

## Data Sheet | Item Number: 769-164/769-313

2-pin terminal block for pluggable modules; 8-pole; with 2 jumper positions; with orange separator plate; for DIN-rail 35 x 15 and 35 x 7.5; gray

<https://www.wago.com/769-164/769-313>



Color:  gray

Similar to illustration

## Notes

|                    |                                          |
|--------------------|------------------------------------------|
| Safety information | 2-conductor female plugs cannot be used. |
|--------------------|------------------------------------------|

## Electrical data

| Ratings per IEC/EN            |                                                           |
|-------------------------------|-----------------------------------------------------------|
| Nominal voltage (III/3)       | 400 V                                                     |
| Rated impulse voltage (III/3) | 6 kV                                                      |
| Rated current                 | 16 A                                                      |
| Legend (ratings)              | (III / 3) ≙ Overvoltage category III / Pollution degree 3 |

| Power Loss                                            |      |
|-------------------------------------------------------|------|
| Rated current I <sub>N</sub> for specified power loss | 16 A |

## Connection data

|                            |   |                     |                    |
|----------------------------|---|---------------------|--------------------|
| Total number of potentials | 8 | <b>Connection 1</b> |                    |
| Number of levels           | 1 | Pole number         | 8                  |
|                            |   | Wiring direction    | Front-entry wiring |

## Physical data

|                                   |                        |
|-----------------------------------|------------------------|
| Width                             | 21.1 mm / 0.831 inches |
| Height                            | 87.5 mm / 3.445 inches |
| Depth from upper-edge of DIN-rail | 28.5 mm / 1.122 inches |



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

| Material data               |                                                                                                                        |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------|
| Note (material data)        | <a href="https://www.wago.com/us/material-specifications">Information on material specifications can be found here</a> |
| Color                       | gray                                                                                                                   |
| Material group              | I                                                                                                                      |
| Insulation material         | Polyamide (PA66)                                                                                                       |
| Flammability class per UL94 | V0                                                                                                                     |
| Fire load                   | 0.736 MJ                                                                                                               |
| Weight                      | 33.1 g                                                                                                                 |

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

| Commercial data       |                   |
|-----------------------|-------------------|
| Product Group         | 18 (X-COM-System) |
| 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)              | 5 pcs             |
| Packaging type        | Box               |
| Country of origin     | DE                |
| GTIN                  | 4044918630207     |
| Customs tariff number | 85369010000       |

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

Approvals / Certificates

| General approvals                       |          |                  | Declarations of conformity and manufacturer's declarations |          |                  |
|-----------------------------------------|----------|------------------|------------------------------------------------------------|----------|------------------|
|                                         |          |                  | Approval                                                   | Standard | Certificate Name |
| Approval                                | Standard | Certificate Name | EU-Declaration of Confor-<br>mity<br>WAGO GmbH & Co. KG    | -        | -                |
| CSA<br>CSA Group                        | C22.2    | 1101144          | UK-Declaration of Confor-<br>mity<br>WAGO GmbH & Co. KG    | -        | -                |
| KEMA/KEUR<br>DEKRA Certification B.V.   | EN 60947 | 2190419.01       |                                                            |          |                  |
| UL<br>Underwriters Laboratories<br>Inc. | UL 1977  | E 45171          |                                                            |          |                  |
| UR<br>Underwriters Laboratories<br>Inc. | UL 1059  | E45172           |                                                            |          |                  |



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<br>769-164/769-313 |



Documentation

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

pdf  
2240.62 KB



| Bid Text        |            |                 |                   |
|-----------------|------------|-----------------|-------------------|
| 769-164/769-313 | 19.02.2019 | xml<br>3.01 KB  | <a href="#">↓</a> |
| 769-164/769-313 | 04.10.2017 | doc<br>25.00 KB | <a href="#">↓</a> |



CAD/CAE-Data

| CAD data                        |
|---------------------------------|
| 2D/3D Models<br>769-164/769-313 |



| CAE data                             |
|--------------------------------------|
| EPLAN Data Portal<br>769-164/769-313 |
| WSCAD Universe<br>769-164/769-313    |
| ZUKEN Portal<br>769-164/769-313      |



1 Compatible Products

1.1 System counterpart

1.1.1 Female connector/socket



|                                                                                                                                                      |                                                                                                                                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| Item No.: 769-104/022-000<br>1-conductor female connector, angled;<br>CAGE CLAMP®; 4 mm²; Pin spacing 5 mm;<br>4-pole; coding finger; 4,00 mm²; gray | Item No.: 769-104<br>1-conductor female connector; CAGE<br>CLAMP®; 4 mm²; Pin spacing 5 mm; 4-po-<br>le; coding finger; 4,00 mm²; gray |
|------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|



1.2 Required Accessories

1.2.1 End plate

1.2.1.1 End plate



**Item No.: 769-309**  
End and intermediate plate; 1.1 mm thick; gray



**Item No.: 769-310**  
End and intermediate plate; 1.1 mm thick; orange

1.3 Optional Accessories

1.3.1 Coding

1.3.1.1 Coding



**Item No.: 769-435**  
Coding pin; for coding of female plugs; for carrier terminal blocks / male connectors; orange

1.3.2 Cover

1.3.2.1 Cover



**Item No.: 769-438**  
Pin cover; with marker slot for miniature WSB; gray



**Item No.: 769-439**  
Pin cover; with marker slot for miniature WSB; orange

1.3.3 DIN-rail

1.3.3.1 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



1.3.4 End plate

1.3.4.1 End plate



**Item No.: 769-313**  
Separator plate; 1.1 mm thick; oversized; orange

1.3.5 Installation

1.3.5.1 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

1.3.6 Jumper

1.3.6.1 Jumper



**Item No.: 280-402**  
Jumper; insulated; gray



**Item No.: 280-409**  
Jumper; insulated; gray



**Item No.: 780-452**  
Staggered jumper; from 1 to 2; insulated; gray



**Item No.: 780-453**  
Staggered jumper; from 1 to 3; insulated; gray



**Item No.: 780-454**  
Staggered jumper; from 1 to 4; insulated; gray



**Item No.: 780-455**  
Staggered jumper; from 1 to 5; insulated; gray



**Item No.: 780-456**  
Staggered jumper; from 1 to 6; insulated; gray



**Item No.: 780-457**  
Staggered jumper; from 1 to 7; insulated; gray



**Item No.: 780-458**  
Staggered jumper; from 1 to 8; insulated; gray

1.3.7 Marking

1.3.7.1 Marker



**Item No.: 2009-145**  
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white



**Item No.: 248-501**  
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white

### 1.3.8 Plug

#### 1.3.8.1 AND gate module



**Item No.: 286-826**

AND gate module with 6 inputs; light gray

#### 1.3.8.2 Component module with diode



**Item No.: 286-807**

Component module with diode; with 7 pcs; Diode 1N4007; with common anode; gray



**Item No.: 286-809**

Component module with diode; with 9 pcs; Diode 1N4007; with common anode; gray

#### 1.3.8.3 Component module with LED



**Item No.: 286-822**

Component module with LED; Red LED; with common cathode

#### 1.3.8.4 Current flow monitoring module



**Item No.: 286-661**

Current flow monitoring module; AC currents; light gray



**Item No.: 286-664**

Current flow monitoring module; AC currents; Monitoring range: 0.2 A – 3 A; 1 changeover contact; light gray



**Item No.: 286-665**

Current flow monitoring module; AC currents; Monitoring range: 1 A – 10 A; 1 changeover contact; light gray

#### 1.3.8.5 Empty component plug housing



**Item No.: 286-112**

Empty component plug housing; Type 11; 20 mm wide; 8-pole; gray



**Item No.: 286-113**

Empty component plug housing; Type 12; 25 mm wide; 10-pole; gray



**Item No.: 786-102**

Empty component plug housing; Type 15; 20 mm wide; 8-pole; gray



**Item No.: 786-103**

Empty component plug housing; Type 16; 25 mm wide; 10-pole; gray

#### 1.3.8.6 Optocoupler module



**Item No.: 286-790**

Optocoupler module; Nominal input voltage: 24 VDC; Output voltage range: 0 ... 30 VDC; Limiting continuous current: 0.5 A; gray



**Item No.: 286-792**

Optocoupler module; Red status indicator; gray

#### 1.3.8.7 Relay module



**Item No.: 286-316**

Relay module; Nominal input voltage: 220 VDC; 2 changeover contacts; Limiting continuous current: 7 A; Red status indicator; Module width: 20 mm; gray



**Item No.: 286-516**

Relay module; Nominal input voltage: 230 VAC; 2 changeover contacts; Limiting continuous current: 7 A; Red status indicator; Module width: 15 mm; gray



**Item No.: 286-320**

Relay module; Nominal input voltage: 24 VDC; 1 break and 1 make contact; Limiting continuous current: 6 A; Red status indicator; Module width: 20 mm; gray



**Item No.: 286-320/004-000**

Relay module; Nominal input voltage: 24 VDC; 1 break and 1 make contact; Railway; Red status indicator; Module width: 20 mm; gray



1.3.8.7 Relay module



**Item No.: 286-336/001-000**  
Relay module; Nominal input voltage: 24 VDC; 2 break and 2 make contacts; Red status indicator; Module width: 25 mm; gray



**Item No.: 286-312/004-000**  
Relay module; Nominal input voltage: 24 VDC; 2 changeover contacts; Limiting continuous current: 5 A; Railway; Red status indicator; Module width: 20 mm; gray



**Item No.: 286-312**  
Relay module; Nominal input voltage: 24 VDC; 2 changeover contacts; Limiting continuous current: 7 A; Red status indicator; Module width: 20 mm; gray



**Item No.: 286-328/004-000**  
Relay module; Nominal input voltage: 24 VDC; 2 make contact; Limiting continuous current: 6 A; Railway; Red status indicator; Module width: 20 mm; gray



**Item No.: 286-328**  
Relay module; Nominal input voltage: 24 VDC; 2 make contact; Limiting continuous current: 6 A; Red status indicator; Module width: 20 mm; gray



**Item No.: 286-344/004-000**  
Relay module; Nominal input voltage: 24 VDC; 3 break contacts and 1 make contact; Railway; Red status indicator; Module width: 25 mm; gray



**Item No.: 286-352/004-000**  
Relay module; Nominal input voltage: 24 VDC; 4 make contacts; Limiting continuous current: 5 A; Railway; Red status indicator; Module width: 25 mm; gray



**Item No.: 286-640/004-000**  
Timer relay module; Nominal input voltage: 24 VDC; Limiting continuous current: 5 A; Railway; Multifunction; Red status indicator; Module width: 20 mm; gray



**Item No.: 286-604/004-000**  
Timer relay module; Nominal input voltage: 24 VDC; Limiting continuous current: 6 A; On-delay: 10 ... 100 s; Red status indicator; Module width: 20 mm; gray



**Item No.: 286-640**  
Timer relay module; Nominal input voltage: 24 VDC; Limiting continuous current: 6 A; Railway; Multifunction/Multitime; Red status indicator; Module width: 20 mm; gray

1.3.8.8 S0 interface power supply unit



**Item No.: 286-742**  
S0 interface power supply; Input voltage: 230 VAC; S0 interface

1.3.8.9 Timer relay module



**Item No.: 286-640/004-000**  
Timer relay module; Nominal input voltage: 24 VDC; Limiting continuous current: 5 A; Railway; Multifunction; Red status indicator; Module width: 20 mm; gray



**Item No.: 286-604/004-000**  
Timer relay module; Nominal input voltage: 24 VDC; Limiting continuous current: 6 A; On-delay: 10 ... 100 s; Red status indicator; Module width: 20 mm; gray



**Item No.: 286-640**  
Timer relay module; Nominal input voltage: 24 VDC; Limiting continuous current: 6 A; Railway; Multifunction/Multitime; Red status indicator; Module width: 20 mm; gray

1.3.9 Push-in type wire jumper

1.3.9.1 Jumper



**Item No.: 249-126**  
Push-in type wire jumper; 0.75 mm<sup>2</sup>; insulated; 110 mm long; black



**Item No.: 249-123**  
Push-in type wire jumper; 0.75 mm<sup>2</sup>; insulated; 180 mm long; black



**Item No.: 249-127**  
Push-in type wire jumper; 0.75 mm<sup>2</sup>; insulated; 250 mm long; black



**Item No.: 249-125**  
Push-in type wire jumper; insulated; 60 mm long; black

1.3.10 Test and measurement

1.3.10.1 Testing accessories



**Item No.: 280-419**  
Spacer module; modular; bridging commoned terminal blocks; gray



**Item No.: 280-404**  
Test plug adapter; 5 mm wide; for test plug (2.3 mm Ø); suitable for 1.5 mm² - 4 mm² tbs; gray



**Item No.: 280-418**  
Test plug module; modular; suitable for all WAGO 280 and 780 Series rail-mounted terminal blocks with jumper slots in the current bar; gray

1.3.11 Tool

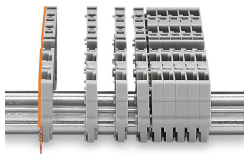
1.3.11.1 Operating tool



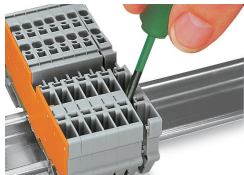
**Item No.: 210-720**  
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

Installation Notes

Installation

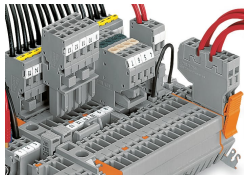


Snap individual carrier terminal blocks on-to the DIN-rail and slide together.

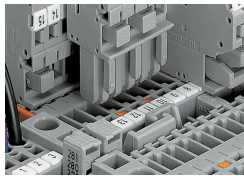


Open the assembly by laterally sliding a block via operating tool and remove terminal block via release lever.

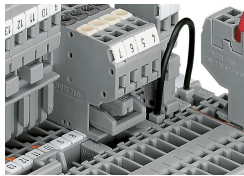
Commoning



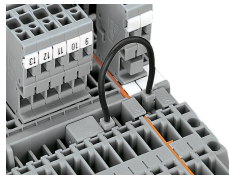
Commoning with adjacent or staggered jumpers.  
Push jumpers down until fully inserted.



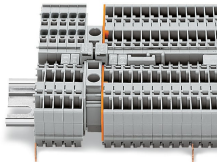
Commoning carrier terminal blocks via staggered jumpers.



Commoning a 2-conductor female plug via staggered jumper and carrier terminal blocks via adjacent jumpers.

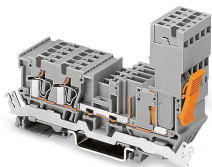


Commoning carrier terminal blocks via push-in type wire jumpers or adjacent jumpers – even over an intermediate plate.



Commoning "supply terminal blocks" (up to 10 mm²/8 AWG) with carrier terminal blocks via step-down jumpers.

## Locking system



Technical drawing of the front view of a mechanical part. The drawing shows a symmetrical component with a central vertical axis. Key dimensions and tolerances are indicated:

- Overall width: 91
- Distance from center to the left edge of the main body: 45.5
- Distance from center to the right edge of the main body: 45.5
- Distance from center to the left edge of the base: 43
- Distance from center to the right edge of the base: 43
- Distance from center to the left edge of the base (with tolerance): 43 ± 0.1
- Distance from center to the right edge of the base (with tolerance): 43 ± 0.1
- Distance from center to the left edge of the base (with tolerance): 43 ± 0.1
- Distance from center to the right edge of the base (with tolerance): 43 ± 0.1
- Distance from center to the left edge of the base (with tolerance): 43 ± 0.1
- Distance from center to the right edge of the base (with tolerance): 43 ± 0.1

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