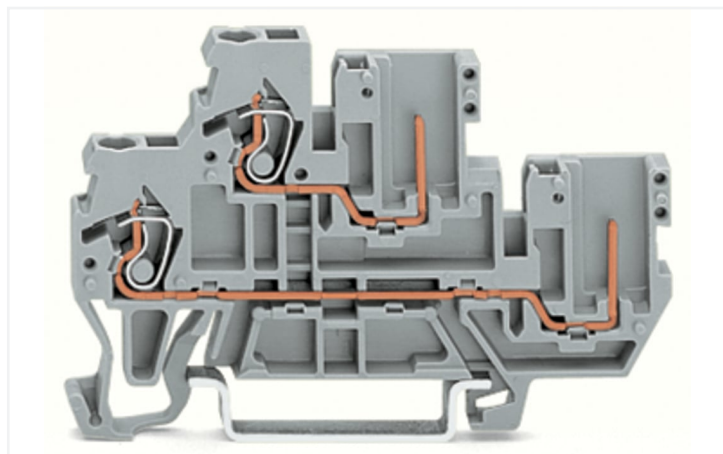


Data Sheet | Item Number: 870-102

1-conductor/1-pin double deck receptacle terminal block; Through/through terminal block; 2.5 mm²; N/L; for DIN-rail 35 x 15 and 35 x 7.5; CAGE CLAMP®; 2,50 mm²; gray

<https://www.wago.com/870-102>



Color: gray

Similar to illustration

Double-deck terminal block, 870 Series, gray

This double-deck terminal block (item number 870-102) is designed for seamless electrical installations. Pluggable rail-mount terminal blocks are mainly used in switchgear units and control systems (e.g., in railroad technology). They are essentially a combination of rail-mount terminal blocks and pluggable connectors. You can also pre-assemble installations thanks to the variable wiring system. This saves both time and money during manufacture, installation, operation, and maintenance. The double-deck terminal block also serves as a through terminal block. Our pluggable rail-mount terminal block is rated for 500 V and is designed for use with a rated current of up to 16 A. Strip lengths must be between 6 mm and 7 mm when connecting conductors to this double-deck terminal block. This product features conductor terminals and utilizes CAGE CLAMP®. Our celebrated universal connection known as CAGE CLAMP® is the industry standard for connection technology and electrical interconnections. This double-deck terminal block is suitable for conductor cross sections ranging from 0.08 mm² to 2.5 mm². It features two levels and two clamping points for connecting two potentials. The gray housing is made of polyamide (PA66) for insulation. This pluggable rail-mount terminal block is operated with an operating tool. These pluggable rail-mount terminal blocks are mounted using DIN-35 rails.. Conductors made of copper can be connected via front-entry wiring.

Notes

Safety Information	Max. insulation diameter: 4.4 mm
Safety information 2	2-conductor female plugs cannot be used.

Electrical data

Ratings per IEC/EN	
Nominal voltage (III/3)	500 V
Rated impulse withstand voltage (III / 3)	6 kV
Rated current	16 A
Legend (ratings)	(III / 3) ≠ Overvoltage category III / Pollution degree 3

Power Loss	
Power loss, per pole (potential)	0.3405 W
Rated current I _N for specified power loss	16 A
Resistance value for specified, current-dependent power loss	0.00133 Ω



Connection data																		
Clamping units	2	Connection 1 <table><tr><td>Connection technology</td><td>CAGE CLAMP®</td></tr><tr><td>Actuation type</td><td>Operating tool</td></tr><tr><td>Connectable conductor materials</td><td>Copper</td></tr><tr><td>Solid conductor</td><td>0.08 ... 2.5 mm² / 28 ... 12 AWG</td></tr><tr><td>Fine-stranded conductor</td><td>0.08 ... 4 mm² / 28 ... 12 AWG</td></tr><tr><td>Fine-stranded conductor; with insulated ferrule</td><td>0.08 ... 1.5 mm² / 28 ... 14 AWG</td></tr><tr><td>Strip length</td><td>6 ... 7 mm / 0.24 ... 0.28 inches</td></tr><tr><td>Wiring direction</td><td>Front-entry wiring</td></tr></table>	Connection technology	CAGE CLAMP®	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
Connection technology	CAGE CLAMP®																	
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																	
Total number of potentials	2																	
Number of levels	2																	

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		N/L
Design		horizontal type
Mounting type		DIN-35 rail
Marking level		Side marking

Material data		
Note (material data)		Information on material specifications can be found here
Color		gray
Material group		I
Insulation material (main housing)		Polyamide (PA66)
Flammability class per UL94		V0
Fire load		0.163 MJ
Weight		9.1 g

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

Commercial data		
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)		50 pcs
Packaging type		Box
Country of origin		DE
GTIN		4045454004453
Customs tariff number		85366990990



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
CCA DEKRA Certification B.V.	EN 60947	NTR NL 7468	EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
CCA DEKRA Certification B.V.	EN 60947	2189801.01	UK-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
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
LR Lloyds Register	EN 60947	91/20112 (E9)

Downloads

Environmental Product Compliance	
Compliance Search	
Environmental Product Compliance 870-102	

Documentation

Additional Information			Bid Text		
Technical Section	pdf 2246.92 KB		870-102	19.02.2019	xml 3.29 KB 
			870-102	04.10.2017	doc 24.50 KB 



CAD/CAE-Data

CAD data	CAE data
2D/3D Models 870-102 	EPLAN Data Portal 870-102 
	WSCAD Universe 870-102 
	ZUKEN Portal 870-102 

1 Compatible Products

1.1 System counterpart

1.1.1 Female connector/socket



[Item No.: 769-101/022-000](#)
1-conductor female connector, angled; CAGE CLAMP®; 4 mm²; Pin spacing 5 mm; 1-pole; coding finger; 4,00 mm²; gray



[Item No.: 769-110/145-000](#)
1-conductor female connector; CAGE CLAMP®; 4 mm²; Pin spacing 5 mm; 10-pole; coding finger; Centered locking levers; Strain relief plate; 4,00 mm²; gray



[Item No.: 769-111/145-000](#)
1-conductor female connector; CAGE CLAMP®; 4 mm²; Pin spacing 5 mm; 11-pole; coding finger; Centered locking levers; Strain relief plate; 4,00 mm²; gray



[Item No.: 769-112/145-000](#)
1-conductor female connector; CAGE CLAMP®; 4 mm²; Pin spacing 5 mm; 12-pole; coding finger; Centered locking levers; Strain relief plate; 4,00 mm²; gray



[Item No.: 769-113/145-000](#)
1-conductor female connector; CAGE CLAMP®; 4 mm²; Pin spacing 5 mm; 13-pole; coding finger; Centered locking levers; Strain relief plate; 4,00 mm²; gray



[Item No.: 769-114/145-000](#)
1-conductor female connector; CAGE CLAMP®; 4 mm²; Pin spacing 5 mm; 14-pole; coding finger; Centered locking levers; Strain relief plate; 4,00 mm²; gray



[Item No.: 769-115/145-000](#)
1-conductor female connector; CAGE CLAMP®; 4 mm²; Pin spacing 5 mm; 15-pole; coding finger; Centered locking levers; Strain relief plate; 4,00 mm²; gray



[Item No.: 769-101](#)
1-conductor female connector; CAGE CLAMP®; 4 mm²; Pin spacing 5 mm; 1-pole; coding finger; 4,00 mm²; gray



[Item No.: 769-101/141-000](#)
1-conductor female connector; CAGE CLAMP®; 4 mm²; Pin spacing 5 mm; 1-pole; coding finger; Centered locking levers; Strain relief plate; 4,00 mm²; gray



[Item No.: 769-102/142-000](#)
1-conductor female connector; CAGE CLAMP®; 4 mm²; Pin spacing 5 mm; 2-pole; coding finger; Centered locking levers; Strain relief plate; 4,00 mm²; gray



[Item No.: 769-103/142-000](#)
1-conductor female connector; CAGE CLAMP®; 4 mm²; Pin spacing 5 mm; 3-pole; coding finger; Centered locking levers; Strain relief plate; 4,00 mm²; gray



[Item No.: 769-104/143-000](#)
1-conductor female connector; CAGE CLAMP®; 4 mm²; Pin spacing 5 mm; 4-pole; coding finger; Centered locking levers; Strain relief plate; 4,00 mm²; gray



[Item No.: 769-105/143-000](#)
1-conductor female connector; CAGE CLAMP®; 4 mm²; Pin spacing 5 mm; 5-pole; coding finger; Centered locking levers; Strain relief plate; 4,00 mm²; gray



[Item No.: 769-106/144-000](#)
1-conductor female connector; CAGE CLAMP®; 4 mm²; Pin spacing 5 mm; 6-pole; coding finger; Centered locking levers; Strain relief plate; 4,00 mm²; gray



[Item No.: 769-107/144-000](#)
1-conductor female connector; CAGE CLAMP®; 4 mm²; Pin spacing 5 mm; 7-pole; coding finger; Centered locking levers; Strain relief plate; 4,00 mm²; gray



[Item No.: 769-108/144-000](#)
1-conductor female connector; CAGE CLAMP®; 4 mm²; Pin spacing 5 mm; 8-pole; coding finger; Centered locking levers; Strain relief plate; 4,00 mm²; gray



[Item No.: 769-109/144-000](#)
1-conductor female connector; CAGE CLAMP®; 4 mm²; Pin spacing 5 mm; 9-pole; coding finger; Centered locking levers; Strain relief plate; 4,00 mm²; gray



1.2 Required Accessories

1.2.1 End plate

1.2.1.1 End plate



Item No.: 870-118
End and intermediate plate; 1 mm thick; gray



Item No.: 870-119
End and intermediate plate; 1 mm thick; orange

1.3 Optional Accessories

1.3.1 Coding

1.3.1.1 Coding



Item No.: 769-435
Coding pin; for coding of female plugs; for carrier terminal blocks / male connectors; orange

1.3.2 Cover

1.3.2.1 Cover



Item No.: 769-438
Pin cover; with marker slot for miniature WSB; gray



Item No.: 769-439
Pin cover; with marker slot for miniature WSB; orange

1.3.3 DIN-rail

1.3.3.1 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



1.3.4 Ferrule

1.3.4.1 Ferrule

			
Item No.: 216-321 Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow	Item No.: 216-131 Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated; silver-colored	Item No.: 216-322 Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise	Item No.: 216-132 Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated
			
Item No.: 216-221 Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white	Item No.: 216-121 Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated; silver-colored	Item No.: 216-222 Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray	Item No.: 216-122 Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated; silver-colored
			
Item No.: 216-223 Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red	Item No.: 216-123 Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated; silver-colored	Item No.: 216-224 Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black	Item No.: 216-124 Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin plated

1.3.5 Installation

1.3.5.1 Mounting accessories

	
Item No.: 209-106 Mounting carrier; for isolated mounting on DIN 35 rails; gray	Item No.: 249-116 Screwless end stop; 6 mm wide; for DIN-rail 35 x 15 and 35 x 7.5; gray

1.3.6 Insulation stop

1.3.6.1 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

1.3.7 Jumper

1.3.7.1 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

1.3.7.1 Jumper



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

1.3.8 Marking

1.3.8.1 Group marker carrier



Item No.: 870-182
Adaptor; gray



Item No.: 870-183
Adaptor; gray



Item No.: 870-184
Adaptor; gray

1.3.8.2 Marker



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.: 248-501
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white



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.: 793-501
WMB marking card; as card; not stretchable; plain; snap-on type; white



Item No.: 2009-115
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

1.3.8.3 Marker carrier



Item No.: 2009-198
Adaptor; gray

1.3.9 Protective warning marker

1.3.9.1 Cover



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

1.3.10 Test and measurement

1.3.10.1 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



1.3.11 Tool

1.3.11.1 Operating tool



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