

Data Sheet | Item Number: 769-504

Start module for 2-conductor female connector; CAGE CLAMP®; 4 mm²; Pin spacing 5 mm; 1-pole; coding finger; with integrated end plate; 4,00 mm²; gray

<https://www.wago.com/769-504>



Color: ■ gray

Female connector, 769 Series, operating tool

Our female connector (item number 769-504) is designed for seamless electrical installations. Conductors should only be connected to this female connector if their strip length is between 8 and 9 mm. Pluggable rail-mount terminal blocks are primarily found in switchgear units and control systems, most notably in railroad technology. These innovative systems combine the benefits 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. Featuring conductor terminals along with CAGE CLAMP®, this connector delivers reliable performance. Our CAGE CLAMP® connection offers a convenient 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. The dimensions are (5 x 45.2 x 35.9) mm (width x height x depth). Depending on the type of conductor, this female connector is designed for conductor cross sections ranging from 0.08 mm² to 4 mm².

This female connector/socket is operated with an operating tool.

Notes

Safety Information

According to EN 61984, pluggable connectors without current interrupting capacity must not be mated or unmated when live or under load.

Safety information 2

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

Electrical data

Ratings per	IEC/EN 61984		
Overvoltage category	III	III	II
Pollution degree	3	2	2
Nominal voltage	500 V	-	-
Rated impulse withstand voltage	6 kV	-	-
Rated current	32 A	-	-

General information

Wiring direction Front-entry wiring

Connection Data

Clamping units	2
Total number of potentials	1

Connection 1

Connection technology	CAGE CLAMP®
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
Pole number	1
Wiring direction	Front-entry wiring

Physical data

Width	5 mm / 0.197 inches
Height	45.2 mm / 1.78 inches
Depth	35.9 mm / 1.413 inches
Module width	5 mm / 0.197 inches

Mechanical data

Variable coding	Yes
Direct ground contact to DIN-rail/drilled hole/housing	No
Marking level	Side marking
Anti-rotation protection	Yes

Plug-in connection

Contact type (pluggable connector)	Female connector/socket
Connector (connection type)	for conductor
Mismating protection	No
Plugging without loss of pin spacing	Yes

Material data

Note (material data)	Information on material specifications can be found here
Color	gray
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.085 MJ
Halogen-free	Yes
Weight	5.7 g

Environmental requirements

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

Commercial data

Product Group	18 (X-COM-System)
PU (SPU)	250 pcs
Packaging type	Bag
Country of origin	PL
GTIN	4017332331449
Customs tariff number	85366990990

Product Classification

UNSPSC	39121409
eCl@ss 10.0	27-14-11-06
eCl@ss 9.0	27-14-11-06
ETIM 9.0	EC001284
ETIM 10.0	EC001284
ECCN	NO US CLASSIFICATION

Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
------------------------	-------------------------

Approvals / Certificates

General approvals **Declarations of conformity and manufacturer's declarations**



Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60947	NTR NL-7626
CCA DEKRA Certification B.V.	EN 61984	2190419.02
CCA DEKRA Certification B.V.	EN 61984	NL-47799/A1
CSA CSA Group	C22.2	1101144
KEMA/KEUR DEKRA Certification B.V.	EN 60947	2190419.01
UL Underwriters Laboratories Inc.	UL 1059	E45172
UL Underwriters Laboratories Inc.	UL 1977	E 45171

Approval	Standard	Certificate Name
EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
Railway WAGO GmbH & Co. KG	-	Z00004428.000

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 769-504



Documentation

Bid Text

769-504	19.02.2019	xml 3.15 KB	
769-504	04.10.2017	doc 25.50 KB	

CAD/CAE-Data

CAD data

2D/3D Models 769-504



CAE data

EPLAN Data Portal 769-504



WSCAD Universe 769-504



ZUKEN Portal 769-504



1 Compatible Products

1.1 Optional Accessories

1.1.1 Ferrule

1.1.1.1 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

1.1.2 Insulation stop

1.1.2.1 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

1.1.3 Locking system

1.1.3.1 Locking system



Item No.: 769-428

Locking lever; for female connectors; 1 part; Pin spacing 5 mm; 1-pole; gray



Item No.: 769-429

Locking lever; for female connectors; 1 part; Pin spacing 5 mm; 1-pole; orange



Item No.: 769-430

Locking lever; for female connectors; 1 part; Pin spacing 5 mm; 2-pole; gray



Item No.: 769-431

Locking lever; for female connectors; 1 part; Pin spacing 5 mm; 2-pole; orange

1.1.4 Marking

1.1.4.1 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

1.1.4.2 Marking strip



Item No.: 210-831

Marking strips; on reel; 2.3 mm wide; plain; Self-adhesive; white



Item No.: 210-832

Marking strips; on reel; 3 mm wide; plain; Self-adhesive; white

1.1.5 Protective warning marker

1.1.5.1 Cover



Item No.: 280-415

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

1.1.6 Strain relief

1.1.6.1 Strain relief



Item No.: 769-414

Strain relief plate; for female and male connectors; 1 part; Pin spacing 5 mm; 10- to 15-pole; gray



Item No.: 769-410

Strain relief plate; for female and male connectors; 1 part; Pin spacing 5 mm; 1-pole; gray



Item No.: 769-411

Strain relief plate; for female and male connectors; 1 part; Pin spacing 5 mm; 2- to 3-pole; gray



Item No.: 769-412

Strain relief plate; for female and male connectors; 1 part; Pin spacing 5 mm; 4- to 5-pole; gray



Item No.: 769-413

Strain relief plate; for female and male connectors; 1 part; Pin spacing 5 mm; 6- to 9-pole; gray

1.1.7 Test and measurement

1.1.7.1 Testing accessories



Item No.: 210-136

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

1.1.8 Tool

1.1.8.1 Operating tool

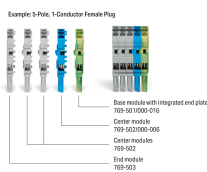


Item No.: 769-434

Operating tool; made of insulating material; 1-way; loose; white

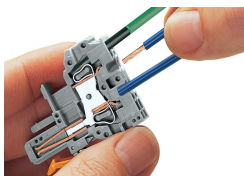
Installation Notes

Installation



Female plugs for self-assembly

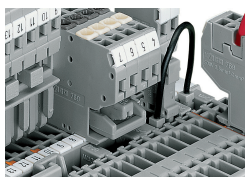
Conductor termination



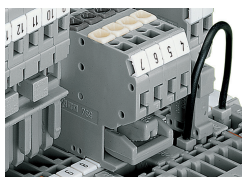
CAGE CLAMP® connection

Female plug: Inserting/removing a conductor via operating tool. Operation 90° to conductor is also possible. With ferruled conductors, it is necessary to use a terminal block one size smaller than the conductor's nominal cross-section.

Commoning



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



Commoning options of female plugs:

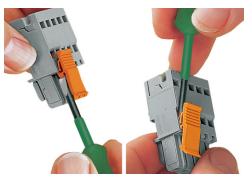
- After removal, commoned potentials still remain commoned
- Use of plug-in jumpers instead of additional wired jumpers
- Can be used as a "hardware" key for safety lockout
- Can also be used as a commoning jumper for sensor circuits or machine programming

Coding



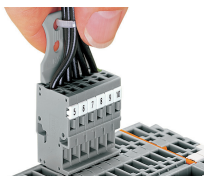
Coding a female plug by removing coding finger(s) via cutting tool. Do not remove the first and last coding fingers or use an additional locking lever.

Locking system



Locking/releasing a lever.

Strain relief



Removing a female plug via conductor bundle provided with strain relief plate.

Marking



Labeling a female plug with CAGE CLAMP® connection via Mini-WSB Quick Markers.