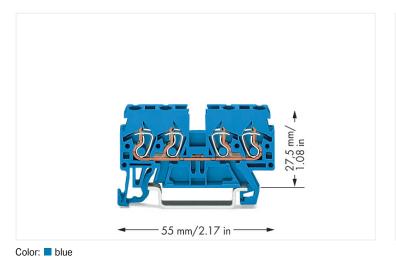
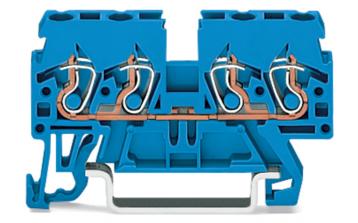
4-conductor through terminal block;  $2.5~\text{mm}^2$ ; suitable for Ex i applications; side and center marking; for DIN-rail 35~x 15~and 35~x 7.5; CAGE CLAMP®;  $2.50~\text{mm}^2$ ; blue



https://www.wago.com/870-834







Similar to illustration

Through terminal block, 870 Series, operating tool

Our through terminal block (item number 870-834) makes connecting wires 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. This mini rail-mount terminal block has a rated voltage of 500 V and can handle currents up to 24 A. Strip lengths must be between 6 mm and 7 mm when connecting conductors to this through terminal block. This product features conductor terminals and utilizes CAGE CLAMP®. Our reliable and maintenance-free CAGE CLAMP® connection makes it easy to connect all conductor types without having to prepare the conductor. For example, you don't need to crimp ferrules. This through terminal block is suitable for conductor cross sections ranging from 0.08 mm² to 2.5 mm². It has one level. The single potential can connect using the four clamping points The blue housing is made of polyamide (PA66) for insulation. This mini rail-mount terminal block is operated with an operating tool. 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/E | EN 60947- | 7-1 | Power Loss                                   |           |
| Overvoltage category | III   | III       | II  | Power loss, per pole (potential)             | 0.7661 W  |
| Pollution degree     | 3     | 2         | 2   | Rated current $I_N$ for specified power loss | 24 A      |
| Nominal voltage      | 500 V | -         | -   | Resistance value for specified, current-     | 0.00133 Ω |
| Rated surge voltage  | 6 kV  | -         | =   | dependent power loss                         |           |
| Rated current        | 24 A  | -         | -   |  |           |



| nnection data             |   |   |                           |                    |
|---------------------------|---|---|---------------------------|--------------------|
| lamping units             | 4 |   | Connection 1              |                    |
| otal number of potentials | 1 |   | Connection technology     | CAGE CLAMP®        |
| Number of levels          | 1 |   | Actuation type            | Operating tool     |
|                           |   | Connectable conductor materials                 | Copper                    |                    |
|                           |   | Solid conductor                                 | 0.08 2.5 mm² / 28 12 AWG  |                    |
|                           |   | Fine-stranded conductor                         | 0.08 4 mm² / 28 12 AWG    |                    |
|                           |   | Fine-stranded conductor; with insulated ferrule | 0.08 1.5 mm² / 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                            | 55 mm / 2.165 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)               |   |
|                                    | <u>Information on material specifications can be found here</u> |
| Color                              | blue  |
| Material group                     |   |
| Insulation material (main housing) | Polyamide (PA66)  |
| Flammability class per UL94        | VO  |
| Fire load                          | 0.132 MJ  |
| Weight                             | 7.4 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                  | 4045454094652                              |
| Customs tariff number | 85369010000                                |



# **Environmental Product Compliance**

RoHS Compliance Status Compliant, No Exemption

# Approvals / Certificates

# General approvals





| 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       |
| cURus<br>UL International Germany<br>GmbH | UL 1059  | E45172           |

# Declarations of conformity and manufacturer's declarations

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

# Approvals for marine applications







| Approval  | Standard | Certificate Name |
|---|----------|------------------|
| ABS<br>American Bureau of Ship-<br>ping               | -        | 20-HG1941090-PDA |
| DNV GL<br>Det Norske Veritas, Ger-<br>manischer Lloyd | -        | TAE00001V2       |
| LR<br>Lloyds Register                                 | EN 60947 | 91/20112 (E9)    |

# Downloads

# **Environmental Product Compliance**

# Compliance Search

**Environmental Product** Compliance 870-834



#### Documentation

**Additional Information** 

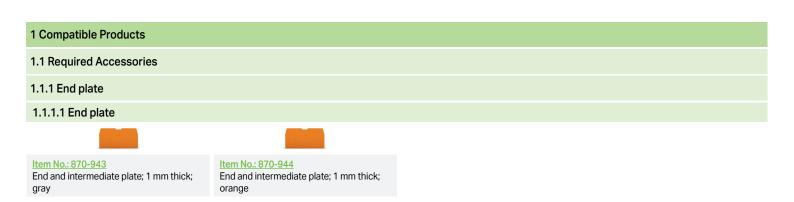
pdf 2246.92 KB **Technical Section** 

| Bid Text |            |                 |                          |
|----------|------------|-----------------|--------------------------|
| 870-834  | 19.02.2019 | xml<br>3.31 KB  | $\underline{\downarrow}$ |
| 870-834  | 31.05.2017 | doc<br>24.50 KB | $\underline{\downarrow}$ |

https://www.wago.com/870-834



# CAD/CAE-Data CAE data CAD data 2D/3D Models 870-834 **EPLAN Data Portal** 870-834 WSCAD Universe 870-834 ZUKEN Portal 870-834



## 1.2 Optional Accessories

### 1.2.1 DIN-rail

Item No.: 210-506

Item No.: 210-112

## 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

Steel carrier rail; 35 x 15 mm; 1.5 mm

milar to EN 60715; silver-colored

thick; 2 m long; unslotted; galvanized; si-

Item No.: 210-198

Steel carrier rail; 35 x 15 mm; 1.5 mm

thick; 2 m long; unslotted; similar to EN

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

Item No.: 210-508

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

Steel carrier rail; 35 x 15 mm; 1.5 mm

lar to EN 60715; silver-colored

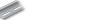
thick; 2 m long; slotted; galvanized; simi-

Item No.: 210-197

Item No.: 210-115

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715; silver-colored

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



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

Item No.: 210-114

60715; silver-colored

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

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### 1.2.2 End plate

## 1.2.2.1 End plate



Item No.: 870-948

Separator plate; 1 mm thick; gray

Item No.: 870-949

Separator plate; 1 mm thick; orange

#### 1.2.3 Ferrule

#### 1.2.3.1 Ferrule



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

# Item No.: 216-221

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

#### Item No.: 216-121

Item No.: 216-131

lored

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

Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24;

uninsulated; electro-tin plated; silver-co-

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

Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; in-

sulated; electro-tin plated; light turquoise

#### Item No.: 216-122

Item No.: 216-132

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

Ferrule; Sleeve for 0.34 mm<sup>2</sup> / AWG 24;

uninsulated; electro-tin plated



#### 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

Item No.: 216-322

Item No.: 216-222

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

## 1.2.4 Installation

Item No.: 209-106

DIN 35 rails; gray

## 1.2.4.1 Mounting accessories



Mounting carrier; for isolated mounting on





# Item No.: 249-117

Screwless end stop; 10 mm wide; for DINrail 35 x 15 and 35 x 7.5; gray

### Item No.: 249-116

Screwless end stop; 6 mm wide; for DINrail 35 x 15 and 35 x 7.5; gray

# 1.2.5 Insulation stop

#### 1.2.5.1 Insulation stop







# Item No.: 280-472

Insulation stop; 0.75 - 1 mm<sup>2</sup>; 5 pieces/ strip; black

# Item No.: 280-470

Insulation stop; 0.08 - 0.2 mm<sup>2</sup> "s" (0.14 mm2 "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



### 1.2.6 Jumper

## 1.2.6.1 Jumper









Item No.: 870-405/011-000

Item No.: 870-409/011-000

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





Jumper; 10-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.: 870-402

Jumper; 6-way; insulated; light gray

Jumper; 2-way; insulated; light gray



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



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.: 870-184



Item No.: 870-182

Adaptor; gray

Item No.: 870-183 Adaptor; gray

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



Mini-WSB marking card; as card; not stret-

## 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

## Item No.: 248-501/000-023

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

stretchable; plain; snap-on type; gray

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

# chable; plain; snap-on type; light green

Item No.: 248-501/000-017

## Item No.: 248-501

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

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#### 1.2.7.2 Marker



## 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



WMB marking card; as card; for terminal



# Item No.: 793-501/000-006

WMB marking card; as card; not stretcha-



#### Item No.: 793-5501

block width 5 - 17.5 mm; stretchable 5 -5.2 mm; plain; snap-on type; white



WMB marking card; as card; for terminal

block width 5 - 17.5 mm; stretchable 5 -

ble; plain; snap-on type; blue

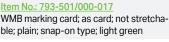


WMB marking card; as card; not stretchable; plain; snap-on type; gray



#### Item No.: 793-501/000-023

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



#### Item No.: 793-501/000-012

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



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



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

# 1.2.7.3 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; translu-

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;  $\overline{\text{Blade: 3.5 x 0.5 mm; with a}}$  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 mm² "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.

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### 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

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# 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.

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