

Data Sheet | Item Number: 870-533
3-conductor, double-deck terminal block; Through/through terminal block; L/N; for DIN-rail 35 x 15 and 35 x 7.5; 2.5 mm²; CAGE CLAMP®; 2,50 mm²; gray

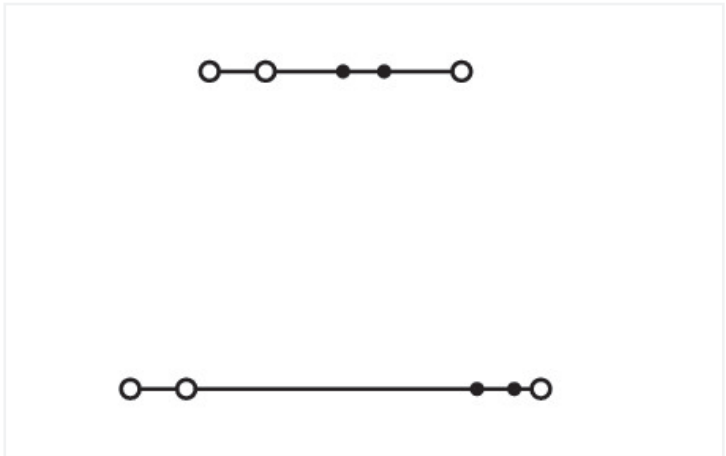


<https://www.wago.com/870-533>



Color: gray

Similar to illustration



Similar to illustration

Notes

Safety information 1	Max. insulation diameter: 4.4 mm
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Electrical data

Ratings per IEC/EN		Power loss	
Ratings per	IEC/EN 60947-7-1	Power loss, per pole (potential)	0.7661 W
Nominal voltage (III/3)	500 V	Rated current I _N for specified power loss	24 A
Rated impulse voltage (III/3)	6 kV	Resistance value for specified, current-dependent power loss	0.00133 Ω
Rated current	24 A		
Legend (ratings)	(III / 3) ≙ Overvoltage category III / Pollution degree 3		

Connection data

Connection data		Connection 1	
Connection points	6	Connection technology	CAGE CLAMP®
Total number of potentials	2	Actuation type	Operating tool
Number of levels	2	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	91 mm / 3.583 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	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.201 MJ
Weight	14 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 8.0	EC000897
ETIM 7.0	EC000897
PU (SPU)	50 pcs
Packaging type	Box
Country of origin	DE
GTIN	4045454094485
Customs tariff number	85369010000

Approvals and 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
cULus UL International Germany GmbH	UL 1059	E45172

Approvals for marine applications



Approval	Standard	Certificate Name
ABS American Bureau of Shipping	-	20-HG1941090-PDA
LR Lloyds Register	EN 60947	91/20112 (E9)



Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 870-533

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Documentation

Additional Information

Technical Section

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CAD/CAE-Data

CAD data

2D/3D Models 870-533

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CAE data

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WSCAD Universe 870-533

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ZUKEN Portal 870-533

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1 Compatible products

1.1 Required accessories

1.1.1 End plate

1.1.1.1 End plate



Item No.: 870-573
End and intermediate plate; 2 mm thick; gray



Item No.: 870-574
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; 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 Ferrule

1.2.2.1 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

1.2.3 Installation

1.2.3.1 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

1.2.4 Insulation stop

1.2.4.1 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

1.2.5 Jumper

1.2.5.1 Jumper

**Item No.: 870-404****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.: 870-405**

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

1.2.6 Marking

1.2.6.1 Group marker carrier

**Item No.: 870-182**

Adaptor; gray

**Item No.: 870-183**

Adaptor; gray

**Item No.: 870-184**

Adaptor; gray

1.2.6.2 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



1.2.6.2 Marker

 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
 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	

1.2.6.3 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
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1.2.7 Protective warning marker

1.2.7.1 Cover



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

1.2.8 Test and measurement

1.2.8.1 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

1.2.9 Tool

1.2.9.1 Operating tool



Item No.: 210-658
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; angled; short; multicoloured



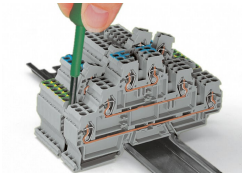
Item No.: 210-720
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured



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

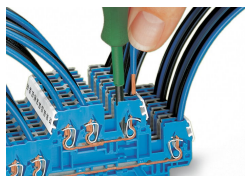
Installation notes

Installation



Removing a terminal block from the assembly.

Conductor termination



CAGE CLAMP® connection

Inserting a conductor via operating tool (0.08 ... 4 mm² "f-st").

With ferruled conductors, it is necessary to use a terminal block one size smaller than the conductor's nominal cross-section.

Commoning



Push jumper bars down firmly until fully inserted. When using multipole bars, push alternately on the right and then left side until installed.

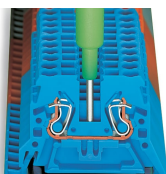
Push-in type jumper bars 1 – 3 – 5 – 7 or 1 – 4 – 7 upon request



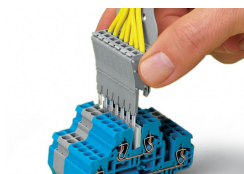
Commoning with push-in type jumper bars:

Two parallel jumper slots are accommodated in one terminal block.

Testing

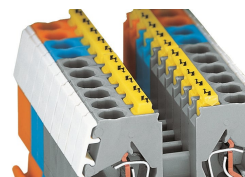


Testing with phase testing device, also possible with single-pole voltage tester.

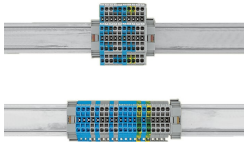


Testing is also possible using a pre-wired tap-off module assembly in the very same way as test plugs.

Cover

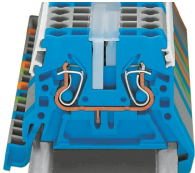


Protective warning markers (280-405), with a black high-voltage symbol

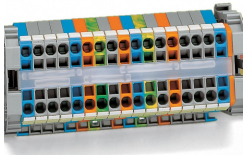


Use 50% less rail space with double-deck terminal blocks.

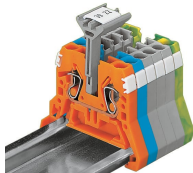
Marking



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.