

Data sheet | Item number: 281-683

3-conductor disconnect terminal block; for DIN-rail 35 x 15 and 35 x 7.5; 4 mm²; CAGE CLAMP®; 4,00 mm²; gray

www.wago.com/281-683



Color:

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

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

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We are always happy to take your call at +49 (571) 887-44222.



Data

Electrical data

Ratings per IEC/EN

| | |
|-------------------------------|---|
| Nominal voltage (III/3) | 400 V |
| Rated impulse voltage (III/3) | 6 kV |
| Rated current | 10 A |
| Legend (ratings) | (III / 3) $\hat{=}$ Overvoltage category III / Pollution degree 3 |

Power Loss

| | |
|----------------------------------|-------|
| Power loss, per pole (potential) | 0.1 W |
|----------------------------------|-------|

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

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| | |
|--|----------------|
| Rated current I_N for specified power loss | 10 A |
| Resistance value for specified, current-dependent power loss | 0.001 Ω |

Connection data

| | |
|----------------------------|---|
| Connection points | 3 |
| Total number of potentials | 2 |
| Number of levels | 1 |

Connection 1

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

| | |
|--|---|
| Connectable conductor materials (note) | <p>Terminating Aluminum Conductors</p> <p>WAGO spring clamp terminal blocks are suitable for solid aluminum conductors up to 4 mm²/12 AWG if WAGO "Alu-Plus" Contact Paste 249-130 is used for termination.</p> |
|--|---|

"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 = 16 A

4 mm² = 22 A

| | |
|-------------------------|--|
| Solid conductor | 0.08 ... 4 mm ² / 28 ... 12 AWG |
| Fine-stranded conductor | 0.08 ... 4 mm ² / 28 ... 12 AWG |

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



| | |
|------------------|------------------------------------|
| Strip length | 9 ... 10 mm / 0.35 ... 0.39 inches |
| Wiring direction | Front-entry wiring |

Physical data

| | |
|-----------------------------------|------------------------|
| Width | 6 mm / 0.236 inches |
| Height | 73.5 mm / 2.894 inches |
| Depth from upper-edge of DIN-rail | 53.5 mm / 2.106 inches |

Mechanical Data

| | |
|---------------|-----------------|
| Design | horizontal type |
| Mounting type | DIN-35 rail |
| Marking level | Center marking |

Material Data

| | |
|----------------------|--|
| Note (material data) | Information on material specifications can be found here |
|----------------------|--|

| | |
|-----------------------------|------------------|
| Color | gray |
| Material group | I |
| Insulation material | Polyamide (PA66) |
| Flammability class per UL94 | V0 |
| Fire load | 0.187 MJ |
| Weight | 11.5 g |

Environmental requirements

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

Commercial data

| | |
|-------------------|----------------------------------|
| Product Group | 1 (Rail Mounted Terminal Blocks) |
| eCl@ss 10.0 | 27-14-11-26 |
| eCl@ss 9.0 | 27-14-11-26 |
| ETIM 8.0 | EC000902 |
| ETIM 7.0 | EC000902 |
| PU (SPU) | 50 pcs |
| Packaging type | box |
| Country of origin | DE |

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| | |
|-----------------------|---------------|
| GTIN | 4044918632027 |
| Customs tariff number | 85365080900 |

Environmental Product Compliance

| | |
|------------------------|-------------------------|
| RoHS Compliance Status | Compliant, No Exemption |
|------------------------|-------------------------|

Approvals / Certificates

General approvals

| Logo | Approval | Additional Approval Text | Certificate name |
|------|--|--------------------------|------------------|
| | CCA DEKRA Certification B.V. | IEC 60947 | NTR NL-7454/A1 |
| | CSA CSA Group | C22.2 | 1505034 |
| | CSA DEKRA Certification B.V. | C22.2 No. 158 | 1505034 |
| | KEMA/KEUR DEKRA Certification B.V. | EN 60947 | 71-107288 |
| | UL Underwriters Laboratories Inc. | UL 1059 | E45172 |

Declarations of conformity and manufacturer's declarations

| Logo | Approval | Additional Approval Text | Certificate name |
|------|---|--------------------------|------------------|
| | EU-Declaration of Conformity WAGO GmbH & Co. KG | - | - |
| | UK-Declaration of Conformity WAGO GmbH & Co. KG | - | - |

Approvals for marine applications

| Logo | Approval | Additional Approval Text | Certificate name |
|------|---|--------------------------|------------------|
| | ABS American Bureau of Shipping | - | 20-HG1941090-PDA |
| | BV Bureau Veritas S.A. | EN 60947 | 07436/F0 BV |
| | DNV GL Det Norske Veritas, Germanischer Lloyd | - | TAE00001V2 |
| | LR Lloyds Register | EN 60947 | 91/20112 (E9) |

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Required accessories

End plate

| End plate | |
|--|--|
| Item no.: 281-324 End and intermediate plate; 2.5 mm thick; gray | www.wago.com/281-324 |
| Item no.: 281-326 End and intermediate plate; 2.5 mm thick; orange | www.wago.com/281-326 |

Optional accessories

Ferrule

| Ferrule | |
|--|--|
| Item no.: 216-106 Ferrule; Sleeve for 2.5 mm ² / AWG 14; uninsulated; electro-tin plated; silver-colored | www.wago.com/216-106 |
| Item no.: 216-203 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; red | www.wago.com/216-203 |
| Item no.: 216-206 Ferrule; Sleeve for 2.5 mm ² / AWG 14; insulated; electro-tin plated; blue | www.wago.com/216-206 |
| 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.: 216-204 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.: 216-201 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; white | www.wago.com/216-201 |
| 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 crimped; acc. to DIN 46228, Part 4/09.90; gray | www.wago.com/216-242 |
| 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 | www.wago.com/216-246 |

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crimped; acc. to DIN 46228, Part 4/09.90; blue

Item no.: 216-301

Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow

www.wago.com/216-301

Item no.: 216-302

Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise

www.wago.com/216-302

Mounting

Cover carrier

Item no.: 709-168

Cover carrier; Type 2; incl. fixing/retaining screws and knurled nut; suitable for 283 to 285 Series rail-mounted terminal blocks; suitable for 279 to 281 Series double- and triple-deck terminal blocks; suitable for 780 to 785, 775, 776 and 777 Series TOPJOB® rail-mounted terminal blocks; suitable for 280 Series sensor and actuator terminal blocks; suitable for 282 Series disconnect/test terminal blocks for transformer circuits; gray

www.wago.com/709-168

Cover

Item no.: 709-154

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

www.wago.com/709-154

Mounting accessories

Item no.: 209-106

Mounting carrier; for isolated mounting on DIN 35 rails; gray

www.wago.com/209-106

Item no.: 249-116

Screwless end stop; 6 mm wide; for DIN-rail 35 x 15 and 35 x 7.5; gray

www.wago.com/249-116

Protective warning marker

Cover

Item no.: 281-415

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

www.wago.com/281-415

Tool

Operating tool

Item no.: 210-657

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

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; multicoloured

www.wago.com/210-658

Item no.: 210-720

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

www.wago.com/210-720

Lock-out

Locking system

Item no.: 709-170

Disconnect lock; for disconnect tab used on 280/281 and 769 Series disconnect terminal blocks; red

www.wago.com/709-170

Marking accessories

Marker

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

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| | |
|--|--|
| 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.: 2009-115/000-007 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.: 2009-115/000-017 WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; light green | 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; violet | www.wago.com/2009-115/000-024 |
| 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.: 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 | www.wago.com/793-5501/000-007 |
| 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; light 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; 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 |
| Item no.: 793-501/000-002 WMB marking card; as card; not stretchable; plain; snap-on type; yellow | www.wago.com/793-501/000-002 |
| Item no.: 793-501/000-007 WMB marking card; as card; not stretchable; plain; snap-on type; gray | www.wago.com/793-501/000-007 |
| Item no.: 793-501/000-017 WMB marking card; as card; not stretchable; plain; snap-on type; light green | www.wago.com/793-501/000-017 |

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| | |
|---|--|
| Item no.: 793-501/000-012 WMB marking card; as card; not stretchable; plain; snap-on type; orange | www.wago.com/793-501/000-012 |
| Item no.: 793-501/000-023 WMB marking card; as card; not stretchable; plain; snap-on type; green | www.wago.com/793-501/000-023 |
| Item no.: 793-501/000-006 WMB marking card; as card; not stretchable; plain; snap-on type; blue | www.wago.com/793-501/000-006 |
| Item no.: 793-501/000-005 WMB marking card; as card; not stretchable; plain; snap-on type; red | www.wago.com/793-501/000-005 |
| Item no.: 793-501 WMB marking card; as card; not stretchable; plain; snap-on type; white | www.wago.com/793-501 |
| Item no.: 793-501/000-024 WMB marking card; as card; not stretchable; plain; snap-on type; violet | www.wago.com/793-501/000-024 |
| 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 | www.wago.com/793-5501/000-005 |
| 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 | www.wago.com/793-5501/000-002 |
| 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 | www.wago.com/793-5501/000-006 |
| 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 | www.wago.com/793-5501 |
| 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 | www.wago.com/2009-115/000-012 |
| 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 | www.wago.com/2009-115/000-006 |
| Group marker carrier | |
| Item no.: 249-105 Group marker carrier; gray | www.wago.com/249-105 |
| Jumpers | |
| Jumper | |

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



| | |
|---|--|
| Item no.: 210-123 Wire commoning chain; insulated; blue | www.wago.com/210-123 |
| Item no.: 210-103 Wire commoning chain; insulated; black | www.wago.com/210-103 |
| Item no.: 281-485 Jumper; 5-way; insulated; gray | www.wago.com/281-485 |
| Item no.: 281-490 Jumper; 10-way; insulated; gray | www.wago.com/281-490 |
| Item no.: 281-492 Jumper; 2-way; insulated; gray | www.wago.com/281-492 |
| Item no.: 281-482 Jumper; 2-way; insulated; gray | www.wago.com/281-482 |
| Item no.: 281-483 Jumper; 3-way; insulated; gray | www.wago.com/281-483 |
| Item no.: 709-110 Wire commoning chain; 2.5 mm ² ; insulated; black | www.wago.com/709-110 |
| Item no.: 709-112 Wire commoning chain; 2.5 mm ² ; insulated; black | www.wago.com/709-112 |
| Item no.: 709-111 Wire commoning chain; 2.5 mm ² ; insulated; black | www.wago.com/709-111 |
| Item no.: 781-455 Staggered jumper; from 1 to 5; insulated; gray | www.wago.com/781-455 |
| Carrier rail | |
| Mounting accessories | |
| 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 | 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; silver-colored | 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; silver-colored | 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; silver-colored | 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; silver-colored | www.wago.com/210-508 |

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



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|--|--|
| 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 | www.wago.com/210-113 |
| 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 | www.wago.com/210-118 |
| 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 | www.wago.com/210-112 |
| 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 | 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; silver-colored | www.wago.com/210-115 |
| 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 |

Testing and measuring

Testing accessories

| | |
|---|--|
| Item no.: 209-107 Test socket; insulated; 2 mm Ø; red | www.wago.com/209-107 |
| Item no.: 209-108 Test socket; insulated; 2.3 mm Ø; yellow | www.wago.com/209-108 |
| Item no.: 210-136 Test plug; 2 mm Ø; with 500 mm cable; red | www.wago.com/210-136 |

Insulation stop

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 |

Downloads

Documentation

Bid Text

| | | | |
|------------------------|--------------|---------------|----------|
| 281-683 X81 - Datei | 2019 年2月19 日 | xml 3.2 kB | Download |
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Additional Information

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CAD/CAE-Data

CAD data

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Environmental Product Compliance

Compliance Search

Environmental Product Compliance 281-683

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3-conductor disconnect terminal block; for DIN-rail 35 x 15 and 35 x 7.5; 4 mm²;
CAGE CLAMP®; 4,00 mm²; gray

Installation Notes

Security

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



Disconnect terminal block with colored tab to indicate the switching status



Pulling the disconnect tab via operating tool.

(red = disconnected)



Pulling the disconnect tab by hand.

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