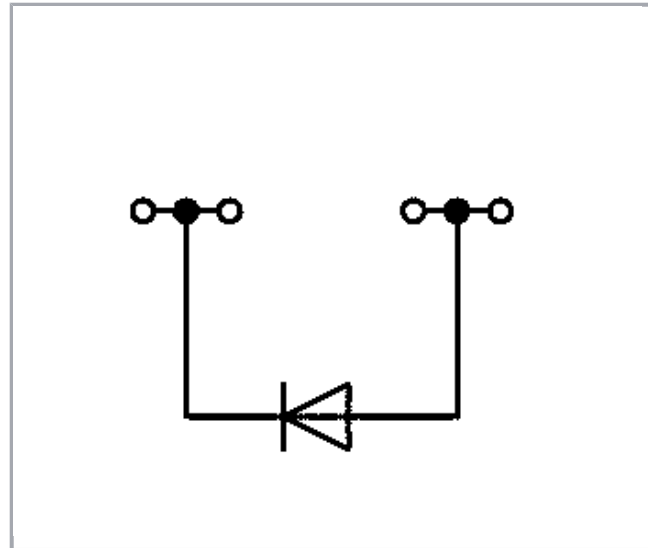
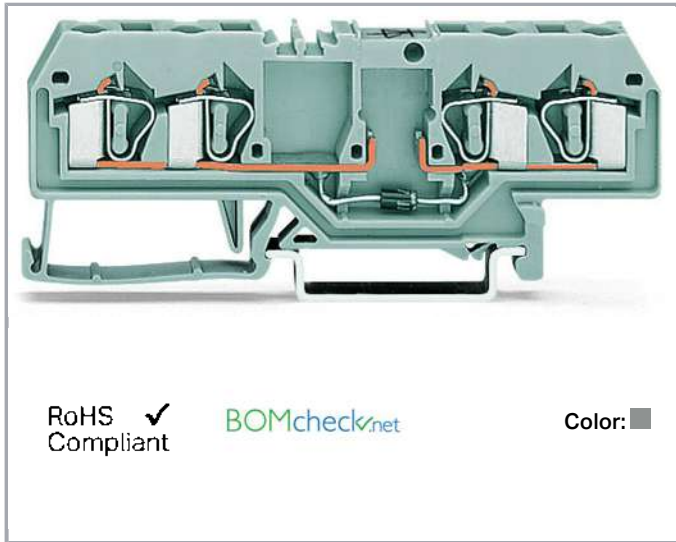


Data sheet | Item number: 281-665/281-401

Component terminal block; 4-conductor; with diode 1N5408; anode, right side; for DIN-rail 35 x 15 and 35 x 7.5; 4 mm²; CAGE CLAMP®; 4,00 mm²; gray



www.wago.com/281-665_281-401



Item description

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 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 be 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 (14 AWG) = 16 A

4 mm² (12 AWG) = 22 A

Subject to changes. Please also observe the further product documentation!

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Email: info.de@wago.com | Web: www.wago.com

Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.



Data

Electrical data

| | |
|-----------------|---------|
| Nominal voltage | 250 V |
| Reverse voltage | 1,000 V |

Ratings per IEC/EN 60664-1

| | |
|---------------|------------------|
| Ratings per | IEC/EN 60947-7-1 |
| Rated current | 1.5 A |

Connection data

| | |
|-----------------------------------|--|
| Connection technology | CAGE CLAMP® |
| Actuation type | Operating tool |
| Connectable conductor materials | Copper Aluminum |
| 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 inch |
| Total number of connection points | 4 |
| Total number of potentials | 1 |
| Number of levels | 1 |
| Type of wiring | Front-entry wiring |

Geometrical Data

| | |
|---------------------------------------|--------------------|
| Width | 6 mm / 0.236 inch |
| Height from upper-edge of DIN-35 rail | 29 mm / 1.142 inch |
| Depth | 86 mm / 3.386 inch |

Mechanical data

| | |
|------------------|----------------|
| Design | horizontal |
| Type of mounting | DIN-35 rail |
| Marking level | Center marking |

Material Data

| | |
|---------------------|----------------------|
| Color | gray |
| Insulating material | Polyamide 66 (PA 66) |

Subject to changes. Please also observe the further product documentation!



| | |
|-----------|----------|
| Fire load | 0.206 MJ |
| Weight | 13.7 g |

Commercial data



| | |
|--------------------|----------------------------------|
| Product Group | 1 (Rail Mounted Terminal Blocks) |
| Packaging type | BOX |
| Country of origin | CN |
| GTIN | 4050821275527 |
| Customs Tariff No. | 85369010000 |

Approvals / Certificates

Country specific Approvals

| Logo | Approval | Additional Approval Text | Certificate name |
|---|---------------------------------------|--------------------------|------------------|
|  | CCA DEKRA Certification B.V. | EN 60947, IEC 60947 | NTR NL-7454/A1 |
|  | KEMA/KEUR DEKRA Certification B.V. | EN 60947 | 71-107288 |

Ship Approvals

| Logo | Approval | Additional Approval Text | Certificate name |
|--|--|--------------------------|------------------|
|  | ABS American Bureau of Shipping | - | 20-HG1941090-PDA |
|  | DNV GL Det Norske Veritas, Germanischer Lloyd | - | TAE00001V2 |

Counterpart




Subject to changes. Please also observe the further product documentation!

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Do you have any questions about our products?
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Compatible products












End plate

| | | |
|--|--|--|
|  | Item no.: 281-334 End and intermediate plate; 2.5 mm thick; gray | www.wago.com/281-334 |
|  | Item no.: 281-335 End and intermediate plate; 2.5 mm thick; orange | www.wago.com/281-335 |
|  | Item no.: 281-338 Separator plate; 2 mm thick; oversized; gray | www.wago.com/281-338 |
|  | Item no.: 281-339 Separator plate; 2 mm thick; oversized; orange | www.wago.com/281-339 |















ferrule

| | | |
|--|--|--|
|  | Item no.: 216-106 Ferrule; Sleeve for 2.5 mm ² / AWG 14; uninsulated; electro-tin plated | www.wago.com/216-106 |
|  | Item no.: 216-201 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; white | www.wago.com/216-201 |
|  | Item no.: 216-202 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; gray | www.wago.com/216-202 |
|  | Item no.: 216-203 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; red | www.wago.com/216-203 |
|  | Item no.: 216-204 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; black | www.wago.com/216-204 |
|  | Item no.: 216-205 Ferrule; Sleeve for 2.08 mm ² / AWG 14; insulated; electro-tin plated; yellow | www.wago.com/216-205 |
|  | Item no.: 216-206 Ferrule; Sleeve for 2.5 mm ² / AWG 14; insulated; electro-tin plated; blue | www.wago.com/216-206 |
|  | Item no.: 216-241 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white | www.wago.com/216-241 |
| | Item no.: 216-242 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight | www.wago.com/216-242 |















Subject to changes. Please also observe the further product documentation!

| | | |
|--|--|--|
|  | crimped; acc. to DIN 46228, Part 4/09.90; gray | |
|  | Item no.: 216-243 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red | www.wago.com/216-243 |
|  | Item no.: 216-244 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black | www.wago.com/216-244 |
|  | Item no.: 216-246 Ferrule; Sleeve for 2.5 mm ² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue | www.wago.com/216-246 |
| | Item no.: 216-301 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated; yellow | www.wago.com/216-301 |
|  | Item no.: 216-302 Ferrule; Sleeve for 0.34 mm ² / 22 AWG; insulated; electro-tin plated; green | www.wago.com/216-302 |
| Marking accessories | | |
|  | Item no.: 2009-115 WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white | www.wago.com/2009-115 |
|  | 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 | www.wago.com/2009-115/000-002 |
|  | Item no.: 2009-115/000-006 WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white | www.wago.com/2009-115/000-006 |
|  | 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 | www.wago.com/2009-115/000-007 |
|  | Item no.: 2009-115/000-012 WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white | www.wago.com/2009-115/000-012 |
|  | Item no.: 2009-115/000-017 WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white | www.wago.com/2009-115/000-017 |
|  | 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 | www.wago.com/2009-115/000-023 |
|  | Item no.: 2009-115/000-024 WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white | www.wago.com/2009-115/000-024 |
|  | Item no.: 249-105 Group marker carrier; gray | www.wago.com/249-105 |









Subject to changes. Please also observe the further product documentation!

| | | |
|--|---|--|
|  | <p>Item no.: 793-501 WMB marking card; as card; not stretchable; plain; snap-on type; white</p> | www.wago.com/793-501 |
|  | <p>Item no.: 793-501/000-002 WMB marking card; as card; not stretchable; plain; snap-on type; yellow</p> | www.wago.com/793-501/000-002 |
|  | <p>Item no.: 793-501/000-005 WMB marking card; as card; not stretchable; plain; snap-on type; red</p> | www.wago.com/793-501/000-005 |
|  | <p>Item no.: 793-501/000-006 WMB marking card; as card; not stretchable; plain; snap-on type; blue</p> | www.wago.com/793-501/000-006 |
|  | <p>Item no.: 793-501/000-007 WMB marking card; as card; not stretchable; plain; snap-on type; gray</p> | www.wago.com/793-501/000-007 |
|  | <p>Item no.: 793-501/000-012 WMB marking card; as card; not stretchable; plain; snap-on type; orange</p> | www.wago.com/793-501/000-012 |
|  | <p>Item no.: 793-501/000-017 WMB marking card; as card; not stretchable; plain; snap-on type; light green</p> | www.wago.com/793-501/000-017 |
|  | <p>Item no.: 793-501/000-023 WMB marking card; as card; not stretchable; plain; snap-on type; green</p> | www.wago.com/793-501/000-023 |
|  | <p>Item no.: 793-501/000-024 WMB marking card; as card; not stretchable; plain; snap-on type; violet</p> | www.wago.com/793-501/000-024 |
|  | <p>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</p> | www.wago.com/793-5501 |
|  | <p>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</p> | www.wago.com/793-5501/000-002 |
|  | <p>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</p> | www.wago.com/793-5501/000-005 |
|  | <p>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</p> | www.wago.com/793-5501/000-006 |
|  | <p>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</p> | www.wago.com/793-5501/000-007 |




Subject to changes. Please also observe the further product documentation!

| | | |
|--|--|--|
|  | 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 | www.wago.com/793-5501/000-012 |
|  | 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; green | www.wago.com/793-5501/000-017 |
|  | 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; light green | www.wago.com/793-5501/000-023 |
|  | 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 | www.wago.com/793-5501/000-024 |
| tools | | |
|  | Item no.: 210-657 Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short | www.wago.com/210-657 |
|  | Item no.: 210-658 Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; angled; short | www.wago.com/210-658 |
|  | Item no.: 210-720 Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft | www.wago.com/210-720 |
| Protective Warning Marker | | |
|  | Item no.: 281-415 Protective warning marker; with high-voltage symbol, black; for 5 terminal blocks; yellow | www.wago.com/281-415 |
| assembling | | |
|  | Item no.: 209-106 Mounting carrier; for isolated mounting on DIN 35 rails; gray | www.wago.com/209-106 |
|  | Item no.: 709-153 Cover; Type 1; suitable for cover carrier, type 1; 1 m long; transparent | www.wago.com/709-153 |
| Carrier rail | | |
|  | 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 | www.wago.com/210-112 |
|  | Item no.: 210-113 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715 | www.wago.com/210-113 |
|  | Item no.: 210-114 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715 | www.wago.com/210-114 |
|  | 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 | www.wago.com/210-115 |






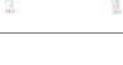
Subject to changes. Please also observe the further product documentation!

| | | |
|--|--|--|
|  | Item no.: 210-118 Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715 | www.wago.com/210-118 |
|  | 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 | www.wago.com/210-196 |
|  | Item no.: 210-197 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715 | www.wago.com/210-197 |
|  | 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 | www.wago.com/210-198 |
|  | Item no.: 210-504 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715 | www.wago.com/210-504 |
|  | Item no.: 210-505 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; according to EN 60715 | www.wago.com/210-505 |
|  | Item no.: 210-506 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715 | www.wago.com/210-506 |
|  | Item no.: 210-508 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715 | www.wago.com/210-508 |









Insulation stop

| | | |
|--|--|--|
|  | Item no.: 281-470 Insulation stop; 0.08 - 0.2 mm ² "s" (0.14 mm ² "f-st"); 5 pieces/strip; white | www.wago.com/281-470 |
|  | Item no.: 281-471 Insulation stop; 0.25 - 0.5 mm ² ; 5 pieces/strip; light gray | www.wago.com/281-471 |
|  | Item no.: 281-472 Insulation stop; 0.75 - 1.5 mm ² ; 5 pieces/strip; dark gray | www.wago.com/281-472 |

Jumper

| | | |
|--|---|--|
|  | Item no.: 210-103 Wire commoning chain; insulated; 50 connections; black | www.wago.com/210-103 |
|  | Item no.: 210-123 Wire commoning chain; insulated; 50 connections | www.wago.com/210-123 |
|  | Item no.: 249-123 Push-in type wire jumper; insulated; wire length 180 mm; Conductor cross section 0.75 mm ² | www.wago.com/249-123 |
|  | Item no.: 249-125 Push-in type wire jumper; insulated; wire length 60 mm; Conductor cross section 0.75 mm ² | www.wago.com/249-125 |
|  | Item no.: 249-126 Push-in type wire jumper; insulated; wire length 110 mm; Conductor cross section 0.75 mm ² | www.wago.com/249-126 |
|  | Item no.: 249-127 Push-in type wire jumper; insulated; wire length 250 mm; Conductor cross section 0.75 mm ² | www.wago.com/249-127 |

Subject to changes. Please also observe the further product documentation!

| | | |
|--|---|--|
|  | Item no.: 281-482 Comb-style jumper bar; insulated; 2-way; IN = IN terminal block; gray | www.wago.com/281-482 |
|  | Item no.: 281-483 Comb-style jumper bar; insulated; 3-way; IN = IN terminal block; gray | www.wago.com/281-483 |
|  | Item no.: 281-485 Comb-style jumper bar; insulated; 5-way; IN = IN terminal block; gray | www.wago.com/281-485 |
|  | Item no.: 281-490 Comb-style jumper bar; insulated; 10-way; IN = IN terminal block; gray | www.wago.com/281-490 |
|  | Item no.: 281-492 Alternate comb-style jumper bar; insulated; 2-way; IN = IN terminal block; gray | www.wago.com/281-492 |
|  | Item no.: 709-110 Wire commoning chain; insulated; 4 connections; 3 x 110 mm; black | www.wago.com/709-110 |
|  | Item no.: 709-111 Wire commoning chain; insulated; 3 connections; 2 x 120 mm; black | www.wago.com/709-111 |
|  | Item no.: 709-112 Wire commoning chain; insulated; 3 connections; 2 x 170 mm; black | www.wago.com/709-112 |

Downloads

Documentation

Bid Text

| | | | |
|--------------------------------|--------------|----------------|----------|
| 281-665/281-401 X81 - Datei | Feb 19, 2019 | xml 3.3 kB | Download |
| 281-665/281-401 doc - Datei | Aug 30, 2017 | doc 25.6 kB | Download |

Additional Information

| | | | |
|------------------------|-------------|---------------|----------|
| Technical explanations | Apr 3, 2019 | pdf 2.1 MB | Download |
|------------------------|-------------|---------------|----------|

CAD/CAE-Data

CAD data

| | | |
|------------------------------|-----|----------|
| 2D/3D Models 281-665/281-401 | URL | Download |
|------------------------------|-----|----------|

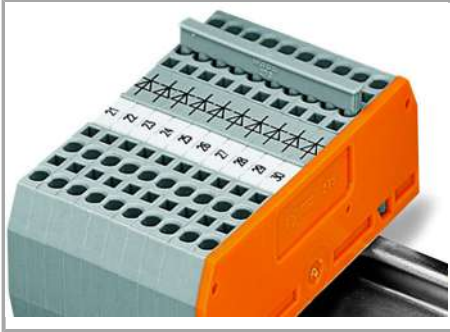
CAE data

| | | |
|-----------------------------------|-----|----------|
| EPLAN Data Portal 281-665/281-401 | URL | Download |
|-----------------------------------|-----|----------|

Subject to changes. Please also observe the further product documentation!

Installation Notes

Jumpered

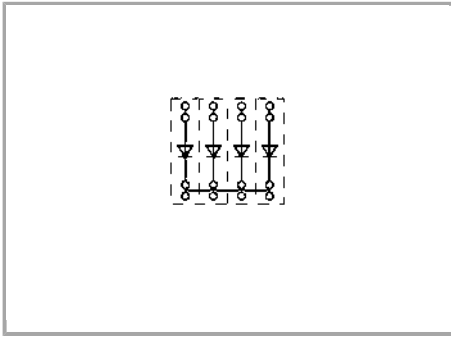


Commoning using comb-style jumper bars. Push comb-style jumper bars down until fully inserted.



These diode terminal blocks have been specially developed for custom diode circuits, such as lamp test and collective fault signal circuits.

Subject to changes. Please also observe the further product documentation!



Polarized diode gate, common cathode

Subject to changes. Please also observe the further product documentation!