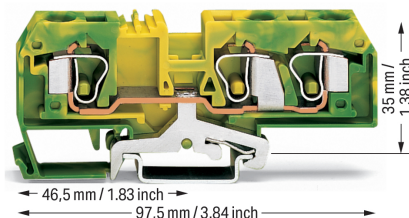


## Data Sheet | Item Number: 284-687

3-conductor ground terminal block; 10 mm<sup>2</sup>; center marking; for DIN-rail 35 x 15 and 35 x 7.5; CAGE CLAMP®; 10,00 mm<sup>2</sup>; green-yellow

<https://www.wago.com/284-687>



Color: ■ green-yellow



Similar to illustration

### Ground terminal block, 284 Series, CAGE CLAMP®

Our ground terminal block (item number 284-687) makes connecting wires quick and easy. Conductors should only be connected to this ground terminal block if their strip length is between 12 and 13 mm. Our 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. This product features conductor terminals and utilizes CAGE CLAMP®. Our reliable and maintenance-free CAGE CLAMP® connection makes it easy to connect all types of conductors without having to prepare the conductor. For example, you don't need to crimp ferrules. Depending on the conductor type, this ground terminal block is suitable for conductor cross sections ranging from 0.2 mm<sup>2</sup> to 10 mm<sup>2</sup>.

This through rail-mount terminal block is operated with an operating tool.

| Electrical data                 |  |                  |     |    |
|---------------------------------|--|------------------|-----|----|
| Ratings per                     |  | IEC/EN 60947-7-2 |     |    |
| Overvoltage category            |  | III              | III | II |
| Pollution degree                |  | 3                | 2   | 2  |
| Nominal voltage                 |  | -                | -   | -  |
| Rated impulse withstand voltage |  | -                | -   | -  |
| Rated current                   |  | -                | -   | -  |

| General information |                    |
|---------------------|--------------------|
| Wiring direction    | Front-entry wiring |

| Connection Data            |   |  |
|----------------------------|---|--|
| Clamping units             | 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 ... 10 mm² / 24 ... 8 AWG       |
| Fine-stranded conductor         | 0.2 ... 10 mm² / 24 ... 8 AWG       |
| Strip length                    | 12 ... 13 mm / 0.47 ... 0.51 inches |
| Wiring direction                | Front-entry wiring                  |

| Physical data                     |  |                        |
|-----------------------------------|--|------------------------|
| Width                             |  | 10 mm / 0.394 inches   |
| Height                            |  | 97.5 mm / 3.839 inches |
| Depth from upper-edge of DIN-rail |  | 35 mm / 1.378 inches   |

| Mechanical data |                 |
|-----------------|-----------------|
| Design          | horizontal type |
| Mounting type   | DIN-35 rail     |
| Marking level   | Center 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                          | 0.367 MJ                                                                 |
| Weight                             | 40 g                                                                     |

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



| Commercial data       |               |
|-----------------------|---------------|
| PU (SPU)              | 25 pcs        |
| Packaging type        | Box           |
| Country of origin     | DE            |
| GTIN                  | 4045454084639 |
| 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)        | ef891d27-a5b7-4e41-b5da-f33218adc984 |
| SCIP notification number (Belgium)        | 0562ff0b-e5a7-4ea0-8f0c-a6a5fd8dd889 |
| SCIP notification number (Bulgaria)       | 6886b8d1-6ab8-44d1-8835-d13adef9b0ff |
| SCIP notification number (Czech Republic) | 2705ac39-4598-4369-854e-f88ee2020cd2 |
| SCIP notification number (Denmark)        | 373cf6ad-e53f-4074-ab82-06ca973c6d87 |
| SCIP notification number (Finland)        | 30afceee-5d13-43a7-8390-12686c75486a |
| SCIP notification number (France)         | 0a5bf724-1fe5-4390-a3b3-5494ed4bff34 |
| SCIP notification number (Germany)        | 83cade3f-a862-4a19-9fd2-320a12929841 |
| SCIP notification number (Hungary)        | 491995cc-1776-49c4-985c-d14e71acf306 |
| SCIP notification number (Italy)          | 401e6bf7-4c3a-4897-a079-3d03ae6b30ba |
| SCIP notification number (Netherlands)    | ae437c52-85e0-4105-a342-f0d42d5dcc39 |
| SCIP notification number (Poland)         | 850a1d86-d189-4c51-a575-3847d5c2b51c |
| SCIP notification number (Romania)        | 54c8ed9e-22b1-4ed3-a08f-08cd6dd5a27c |
| SCIP notification number (Sweden)         | 8d32e2d8-59ce-4bf3-a22f-a561db242cea |

Approvals / Certificates

| General approvals                                  |          | Declarations of conformity and manufacturer's declarations                                                                                                                                                                                                                    |          |          |                  |                                                    |   |   |                                                    |   |   |
|----------------------------------------------------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|------------------|----------------------------------------------------|---|---|----------------------------------------------------|---|---|
|                                                    |          |                                                                                                                                                                                                                                                                               |          |          |                  |                                                    |   |   |                                                    |   |   |
| Approval                                           | Standard | Certificate Name                                                                                                                                                                                                                                                              |          |          |                  |                                                    |   |   |                                                    |   |   |
| CCA<br>DEKRA Certification B.V.                    | EN 60947 | NTR NL-7379                                                                                                                                                                                                                                                                   |          |          |                  |                                                    |   |   |                                                    |   |   |
| CSA<br>CSA Group                                   | C22.2    | 1536073                                                                                                                                                                                                                                                                       |          |          |                  |                                                    |   |   |                                                    |   |   |
| KEMA/KEUR<br>DEKRA Certification B.V.              | EN 60947 | 2178517.01                                                                                                                                                                                                                                                                    |          |          |                  |                                                    |   |   |                                                    |   |   |
| UL<br>Underwriters Laboratories Inc.               | UL 1059  | 20190731-E45172                                                                                                                                                                                                                                                               |          |          |                  |                                                    |   |   |                                                    |   |   |
|                                                    |          | <table><tr><th>Approval</th><th>Standard</th><th>Certificate Name</th></tr><tr><td>EU-Declaration of Conformity<br/>WAGO GmbH &amp; Co. KG</td><td>-</td><td>-</td></tr><tr><td>UK-Declaration of Conformity<br/>WAGO GmbH &amp; Co. KG</td><td>-</td><td>-</td></tr></table> | Approval | Standard | Certificate Name | EU-Declaration of Conformity<br>WAGO GmbH & Co. KG | - | - | UK-Declaration of Conformity<br>WAGO GmbH & Co. KG | - | - |
| Approval                                           | Standard | Certificate Name                                                                                                                                                                                                                                                              |          |          |                  |                                                    |   |   |                                                    |   |   |
| EU-Declaration of Conformity<br>WAGO GmbH & Co. KG | -        | -                                                                                                                                                                                                                                                                             |          |          |                  |                                                    |   |   |                                                    |   |   |
| UK-Declaration of Conformity<br>WAGO GmbH & Co. KG | -        | -                                                                                                                                                                                                                                                                             |          |          |                  |                                                    |   |   |                                                    |   |   |



Approvals for marine applications



| Approval                                              | Standard | Certificate Name  |
|-------------------------------------------------------|----------|-------------------|
| ABS<br>American Bureau of Ship-<br>ping               | EN 60947 | 24-0152298-PDA    |
| DNV GL<br>Det Norske Veritas, Ger-<br>manischer Lloyd | -        | TAE00001V2        |
| PRS<br>Polski Rejestr Statków                         | -        | TE/1094/880590/23 |

Downloads

Environmental Product Compliance

| Compliance Search                           |
|---------------------------------------------|
| Environmental Product<br>Compliance 284-687 |



Documentation

| Bid Text |            |                 |                   |
|----------|------------|-----------------|-------------------|
| 284-687  | 19.02.2019 | xml<br>3.04 KB  | <a href="#">↓</a> |
| 284-687  | 28.02.2017 | doc<br>24.00 KB | <a href="#">↓</a> |



CAD/CAE-Data

| CAD data             |
|----------------------|
| 2D/3D Models 284-687 |



| CAE data                     |
|------------------------------|
| EPLAN Data Portal<br>284-687 |
| WSCAD Universe<br>284-687    |
| ZUKEN Portal 284-687         |



## 1 Compatible Products

### 1.1 Required Accessories

#### 1.1.1 End plate

##### 1.1.1.1 End plate



**Item No.: 284-308**

End and intermediate plate; 2.5 mm thick; gray



**Item No.: 284-339**

End and intermediate plate; 2.5 mm thick; orange



**Item No.: 284-309**

Separator plate; 2 mm thick; oversized; gray



**Item No.: 284-340**

Separator plate; 2 mm thick; oversized; orange

### 1.2 Optional Accessories

#### 1.2.1 Cover

##### 1.2.1.1 Cover



**Item No.: 284-400**

Finger guard; touchproof cover protects unused conductor entries; yellow

#### 1.2.2 DIN-rail

##### 1.2.2.1 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

#### 1.2.3 Ferrule

##### 1.2.3.1 Ferrule



**Item No.: 216-262**

Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray



**Item No.: 216-263**

Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red



**Item No.: 216-264**

Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black



**Item No.: 216-266**

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



1.2.3.1 Ferrule



**Item No.: 216-267**  
Ferrule; Sleeve for 4 mm² / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray



**Item No.: 216-208**  
Ferrule; Sleeve for 6 mm² / AWG 10; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; yellow



**Item No.: 216-108**  
Ferrule; Sleeve for 6 mm² / AWG 10; uninsulated; electro-tin plated; silver-colored

1.2.4 Installation

1.2.4.1 Cover



**Item No.: 709-154**  
Cover; Type 2; suitable for cover carrier, type 2; 1 m long; transparent

1.2.4.2 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

1.2.4.3 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

1.2.5 Jumper

1.2.5.1 Jumper



**Item No.: 284-402**  
Jumper; insulated; gray



**Item No.: 284-409**  
Jumper; insulated; gray



**Item No.: 284-422**  
Jumper; insulated; yellow-green

## 1.2.6 Marking

### 1.2.6.1 Group marker carrier



#### 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.: 284-415**  
Protective warning marker; for 5 terminal blocks; with high-voltage symbol, black; yellow

1.2.8 Test and measurement

1.2.8.1 Testing accessories



**Item No.: 709-311**  
B-type spacer module; modular; e.g., for bridging commoned terminal blocks; gray



**Item No.: 709-310**  
B-type test plug module; modular; suitable for all WAGO 282 Series rail-mounted terminal blocks with jumper slots; 6,00 mm<sup>2</sup>; 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

1.2.9 Tool

1.2.9.1 Operating tool



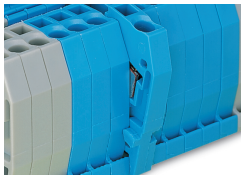
**Item No.: 210-721**  
Operating tool; Blade: 5.5 x 0.8 mm; with a partially insulated shaft; multicoloured

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.

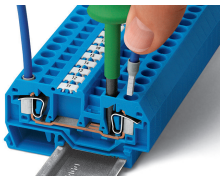


Removing a terminal block from the assembly.

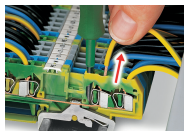
Conductor termination



**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.



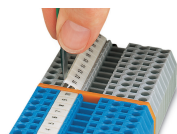
**CAGE CLAMP® connection**  
Removing a solid conductor.

## 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.

## Marking



Labeling via WMB Multi Marking System.