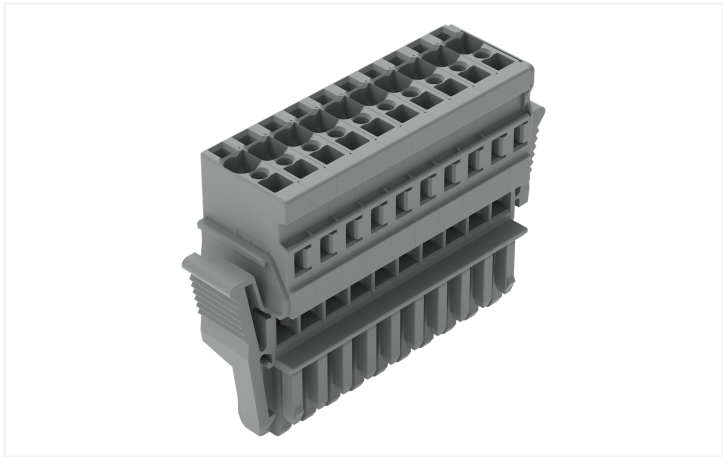




Color: ■ gray

Female connector, 769 Series, operating tool

Enjoy convenient electrical installations with this female connector (item number 769-110/021-000). Ensure that the strip lengths are between 8 and 9 mm when connecting conductors to this female connector. 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 features conductor terminals and utilizes CAGE CLAMP®. Our renowned universal connection known as CAGE CLAMP® is industry-leading when it comes to connection technology and electrical interconnections. The item's dimensions are (65 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.

An operating tool is used to operate this female connector/socket.

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			General information	
Overvoltage category		III	III	II	Wiring direction	Front-entry wiring
Pollution degree		3	2	2		
Nominal voltage		500 V	-	-		
Rated impulse withstand voltage		6 kV	-	-		
Rated current		32 A	-	-		



Connection data																				
Clamping units	10	Connection 1 <table><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>10</td></tr><tr><td>Wiring direction</td><td>Front-entry wiring</td></tr></table>	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	10	Wiring direction	Front-entry wiring
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	10																			
Wiring direction	Front-entry wiring																			
Total number of potentials	10																			

Physical data	
Width	65 mm / 2.583 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
Locking lever	Yes

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	0.571 MJ
Halogen-free	Yes
Weight	33.2 g



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

Commercial data	
Product Group	18 (X-COM-System)
PU (SPU)	10 pcs
Packaging type	Box
Country of origin	DE
GTIN	4044918471824
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	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.	IEC 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			



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 769-110/021-000	↓

Documentation

Bid Text			
769-110/021-000	19.02.2019	xml 3.21 KB	↓
769-110/021-000	04.10.2017	doc 25.00 KB	↓

CAD/CAE-Data

CAD data	
2D/3D Models 769-110/021-000	↓

CAE data	
EPLAN Data Portal 769-110/021-000	↓
WSCAD Universe 769-110/021-000	↓
ZUKEN Portal 769-110/021-000	↓



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.: 769-430 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	Item No.: 210-834 Marking strips; on reel; 5 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.: 769-414 Strain relief plate; for female and male connectors; 1 part; Pin spacing 5 mm; 10- to 15-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



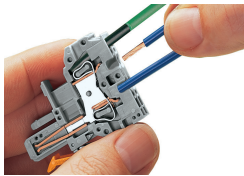
Item No.: 210-490
Operating tool



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

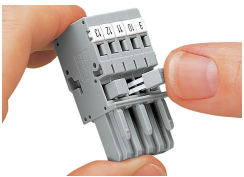
Installation Notes

Conductor termination

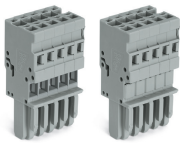


CAGE CLAMP® connection
Female plug: Inserting/removing a conductor via operating tool.
Operation 90° to conductor is also possible.
With ferruled conductors, it is necessary to use a terminal block one size smaller than the conductor's nominal cross-section.

Commoning



Commoning 1-conductor female plugs via miniature adjacent jumpers.



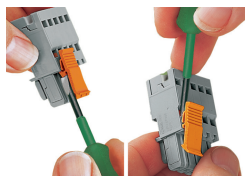
Jumper cover for 1-conductor female plugs

Coding



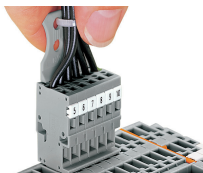
Coding a female plug by removing coding finger(s) via cutting tool. Do not remove the first and last coding fingers or use an additional locking lever.

Locking system

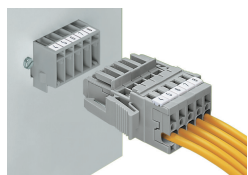


Locking/releasing a lever.

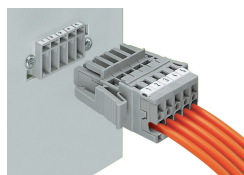
Strain relief



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

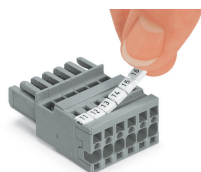


Male header with mounting flanges
1-conductor female plug with lateral
locking levers



Male header and 1-conductor female plug
with lateral locking levers

Marking



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