 x 15 and 35 x 7.5; gray

### 1.3.6 Insulation stop

#### 1.3.6.1 Insulation stop

		
<a href="#">Item No.: 280-470</a> Insulation stop; 0.08 - 0.2 mm <sup>2</sup> "s" (0.14 mm <sup>2</sup> "f-st"); 5 pieces/strip; white	<a href="#">Item No.: 280-471</a> Insulation stop; 0.25 - 0.5 mm <sup>2</sup> ; 5 pieces/strip; light gray	<a href="#">Item No.: 280-472</a> Insulation stop; 0.75 - 1 mm <sup>2</sup> ; 5 pieces/strip; black

### 1.3.7 Jumper

#### 1.3.7.1 Jumper

			
<a href="#">Item No.: 870-405/011-000</a> Jumper; 10-way; insulated; light gray	<a href="#">Item No.: 870-407/011-000</a> Jumper; 2-way; insulated; light gray	<a href="#">Item No.: 870-409/011-000</a> Jumper; 3-way; insulated; light gray	<a href="#">Item No.: 870-406/020-000</a> Delta jumper; insulated; light gray
			
<a href="#">Item No.: 870-410</a> Jumper; 10-way; insulated; light gray	<a href="#">Item No.: 870-402</a> Jumper; 2-way; insulated; light gray	<a href="#">Item No.: 870-403</a> Jumper; 3-way; insulated; light gray	<a href="#">Item No.: 870-404</a> Jumper; 4-way; insulated; light gray
			
<a href="#">Item No.: 870-405</a> Jumper; 5-way; insulated; light gray	<a href="#">Item No.: 870-406</a> Jumper; 6-way; insulated; light gray	<a href="#">Item No.: 870-407</a> Jumper; 7-way; insulated; light gray	<a href="#">Item No.: 870-408</a> Jumper; 8-way; insulated; light gray
			
<a href="#">Item No.: 870-409</a> Jumper; 9-way; insulated; light gray	<a href="#">Item No.: 870-440</a> Jumper; from 1 to 10; insulated; light gray	<a href="#">Item No.: 870-433</a> Jumper; from 1 to 3; insulated; light gray	<a href="#">Item No.: 870-434</a> Jumper; from 1 to 4; insulated; light gray

## 1.3.7.1 Jumper

[Item No.: 870-435](#)

Jumper; from 1 to 5; insulated; light gray

## 1.3.8 Marking

## 1.3.8.1 Group marker carrier

[Item No.: 870-182](#)

Adaptor; gray

[Item No.: 870-183](#)

Adaptor; gray

[Item No.: 870-184](#)

Adaptor; gray

## 1.3.8.2 Marker

[Item No.: 2009-145](#)

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

[Item No.: 248-501](#)

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

[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](#)

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

[Item No.: 2009-115](#)

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

## 1.3.8.3 Marker carrier

[Item No.: 2009-198](#)

Adaptor; gray

## 1.3.9 Protective warning marker

## 1.3.9.1 Cover

[Item No.: 280-405](#)

Protective warning marker; for 5 terminal blocks; with high-voltage symbol, black; yellow

## 1.3.10 Test and measurement

## 1.3.10.1 Testing accessories

[Item No.: 870-427](#)

Spacer module; modular; bridging common terminal blocks; gray

[Item No.: 870-426](#)

Tap-off module; modular; suitable for 870 Series terminal blocks with jumper slots in the current bar; gray

[Item No.: 870-425](#)

Tap-off module; with anti-rotation protection; modular; suitable for 870 Series terminal blocks with jumper slots in the current bar; gray

1.3.11 Tool

1.3.11.1 Operating tool



[Item No.: 210-720](#)

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured