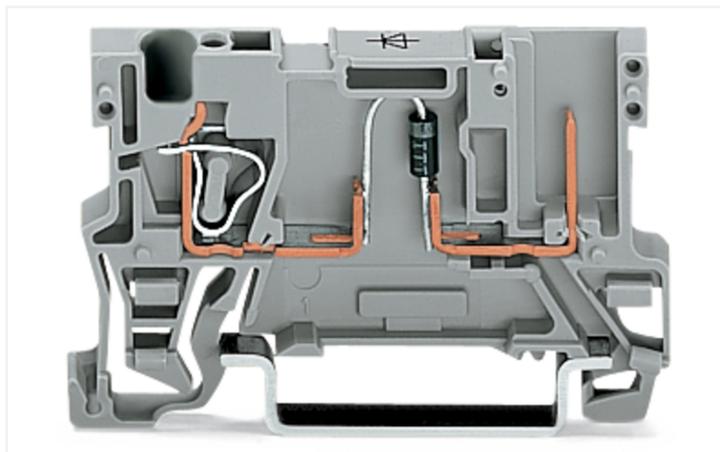
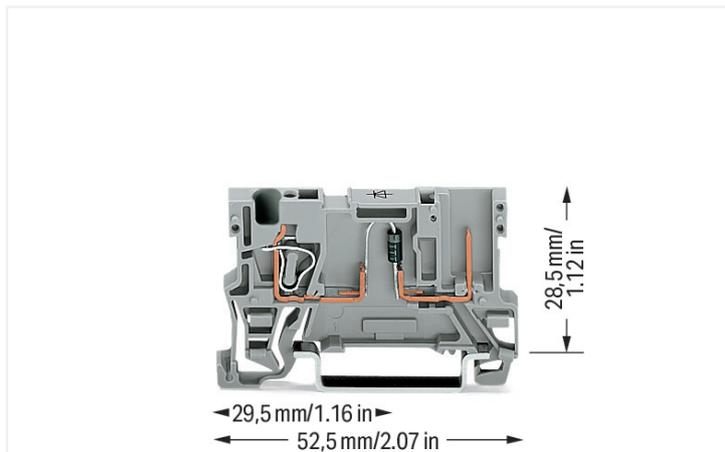


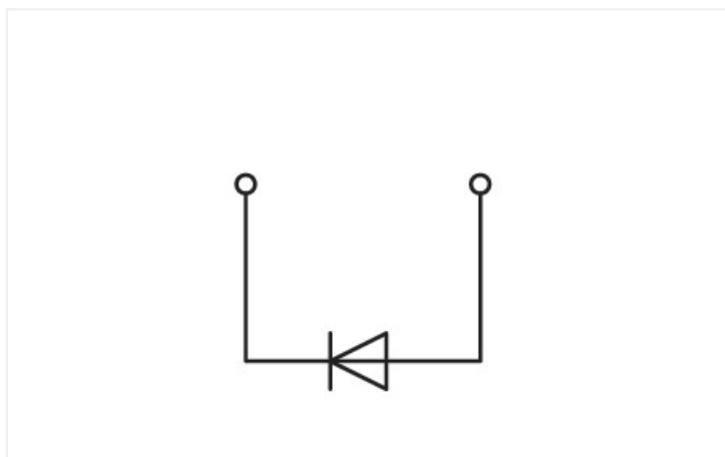
Data Sheet | Item Number: 769-238/281-411

1-conductor/1-pin component carrier terminal block; with diode 1N4007; anode, right side; for DIN-rail 35 x 15 and 35 x 7.5; 4 mm²; CAGE CLAMP®; gray

<https://www.wago.com/769-238/281-411>



Color: ■ gray



Component terminal block with diode, 769 Series, CAGE CLAMP®

This component terminal block with diode (item number 769-238/281-411) is designed for quick and simple connections. Strip lengths must be between 8 and 9 mm when connecting conductors to this component terminal block with diode. Pluggable rail-mount terminal blocks are primarily found in switchgear units and control systems, most notably in railroad technology. These innovative systems combine the properties of rail-mount terminal blocks and connectors for a flexible and reliable wiring system. You also have the option of pre-assembling installations, which not only makes production but also installation, operation, and maintenance more efficient and cost-effective. This product incorporates conductor terminals and utilizes CAGE CLAMP®. Our CAGE CLAMP® connection offers a secure and maintenance-free way to connect all types of conductors. You do not need to prepare the conductor in any way, such as crimping ferrules. Depending on the conductor type, this component terminal block with diode is designed for conductor cross sections ranging from 0.08 mm² to 4 mm².

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
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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 ² / 12 AWG
Solid conductor	0.08 ... 4 mm ² / 28 ... 12 AWG
Fine-stranded conductor	0.08 ... 4 mm ² / 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
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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)	Information on material specifications can be found here
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	4045454619527
Customs tariff number	85366990990

Product Classification

UNSPSC	39121402
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)	97a6837e-a467-4dcc-81b4-ee2ec7b8fe9c
SCIP notification number (Belgium)	ee169d46-8139-4f80-87ac-e8a13195f377
SCIP notification number (Bulgaria)	1cd3839d-1121-4315-8342-0f5f99fb61c7
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SCIP notification number (Denmark)	dcdbb680-b054-493b-9525-56ff1c536692
SCIP notification number (Finland)	a0970ae1-d051-4f53-afa5-77357e04321a
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SCIP notification number (Poland)	cc7db435-1781-4545-ac1f-7436b2373947
SCIP notification number (Romania)	bee91c20-b557-4655-81c0-5091e24f4cfb
SCIP notification number (Sweden)	587c530a-18a1-4dc3-a747-860a5f51636e

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 769-238/281-411	↓
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Documentation

Bid Text

Item Number	Date	File Type / Size	Action
769-238/281-411	19.02.2019	xml 3.22 KB	↓
769-238/281-411	02.10.2017	doc 24.00 KB	↓

CAD/CAE-Data

CAD data

2D/3D Models
769-238/281-411

CAE data

EPLAN Data Portal
769-238/281-411

WSCAD Universe
769-238/281-411

ZUKEN Portal
769-238/281-411

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



Item No.: 769-109/144-000
1-conductor female connector; CAGE CLAMP®; 4 mm²; Pin spacing 5 mm; 9-pole; coding finger; Centered locking levers; Strain relief plate; 4,00 mm²; gray



Item No.: 769-121
2-conductor female connector; CAGE CLAMP®; 4 mm²; Pin spacing 5 mm; 1-pole; coding finger; 4,00 mm²; 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



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 mm² / AWG 24; insulated; electro-tin plated; yellow



Item No.: 216-302

Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise



Item No.: 216-201

Ferrule; Sleeve for 0.5 mm² / 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 mm² / AWG 22; un-insulated; electro-tin plated; silver-colored



Item No.: 216-202

Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray



Item No.: 216-102

Ferrule; Sleeve for 0.75 mm² / AWG 20; un-insulated; electro-tin plated; silver-colored



Item No.: 216-203

Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red



Item No.: 216-103

Ferrule; Sleeve for 1 mm² / AWG 18; un-insulated; electro-tin plated



Item No.: 216-204

Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black



Item No.: 216-104

Ferrule; Sleeve for 1.5 mm² / AWG 16; un-insulated; electro-tin plated; silver-colored



Item No.: 216-206

Ferrule; Sleeve for 2.5 mm² / 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 mm² "s" (0.14 mm² "f-st"); 5 pieces/strip; white



Item No.: 769-471

Insulation stop; 0.25 - 0.5 mm²; 5 pieces/strip; light gray



Item No.: 769-472

Insulation stop; 0.75 - 1 mm²; 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

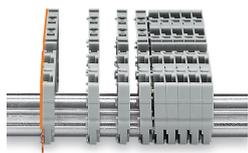


Item No.: 210-720

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

Installation Notes

Installation

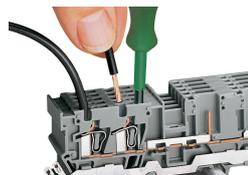


Snap individual carrier terminal blocks onto the DIN-rail and slide together.



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

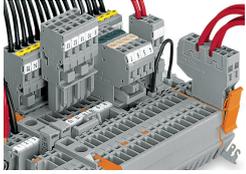
Conductor termination



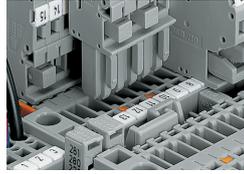
CAGE CLAMP® connection

Carrier terminal block: Insert/remove conductor via operating tool (3.5 x 0.5 mm blade).

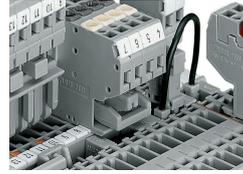
Commoning



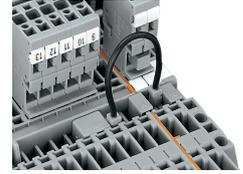
Commoning with adjacent or staggered jumpers.
Push jumpers down until fully inserted.



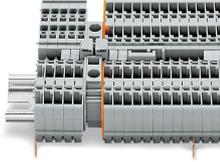
Commoning carrier terminal blocks via staggered jumpers.



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

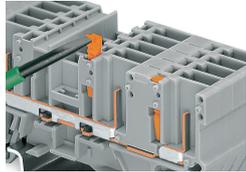


Commoning carrier terminal blocks via push-in type wire jumpers or adjacent jumpers – even over an intermediate plate.



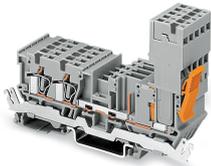
Commoning "supply terminal blocks" (up to 10 mm²/8 AWG) with carrier terminal blocks via step-down jumpers.

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.