



Color: ■ gray

Female connector, 769 Series, operating tool

This female connector (item number 769-502) simplifies electrical installations. 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 for the perfect solution. Variable wiring systems make pre-assembly easy, which leads to considerable time and cost savings in production, installation, operation, and maintenance. Our pluggable rail-mount terminal block is rated for 500 V and is designed to handle a rated current of up to 32 A. Strip lengths must be between 8 mm and 9 mm when connecting conductors to this female connector. This product incorporates conductor terminals and utilizes CAGE CLAMP®. Our trusted universal connection known as CAGE CLAMP® is the industry standard when it comes to connection technology and electrical interconnections. Dimensions: 5 x 45.2 x 18.3 mm (width x height x depth). This female connector is suitable for conductor cross sections ranging from 0.08 mm² to 4 mm². Up to one potential / one pole can be connected to this terminal block using one clamping point. The gray housing is made of polyamide (PA66) for insulation. This female connector/socket is operated with an operating tool. The front-entry wiring means you can connect copper conductors.

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

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

Connection data																						
Clamping units	1	<table><tr><th colspan="2">Connection 1</th></tr><tr><td>Connection technology</td><td>CAGE CLAMP®</td></tr><tr><td>Actuation type</td><td>Operating tool</td></tr><tr><td>Connectable conductor materials</td><td>Copper</td></tr><tr><td>Nominal cross-section</td><td>4 mm² / 12 AWG</td></tr><tr><td>Solid conductor</td><td>0.08 ... 4 mm² / 28 ... 12 AWG</td></tr><tr><td>Fine-stranded conductor</td><td>0.08 ... 4 mm² / 28 ... 12 AWG</td></tr><tr><td>Strip length</td><td>8 ... 9 mm / 0.31 ... 0.35 inches</td></tr><tr><td>Pole number</td><td>1</td></tr><tr><td>Wiring direction</td><td>Front-entry wiring</td></tr></table>	Connection 1		Connection technology	CAGE CLAMP®	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	Pole number	1	Wiring direction	Front-entry wiring
Connection 1																						
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Pole number	1																					
Wiring direction	Front-entry wiring																					
Total number of potentials	1																					

Physical data

Width	5 mm / 0.197 inches
Height	45.2 mm / 1.78 inches
Depth	18.3 mm / 0.72 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	0.052 MJ
Halogen-free	Yes
Weight	3.2 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	DE
GTIN	4017332331425
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 8.0	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	Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60947	NTR NL-7626	EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
CCA DEKRA Certification B.V.	EN 61984	2190419.02	Railway WAGO GmbH & Co. KG	-	Z00004428.000
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 1977	E 45171			
UR Underwriters Laboratories Inc.	UL 1059	E45172			

Downloads

Environmental Product Compliance	
Compliance Search	
Environmental Product Compliance 769-502	

Documentation

Bid Text			
769-502	19.02.2019	xml 3.07 KB	
769-502	04.10.2017	doc 25.50 KB	

CAD/CAE-Data

CAD data		CAE data	
2D/3D Models 769-502		EPLAN Data Portal 769-502	
		WSCAD Universe 769-502	
		ZUKEN Portal 769-502	



1 Compatible Products

1.1 Optional Accessories

1.1.1 Cover

1.1.1.1 Cover



Item No.: 769-436
Jumper cover; for 1-conductor female plugs; for 5 poles; gray

1.1.2 Ferrule

1.1.2.1 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; 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

1.1.3 Insulation stop

1.1.3.1 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

1.1.4 Jumper

1.1.4.1 Jumper



Item No.: 769-402
Jumper; insulated; gray



1.1.5 Locking system

1.1.5.1 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

1.1.6 Marking

1.1.6.1 Label



Item No.: 210-805
Labels; for Smart Printer; permanent adhesive; 6 x 15 mm; 3000 pieces on roll; white



Item No.: 210-805/000-002
Labels; for Smart Printer; permanent adhesive; 6 x 15 mm; 3000 pieces on roll; yellow

1.1.6.2 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

1.1.6.3 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

1.1.7 Protective warning marker

1.1.7.1 Cover



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

1.1.8 Strain relief

1.1.8.1 Strain relief



Item No.: 769-1610
Strain relief housing; for female and male connectors; 2 parts; Pin spacing 5 mm; 10-pole; gray



Item No.: 769-1611
Strain relief housing; for female and male connectors; 2 parts; Pin spacing 5 mm; 11-pole; gray



Item No.: 769-1612
Strain relief housing; for female and male connectors; 2 parts; Pin spacing 5 mm; 12-pole; gray



Item No.: 769-1613
Strain relief housing; for female and male connectors; 2 parts; Pin spacing 5 mm; 13-pole; gray



1.1.8.1 Strain relief



Item No.: 769-1614
Strain relief housing; for female and male connectors; 2 parts; Pin spacing 5 mm; 14-pole; gray



Item No.: 769-1615
Strain relief housing; for female and male connectors; 2 parts; Pin spacing 5 mm; 15-pole; gray



Item No.: 769-1602
Strain relief housing; for female and male connectors; 2 parts; Pin spacing 5 mm; 2-pole; gray



Item No.: 769-1603
Strain relief housing; for female and male connectors; 2 parts; Pin spacing 5 mm; 3-pole; gray



Item No.: 769-1604
Strain relief housing; for female and male connectors; 2 parts; Pin spacing 5 mm; 4-pole; gray



Item No.: 769-1605
Strain relief housing; for female and male connectors; 2 parts; Pin spacing 5 mm; 5-pole; gray



Item No.: 769-1606
Strain relief housing; for female and male connectors; 2 parts; Pin spacing 5 mm; 6-pole; gray



Item No.: 769-1607
Strain relief housing; for female and male connectors; 2 parts; Pin spacing 5 mm; 7-pole; gray



Item No.: 769-1608
Strain relief housing; for female and male connectors; 2 parts; Pin spacing 5 mm; 8-pole; gray



Item No.: 769-1609
Strain relief housing; for female and male connectors; 2 parts; Pin spacing 5 mm; 9-pole; gray



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

1.1.9 Test and measurement

1.1.9.1 Testing accessories



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

1.1.10 Tool

1.1.10.1 Operating tool



Item No.: 210-490
Operating tool

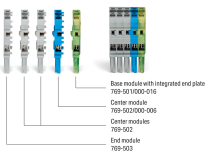


Item No.: 769-434
Operating tool; made of insulating material; 1-way; loose; white

Installation Notes

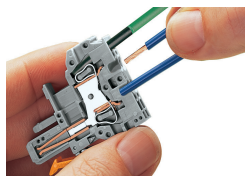
Installation

Example: 5-Pole, 1-Conductor Female Plug



Female plugs for self-assembly

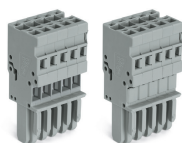
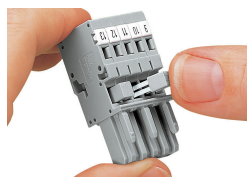
Conductor termination



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 1-conductor female plugs via miniature adjacent jumpers.

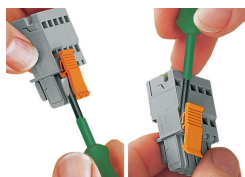
Jumper cover for 1-conductor female plugs

Coding



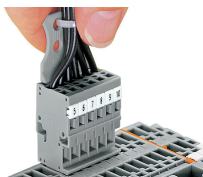
Coding a female plug by removing coding finger(s) via cutting tool. Do not remove the first and last coding fingers or use an additional locking lever.

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.