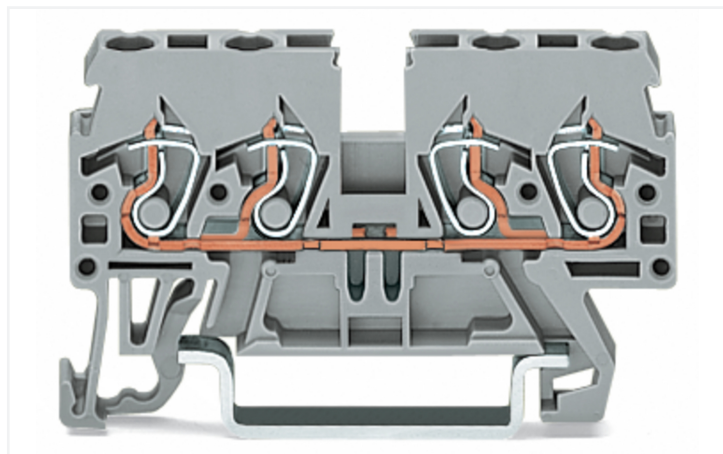


## Data Sheet | Item Number: 870-835

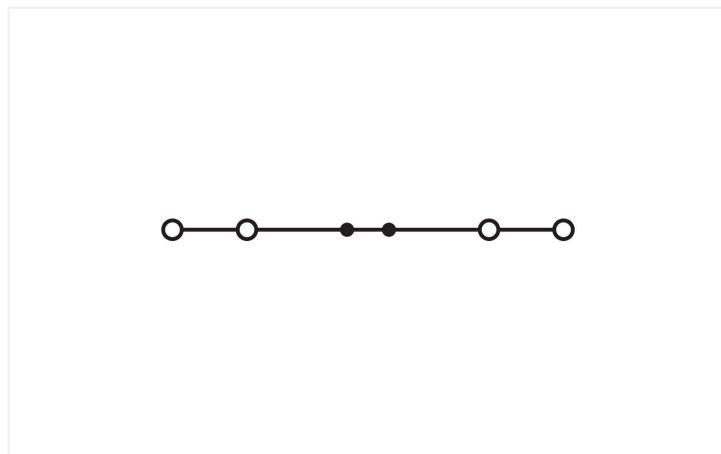
4-conductor through terminal block; 2.5 mm<sup>2</sup>; side and center marking; for DIN-rail  
35 x 15 and 35 x 7.5; CAGE CLAMP®; 2,50 mm<sup>2</sup>; black

<https://www.wago.com/870-835>



Color: ■ black

Similar to illustration



Similar to illustration

Through terminal block, 870 Series, CAGE CLAMP®

Our through terminal block (item number 870-835) makes connecting wires quick and easy. Whether in industrial or building applications, our rail-mount through terminal blocks are the perfect solution to quickly and securely connect electrical conductors. Depending on the variant, you can use them for either typical through-wiring or potential distribution. Our mini rail-mount terminal block is rated for 500 V and is designed to handle a rated current of up to 24 A. Ensure that the strip lengths are between 6 mm and 7 mm when connecting conductors to this through terminal block. This product features conductor terminals and utilizes CAGE CLAMP®. Our CAGE CLAMP® connection provides a convenient 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. Depending on the type of conductor, this through terminal block is ideal for conductor cross sections ranging from 0.08 mm<sup>2</sup> to 2.5 mm<sup>2</sup>. It comes with one level and four clamping points for connecting a single potential. The black 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.. You can connect copper conductors via front-entry wiring.

### 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

### Connection data

Clamping units	4
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	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)	<a href="#">Information on material specifications can be found here</a>
Color	black
Material group	I
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.132 MJ
Weight	7.4 g

### Environmental requirements

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

### Commercial data

PU (SPU)	100 pcs
Packaging type	Box
Country of origin	DE
GTIN	4045454094669
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 8.0	EC000897
ECCN	NO US CLASSIFICATION

### 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 Confor- mity WAGO GmbH & Co. KG	-	-
UK-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-

Approvals for marine applications



Approval	Standard	Certificate Name
ABS American Bureau of Ship- ping	-	24-0152298-PDA
DNV GL Det Norske Veritas, Ger- manischer Lloyd	-	TAE00001V2

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product  
Compliance 870-835



CAD/CAE-Data

CAD data

2D/3D Models 870-835



CAE data

EPLAN Data Portal  
870-835



WSCAD Universe  
870-835



## 1 Compatible Products

### 1.1 Required Accessories

#### 1.1.1 End plate

##### 1.1.1.1 End plate



**Item No.: 870-943**

End and intermediate plate; 1 mm thick; gray

**Item No.: 870-944**

End and intermediate plate; 1 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.: 870-948**

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



**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; 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

1.2.4 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

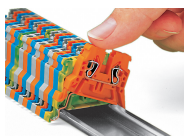


**Item No.: 210-657**

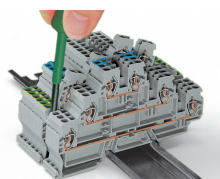
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short; multicoloured

## 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.

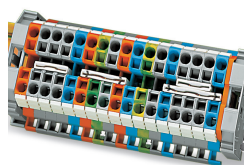


Inserting insulation stops into conductor entry holes of terminal strip.

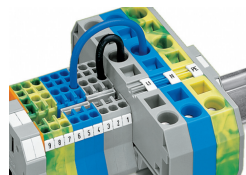
### Commoning



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

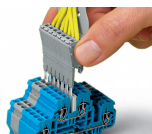
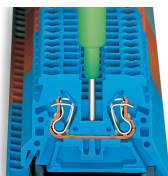


Commoning with push-in type jumper bars:  
Two parallel jumper slots are accommodated in one terminal block.



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

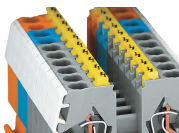
## Testing



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

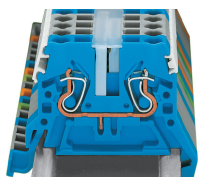
Testing is also possible using a pre-wired tap-off module assembly in the very same way as test plugs.

## Cover



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

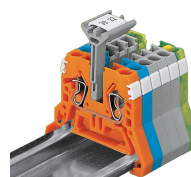
## Marking



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.