

Data sheet | Item number: 283-998

3-conductor through terminal block; 16 mm²; suitable for Ex e II applications;
center marking; for DIN-rail 35 x 15 and 35 x 7.5; CAGE CLAMP®; 16,00 mm²;
light gray



www.wago.com/283-998



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

Notes

Safety information

Notice: This terminal block cannot be commoned with adjacent jumpers.

Electrical data

Ratings per IEC/EN

Ratings per

IEC/EN 60947-7-1

Ex information

Reference hazardous areas

See application instructions in section "Knowledge and Downloads – Documentation – Additional Information: Technical Section; Technical Explications"

Rated voltage EN (Ex e II)

550 V

Rated current (Ex e II)

68 A

Power Loss

Power loss, per pole (potential)

1.942 W

Rated current I_N for specified power loss

68 A

Resistance value for specified, current-dependent power loss

0 Ω

Connection data

Connection points

3

Total number of potentials

1

Number of levels

1

Connection 1

Connection technology

CAGE CLAMP®

Actuation type

Operating tool

Connectable conductor materials

Copper

Solid conductor

0.2 ... 16 mm² / 24 ... 6 AWG

Fine-stranded conductor

0.2 ... 16 mm² / 24 ... 6 AWG

Strip length

16 ... 17 mm / 0.63 ... 0.67 inches

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| | |
|------------------|--------------------|
| Wiring direction | Front-entry wiring |
|------------------|--------------------|

Physical data

| | |
|-----------------------------------|-------------------------|
| Width | 12 mm / 0.472 inches |
| Height | 104.5 mm / 4.114 inches |
| Depth from upper-edge of DIN-rail | 37.5 mm / 1.476 inches |

Mechanical Data

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

Material Data

| | |
|-----------------------------|--|
| Note (material data) | Information on material specifications can be found here |
| Color | light gray |
| Material group | I |
| Insulation material | Polyamide (PA66) |
| Flammability class per UL94 | V0 |
| Fire load | 0.619 MJ |
| Weight | 45.3 g |

Environmental requirements

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

Commercial data

| | |
|-----------------------|---------------|
| eCl@ss 10.0 | 27-14-11-20 |
| eCl@ss 9.0 | 27-14-11-20 |
| ETIM 8.0 | EC000897 |
| ETIM 7.0 | EC000897 |
| PU (SPU) | 20 pcs |
| Packaging type | box |
| Country of origin | DE |
| GTIN | 4044918543712 |
| Customs tariff number | 85369010000 |

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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. | EN 60947 | NTR NL 7895 |
| | KEMA/KEUR DEKRA Certification B.V. | EN 60947 | 71- 120777 |
| | UL UL International Germany GmbH | UL 1059 | E45172 |

Declarations of conformity and manufacturer's declarations

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

Approvals for hazardous areas

| Logo | Approval | Additional Approval Text | Certificate name |
|------|--|--------------------------|--|
| | AEx UL International Germany GmbH c/o Physikalisch Technische Bundesanstalt | UL 60079 | E185892 (AEx e II resp. Ex e II) |
| | ATEX Physikalisch Technische Bundesanstalt (PTB) | - | PTB 98 ATEX 3132 U (II 2 G Ex eb IIC Gb bzw. I M 2 Ex eb I Mb) |
| | CCC | GB/T 3836.3 | 2020312313000232 |

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| | | |
|---|----------------|--|
| CNEX | | (Ex eb IIC Gb, Ex eb I Mb) |
| EAC Brjansker Zertifizierungsstelle | TP TC 012/2011 | RU C-DE.AM02.B. 00127/19 |
| IECEX Physikalisch Technische Bundesanstalt | IEC 60079-0 | IECEX PTB 03.0004U (Ex eb IIC Gb or Ex eb I Mb) |

Required accessories

End plate

| | | |
|--|--|--|
| End plate | | |
| Item no.: 283-354 End and intermediate plate; 2.5 mm thick; light gray | | www.wago.com/283-354 |

Optional accessories

Cover

| | | |
|--|--|--|
| Cover | | |
| Item no.: 283-400 Finger guard; touchproof cover protects unused conductor entries; yellow | | www.wago.com/283-400 |

Marking accessories

| | | |
|---|--|--|
| Marker | | |
| 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 |

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



Item no.: 793-5501/000-007 www.wago.com/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.: 793-5501/000-012 www.wago.com/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.: 793-5501/000-017 www.wago.com/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.: 793-5501/000-023 www.wago.com/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.: 793-5501/000-024 www.wago.com/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.: 793-501/000-002 www.wago.com/793-501/000-002
WMB marking card; as card; not stretchable; plain; snap-on type; yellow

Item no.: 793-501/000-007 www.wago.com/793-501/000-007
WMB marking card; as card; not stretchable; plain; snap-on type; gray

Item no.: 793-501/000-017 www.wago.com/793-501/000-017
WMB marking card; as card; not stretchable; plain; snap-on type; light green

Item no.: 793-501/000-012 www.wago.com/793-501/000-012
WMB marking card; as card; not stretchable; plain; snap-on type; orange

Item no.: 793-501/000-023 www.wago.com/793-501/000-023
WMB marking card; as card; not stretchable; plain; snap-on type; green

Item no.: 793-501/000-006 www.wago.com/793-501/000-006
WMB marking card; as card; not stretchable; plain; snap-on type; blue

Item no.: 793-501/000-005 www.wago.com/793-501/000-005
WMB marking card; as card; not stretchable; plain; snap-on type; red

Item no.: 793-501 www.wago.com/793-501
WMB marking card; as card; not stretchable; plain; snap-on type; white

Item no.: 793-501/000-024 www.wago.com/793-501/000-024
WMB marking card; as card; not stretchable; plain; snap-on type; violet

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



| | |
|---|--|
| 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 |
| Protective warning marker | |
| Cover | |
| Item no.: 283-415 Protective warning marker; for 5 terminal blocks; with high-voltage symbol, black; yellow | www.wago.com/283-415 |
| Tool | |
| Operating tool | |
| Item no.: 210-721 Operating tool; Blade: 5.5 x 0.8 mm; with a partially insulated shaft; multicoloured | www.wago.com/210-721 |
| 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 | |

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

**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**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**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**Ferrule**

Ferrule

Item no.: 216-108Ferrule; Sleeve for 6 mm² / AWG 10; uninsulated; electro-tin plated; silver-coloredwww.wago.com/216-108**Item no.: 216-109**www.wago.com/216-109

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

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Ferrule; Sleeve for 10 mm² / AWG 8; uninsulated; electro-tin plated

Item no.: 216-286

Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue

www.wago.com/216-286

Item no.: 216-287

Ferrule; Sleeve for 4 mm² / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray

www.wago.com/216-287

Item no.: 216-288

Ferrule; Sleeve for 6 mm² / AWG 10; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; yellow

www.wago.com/216-288

Item no.: 216-289

Ferrule; Sleeve for 10 mm² / AWG 8; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red

www.wago.com/216-289

Downloads

Documentation

Bid Text

| | | | |
|------------------------|--------------|---------------|----------|
| 283-998 X81 - Datei | 2019 年2月19 日 | xml 3.4 kB | Download |
|------------------------|--------------|---------------|----------|

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| 283-998 doc - Datei | 2017 年2月28 日 | doc 25.6 kB | Download |
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Additional Information

| | | | |
|--|--|---------------|----------|
| | | pdf 2.3 MB | Download |
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CAD/CAE-Data

CAD data

| | | | |
|----------------------|--|-----|----------|
| 2D/3D Models 283-998 | | URL | Download |
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CAE data

| | | | |
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Environmental Product Compliance

Compliance Search

Environmental Product Compliance 283-998

URL

Download

3-conductor through terminal block; 16 mm²; suitable for Ex e II applications; center marking; for DIN-rail 35 x 15 and 35 x 7.5; CAGE CLAMP®; 16,00 mm²; light gray

Installation Notes

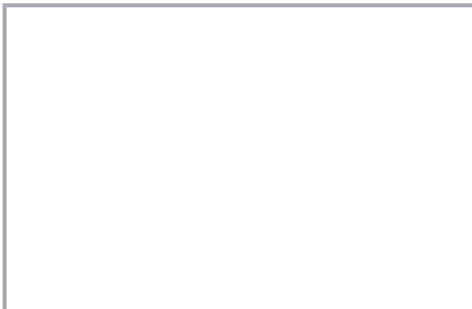
Installation



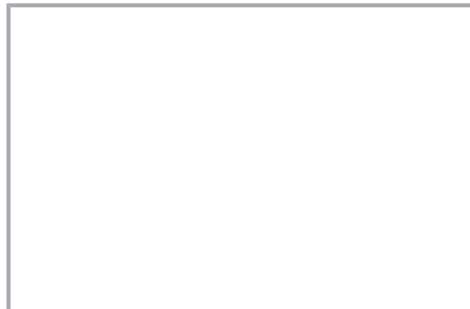
Snapping a terminal block onto the DIN-rail.



Quick assembly keys prevent reverse mounting.



Removing a terminal block from the assembly.



Steel DIN-rails are not suited for PEN (ground and N-conductor) applications per EN 60947-7-2 (VDE 0611, Part 3).

Conductor termination

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



CAGE CLAMP® connection

Inserting a conductor.



CAGE CLAMP® connection

Inserting a conductor.

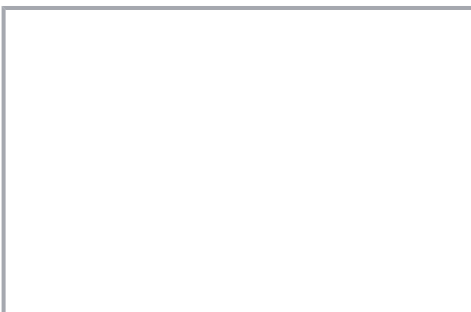
With ferruled conductors, it is necessary to use a terminal block one size larger than the conductor's nominal cross-section.



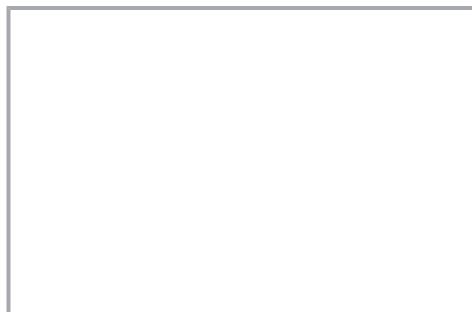
CAGE CLAMP® connection

Removing a solid conductor.

Cover



Protective warning markers inserted into the operating slots



Finger guard seals an unused conductor entry.

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

Marking



Labeling via WMB Multi Marking System.

Ex application



Separator plate for Ex e/Ex i applications

According to EN 50020, a minimum distance of 50 mm must be kept between live parts of Ex e and Ex i circuits. The use of Ex e/Ex i separators is a space-saving solution when Ex e and Ex i terminal blocks are mounted on a common DIN-rail.

For 279 ... 282 Series:

209-190 for 2-conductor terminal blocks

209-191 for 2-, 3-, 4-conductor terminal blocks

End and intermediate plate

In order to meet creepage and clearance requirements for Ex e applications, it is necessary to insert an end or intermediate plate between a through and a ground conductor terminal block.

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