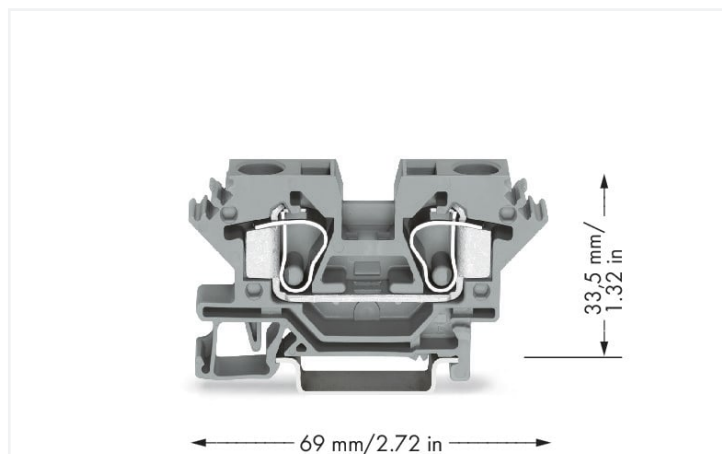


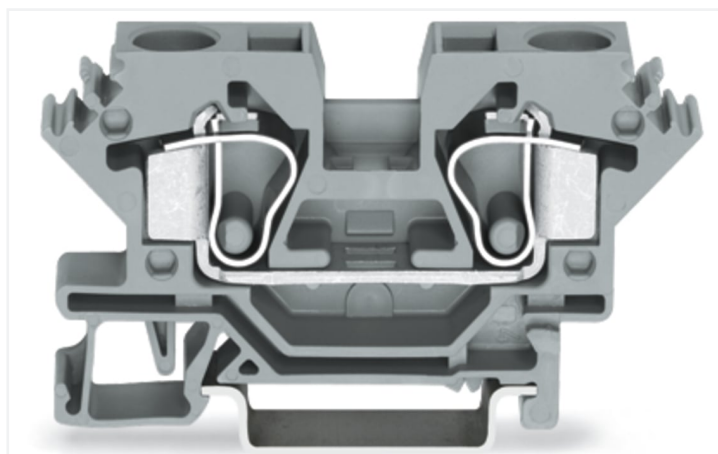
## Data Sheet | Item Number: 284-601

2-conductor through terminal block; 10 mm<sup>2</sup>; lateral marker slots; for DIN-rail 35 x 15 and 35 x 7.5; CAGE CLAMP®; 10,00 mm<sup>2</sup>; gray

<https://www.wago.com/284-601>



Color:  gray



Through terminal block, 284 Series, operating tool

This through terminal block (item number 284-601) is designed to connect conductors quickly and easily. Whether for industrial or building applications, you can use our through terminal blocks to connect electrical conductors quickly and safely. We offer variants for both classic through-wiring and potential distribution. Our through rail-mount terminal block is rated for 800 V and is designed to handle a rated current of up to 57 A. Ensure that the strip lengths are between 12 mm and 13 mm when connecting conductors to this through terminal block. This product features conductor terminals and utilizes CAGE CLAMP®. Our reliable and maintenance-free CAGE CLAMP® connection makes it easy to connect all conductor types without having to prepare the conductor. For example, you don't need to crimp ferrules. This through terminal block is suitable for conductor cross sections ranging from 0.2 mm² to 10 mm². It has one level. The single potential can connect using the two clamping points. The gray housing is made of polyamide (PA66) for insulation. This through rail-mount terminal block is operated with an operating tool. These through rail-mount terminal blocks are mounted using DIN-35 rails.. You can connect copper conductors thanks to front-entry wiring.

## Electrical data

| Ratings per          | IEC/EN 60947-7-1 |     |    |
|----------------------|------------------|-----|----|
| Overvoltage category | III              | III | II |
| Pollution degree     | 3                | 2   | 2  |
| Nominal voltage      | 800 V            | -   | -  |
| Rated surge voltage  | 8 kV             | -   | -  |
| Rated current        | 57 A             | -   | -  |

## Power Loss

|                                                              |                  |
|--------------------------------------------------------------|------------------|
| Power loss, per pole (potential)                             | 1.8194 W         |
| Rated current $I_N$ for specified power loss                 | 57 A             |
| Resistance value for specified, current-dependent power loss | 0.00056 $\Omega$ |

## Connection data

|                            |   |
|----------------------------|---|
| Clamping units             | 2 |
| 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                            | 69 mm / 2.717 inches   |
| Depth from upper-edge of DIN-rail | 33.5 mm / 1.319 inches |

| Mechanical data |                 |
|-----------------|-----------------|
| Design          | horizontal type |
| Mounting type   | DIN-35 rail     |
| Marking level   | Side marking    |

| Material data                      |                                                                          |
|------------------------------------|--------------------------------------------------------------------------|
| Note (material data)               | <a href="#">Information on material specifications can be found here</a> |
| Color                              | gray                                                                     |
| Material group                     | I                                                                        |
| Insulation material (main housing) | Polyamide (PA66)                                                         |
| Flammability class per UL94        | V0                                                                       |
| Fire load                          | 0.253 MJ                                                                 |
| Weight                             | 18.9 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           | 27-14-11-20                      |
| eCl@ss 9.0            | 27-14-11-20                      |
| ETIM 9.0              | EC000897                         |
| ETIM 8.0              | EC000897                         |
| PU (SPU)              | 25 pcs                           |
| Packaging type        | Box                              |
| Country of origin     | DE                               |
| GTIN                  | 4044918486361                    |
| Customs tariff number | 85369010000                      |

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

| Approvals / Certificates              |          |                                     |
|---------------------------------------|----------|-------------------------------------|
| General approvals                     |          | General approvals                   |
|                                       |          | UL<br>UL International Germany GmbH |
|                                       |          | UL 1059                             |
|                                       |          | E45172                              |
| 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                          |



Declarations of conformity and manufacturer's declarations

| Approval                                                | Standard | Certificate Name |
|---------------------------------------------------------|----------|------------------|
| EU-Declaration of Confor-<br>mity<br>WAGO GmbH & Co. KG | -        | -                |
| UK-Declaration of Confor-<br>mity<br>WAGO GmbH & Co. KG | -        | -                |

Approvals for marine applications



| Approval                                              | Standard | Certificate Name |
|-------------------------------------------------------|----------|------------------|
| ABS<br>American Bureau of Ship-<br>ping               | EN 60947 | 20-HG1941090-PDA |
| DNV GL<br>Det Norske Veritas, Ger-<br>manischer Lloyd | -        | TAE00001V2       |

Downloads

Environmental Product Compliance

|                                             |
|---------------------------------------------|
| Compliance Search                           |
| Environmental Product<br>Compliance 284-601 |



Documentation

|                        |
|------------------------|
| Additional Information |
| Technical Section      |

pdf  
2246.92 KB



CAD/CAE-Data

|                      |
|----------------------|
| CAD data             |
| 2D/3D Models 284-601 |



|                              |
|------------------------------|
| CAE data                     |
| EPLAN Data Portal<br>284-601 |
| WSCAD Universe<br>284-601    |
| ZUKEN Portal 284-601         |



1 Compatible Products

1.1 Required Accessories

1.1.1 End plate

1.1.1.1 End plate



[Item No.: 284-316](#)  
End and intermediate plate; 2.5 mm thick;  
gray



[Item No.: 284-317](#)  
End and intermediate plate; 2.5 mm thick;  
orange



[Item No.: 284-337](#)  
Separator plate; 2 mm thick; oversized;  
gray



[Item No.: 284-327](#)  
Separator plate; 2 mm thick; oversized;  
orange

[Item No.: 284-334](#)  
Step-down cover plate; 1 mm thick; for 2-,  
3- and 4-conductor terminal blocks; gray

[Item No.: 284-344](#)  
Step-down cover plate; 1 mm thick; for 2-,  
3- and 4-conductor terminal blocks; oran-  
ge



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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue



**Item No.: 216-267**  
Ferrule; Sleeve for 4 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 TOP-JOB® 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



**Item No.: 284-414**  
Step-down jumper; from 284/282 to 281/280/279 series; insulated; gray



**Item No.: 284-413**  
Step-down jumper; from 284/282 to 282/281 series; insulated; gray

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

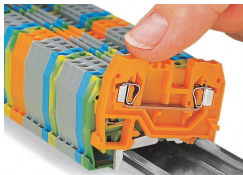
1.2.9.1 Operating tool



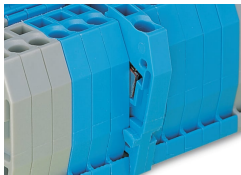
**Item No.: 210-721**  
Operating tool; Blade: 5.5 x 0.8 mm; with a partially insulated shaft; multicoloured

Installation Notes

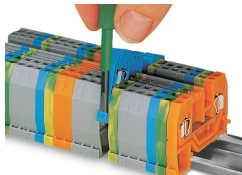
Installation



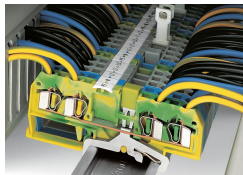
Snapping a terminal block onto the DIN-rail.



Quick assembly keys prevent reverse mounting.

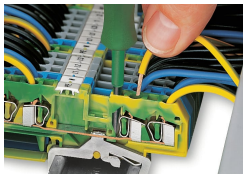


Removing a terminal block from the assembly.

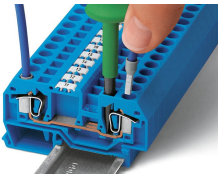


Steel DIN-rails are not suited for PEN (ground and N-conductor) applications per EN 60947-7-2 (VDE 0611, Part 3).

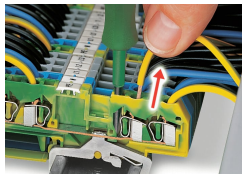
Conductor termination



**CAGE CLAMP® connection**  
Inserting a conductor.

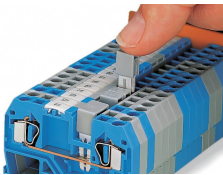


**CAGE CLAMP® connection**  
Inserting a conductor.  
With ferruled conductors, it is necessary to use a terminal block one size larger than the conductor's nominal cross-section.



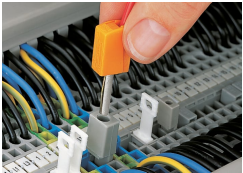
**CAGE CLAMP® connection**  
Removing a solid conductor.

Commoning

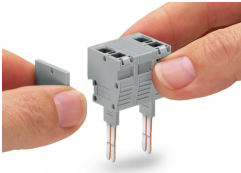


Commoning using an adjacent jumper.  
Push jumper down until fully inserted!

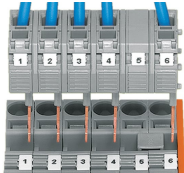
Testing



Testing with a test plug.  
Picture shows a test plug adapter (209-170).

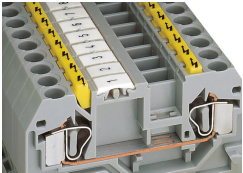


Snapping test plug and spacer modules together to assemble a multi-pole test plug module (max. 10 poles) for 10 mm terminal block width.



Test plug modules are directly plugged in- to the jumper contact slot of the current bar (picture shows 284 Series).

Cover

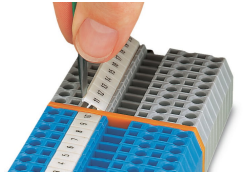


Protective warning markers inserted into the operating slots



Finger guard seals an unused conductor entry.

Marking



Labeling via WMB Multi Marking System.