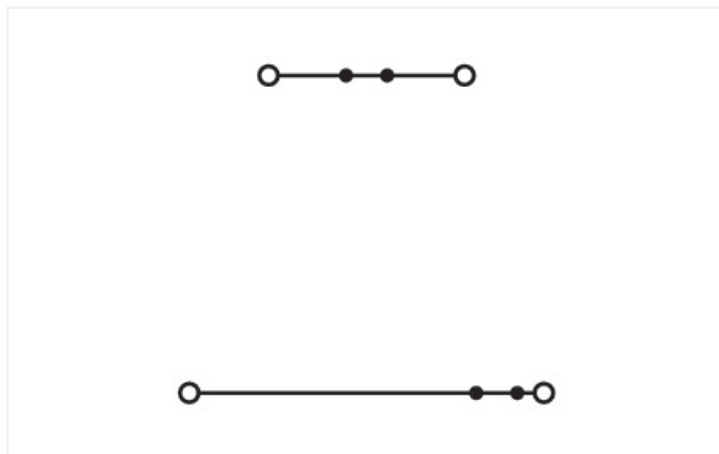
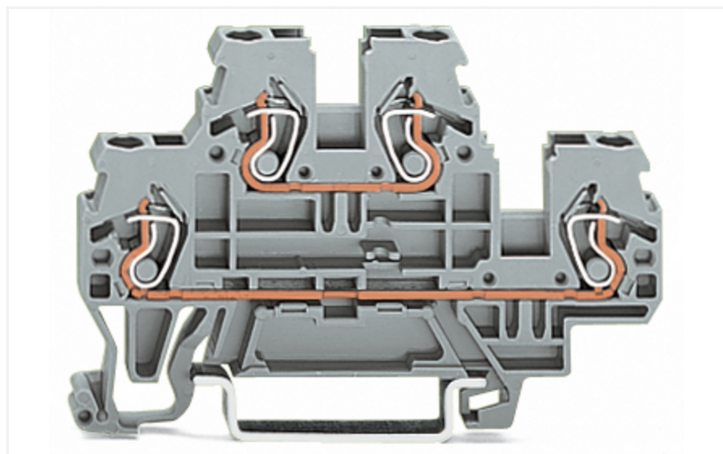


## Data Sheet | Item Number: 870-503

Double-deck terminal block; Through/through terminal block; L/N; for DIN-rail 35 x 15 and 35 x 7.5; 2.5 mm<sup>2</sup>; CAGE CLAMP®; 2,50 mm<sup>2</sup>; gray

<https://www.wago.com/870-503>



Color: ■ gray

Similar to illustration

Similar to illustration

Double-deck terminal block, 870 Series, operating tool

Enjoy seamless electrical installations with this double-deck terminal block (item number 870-503). Strip lengths must be between 6 and 7 mm when connecting conductors to this double-deck terminal block. The double-deck terminal block also serves as a through terminal block. This product features conductor terminals and utilizes CAGE CLAMP®. Our CAGE CLAMP® connection provides a proven 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>.

### 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 impulse withstand voltage | 6 kV             | -   | -  |
| Rated current                   | 24 A             | -   | -  |

### Power Loss

|  |           |
|--|-----------|
| Power loss, per pole (potential)                             | 0.7661 W  |
| Rated current $I_N$ for power loss specification             | 24 A      |
| Resistance value for specified, current-dependent power loss | 0.00133 Ω |

### General information

Wiring direction Front-entry wiring

### Connection data

|                            |   |
|----------------------------|---|
| Clamping units             | 4 |
| 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                            | 70 mm / 2.756 inches |
| Depth from upper-edge of DIN-rail | 40 mm / 1.575 inches |

### Mechanical data

|                   |                 |
|-------------------|-----------------|
| Potential marking | L/N             |
| 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                          | 0.168 MJ   |
| Weight                             | 10.1 g   |

### Environmental requirements

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

### Commercial data

|                       |               |
|-----------------------|---------------|
| PU (SPU)              | 50 pcs        |
| Packaging type        | Box           |
| Country of origin     | DE            |
| GTIN                  | 4044918630894 |
| 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** **Declarations of conformity and manufacturer's declarations**



| Approval                        | Standard | Certificate Name |
|---------------------------------|----------|------------------|
| CCA<br>DEKRA Certification B.V. | EN 60947 | NTR NL 7468      |
| CCA<br>DEKRA Certification B.V. | EN 60947 | 2189801.01       |

| Approval  | Standard | Certificate Name |
|---|----------|------------------|
| EU-Declaration of Confor-<br>mity<br>WAGO GmbH & Co. KG | -        | -                |
| UK-Declaration of Confor-<br>mity<br>WAGO GmbH & Co. KG | -        | -                |

**Approvals for marine applications**



| Approval  | Standard | Certificate Name  |
|---|----------|-------------------|
| ABS<br>American Bureau of Ship-<br>ping               | -        | 24-0152298-PDA    |
| DNV GL<br>Det Norske Veritas, Ger-<br>manischer Lloyd | -        | TAE00001V2        |
| PRS<br>Polski Rejestr Statków                         | -        | TE/1094/880590/23 |

**Downloads**

**Environmental Product Compliance**

|   |
|---|
| <b>Compliance Search</b>                    |
| Environmental Product<br>Compliance 870-503 |

Documentation

| Bid Text |            |                 |                   |
|----------|------------|-----------------|-------------------|
| 870-503  | 19.02.2019 | xml<br>3.24 KB  | <a href="#">↓</a> |
| 870-503  | 31.05.2017 | doc<br>24.50 KB | <a href="#">↓</a> |

CAD/CAE-Data

| CAD data                               | CAE data                                    |
|--|---|
| 2D/3D Models 870-503 <a href="#">↓</a> | EPLAN Data Portal 870-503 <a href="#">↓</a> |
|  | WSCAD Universe 870-503 <a href="#">↓</a>    |
|  | ZUKEN Portal 870-503 <a href="#">↓</a>      |

1 Compatible Products

1.1 Required Accessories

1.1.1 End plate

1.1.1.1 End plate



**Item No.: 870-518**  
End and intermediate plate; 2 mm thick; gray

**Item No.: 870-519**  
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.: 210-508**  
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 Ferrule

### 1.2.2.1 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



**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; uninsulated; 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; uninsulated; electro-tin plated

## 1.2.3 Installation

### 1.2.3.1 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

## 1.2.4 Insulation stop

### 1.2.4.1 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

## 1.2.5 Jumper

### 1.2.5.1 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

1.2.5.1 Jumper



**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

1.2.6 Marking

1.2.6.1 Group marker carrier



**Item No.: 870-182**  
Adaptor; gray

**Item No.: 870-183**  
Adaptor; gray

**Item No.: 870-184**  
Adaptor; gray

1.2.6.2 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

1.2.6.2 Marker



**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.: 2009-115/000-024**  
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

1.2.6.3 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

1.2.7 Protective warning marker

1.2.7.1 Cover



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

1.2.8 Test and measurement

1.2.8.1 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

## 1.2.9 Tool

### 1.2.9.1 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

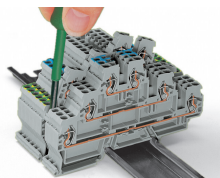


**Item No.: 210-657**

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

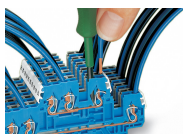
## Installation Notes

### Installation



Removing a terminal block from the assembly.

## Conductor termination



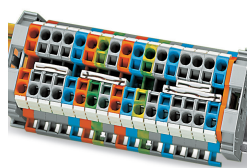
**CAGE CLAMP® connection**

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.

## Commoning



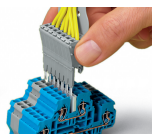
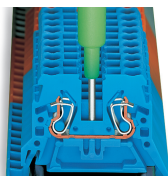
Push jumper bars down firmly until fully inserted. When using multipole bars, push alternately on the right and then left side until installed.  
Push-in type jumper bars 1 - 3 - 5 - 7 or 1 - - 4 - - 7 upon request



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



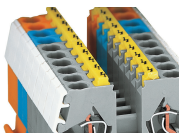
## Testing



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

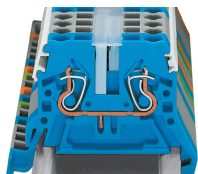


Protective warning markers (280-405), with a black high-voltage symbol



Use 50% less rail space with double-deck terminal blocks.

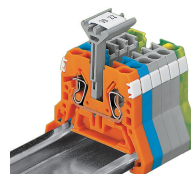
## Marking



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.