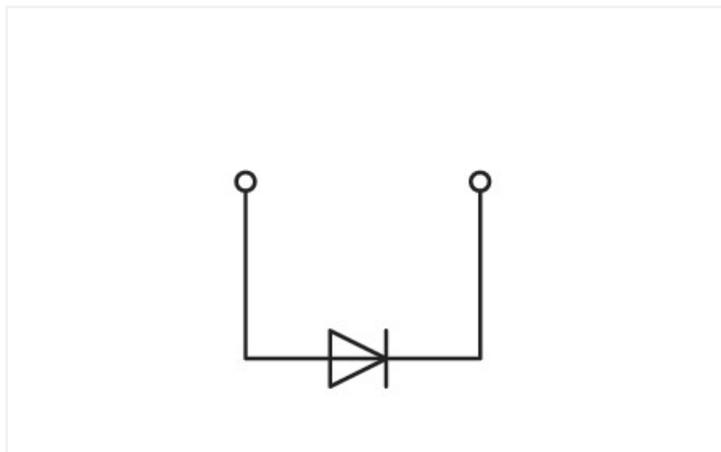


## Data Sheet | Item Number: 769-238/281-410

1-conductor/1-pin component carrier terminal block; with diode 1N4007; anode, left side; for DIN-rail 35 x 15 and 35 x 7.5; 4 mm<sup>2</sup>; CAGE CLAMP®; gray

<https://www.wago.com/769-238/281-410>



Color: ■ gray

Component terminal block with diode, 769 Series, gray

Our component terminal block with diode (item number 769-238/281-410) simplifies electrical installations. Ensure that the strip lengths are between 8 and 9 mm when connecting conductors to this component terminal block with diode. Electronic components are integrated directly into the housing of diode terminal blocks. This allows you to set up custom diode circuits. They are also perfect for bulb test and collective fault sensor circuits, for example. This product features conductor terminals and utilizes CAGE CLAMP®. Our proven universal connection known as CAGE CLAMP® is the industry standard for connection technology and electrical interconnections. This component terminal block with diode is suitable for conductor cross sections ranging from 0.08 mm<sup>2</sup> to 4 mm<sup>2</sup>.

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

### Notes

#### Safety Information

A separator plate (Item No. 209-191) or a 10 mm end stop (Item No. 249-117) must be placed at the end of a WAGO X-COM®-SYSTEM terminal strip.

#### Safety information 2

Staggered jumpers cannot be installed in terminal blocks when using 2-conductor female plugs.

#### Note

2-conductor female plugs cannot be used.

### Electrical data

#### Ratings per IEC/EN

Rated current 0.5 A

#### General information

Nominal voltage 250 V  
Reverse voltage 1000 V  
Number/type of diode/LED with 1N4007 diode  
Wiring direction Front-entry wiring

## Connection Data

Clamping units	1
Total number of potentials	1
Number of levels	1

### Connection 1

Connection technology	CAGE CLAMP®
Number of connection points	1
Actuation type	Operating tool
Connectable conductor materials	Copper
Nominal cross-section	4 mm <sup>2</sup> / 12 AWG
Solid conductor	0.08 ... 4 mm <sup>2</sup> / 28 ... 12 AWG
Fine-stranded conductor	0.08 ... 4 mm <sup>2</sup> / 28 ... 12 AWG
Strip length	8 ... 9 mm / 0.31 ... 0.35 inches
Wiring direction	Front-entry wiring

### Connection 2

Number of connection points	1
-----------------------------	---

## Physical data

Width	5 mm / 0.197 inches
Height	52.5 mm / 2.067 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="#">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	0.109 MJ
Weight	5.1 g

## Environmental requirements

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

## Commercial data

Product Group	18 (X-COM-System)
PU (SPU)	100 pcs
Packaging type	Box
Country of origin	DE
GTIN	4045454619510
Customs tariff number	85366990990

### Product Classification

UNSPSC	39121410
eCl@ss 10.0	27-14-11-27
eCl@ss 9.0	27-14-11-27
ETIM 9.0	EC000903
ETIM 10.0	EC000903
ECCN	NO US CLASSIFICATION

### Environmental Product Compliance

CAS-No.	7439-92-1 79-94-7
REACH Candidate List Substance	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol Lead
RoHS Compliance Status	Compliant,With Exemption
RoHS Exemption	7(a)
SCIP notification number (Austria)	5eeef95e-2c59-4ac9-a4a9-efdac414268
SCIP notification number (Belgium)	ebcdc798-c6b0-40e0-9d6b-47bb5da7d8fd
SCIP notification number (Bulgaria)	02ae744e-855a-4661-8056-f87fa4eb69cc
SCIP notification number (Czech Republic)	44e414cd-e678-4a51-bf2f-4071a377c969
SCIP notification number (Denmark)	84954bd9-f901-4245-85f7-7577d52e0531
SCIP notification number (Finland)	bf69a277-2238-4422-912b-68af0fa6db2a
SCIP notification number (France)	467b416f-59b8-484a-8e53-df8303a0256c
SCIP notification number (Germany)	c6077f93-4301-44b4-801a-01cdb6d8f4bc
SCIP notification number (Hungary)	8c6f6891-7413-40c4-b994-1294345302b2
SCIP notification number (Italy)	4c0d2a7e-1dfa-4705-a08a-b696e8a5f67e
SCIP notification number (Netherlands)	d163d7b8-ff88-44ec-b28c-9c435165cbe9
SCIP notification number (Poland)	1d3758e6-53fe-4dc4-89b1-8b50d3ad8fc0
SCIP notification number (Romania)	ad390b21-fa2c-4ea2-9463-b0bed4ae9615
SCIP notification number (Sweden)	ddab7472-294c-44d4-9192-133d46ed6205

### Approvals / Certificates

#### General approvals



Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60947	NTR NL-7626
CSA CSA Group	C22.2	1101144
KEMA/KEUR DEKRA Certification B.V.	EN 60947	2190419.01

#### Declarations of conformity and manufacturer's declarations



Approval	Standard	Certificate Name
Railway WAGO GmbH & Co. KG	-	Z00004428.000
UK-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-

### Approvals for marine applications



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

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance  
769-238/281-410



Documentation

Bid Text

769-238/281-410	19.02.2019	xml 3.22 KB	
769-238/281-410	02.10.2017	doc 24.00 KB	

CAD/CAE-Data

CAD data

2D/3D Models  
769-238/281-410



CAE data

EPLAN Data Portal  
769-238/281-410



WSCAD Universe  
769-238/281-410



ZUKEN Portal  
769-238/281-410



1 Compatible Products

1.1 System counterpart

1.1.1 Female connector/socket



**Item No.: 769-101/022-000**  
1-conductor female connector, angled; CAGE CLAMP®; 4 mm²; Pin spacing 5 mm; 1-pole; coding finger; 4,00 mm²; gray



**Item No.: 769-110/145-000**  
1-conductor female connector; CAGE CLAMP®; 4 mm²; Pin spacing 5 mm; 10-pole; coding finger; Centered locking levers; Strain relief plate; 4,00 mm²; gray



**Item No.: 769-111/145-000**  
1-conductor female connector; CAGE CLAMP®; 4 mm²; Pin spacing 5 mm; 11-pole; coding finger; Centered locking levers; Strain relief plate; 4,00 mm²; gray



**Item No.: 769-112/145-000**  
1-conductor female connector; CAGE CLAMP®; 4 mm²; Pin spacing 5 mm; 12-pole; coding finger; Centered locking levers; Strain relief plate; 4,00 mm²; gray



**Item No.: 769-113/145-000**  
1-conductor female connector; CAGE CLAMP®; 4 mm²; Pin spacing 5 mm; 13-pole; coding finger; Centered locking levers; Strain relief plate; 4,00 mm²; gray



**Item No.: 769-114/145-000**  
1-conductor female connector; CAGE CLAMP®; 4 mm²; Pin spacing 5 mm; 14-pole; coding finger; Centered locking levers; Strain relief plate; 4,00 mm²; gray



**Item No.: 769-115/145-000**  
1-conductor female connector; CAGE CLAMP®; 4 mm²; Pin spacing 5 mm; 15-pole; coding finger; Centered locking levers; Strain relief plate; 4,00 mm²; gray



**Item No.: 769-101**  
1-conductor female connector; CAGE CLAMP®; 4 mm²; Pin spacing 5 mm; 1-pole; coding finger; 4,00 mm²; gray



**Item No.: 769-101/141-000**  
1-conductor female connector; CAGE CLAMP®; 4 mm²; Pin spacing 5 mm; 1-pole; coding finger; Centered locking levers; Strain relief plate; 4,00 mm²; gray



**Item No.: 769-102/142-000**  
1-conductor female connector; CAGE CLAMP®; 4 mm²; Pin spacing 5 mm; 2-pole; coding finger; Centered locking levers; Strain relief plate; 4,00 mm²; gray



**Item No.: 769-103/142-000**  
1-conductor female connector; CAGE CLAMP®; 4 mm²; Pin spacing 5 mm; 3-pole; coding finger; Centered locking levers; Strain relief plate; 4,00 mm²; gray



**Item No.: 769-104/143-000**  
1-conductor female connector; CAGE CLAMP®; 4 mm²; Pin spacing 5 mm; 4-pole; coding finger; Centered locking levers; Strain relief plate; 4,00 mm²; gray



**Item No.: 769-105/143-000**  
1-conductor female connector; CAGE CLAMP®; 4 mm²; Pin spacing 5 mm; 5-pole; coding finger; Centered locking levers; Strain relief plate; 4,00 mm²; gray



**Item No.: 769-106/144-000**  
1-conductor female connector; CAGE CLAMP®; 4 mm²; Pin spacing 5 mm; 6-pole; coding finger; Centered locking levers; Strain relief plate; 4,00 mm²; gray



**Item No.: 769-107/144-000**  
1-conductor female connector; CAGE CLAMP®; 4 mm²; Pin spacing 5 mm; 7-pole; coding finger; Centered locking levers; Strain relief plate; 4,00 mm²; gray



**Item No.: 769-108/144-000**  
1-conductor female connector; CAGE CLAMP®; 4 mm²; Pin spacing 5 mm; 8-pole; coding finger; Centered locking levers; Strain relief plate; 4,00 mm²; gray

1.1.1 Female connector/socket



**Item No.: 769-109/144-000**  
 1-conductor female connector; CAGE CLAMP®; 4 mm<sup>2</sup>; Pin spacing 5 mm; 9-pole; coding finger; Centered locking levers; Strain relief plate; 4,00 mm<sup>2</sup>; gray

**Item No.: 769-121**  
 2-conductor female connector; CAGE CLAMP®; 4 mm<sup>2</sup>; Pin spacing 5 mm; 1-pole; coding finger; 4,00 mm<sup>2</sup>; gray

1.2 Required Accessories

1.2.1 End plate

1.2.1.1 End plate



**Item No.: 769-307**  
 End and intermediate plate; 1.1 mm thick; gray

**Item No.: 769-308**  
 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

1.3.3.1 Mounting accessories



**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 Ferrule

1.3.4.1 Ferrule



**Item No.: 216-301**  
Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow



**Item No.: 216-302**  
Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise



**Item No.: 216-201**  
Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; electrolytic copper; acc. to DIN 46228, Part 4/09.90; white



**Item No.: 216-101**  
Ferrule; Sleeve for 0.5 mm<sup>2</sup> / AWG 22; un-insulated; electro-tin plated; silver-colored



**Item No.: 216-202**  
Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray



**Item No.: 216-102**  
Ferrule; Sleeve for 0.75 mm<sup>2</sup> / AWG 20; un-insulated; electro-tin plated; silver-colored



**Item No.: 216-203**  
Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; red



**Item No.: 216-103**  
Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; un-insulated; electro-tin plated



**Item No.: 216-204**  
Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; un-insulated; electro-tin plated; black



**Item No.: 216-104**  
Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; un-insulated; electro-tin plated; silver-colored



**Item No.: 216-206**  
Ferrule; Sleeve for 2.5 mm<sup>2</sup> / AWG 14; insulated; electro-tin plated; blue

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 Insulation stop

1.3.6.1 Insulation stop



**Item No.: 769-470**  
Insulation stop; 0.08 - 0.2 mm<sup>2</sup> "s" (0.14 mm<sup>2</sup> "f-st"); 5 pieces/strip; white



**Item No.: 769-471**  
Insulation stop; 0.25 - 0.5 mm<sup>2</sup>; 5 pieces/strip; light gray



**Item No.: 769-472**  
Insulation stop; 0.75 - 1 mm<sup>2</sup>; 5 pieces/strip; dark 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 Protective warning marker

#### 1.3.8.1 Cover



**Item No.: 280-415**

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

### 1.3.9 Test and measurement

#### 1.3.9.1 Testing accessories



**Item No.: 210-136**

Test plug; 2 mm Ø; with 500 mm cable; red

### 1.3.10 Tool

#### 1.3.10.1 Operating tool

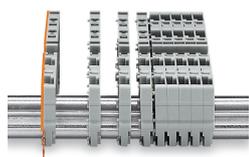


**Item No.: 210-720**

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.



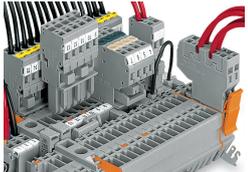
Open the assembly by laterally sliding a block via operating tool and remove terminal block via release lever.

**Conductor termination**

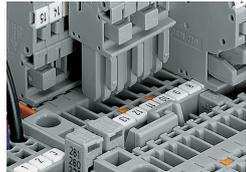


**CAGE CLAMP® connection**  
Carrier terminal block: Insert/remove conductor via operating tool (3.5 x 0.5 mm blade).

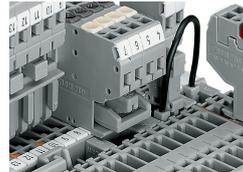
**Commoning**



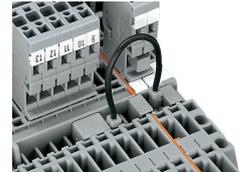
Commoning with adjacent or staggered jumpers. Push jumpers down until fully inserted.



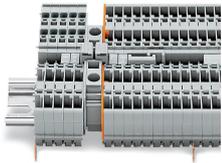
Commoning carrier terminal blocks via staggered jumpers.



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.



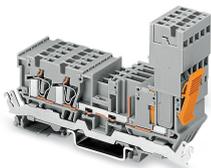
Commoning "supply terminal blocks" (up to 10 mm<sup>2</sup>/8 AWG) with carrier terminal blocks via step-down jumpers.

**Coding**



Snap coding pin in proper direction on carrier terminal block. Shown: Coding pin removal from carrier terminal block.

**Locking system**



Securing a female plug via locking lever on the terminal block side.



1-conductor female plug  
Diode carrier terminal blocks cannot be  
commoned.