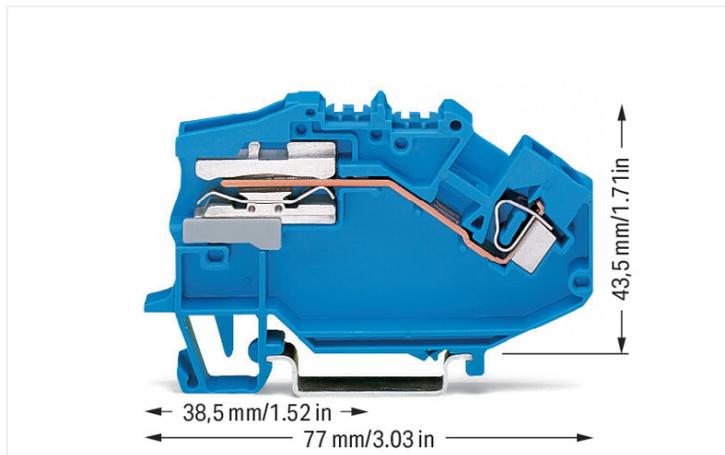


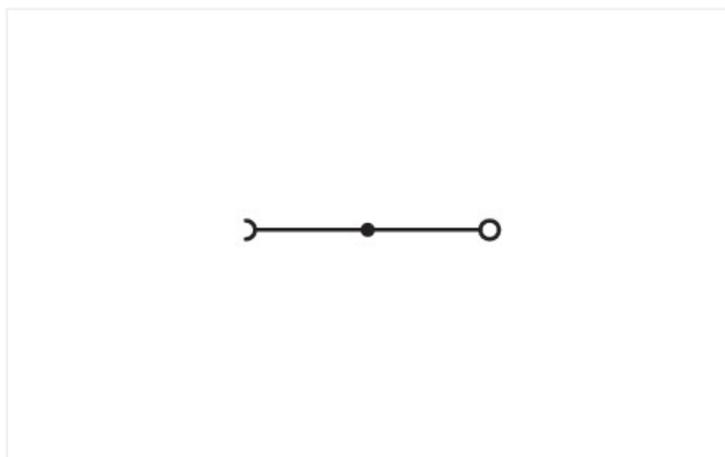
## Data Sheet | Item Number: 781-613

1-conductor N-disconnect terminal block; 4 mm<sup>2</sup>; CAGE CLAMP®; 4,00 mm<sup>2</sup>; blue

<https://www.wago.com/781-613>



Color: ■ blue



Similar to illustration

N-disconnect terminal block, 781 Series, blue

Quick and easy connections are guaranteed with this N-disconnect terminal block (item number 781-613). Strip lengths must be between 9 and 10 mm when connecting conductors to this N-disconnect terminal block. This product features conductor terminals and utilizes CAGE CLAMP®. Our CAGE CLAMP® connection offers a proven and maintenance-free way to connect all types of conductors. You do not need to prepare the conductor in any way, such as crimping ferrules. This N-disconnect terminal block is suitable for conductor cross sections ranging from 0.08 mm<sup>2</sup> to 4 mm<sup>2</sup>.

### 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	1
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 mm<sup>2</sup>/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 mm<sup>2</sup> = 16 A  
4 mm<sup>2</sup> = 22 A

Solid conductor	0.08 ... 4 mm <sup>2</sup> / 28 ... 12 AWG
Fine-stranded conductor	0.08 ... 4 mm <sup>2</sup> / 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)	<a href="#">Information on material specifications can be found here</a>
Color	blue
Material group	I
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.231 MJ
Weight	16.4 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	4044918813327
Customs tariff number	85365080000

### 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)	fcc55d7e-702c-4c16-ae30-2f17c2f925fd
SCIP notification number (Belgium)	307ec76a-c71f-4219-b1b7-64de484fd30a
SCIP notification number (Bulgaria)	2e8c1f1d-07f6-45aa-b512-b0b41895df60
SCIP notification number (Czech Republic)	e899b8cc-2f54-4ac8-8498-c27765ab6748
SCIP notification number (Denmark)	268b404e-de2f-412b-8709-61a007e096e1
SCIP notification number (Finland)	199fe248-ef6c-4c30-81af-75a96c238297
SCIP notification number (France)	cb7abae5-9d72-4386-95af-1d3293fa47e0
SCIP notification number (Germany)	703fa639-c355-4e5b-af48-5e199af40287
SCIP notification number (Hungary)	62a46408-33f6-48ef-9c29-8bc6bdb3b5e1
SCIP notification number (Italy)	af1667cd-c911-44a6-819c-6a9021934c26
SCIP notification number (Netherlands)	fe2f0944-279e-4983-866a-46e0628e003b
SCIP notification number (Poland)	8c3a4e1e-4e31-4cb5-9ac3-814499a137ae
SCIP notification number (Romania)	d9e81337-5d65-4c72-80b9-37930d2f8c19
SCIP notification number (Sweden)	850ba5fa-24d1-4553-a623-64631b0a7db6

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 781-613 <a href="#">↓</a>

Documentation

Bid Text			
781-613	19.02.2019	xml 3.13 KB	<a href="#">↓</a>
781-613	02.03.2017	doc 24.00 KB	<a href="#">↓</a>

CAD/CAE-Data

CAD data	CAE data
2D/3D Models 781-613	EPLAN Data Portal 781-613
	WSCAD Universe 781-613
	ZUKEN Portal 781-613

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 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated; silver-colored



**Item No.: 216-241**

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / AWG 14; uninsulated; electro-tin plated; silver-colored



**Item No.: 216-267**

Ferrule; Sleeve for 4 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / AWG 12; insulated; electro-tin plated; gray



**Item No.: 216-107**

Ferrule; Sleeve for 4 mm<sup>2</sup> / 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.: 780-321**

Busbar carrier; not suitable for use as end stop; for DIN 35 rail; 1.5 mm thick; blue

**Item No.: 777-305**

Busbar carrier; with end stop function and detachable separator plate; for DIN 35 rail; 8 mm thick; blue

**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 mm<sup>2</sup> "s" (0.14 mm<sup>2</sup> "f-st"); 5 pieces/strip; white

**Item No.: 281-471**

Insulation stop; 0.25 - 0.5 mm<sup>2</sup>; 5 pieces/strip; light gray

**Item No.: 281-472**

Insulation stop; 0.75 - 1.5 mm<sup>2</sup>; 5 pieces/strip; dark gray

### 1.2.5 Jumper

#### 1.2.5.1 Jumper



**Item No.: 281-402**

Jumper; insulated; gray

**Item No.: 281-409**

Jumper; insulated; gray

**Item No.: 281-422**

Jumper; insulated; yellow-green

**Item No.: 781-452**

Staggered jumper; from 1 to 2; insulated; gray



**Item No.: 781-453**

Staggered jumper; from 1 to 3; insulated; gray

**Item No.: 781-454**

Staggered jumper; from 1 to 4; insulated; gray

**Item No.: 781-455**

Staggered jumper; from 1 to 5; insulated; gray

**Item No.: 781-456**

Staggered jumper; from 1 to 6; 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 mm<sup>2</sup>; insulated; 110 mm long; black



**Item No.: 249-123**

Push-in type wire jumper; 0.75 mm<sup>2</sup>; insulated; 180 mm long; black



**Item No.: 249-127**

Push-in type wire jumper; 0.75 mm<sup>2</sup>; 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 mm<sup>2</sup>; gray



**Item No.: 249-145**

L-type end module; modular; with rigid contact pin; End module; 2,50 mm<sup>2</sup>; 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 mm<sup>2</sup>; gray



**Item No.: 281-419**

Spacer module; modular; bridging commoned terminal blocks; gray



**Item No.: 210-297**

Step-down test plug; from 4mm socket to 2mm plug; red



**Item No.: 280-404**

Test plug adapter; 5 mm wide; for test plug (2.3 mm Ø); suitable for 1.5 mm<sup>2</sup> - 4 mm<sup>2</sup> tbs; gray



**Item No.: 209-170**

Test plug adapter; 8.3 mm wide; for 4 mm Ø test plugs; suitable for 1.5 mm<sup>2</sup> - 10 mm<sup>2</sup> 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 mm<sup>2</sup> - 2.5 mm<sup>2</sup>; 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.