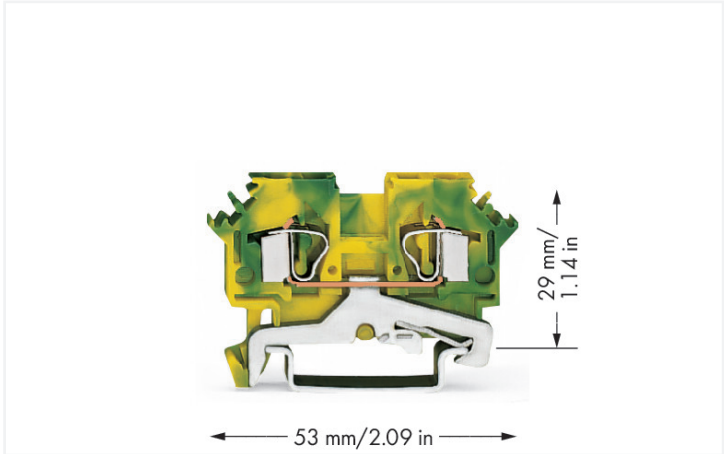


**Data Sheet | Item Number: 281-607**

2-conductor ground terminal block; 4 mm<sup>2</sup>; lateral marker slots; for DIN-rail 35 x 15 and 35 x 7.5; CAGE CLAMP®; 4,00 mm<sup>2</sup>; green-yellow

<https://www.wago.com/281-607>



Color: ■ green-yellow

**Ground terminal block, 281 Series, CAGE CLAMP®**

Our ground terminal block (item number 281-607) is designed for seamless electrical installations. Conductors can only be connected to this ground terminal block if their strip length is between 9 and 10 mm . WAGO's ground terminal blocks allow you to connect electrical conductors directly to the mounting rail thanks to an integrated contact foot. This connection ensures both electrical and mechanical stability between the conductors and the mounting adapter. Featuring conductor terminals along with CAGE CLAMP®, this connector outperforms the competition. Our proven universal connection known as CAGE CLAMP® is industry-leading when it comes to connection technology and electrical interconnections. This ground terminal block is suitable for conductor cross sections ranging from 0.08 mm<sup>2</sup> to 4 mm<sup>2</sup>.

An operating tool is used to operate this through rail-mount terminal block.

| Electrical data                 |  |                  |     |    | General information |  |
|---------------------------------|--|------------------|-----|----|---------------------|--|
| Ratings per                     |  | IEC/EN 60947-7-2 |     |    | Wiring direction    |  |
| Overvoltage category            |  | III              | III | II | Front-entry wiring  |  |
| Pollution degree                |  | 3                | 2   | 2  |                     |  |
| Nominal voltage                 |  | -                | -   | -  |                     |  |
| Rated impulse withstand voltage |  | -                | -   | -  |                     |  |
| Rated current                   |  | -                | -   | -  |                     |  |

| Connection Data            |   | Connection 1                    |                    |
|----------------------------|---|---------------------------------|--------------------|
| Clamping units             | 2 | Connection technology           | CAGE CLAMP®        |
| Total number of potentials | 1 | Actuation type                  | Operating tool     |
| Number of levels           | 1 | Connectable conductor materials | Copper<br>Aluminum |

| Connection 1                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Connectable conductor materials (note) | <div><div><div><b>Terminating Aluminum Conductors</b></div><div>WAGO Spring-Clamp Terminal Blocks are suitable for solid aluminum conductors up to 4 mm²/12 AWG if WAGO Aluminum Contact Paste <a href="#">249-130</a> is used for termination.</div></div><div><div>Aluminum Contact Paste Advantages:</div><div><ul style="list-style-type: none"><li>▪ Automatically destroys the oxide film during clamping.</li><li>▪ Prevents fresh oxidation at the clamping point.</li><li>▪ Prevents electrolytic corrosion between aluminum and copper conductors (in the same terminal block).</li><li>▪ Provides long-term protection against corrosion.</li></ul></div></div><div><div>Using terminal blocks with CAGE CLAMP® Spring Pressure Connection Technology, <b>aluminum conductors must first be cleaned with a blade</b> and then immediately inserted into the clamping units filled with aluminum contact paste.</div><div>It is also possible to apply WAGO Aluminum Contact Paste <b>additionally</b> on the whole surface of the aluminum conductor before termination.</div><div>Please note that the nominal currents must be adapted to the reduced conductivity of the aluminum conductors::<br/>2.5 mm² = 16 A<br/>4 mm² = 22 A</div></div></div> |
| Solid conductor                        | 0.08 ... 4 mm² / 28 ... 12 AWG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Fine-stranded conductor                | 0.08 ... 4 mm² / 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                            | 53 mm / 2.087 inches |
| Depth from upper-edge of DIN-rail | 29 mm / 1.142 inches |

| Mechanical data |                 |
|-----------------|-----------------|
| Design          | horizontal type |
| Mounting type   | DIN-35 rail     |
| Marking level   | Side marking    |

| Material data                      |                                                                          |
|------------------------------------|--------------------------------------------------------------------------|
| Note (material data)               | <a href="#">Information on material specifications can be found here</a> |
| Color                              | green-yellow                                                             |
| Material group                     | I                                                                        |
| Insulation material (main housing) | Polyamide (PA66)                                                         |
| Flammability class per UL94        | V0                                                                       |
| Fire load                          | 0.101 MJ                                                                 |
| Weight                             | 11.3 g                                                                   |

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

| Commercial data       |                                  |
|-----------------------|----------------------------------|
| Product Group         | 1 (Rail Mounted Terminal Blocks) |
| PU (SPU)              | 50 pcs                           |
| Packaging type        | Box                              |
| Country of origin     | PL                               |
| GTIN                  | 4044918511971                    |
| Customs tariff number | 85369010000                      |

| Product Classification |                      |
|------------------------|----------------------|
| UNSPSC                 | 39121410             |
| eCl@ss 10.0            | 27-14-11-41          |
| eCl@ss 9.0             | 27-14-11-41          |
| ETIM 9.0               | EC000901             |
| ETIM 10.0              | EC000901             |
| 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)        | cde857ac-9f5e-427c-a3ce-5750a9426d46 |
| SCIP notification number (Belgium)        | 13207e6e-08f6-48ee-a5af-5db0e3632a80 |
| SCIP notification number (Bulgaria)       | 27ba45f5-02f8-4106-9cca-e7966d0a1056 |
| SCIP notification number (Czech Republic) | ca58af72-a944-4109-bb63-be2fa05b86d1 |
| SCIP notification number (Denmark)        | 66e4b624-eb59-4fc9-9499-11c25e290204 |
| SCIP notification number (Finland)        | c6beeb7d-4eed-4b49-bd4c-9e14409cd660 |
| SCIP notification number (France)         | a24bb8e4-14a6-4291-8484-bfd0dc0300   |
| SCIP notification number (Germany)        | acdc5dd8-0983-49fc-8073-cea882d7db1e |
| SCIP notification number (Hungary)        | c42495f8-088a-4a50-b54a-4b2c61e2ae0d |
| SCIP notification number (Italy)          | 09122bba-6fd4-407e-a07e-5b6bbb55508b |
| SCIP notification number (Netherlands)    | 6b49152b-d73b-4aa2-93ab-a0745ce46107 |
| SCIP notification number (Poland)         | 1c901ba7-ca77-4eeb-b2f1-a5147838035d |
| SCIP notification number (Romania)        | a68d889b-61ed-4a6d-bfea-ce80a3b5116c |
| SCIP notification number (Sweden)         | a1fcb201-4d61-4a47-9743-b14436ba71fb |

| Approvals / Certificates                                                                                                                                                                                                                                            |          |                                                                                            |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|--------------------------------------------------------------------------------------------|
| General approvals                                                                                                                                                                                                                                                   |          | General approvals                                                                          |
| <div></div> |          | <div>UL Underwriters Laboratories Inc.</div> <div>UL 1059</div> <div>20190731-E45172</div> |
| Approval                                                                                                                                                                                                                                                            | Standard | Certificate Name                                                                           |
| CCA<br>DEKRA Certification B.V.                                                                                                                                                                                                                                     | EN 60947 | NTR NL-7727                                                                                |
| CSA<br>CSA Group                                                                                                                                                                                                                                                    | C22.2    | 1505034                                                                                    |
| KEMA/KEUR<br>DEKRA Certification B.V.                                                                                                                                                                                                                               | EN 60947 | 71-107288                                                                                  |



Declarations of conformity and manufacturer's declarations

| Approval                                           | Standard | Certificate Name |
|----------------------------------------------------|----------|------------------|
| EU-Declaration of Conformity<br>WAGO GmbH & Co. KG | -        | -                |

Approvals for marine applications

|     |          |                   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------------------|
| Approval                                                                                                                                                                                                                                                                                                                                     | Standard | Certificate Name  |
| ABS<br>American Bureau of Shipping                                                                                                                                                                                                                                                                                                           | -        | 24-0152298-PDA    |
| BV<br>Bureau Veritas S.A.                                                                                                                                                                                                                                                                                                                    | EN 60947 | 07436/G0 BV       |
| DNV GL<br>Det Norske Veritas, Germanischer Lloyd                                                                                                                                                                                                                                                                                             | -        | TAE00001V2        |
| PRS<br>Polski Rejestr Statków                                                                                                                                                                                                                                                                                                                | -        | TE/1094/880590/23 |

Downloads

Environmental Product Compliance

| Compliance Search                                                                                                          |
|----------------------------------------------------------------------------------------------------------------------------|
| Environmental Product Compliance 281-607  |

CAD/CAE-Data

| CAD data                                                                                                 |
|----------------------------------------------------------------------------------------------------------|
| 2D/3D Models 281-607  |

| CAE data                                                                                                        |
|-----------------------------------------------------------------------------------------------------------------|
| EPLAN Data Portal 281-607  |
| WSCAD Universe 281-607     |
| ZUKEN Portal 281-607       |

1 Compatible Products

1.1 Required Accessories

1.1.1 End plate

1.1.1.1 End plate



|                                                                          |
|--------------------------------------------------------------------------|
| <b>Item No.: 281-316</b><br>End and intermediate plate; 3 mm thick; gray |
|--------------------------------------------------------------------------|



|                                                                            |
|----------------------------------------------------------------------------|
| <b>Item No.: 281-317</b><br>End and intermediate plate; 3 mm thick; orange |
|----------------------------------------------------------------------------|



|                                                                          |
|--------------------------------------------------------------------------|
| <b>Item No.: 281-337</b><br>Separator plate; 2 mm thick; oversized; gray |
|--------------------------------------------------------------------------|



|                                                                            |
|----------------------------------------------------------------------------|
| <b>Item No.: 281-327</b><br>Separator plate; 2 mm thick; oversized; 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.: 216-241**  
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.: 216-242**  
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.: 216-243**  
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.: 216-244**  
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.: 216-246**  
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.: 216-106**  
Ferrule; Sleeve for 2.5 mm<sup>2</sup> / AWG 14; uninsulated; electro-tin plated; silver-colored

1.2.3 Installation

1.2.3.1 Cover



**Item No.: 709-153**  
Cover; Type 1; suitable for cover carrier, type 1; 1 m long; transparent



1.2.3.2 Cover carrier



**Item No.: 709-167**  
Cover carrier; Type 1; incl. fixing/retaining screws and knurled nut; suitable for 279 to 282 and 880 Series rail-mounted terminal blocks; suitable for 264 Series miniature rail-mounted terminal blocks; suitable for 270 Series sensor and actuator terminal blocks; gray

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 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.: 281-490**  
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



**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



**Item No.: 210-103**  
Wire commoning chain; 0.5 mm<sup>2</sup>; insulated; black



**Item No.: 709-110**  
Wire commoning chain; 2.5 mm<sup>2</sup>; insulated; black



**Item No.: 709-111**  
Wire commoning chain; 2.5 mm<sup>2</sup>; insulated; black



**Item No.: 709-112**  
Wire commoning chain; 2.5 mm<sup>2</sup>; insulated; black



**Item No.: 210-123**  
Wire commoning chain; insulated; blue



1.2.6 Marking

1.2.6.1 Group marker carrier



**Item No.: 209-140**  
Group marker carrier; gray



**Item No.: 209-141**  
Group marker carrier; gray



**Item No.: 209-142**  
Group marker carrier; gray



**Item No.: 249-105**  
Group marker carrier; gray

1.2.6.2 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

1.2.7 Protective warning marker

1.2.7.1 Cover



**Item No.: 281-415**  
Protective warning marker; for 5 terminal blocks; with high-voltage symbol, black; yellow

1.2.8 Push-in type wire jumper

1.2.8.1 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

1.2.9 Test and measurement

1.2.9.1 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.: 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

1.2.10 Tool

1.2.10.1 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

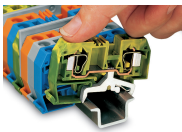


**Item No.: 210-657**  
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short; multicoloured

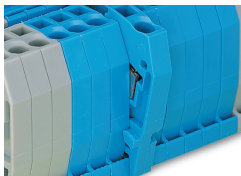


Installation Notes

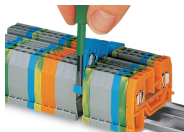
Installation



Snapping a ground conductor block onto the DIN-rail automatically makes a direct electrical connection to the rail.



Quick assembly keys prevent reverse mounting.

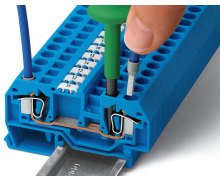


Removing a terminal block from the assembly.

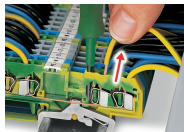
Conductor termination



**CAGE CLAMP® connection**  
Inserting a conductor.



**CAGE CLAMP® connection**  
Inserting a conductor.  
With ferruled conductors, it is necessary to use a terminal block one size larger than the conductor's nominal cross-section.



**CAGE CLAMP® connection**  
Removing a solid conductor.

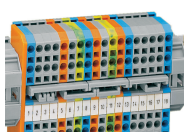


Inserting insulation stops.

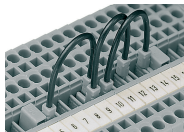
Commoning



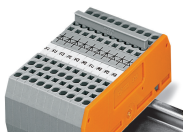
Commoning ground conductor terminal blocks with through terminal blocks is possible in one direction only (via rear side of terminal block) using adjacent jumpers. WAGO recommends using yellow-green adjacent jumpers in addition to the required marking of these blocks.



Staggered jumpers are suitable for sophisticated circuit requirements. Push jumpers down until fully inserted!



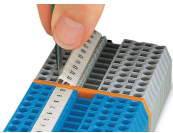
**Push-In Type Wire Jumpers**  
When installing machines or control systems, it is often necessary to make an additional connection between two terminal blocks that are not next to each other on the rail. In such cases, WAGO's touch-proof, push-in type wire jumpers are the ideal solution.  
  
These jumpers are compatible with the following rail-mount terminal blocks:  
- 279 Series (1.5 mm<sup>2</sup>/16 AWG),  
- 280/775/780 Series (2.5 mm<sup>2</sup>/14 AWG)  
- 281/769/776/777/781 and 880 Series (4 mm<sup>2</sup>/12 AWG)  
They are available in three conductor lengths (60, 110 and 250 mm), allowing up to 60 terminal blocks to be commoned depending on their width (see table on the right).  
  
The 280/775/780 and 281/776/777/781 Series Terminal Blocks accept two wire jumpers, allowing the use of commoning chains. Furthermore, the 280/769/775/780/880 and 281/776/777/781 Series allow both wire jumper and adjacent jumper to be simultaneously plugged into a same terminal block.



Commoning using comb-style jumper bars: Push comb-style jumper bars down until fully inserted.



Marking



Labeling via WMB Multi Marking System.