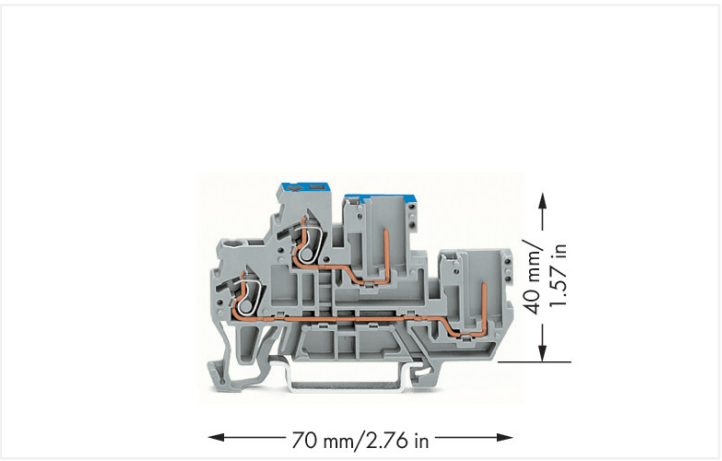
Data Sheet | Item Number: 870-103

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

https://www.wago.com/870-103





Color: gray

Double-deck terminal block, 870 Series, operating tool

Our double-deck terminal block (item number 870-103) ensures effortless electrical installations. Conductors should only be connected to this double-deck terminal block if their strip length is between 6 and 7 mm . 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. Featuring conductor terminals along with CAGE CLAMP®, this connector delivers reliable performance. Our highly-rated 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.

This pluggable rail-mount terminal block is operated with an operating tool.

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 power loss specification	16 A
Resistance value for specified, current-dependent power loss	0.00133 Ω

General information

Wiring direction	Front-entry wiring

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/N
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	0.146 MJ
Weight	9.3 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	4045454004460
Customs tariff number	85366990990

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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 10.0	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 Conformity WAGO GmbH & Co. KG	-	-
Railway WAGO GmbH & Co. KG	-	Z00004430.000
UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Approvals for marine applications

Approval	Standard	Certificate Name
ABS American Bureau of Shipping	-	24-0152298-PDA
DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE00001V2
PRS Polski Rejestr Statków	-	TE/1094/880590/23

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 870-103

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Documentation

Bid Text

870-103	19.02.2019	xml 3.29 KB
870-103	04.10.2017	doc 24.50 KB

CAD/CAE-Data

CAD data

2D/3D Models 870-103

CAE data

EPLAN Data Portal 870-103

WSCAD Universe 870-103

ZUKEN Portal 870-103

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

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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

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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 / 22 AWG; 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.: 870-407/011-000



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

Continued on next page

1.3.7.1 Jumper



Item No.: 870-405/011-000
Jumper; 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

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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