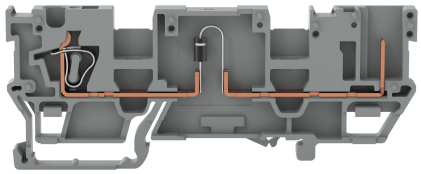
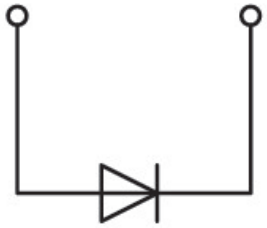
Data Sheet | Item Number: 769-218/281-410

1-conductor/1-pin component carrier terminal block; with 2 jumper positions; with diode 1N4007; anode, left side; for DIN-rail 35 x 15 and 35 x 7.5; 4 mm²; CAGE CLAMP®; gray

https://www.wago.com/769-218/281-410





Color: gray

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

This component terminal block with diode (item number 769-218/281-410) is designed to connect conductors quickly and easily. Conductors can only be connected to this component terminal block with diode if their strip length is between 8 and 9 mm . Pluggable rail-mount terminal blocks are hugely popular in switchgear and control systems, for example, in railroad technology. They combine the best of rail-mount terminal blocks and connectors to create the perfect solution. Variable wiring systems make pre-assembly easy, which saves both time and money in production, installation, operation, and maintenance. 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 type of conductor, this component terminal block with diode is designed for conductor cross sections ranging from 0.08 mm² to 4 mm².

An operating tool is used to operate this pluggable rail-mount terminal block.

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.

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 mm² / 12 AWG
Solid conductor	0.08 … 4 mm² / 28 … 12 AWG
Fine-stranded conductor	0.08 … 4 mm² / 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	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)	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	0.174 MJ
Weight	8.1 g

Environmental requirements

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

Commercial data

Product Group	18 (X-COM-System)
PU (SPU)	50 pcs
Packaging type	Box
Country of origin	DE
GTIN	4045454198381
Customs tariff number	85366990990

Continued on next page

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)	6a8ba8c6-5ea3-45f0-bb03-3805bae88e55
SCIP notification number (Belgium)	03e589ec-9621-4764-8f8c-8b077e0b7092
SCIP notification number (Bulgaria)	21c279bd-538b-4c17-b458-f7c6325cd1bf
SCIP notification number (Czech Republic)	6452c108-ffc5-4668-a7ba-f4d6478371da
SCIP notification number (Denmark)	f6357bee-2307-463e-a791-13babf838cec
SCIP notification number (Finland)	aa756b1e-8de7-4ab1-bb6b-30318e3fba50
SCIP notification number (France)	7f48b72a-f41f-45bc-a206-97f0854c6cec
SCIP notification number (Germany)	c5871bc0-e241-43f1-9972-a7eac02a0509
SCIP notification number (Hungary)	44e418e6-b308-404f-9778-bbecb7e08d0e
SCIP notification number (Italy)	5922bde7-a4d7-465b-825c-991c24935076
SCIP notification number (Netherlands)	6e09dc49-6225-48c1-a50d-692fef58b0c8
SCIP notification number (Poland)	39058992-5489-4cc9-8963-59622c942d7e
SCIP notification number (Romania)	bf5cdd6a-e623-4383-bb38-0a8cd4607da7
SCIP notification number (Sweden)	af843322-ae6c-4f70-a713-1235e52e8a42

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 Conformity WAGO GmbH & Co. KG	-	-

Approvals for marine applications

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

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Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 769-218/281-410

Documentation

Bid Text

769-218/281-410	19.02.2019	xml 3.26 KB
769-218/281-410	02.10.2017	doc 25.00 KB

CAD/CAE-Data

CAD data

2D/3D Models 769-218/281-410

CAE data

EPLAN Data Portal 769-218/281-410

WSCAD Universe 769-218/281-410

ZUKEN Portal 769-218/281-410

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

Continued on next page

1.1.1 Female connector/socket

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.: 769-311
End and intermediate plate; 1.1 mm thick; gray

Item No.: 769-312
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

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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 End plate

1.3.4.1 End plate

Item No.: 769-314
Separator plate; 1.1 mm thick; oversized; orange

1.3.5 Ferrule

1.3.5.1 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; uninsulated; 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; uninsulated; 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; uninsulated; 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; uninsulated; electro-tin plated; silver-colored

Item No.: 216-206
Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; blue

1.3.6 Installation

1.3.6.1 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

1.3.7 Insulation stop

1.3.7.1 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

1.3.8 Jumper

1.3.8.1 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

1.3.9 Marking

1.3.9.1 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

1.3.10 Protective warning marker

1.3.10.1 Cover

Item No.: 280-415
Protective warning marker; for 5 terminal blocks; with high-voltage symbol, black; yellow

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1.3.11 Push-in type wire jumper

1.3.11.1 Jumper

Item No.: 249-126
Push-in type wire jumper; 0.75 mm²; insulated; 110 mm long; black

Item No.: 249-123
Push-in type wire jumper; 0.75 mm²; insulated; 180 mm long; black

Item No.: 249-127
Push-in type wire jumper; 0.75 mm²; insulated; 250 mm long; black

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

1.3.12 Test and measurement

1.3.12.1 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

Item No.: 210-136
Test plug; 2 mm Ø; with 500 mm cable; red

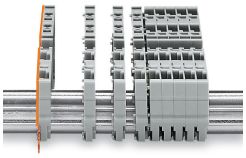
1.3.13 Tool

1.3.13.1 Operating tool

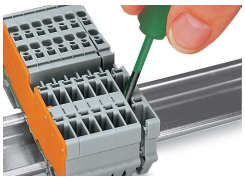
Item No.: 210-720
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

Installation Notes

Installation

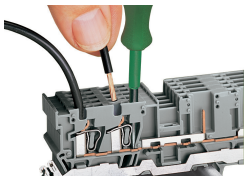


Snap individual carrier terminal blocks onto the DIN-rail and slide together.



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).

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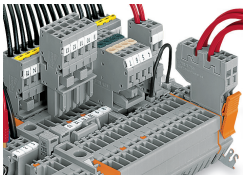
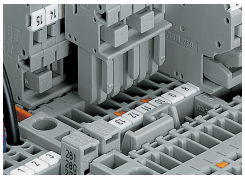
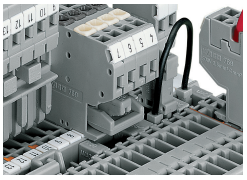
Commoning



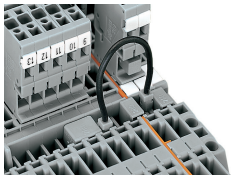
Commoning with adjacent or staggered jumpers.
Push jumpers down until fully inserted.



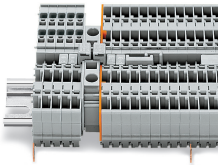
Commoning carrier terminal blocks via staggered jumpers.



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

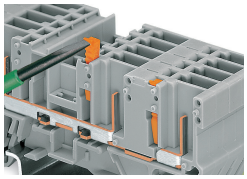


Commoning carrier terminal blocks via push-in type wire jumpers or adjacent jumpers – even over an intermediate plate.



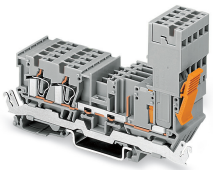
Commoning “supply terminal blocks” (up to 10 mm²/8 AWG) with carrier terminal blocks via step-down jumpers.

Coding

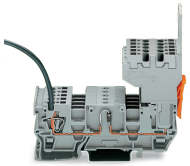


Snap coding pin in proper direction on carrier terminal block.
Shown: Coding pin removal from carrier terminal block.

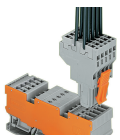
Locking system



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



2-conductor female plug
Diode carrier terminal blocks can be commoned via 280 and 780 Series Jumpers and tested using a test plug adapter (280-4..).



1-conductor/1-pin diode carrier terminal block with two jumper positions
2-conductor female plug