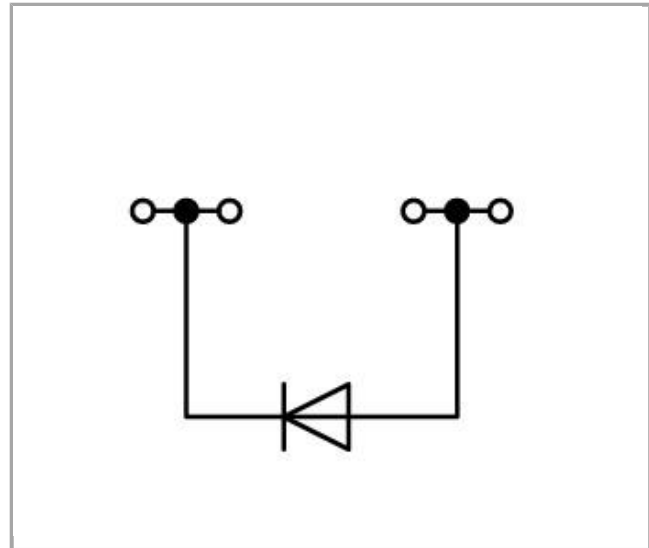
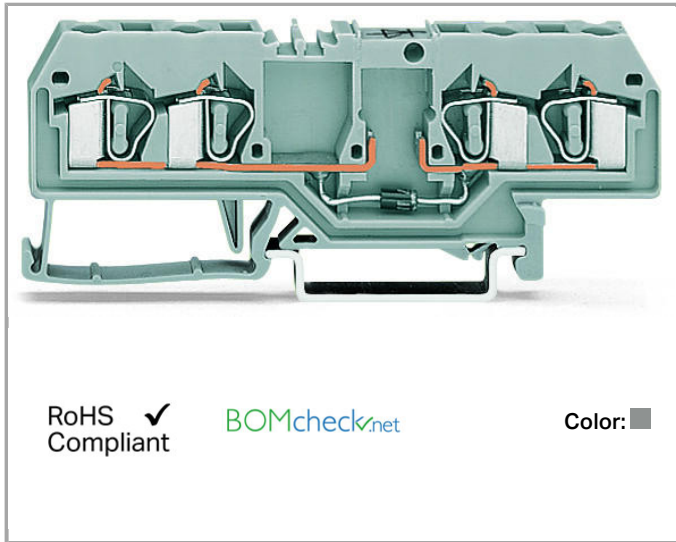


Data sheet | Item number: 281-665/281-411

Component terminal block; 4-conductor; with diode 1N4007; anode, right side; for DIN-rail 35 x 15 and 35 x 7.5; 4 mm²; CAGE CLAMP®



281-665/281-411



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

Data

Electrical data

Nominal voltage

250 V

| | |
|-----------------|--------|
| Reverse voltage | 1000 V |
|-----------------|--------|

Ratings per IEC/EN 60664-1

| | |
|---------------|-------|
| Rated current | 0.5 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) |
| Fire load | 0.219 MJ |
| Weight | 13.136 g |

Commercial data



| | |
|--------------------|----------------------------------|
| Product Group | 1 (Rail Mounted Terminal Blocks) |
| Country of origin | CN |
| GTIN | 4050821275541 |
| Customs Tariff No. | 85369010000 |

Approvals / Certificates

Country specific Approvals


| Logo | Approval | Additional Approval Text | Certificate name |
|----------------------------------------------------------------------------------|---------------------------------------|--------------------------|------------------|
|  | CCA DEKRA Certification B.V. | EN 60947 | NTR NL-7454/A1 |
|  | CCA DEKRA Certification B.V. | 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 | - | 14-HG1293677-PDA |
|  | DNV GL Det Norske Veritas, Germanischer Lloyd | - | TAE00001V2 |

Compatible products

Insulation stop

| | | |
|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|---------|
|  | Item no.: 281-470 Insulation stop; 0.08 - 0.2 mm ² "s" (0.14 mm ² "f-st"); 5 pieces/strip | 281-470 |
|  | Item no.: 281-471 Insulation stop; 0.25 - 0.5 mm ² ; 5 pieces/strip | 281-471 |



Item no.: 281-472
Insulation stop; 0.75 - 1.5 mm²; 5 pieces/strip

281-472

General accessories



Item no.: 249-105
Group marker carrier

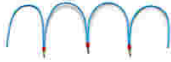
249-105

Jumper



Item no.: 210-103
Wire commoning chain; insulated; 50 connections

210-103



Item no.: 210-123
Wire commoning chain; insulated; 50 connections

210-123



Item no.: 249-123
Push-in type wire jumper; insulated; wire length 180 mm; Conductor cross section 0.75 mm²

249-123



Item no.: 249-125
Push-in type wire jumper; insulated; wire length 60 mm; Conductor cross section 0.75 mm²

249-125



Item no.: 249-126
Push-in type wire jumper; insulated; wire length 110 mm; Conductor cross section 0.75 mm²

249-126



Item no.: 249-127
Push-in type wire jumper; insulated; wire length 250 mm; Conductor cross section 0.75 mm²

249-127



Item no.: 281-482
Comb-style jumper bar; insulated; 2-way; IN = IN terminal block

281-482



Item no.: 281-483
Comb-style jumper bar; insulated; 3-way; IN = IN terminal block

281-483



Item no.: 281-485
Comb-style jumper bar; insulated; 5-way; IN = IN terminal block

281-485



Item no.: 281-490
Comb-style jumper bar; insulated; 10-way; IN = IN terminal block

281-490



Item no.: 281-492
Alternate comb-style jumper bar; insulated; 2-way; IN = IN terminal block

281-492



Item no.: 709-110
Wire commoning chain; insulated; 4 connections; 3 x 110 mm

709-110



Item no.: 709-111
Wire commoning chain; insulated; 3 connections; 2 x 120 mm

709-111



Item no.: 709-112
Wire commoning chain; insulated; 3 connections; 2 x 170 mm

709-112

End plate



Item no.: 281-334
End and intermediate plate; 2.5 mm thick

281-334




















Item no.: 281-335
End and intermediate plate; 2.5 mm thick
















281-335




























Item no.: 281-338
Separator plate; 2 mm thick; oversized

281-338

| | | |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|----------------------|
|  | Item no.: 281-339 Separator plate; 2 mm thick; oversized | 281-339 |
| Protective Warning Marker | | |
|  | Item no.: 281-415 Protective warning marker; with high-voltage symbol, black; for 5 terminal blocks | 281-415 |
| 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 | 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 | 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 | 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 | 210-115 |
|  | Item no.: 210-118 Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 210-508 |
| Marking accessories | | |
|  | Item no.: 2009-115 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type | 2009-115 |
|  | Item no.: 2009-115/000-002 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type | 2009-115 /UUU-UUZ |
|  | Item no.: 2009-115/000-006 WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type | 2009-115 /UUU-UUB |

| | | |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|----------|
|  | Item no.: 2009-115/000-007 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type | 2009-115 |
| | | /000-007 |
|  | Item no.: 2009-115/000-012 WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type | 2009-115 |
| | | /000-012 |
|  | Item no.: 2009-115/000-017 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type | 2009-115 |
| | | /000-017 |
|  | Item no.: 2009-115/000-023 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type | 2009-115 |
| | | /000-023 |
|  | Item no.: 2009-115/000-024 WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type | 2009-115 |
| | | /000-024 |
|  | Item no.: 793-501 WMB marking card; as card; not stretchable; plain; snap-on type | 793-501 |
|  | Item no.: 793-501/000-002 WMB marking card; as card; not stretchable; plain; snap-on type | 793-501 |
| | | /000-002 |
|  | Item no.: 793-501/000-005 WMB marking card; as card; not stretchable; plain; snap-on type | 793-501 |
| | | /000-005 |
|  | Item no.: 793-501/000-006 WMB marking card; as card; not stretchable; plain; snap-on type | 793-501 |
| | | /000-006 |
|  | Item no.: 793-501/000-007 WMB marking card; as card; not stretchable; plain; snap-on type | 793-501 |
| | | /000-007 |
|  | Item no.: 793-501/000-012 WMB marking card; as card; not stretchable; plain; snap-on type | 793-501 |
| | | /000-012 |
|  | Item no.: 793-501/000-017 WMB marking card; as card; not stretchable; plain; snap-on type | 793-501 |
| | | /000-017 |
|  | Item no.: 793-501/000-023 WMB marking card; as card; not stretchable; plain; snap-on type | 793-501 |
| | | /000-023 |
|  | Item no.: 793-501/000-024 WMB marking card; as card; not stretchable; plain; snap-on type | 793-501 |
| | | /000-024 |
|  | 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 | 793-5501 |

| | | | |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|
|  | 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 | /000-002 | 793-5501 |
|  | Item no.: 793-5501/000-005 WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type | /000-005 | 793-5501 |
|  | Item no.: 793-5501/000-006 WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type | /000-006 | 793-5501 |
|  | Item no.: 793-5501/000-007 WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type | /000-007 | 793-5501 |
|  | Item no.: 793-5501/000-012 WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type | /000-012 | 793-5501 |
|  | Item no.: 793-5501/000-017 WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type | /000-017 | 793-5501 |
|  | Item no.: 793-5501/000-023 WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type | /000-023 | 793-5501 |
|  | Item no.: 793-5501/000-024 WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type | /000-024 | 793-5501 |
| ferrule | | | |
|  | Item no.: 216-106 Ferrule; Sleeve for 2.5 mm ² / AWG 14; uninsulated; electro-tin plated | | 216-106 |
|  | Item no.: 216-201 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated | | 216-201 |
|  | Item no.: 216-202 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated | | 216-202 |
|  | Item no.: 216-203 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated | | 216-203 |
|  | Item no.: 216-204 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated | | 216-204 |
|  | Item no.: 216-205 Ferrule; Sleeve for 2.08 mm ² / AWG 14; insulated; electro-tin plated | | 216-205 |
|  | Item no.: 216-206 Ferrule; Sleeve for 2.5 mm ² / AWG 14; insulated; electro-tin plated | | 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 | | 216-241 |
| | Item no.: 216-242 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight | | 216-242 |

| | | |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
|  | crimped; acc. to DIN 46228, Part 4/09.90 | |
|  | 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 | 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 | 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 | 216-246 |
| | Item no.: 216-301 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated | 216-301 |
|  | Item no.: 216-302 Ferrule; Sleeve for 0.34 mm ² / 22 AWG; insulated; electro-tin plated | 216-302 |
| assembling | | |
|  | Item no.: 209-106 Mounting carrier; for isolated mounting on DIN 35 rails | 209-106 |
|  | Item no.: 709-153 Cover; Type 1; suitable for cover carrier, type 1; 1 m long | 709-153 |
| tools | | |
|  | Item no.: 210-657 Operating tool with partially insulated shaft; Blade (3.5 x 0.5) mm; short | 210-657 |
|  | Item no.: 210-658 Operating tool with partially insulated shaft; Blade (3.5 x 0.5) mm; short; angled | 210-658 |
|  | Item no.: 210-720 Operating tool with partially insulated shaft; Type 2, blade (3.5 x 0.5) mm | 210-720 |

Downloads

Documentation

Bid Text

| | | |
|-----------------|----------------|----------|
| 281-665/281-411 | doc 25.6 kB | Download |
|-----------------|----------------|----------|

CAD/CAE - Smart Data

CAD data

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| 3D Download 281-665/281-411 | URL | Download |
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Subject to changes.
