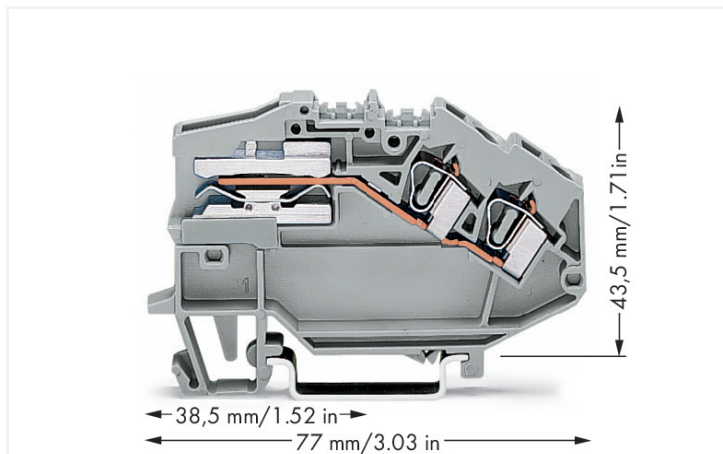


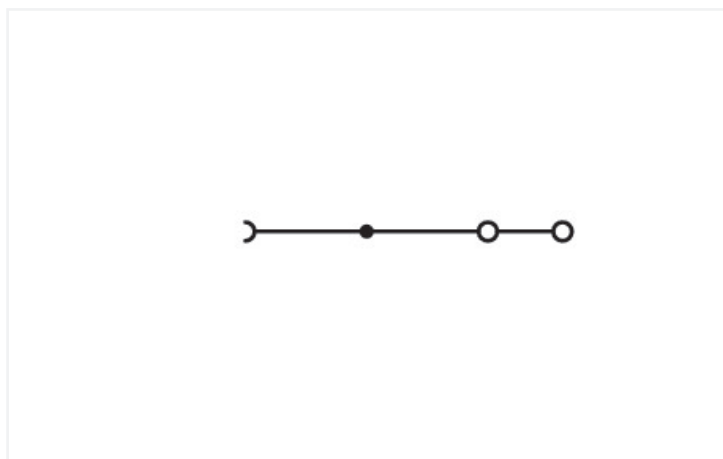
Data Sheet | Item Number: 781-653

2-conductor power distribution disconnect terminal block; 4 mm²; CAGE CLAMP®; 4,00 mm²; gray

<https://www.wago.com/781-653>



Color: ■ gray



Similar to illustration

Power distribution disconnect terminal block, 781 Series, operating tool

This power distribution disconnect terminal block (item number 781-653) provides fault-free electrical installations. Strip lengths must be between 9 and 10 mm when connecting conductors to this power distribution disconnect 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 types of conductors without having to prepare the conductor. For example, you don't need to crimp ferrules. Depending on the type of conductor, this power distribution disconnect terminal block is designed for conductor cross sections ranging from 0.08 mm² to 4 mm².

Electrical data

Ratings per IEC/EN

Nominal voltage (III/3)	400 V
Rated impulse withstand voltage (III / 3)	6 kV
Rated current	32 A
Legend (ratings)	(III / 3) ± Overvoltage category III / Pollution degree 3

Power Loss

Power loss, per pole (potential)	1.024 W
Rated current I_N for power loss specification	32 A
Resistance value for specified, current-dependent power loss	0.001 Ω

General information

Wiring direction	Front-entry wiring
------------------	--------------------

Connection Data

Clamping units	2
Total number of potentials	1
Number of levels	1

Connection 1

Connection technology	CAGE CLAMP®
Actuation type	Operating tool
Connectable conductor materials	Copper Aluminum

Connectable conductor materials (note) **Terminating Aluminum Conductors**
WAGO Spring-Clamp Terminal Blocks are suitable for solid aluminum conductors up to 4 mm²/12 AWG if WAGO "Alu-Plus" Contact Paste [249-130](#) is used for termination.

"Alu-Plus" Contact Paste Advantages:

- Automatically destroys the oxide film during clamping.
- Prevents fresh oxidation at the clamping point.
- Prevents electrolytic corrosion between aluminum and copper conductors (in the same terminal block).
- Provides long-term protection against corrosion.

Using terminal blocks with CAGE CLAMP® Spring Pressure Connection Technology, **aluminum conductors must first be cleaned with a blade** and then immediately inserted into the clamping units filled with "Alu-Plus" contact paste.

It is also possible to apply WAGO "Alu-Plus" **additionally** on the whole surface of the aluminum conductor before termination.

Please note that the nominal currents must be adapted to the reduced conductivity of the aluminum conductors:
2.5 mm² = 16 A
4 mm² = 22 A

Solid conductor	0.08 ... 4 mm ² / 28 ... 12 AWG
Fine-stranded conductor	0.08 ... 4 mm ² / 28 ... 12 AWG
Strip length	9 ... 10 mm / 0.35 ... 0.39 inches
Wiring direction	Front-entry wiring

Physical data

Width	6 mm / 0.236 inches
Height	77 mm / 3.031 inches
Depth from upper-edge of DIN-rail	43.5 mm / 1.713 inches

Mechanical data

Design	angled
Mounting type	DIN-35 rail
Marking level	Center 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	0.21 MJ
Weight	17.9 g

Environmental requirements

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

Commercial data

Product Group	17 (TOP JOB Installation Terminal Blocks)
PU (SPU)	50 pcs
Packaging type	Box
Country of origin	PL
GTIN	4044918808101
Customs tariff number	85369010000

Product Classification

UNSPSC	39121410
eCl@ss 10.0	27-14-11-38
eCl@ss 9.0	27-14-11-38
ETIM 9.0	EC001257
ETIM 10.0	EC001257
ECCN	NO US CLASSIFICATION

Environmental Product Compliance

CAS-No.	7439-92-1
REACH Candidate List Substance	Lead
RoHS Compliance Status	Compliant, No Exemption
SCIP notification number (Austria)	0d2c88b2-fda5-4b24-9c80-061aeae6eec0
SCIP notification number (Belgium)	1e2e8f47-c1bd-49d5-bc49-97fb3da04a84
SCIP notification number (Bulgaria)	2207b806-aa82-4e13-8345-cbe9db948860
SCIP notification number (Czech Republic)	842dcd9d-9462-4697-a772-0e91d61e8fea
SCIP notification number (Denmark)	d02d3acd-8867-4d12-9f91-c07c3b070a63
SCIP notification number (Finland)	5263377f-aa14-4ec8-a859-1fc3e9c6f25f
SCIP notification number (France)	aa6cff68-b977-47ce-89f9-9f2f00e7c706
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SCIP notification number (Poland)	f554e8a5-9c88-4125-afe3-001c11f9eb20
SCIP notification number (Romania)	37ec6941-dcf3-4a40-89e9-85d9a36d44b2
SCIP notification number (Sweden)	f74e958c-2231-42a2-b2b8-cc5392d5dfa3

Approvals / Certificates

General approvals



Approval	Standard	Certificate Name
CSA DEKRA Certification B.V.	C22.2 No. 158	1536075
KEMA/KEUR DEKRA Certification B.V.	EN 60947	71-107288
UR Underwriters Laboratories Inc.	UL 1059	E45172

Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
UK-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-

Approvals for marine applications



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

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product
Compliance 781-653



Documentation

Bid Text

781-653	19.02.2019	xml 3.16 KB	
781-653	02.03.2017	doc 24.00 KB	

CAD/CAE-Data

CAD data	CAE data
2D/3D Models 781-653	EPLAN Data Portal 781-653
	WSCAD Universe 781-653
	ZUKEN Portal 781-653

1 Compatible Products

1.1 Required Accessories

1.1.1 End plate

1.1.1.1 End plate



Item No.: 780-317

End and intermediate plate; 1.5 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.: 216-131

Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated; silver-colored



Item No.: 216-241

Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white



Item No.: 216-141

Ferrule; Sleeve for 0.5 mm² / 20 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92



Item No.: 216-242

Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray



Item No.: 216-262

Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray



Item No.: 216-142

Ferrule; Sleeve for 0.75 mm² / 18 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92



Item No.: 216-243

Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red



Item No.: 216-263

Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red



Item No.: 216-143

Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92



Item No.: 216-244

Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black



Item No.: 216-264

Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black



Item No.: 216-284

Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black



Item No.: 216-144

Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92; silver-colored



Item No.: 216-246

Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue



Item No.: 216-266

Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue



Item No.: 216-286

Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue



Item No.: 216-106

Ferrule; Sleeve for 2.5 mm² / AWG 14; uninsulated; electro-tin plated; silver-colored



Item No.: 216-267

Ferrule; Sleeve for 4 mm² / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray



Item No.: 216-287

Ferrule; Sleeve for 4 mm² / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray



Item No.: 216-207

Ferrule; Sleeve for 4 mm² / AWG 12; insulated; electro-tin plated; gray



Item No.: 216-107

Ferrule; Sleeve for 4 mm² / AWG 12; uninsulated; electro-tin plated

1.2.3 Installation

1.2.3.1 Cover



Item No.: 709-154

Cover; Type 2; suitable for cover carrier, type 2; 1 m long; transparent

1.2.3.3 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

1.2.4 Insulation stop

1.2.4.1 Insulation stop



Item No.: 281-470

Insulation stop; 0.08 - 0.2 mm² "s" (0.14 mm² "f-st"); 5 pieces/strip; white

Item No.: 281-471

Insulation stop; 0.25 - 0.5 mm²; 5 pieces/strip; light gray

Item No.: 281-472

Insulation stop; 0.75 - 1.5 mm²; 5 pieces/strip; dark gray

1.2.5 Jumper

1.2.5.1 Jumper



Item No.: 281-490

Jumper; 10-way; insulated; gray

Item No.: 281-482

Jumper; 2-way; insulated; gray

Item No.: 281-492

Jumper; 2-way; insulated; gray

Item No.: 281-483

Jumper; 3-way; insulated; gray



Item No.: 281-485

Jumper; 5-way; insulated; gray

1.2.6 Lock-out

1.2.6.1 Locking system



Item No.: 777-300

Lock-out; prevents reclosing of slide link; Snap-in type; for 780/781 Series; orange

1.2.7 Marking

1.2.7.1 Group marker carrier



Item No.: 249-105

Group marker carrier; gray

1.2.7.2 Marker



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

1.2.8 N-busbar

1.2.8.1 Busbar



Item No.: 210-133

Busbar; tin-plated; 1000 mm long; Cu 10 mm x 3 mm; white

1.2.8.2 Cover



Item No.: 777-303

N-busbar cover; 1000 mm long; transparent

1.2.9 Protective warning marker

1.2.9.1 Cover



Item No.: 281-415

Protective warning marker; for 5 terminal blocks; with high-voltage symbol, black; yellow

1.2.10 Push-in type wire jumper

1.2.10.1 Jumper



Item No.: 249-126

Push-in type wire jumper; 0.75 mm²; insulated; 110 mm long; black



Item No.: 249-123

Push-in type wire jumper; 0.75 mm²; insulated; 180 mm long; black



Item No.: 249-127

Push-in type wire jumper; 0.75 mm²; insulated; 250 mm long; black



Item No.: 249-125

Push-in type wire jumper; insulated; 60 mm long; black

1.2.11 Terminal blocks

1.2.11.1 Busbar terminal block



Item No.: 210-281

Connector; blue



Item No.: 209-105

Connector; silver-colored

1.2.12 Test and measurement

1.2.12.1 Testing accessories



Item No.: 249-148

B-type spacer module; modular; e.g., for bridging commoned terminal blocks; gray



Item No.: 249-147

B-type test plug module; modular; 2,50 mm²; gray



Item No.: 249-145

L-type end module; modular; with rigid contact pin; End module; 2,50 mm²; gray



Item No.: 249-146

L-type spacer module; modular; e.g., bridging commoned terminal blocks; gray



Item No.: 249-144

L-type test plug module; modular; with spring-loaded contact pin; Center module; 2,50 mm²; gray



Item No.: 281-419

Spacer module; modular; bridging commoned terminal blocks; gray



Item No.: 280-404

Test plug adapter; 5 mm wide; for test plug (2.3 mm Ø); suitable for 1.5 mm² - 4 mm² tbs; gray



Item No.: 209-170

Test plug adapter; 8.3 mm wide; for 4 mm Ø test plugs; suitable for 1.5 mm² - 10 mm² tbs; gray



Item No.: 281-418

Test plug module; modular; suitable for all WAGO 281, 776, 777 and 781 series rail-mounted terminal blocks with jumper slots in the current bar; gray



Item No.: 281-407

Test plug; 6 mm wide; Nominal current 24 A; for 0.08 mm² - 2.5 mm²; gray

1.2.13 Tool

1.2.13.1 Operating tool



Item No.: 210-720

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured



Item No.: 777-310

Operating tool; Specially designed blade; for TOPJOB® Terminal Blocks; orange

Installation Notes



Operating a screwless N-disconnect slide link.