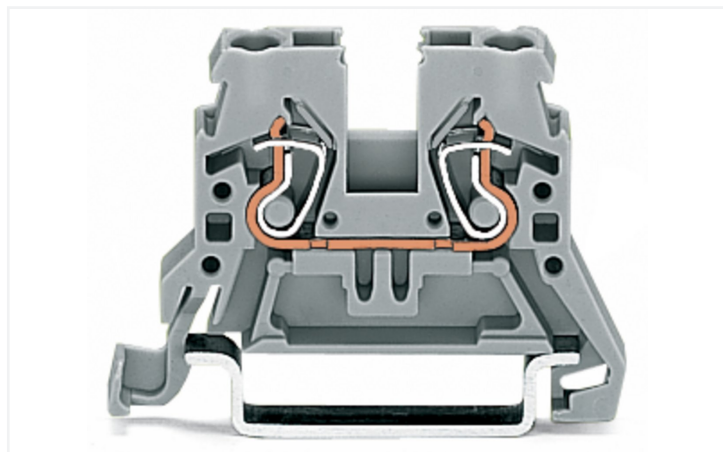


## Data Sheet | Item Number: 870-902

2-conductor through terminal block; 2.5 mm<sup>2</sup>; side and center marking; for DIN-rail 35 x 15 and 35 x 7.5; CAGE CLAMP®; 2,50 mm<sup>2</sup>; orange

<https://www.wago.com/870-902>



Color: ■ orange

Similar to illustration



Similar to illustration

Through terminal block, 870 Series, operating tool

This through terminal block (item number 870-902) streamlines wire connections, making them both quick and easy. Whether for use in industry or building installations, our rail-mount through terminal blocks allow you to quickly and securely connect electrical conductors. They're perfect for either classic through-wiring or distributing potential, depending on the variant. Rated current and voltage are important parameters when selecting a mini rail-mount terminal block, as they determine the product's suitability for different applications. This product has a rated voltage of 500 V and a rated current of 24 A. Conductors can only be connected to this through terminal block if their strip length is between 6 mm and 7 mm. This product incorporates conductor terminals and utilizes CAGE CLAMP®. Our proven universal connection known as CAGE CLAMP® is the industry standard when it comes to connection technology and electrical interconnections. Depending on the type of conductor, this through terminal block is designed for conductor cross sections ranging from 0.08 mm<sup>2</sup> to 2.5 mm<sup>2</sup>. It has one level. The single potential can connect using the two clamping points. The orange housing is made of polyamide (PA66) for insulation. An operating tool is used to operate this mini rail-mount terminal block. These mini rail-mount terminal blocks are mounted using DIN-35 rails. The front-entry wiring makes it possible to connect copper conductors.

### Notes

Safety Information

Max. insulation diameter: 4.4 mm

### Electrical data

Ratings per	IEC/EN 60947-7-1		
Overvoltage category	III	III	II
Pollution degree	3	2	2
Nominal voltage	500 V	-	-
Rated surge voltage	6 kV	-	-
Rated current	24 A	-	-

### Power Loss

Power loss, per pole (potential)	0.7661 W
Rated current I <sub>N</sub> for specified power loss	24 A
Resistance value for specified, current-dependent power loss	0.00133 Ω

### Connection data

Clamping units	2
Total number of potentials	1
Number of levels	1

### 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	44.5 mm / 1.752 inches
Depth from upper-edge of DIN-rail	27.5 mm / 1.083 inches

### Mechanical data

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	orange
Material group	I
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.08 MJ
Weight	4.3 g

### Environmental requirements

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

### Commercial data

Product Group	16 (Rail Mounted Terminal Blocks with CCC)
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	4044918478328
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 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 Ship- ping	-	20-HG1941090-PDA
BV Bureau Veritas S.A.	EN 60947	07436/F0 BV
DNV GL Det Norske Veritas, Ger- manischer Lloyd	-	TAE00001V2
LR Lloyds Register	EN 60947	91/20112 (E9)

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 870-902 <a href="#">↓</a>

Documentation

Additional Information		
Technical Section	pdf 2246.92 KB	<a href="#">↓</a>

Bid Text				
870-902	19.02.2019	xml 3.27 KB	<a href="#">↓</a>	
870-902	31.05.2017	doc 24.50 KB	<a href="#">↓</a>	

CAD/CAE-Data

CAD data
2D/3D Models 870-902 <a href="#">↓</a>

CAE data	
EPLAN Data Portal 870-902	<a href="#">↓</a>
WSCAD Universe 870-902	<a href="#">↓</a>
ZUKEN Portal 870-902	<a href="#">↓</a>

## 1 Compatible Products

### 1.1 Required Accessories

#### 1.1.1 End plate

##### 1.1.1.1 End plate



**Item No.: 870-923**

End and intermediate plate; 2 mm thick; gray

**Item No.: 870-924**

End and intermediate plate; 2 mm thick; orange

### 1.2 Optional Accessories

#### 1.2.1 DIN-rail

##### 1.2.1.1 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

#### 1.2.2 End plate

##### 1.2.2.1 End plate



**Item No.: 870-928**

Separator plate; 2 mm thick; oversized; gray

**Item No.: 870-929**

Separator plate; 2 mm thick; oversized; orange

#### 1.2.3 Ferrule

##### 1.2.3.1 Ferrule



**Item No.: 216-321**

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



**Item No.: 216-131**

Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated; silver-colored



**Item No.: 216-322**

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



**Item No.: 216-132**

Ferrule; Sleeve for 0.34 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated



**Item No.: 216-221**

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



**Item No.: 216-121**

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



**Item No.: 216-222**

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



**Item No.: 216-122**

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

1.2.3.1 Ferrule



**Item No.: 216-223**  
 Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; red

**Item No.: 216-123**  
 Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; un-insulated; electro-tin plated; silver-colored

**Item No.: 216-224**  
 Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; black

**Item No.: 216-124**  
 Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; un-insulated; electro-tin plated

1.2.4 Installation

1.2.4.1 Mounting accessories



**Item No.: 209-106**  
 Mounting carrier; for isolated mounting on DIN 35 rails; gray

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

**Item No.: 249-116**  
 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.: 280-470**  
 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.: 280-471**  
 Insulation stop; 0.25 - 0.5 mm<sup>2</sup>; 5 pieces/strip; light gray

**Item No.: 280-472**  
 Insulation stop; 0.75 - 1 mm<sup>2</sup>; 5 pieces/strip; black

1.2.6 Jumper

1.2.6.1 Jumper



**Item No.: 870-405/011-000**

**Item No.: 870-407/011-000**

**Item No.: 870-409/011-000**

**Item No.: 870-406/020-000**  
 Delta jumper; insulated; light gray



**Item No.: 870-410**  
 Jumper; 10-way; insulated; light gray

**Item No.: 870-402**  
 Jumper; 2-way; insulated; light gray

**Item No.: 870-403**  
 Jumper; 3-way; insulated; light gray

**Item No.: 870-404**  
 Jumper; 4-way; insulated; light gray



**Item No.: 870-405**  
 Jumper; 5-way; insulated; light gray

**Item No.: 870-406**  
 Jumper; 6-way; insulated; light gray

**Item No.: 870-407**  
 Jumper; 7-way; insulated; light gray

**Item No.: 870-408**  
 Jumper; 8-way; insulated; light gray



**Item No.: 870-409**  
 Jumper; 9-way; insulated; light gray

**Item No.: 870-440**  
 Jumper; from 1 to 10; insulated; light gray

**Item No.: 870-433**  
 Jumper; from 1 to 3; insulated; light gray

**Item No.: 870-434**  
 Jumper; from 1 to 4; insulated; light gray



**Item No.: 870-435**  
 Jumper; from 1 to 5; insulated; light gray

**Item No.: 870-436**  
 Jumper; from 1 to 6; insulated; light gray

**Item No.: 870-437**  
 Jumper; from 1 to 7; insulated; light gray

**Item No.: 870-438**  
 Jumper; from 1 to 8; insulated; light gray



**Item No.: 870-439**  
 Jumper; from 1 to 9; insulated; light gray

1.2.7 Marking

1.2.7.1 Group marker carrier



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

Adaptor; gray

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

Adaptor; gray

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

Adaptor; gray

1.2.7.2 Marker

Item No.: [2009-145/000-006](#)

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

Item No.: [2009-145/000-007](#)

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

Item No.: [2009-145/000-023](#)

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

Item No.: [2009-145/000-012](#)

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

Item No.: [2009-145/000-005](#)

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

Item No.: [2009-145/000-024](#)

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

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.: [2009-145/000-002](#)

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



Item No.: [248-501/000-006](#)

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

Item No.: [248-501/000-007](#)

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

Item No.: [248-501/000-023](#)

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

Item No.: [248-501/000-017](#)

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



Item No.: [248-501/000-012](#)

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

Item No.: [248-501/000-005](#)

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

Item No.: [248-501/000-024](#)

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

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

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



Item No.: [248-501/000-002](#)

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

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.: [793-5501/000-007](#)

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

1.2.7.2 Marker



**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

1.2.7.3 Marking strip



**Item No.: 709-196**  
Marking strips; for laser printer; translucent



**Item No.: 709-177**  
Marking strips; on reel; 7.5 mm wide; not stretchable; plain; snap-on type; translucent



**Item No.: 709-178**  
Marking strips; on reel; 7.5 mm wide; not stretchable; plain; snap-on type; white

1.2.8 Protective warning marker

1.2.8.1 Cover



**Item No.: 280-405**  
Protective warning marker; for 5 terminal blocks; with high-voltage symbol, black; yellow

1.2.9 Test and measurement

1.2.9.1 Testing accessories



**Item No.: 870-427**  
Spacer module; modular; bridging commoned 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

1.2.10 Tool

1.2.10.1 Operating tool



**Item No.: 210-658**  
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; angled; short; multicoloured



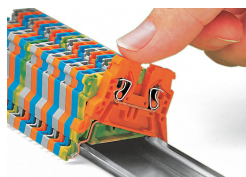
**Item No.: 210-720**  
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured



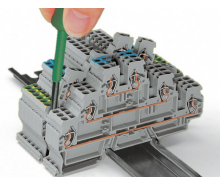
**Item No.: 210-657**  
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short; multicoloured

## Installation Notes

### Installation



Snapping a rail-mount terminal block onto DIN-35 rail.



Removing a terminal block from the assembly.

### Conductor termination



#### CAGE CLAMP® connection

Inserting a conductor via operating tool (0.08 ... 4 mm<sup>2</sup> "f-st").  
With ferruled conductors, it is necessary to use a terminal block one size smaller than the conductor's nominal cross-section.



Inserting insulation stops into conductor entry holes of terminal strip.

### Commoning



Push jumper bars down firmly until fully inserted. When using multipole bars, push alternately on the right and then left side until installed.  
Push-in type jumper bars 1-3-5-7 or 1--4--7 upon request



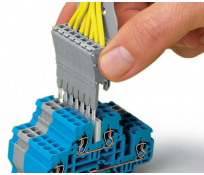
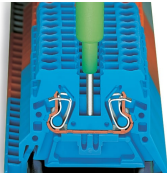
Commoning with push-in type jumper bars:  
Two parallel jumper slots are accommodated in one terminal block.



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



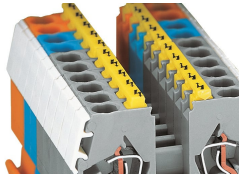
Testing



Testing with phase testing device, also possible with single-pole voltage tester.

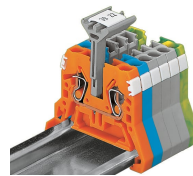
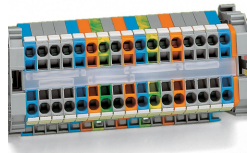
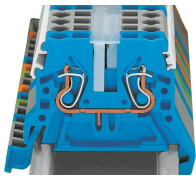
Testing is also possible using a pre-wired tap-off module assembly in the very same way as test plugs.

Cover



Protective warning markers (280-405), with a black high-voltage symbol

Marking



WMB markers in Mini-WSB marker slots  
 Translucent marking strip  
 Mini-WSB markers

Translucent marking strip (709-196) – jumpers below may be visible.

In addition to the plastic marker strips, group marker carriers are now available for the WMB and WSB marking systems. They can be mounted in parallel to a push-in type jumper bar via the open jumper contact slot. It is also very useful if the marker slots on the side of the terminal block are hidden. The carriers are available in the following widths: 5 mm (0.197 inch), 10 mm (0.394 inch) and 15 mm (0.591 inch).  
**Notice:**  
 Group marker carriers are not suitable for ground conductor terminal blocks and double potential terminal blocks as they have no jumper contact slots.