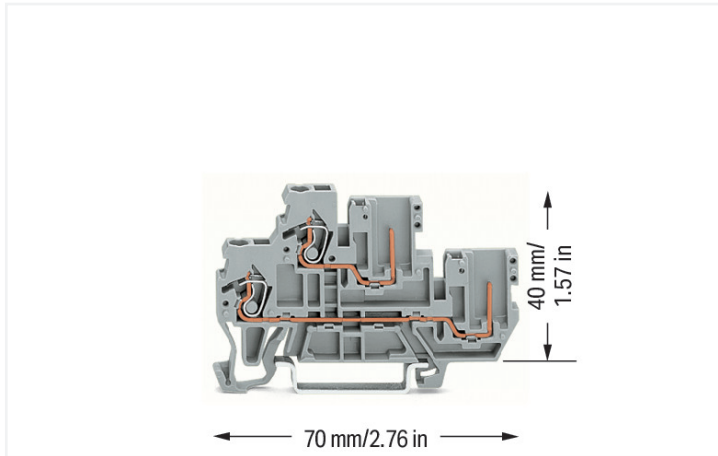


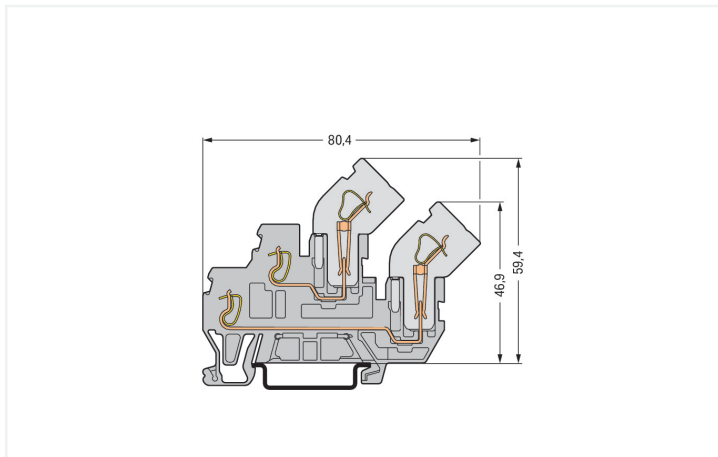
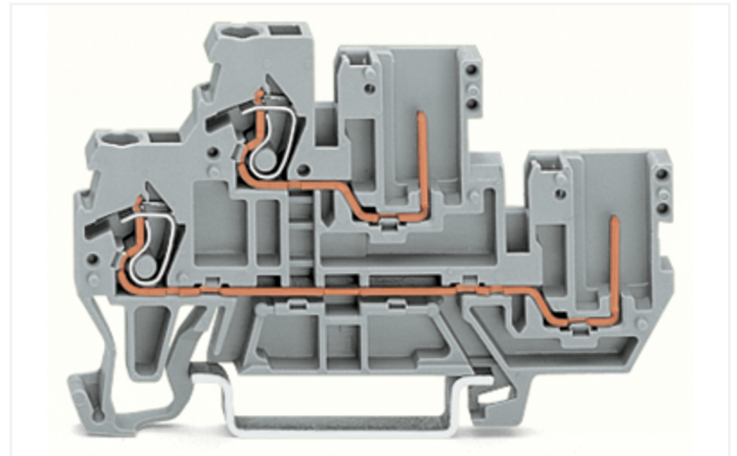
Data Sheet | Item Number: 870-101

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

<https://www.wago.com/870-101>



Color: ■ gray



Carrier terminal block

Double-deck terminal block, 870 Series, CAGE CLAMP®

This double-deck terminal block (item number 870-101) simplifies electrical installations. Pluggable rail-mount terminal blocks are hugely popular in switchgear and control systems, for example, in railroad technology. They combine the best of rail-mount terminal blocks and connectors to create the perfect solution. Variable wiring systems make pre-assembly easy, which leads to considerable time and cost savings in production, installation, operation, and maintenance. The double-deck terminal block also functions as a through terminal block. Our pluggable rail-mount terminal block is rated for 500 V and is designed to handle 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 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. Depending on the conductor type, this double-deck terminal block is suitable for conductor cross sections ranging from 0.08 mm² to 2.5 mm². It has two levels. Two potentials can connect using the two clamping points. The gray housing is made of polyamide (PA66) for insulation. An operating tool is used to operate this pluggable rail-mount terminal block. These pluggable rail-mount terminal blocks are mounted using DIN-35 rails. You can connect copper conductors thanks to 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	Approvals per UL 1059
Nominal voltage (III/3)	500 V
Rated impulse withstand voltage (III / 3)	6 kV
Rated current	16 A
Legend (ratings)	(III / 3) Δ Overvoltage category III / Pollution degree 3

Approvals per CSA 22.2 No 158	
Use group	B C D
Rated voltage	- - -

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
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 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	70 mm / 2.756 inches
Depth from upper-edge of DIN-rail	40 mm / 1.575 inches

Mechanical data	
Potential marking	L/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		
PU (SPU)		50 pcs
Packaging type		Box
Country of origin		DE
GTIN		4045454004446
Customs tariff number		85366990990

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			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	Railway WAGO GmbH & Co. KG	-	Z00004430.000
cURus UL International Germany GmbH	UL 1059	E45172	UK-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-



Approvals for marine applications



Approval	Standard	Certificate Name
ABS American Bureau of Ship- ping	-	20-HG1941090-PDA

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 870-101



Documentation

Bid Text			
870-101	19.02.2019	xml 3.20 KB	
870-101	04.10.2017	doc 24.50 KB	

CAD/CAE-Data

CAD data
2D/3D Models 870-101



CAE data
EPLAN Data Portal 870-101
WSCAD Universe 870-101
ZUKEN Portal 870-101



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 le-
vers; 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 le-
vers; 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 le-
vers; 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 le-
vers; 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 le-
vers; 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 le-
vers; Strain relief plate; 4,00 mm²; gray



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



1.1.1 Female connector/socket



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; 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

1.3.4 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



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

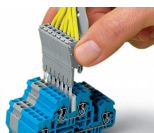


[Item No.: 210-720](#)
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

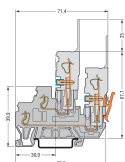
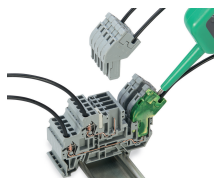
Installation Notes



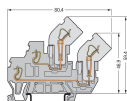
Commoning a double-deck through terminal block (870-501) with a 1-conductor/1-pin double-deck terminal block (870-101) via push-in type jumper bar.



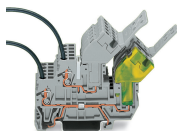
Testing with voltage tester.



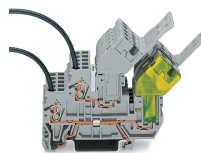
Carrier terminal block



Carrier terminal block



1-conductor/1-pin double-deck carrier
terminal block
1-conductor female plug, angled*
*1-conductor straight female plug is also
possible!



1-conductor female plug, angled
Double-deck carrier terminal blocks can
be commoned via 870 Series Push-In Type
Jumper Bars.