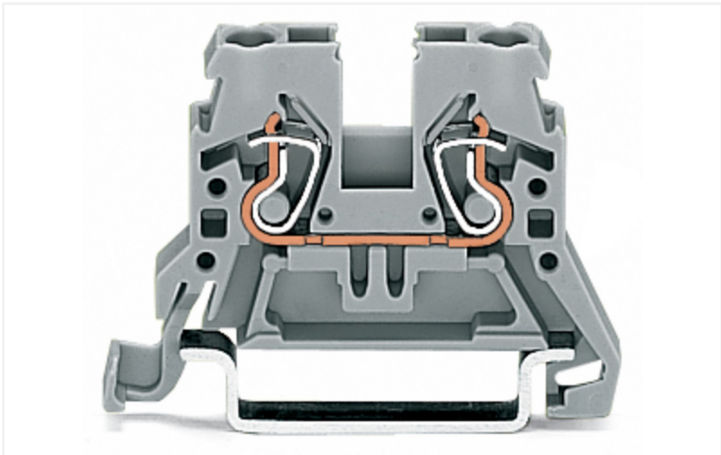


Data Sheet | Item Number: 870-905

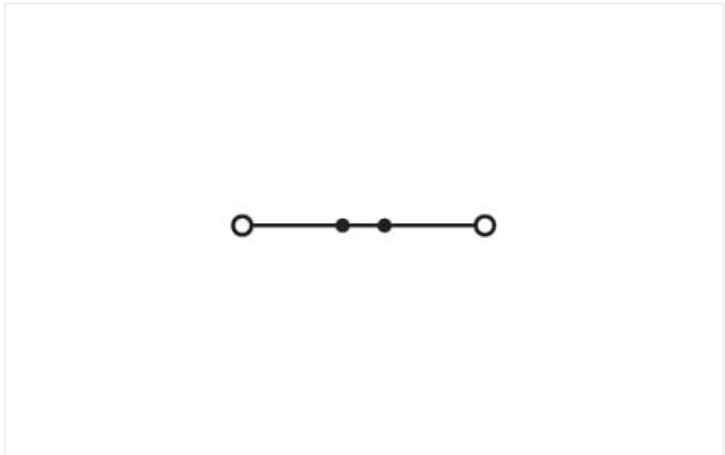
2-conductor through terminal block; 2.5 mm²; side and center marking; for DIN-rail 35 x 15 and 35 x 7.5; CAGE CLAMP®; 2,50 mm²; black

<https://www.wago.com/870-905>



Color: ■ black

Similar to illustration



Similar to illustration

Through terminal block, 870 Series, black

Our through terminal block (item number 870-905) makes connections quick and easy. Whether for industrial or building applications, you can use our through terminal blocks to connect electrical conductors quickly and safely. We offer variants for both classic through-wiring and potential distribution. Rated current and voltage are important parameters when choosing a mini rail-mount terminal block, as they indicate possible applications and uses. 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 for connection technology and electrical interconnections. 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 two clamping points. 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. The front-entry wiring allows you 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		Connection 1	
Clamping units	2	Connection technology	CAGE CLAMP®
Total number of potentials	1	Actuation type	Operating tool
Number of levels	1	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	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	black
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	4044918478427
Customs tariff number	85369010000

Environmental Product Compliance	
RoHS Compliance Status	Compliant, No Exemption

Approvals / Certificates

General approvals			Declarations of conformity and manufacturer's declarations		
  			Approval	Standard	Certificate Name
Approval	Standard	Certificate Name	EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
CCA DEKRA Certification B.V.	EN 60947	NTR NL 7468	UK-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
CCA DEKRA Certification B.V.	EN 60947	2189801.01			
cURus UL International Germany GmbH	UL 1059	E45172			



Approvals for marine applications



Approval	Standard	Certificate Name
ABS American Bureau of Ship- ping	-	20-HG1941090-PDA
DNV GL Det Norske Veritas, Ger- manischer Lloyd	-	TAE00001V2

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 870-905



Documentation

Additional Information
Technical Section

pdf  
2246.92 KB



CAD/CAE-Data

CAD data
2D/3D Models 870-905



CAE data
EPLAN Data Portal 870-905
WSCAD Universe 870-905



1 Compatible Products

1.1 Required Accessories

1.1.1 End plate

1.1.1.1 End plate



<b>Item No.: 870-923</b> End and intermediate plate; 2 mm thick; gray	<b>Item No.: 870-924</b> 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; unslopped; similar to EN 60715; silver-colored



**Item No.: 210-198**  
Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslopped; according to EN 60715; copper-colored



**Item No.: 210-508**  
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slopped; 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; slopped; similar to EN 60715; silver-colored



**Item No.: 210-506**  
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslopped; 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; unslopped; similar to EN 60715; silver-colored



**Item No.: 210-118**  
Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslopped; according to EN 60715; silver-colored



**Item No.: 210-115**  
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slopped; 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; slopped; 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; slopped; 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; unslopped; according to EN 60715; silver-colored



**Item No.: 210-505**  
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslopped; 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



**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 mm² "s" (0.14 mm² "f-st"); 5 pieces/strip; white



**Item No.: 280-471**  
Insulation stop; 0.25 - 0.5 mm²; 5 pieces/strip; light gray



**Item No.: 280-472**  
Insulation stop; 0.75 - 1 mm²; 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



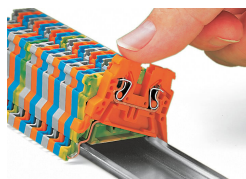
**Item No.: 210-720**  
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured



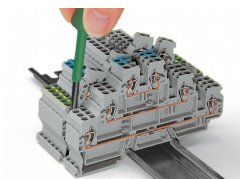
**Item No.: 210-657**  
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short; multicoloured

## Installation Notes

### Installation

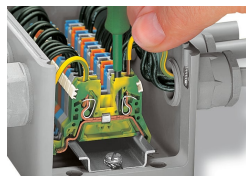


Snapping a rail-mount terminal block onto DIN-35 rail.



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.

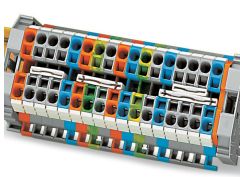


Inserting insulation stops into conductor entry holes of terminal strip.

### 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



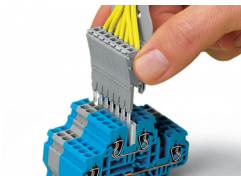
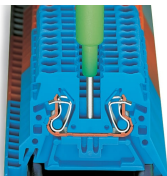
Commoning with push-in type jumper bars:  
Two parallel jumper slots are accommodated in one terminal block.



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



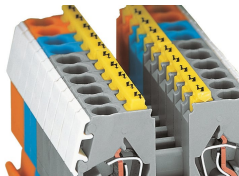
Testing



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

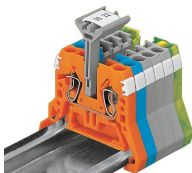
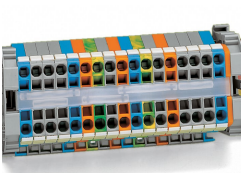
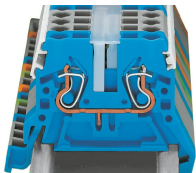
Testing is also possible using a pre-wired tap-off module assembly in the very same way as test plugs.

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.