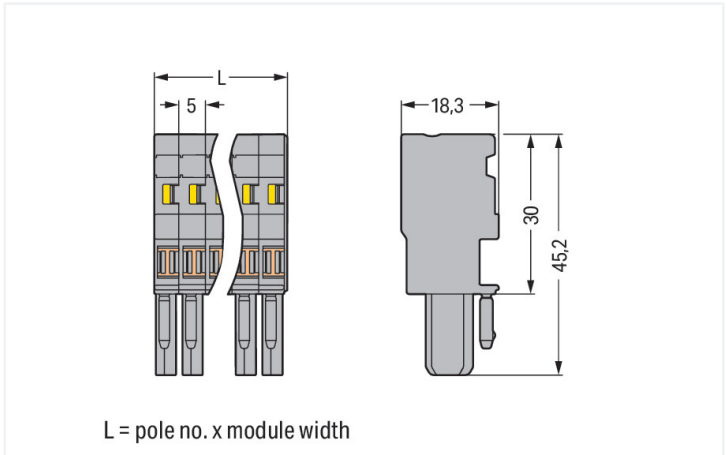


Color: ■ gray



Dimensions in mm

Female connector, 769 Series, operating tool

Easy electrical installations are guaranteed with this female connector (item number 769-104). 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. Rated current and voltage are key factors to consider when selecting a pluggable rail-mount terminal block, as they indicate possible applications and uses. This product has a rated voltage of 500 V and a rated current of 32 A. Conductors can only be connected to this female connector if their strip length is between 8 mm and 9 mm. Featuring conductor terminals along with CAGE CLAMP®, this connector delivers reliable performance. Our trusted universal connection known as CAGE CLAMP® is the industry standard for connection technology and electrical interconnections. The dimensions are 20 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 four potentials / four poles can be connected to this terminal strip using four clamping points. The gray housing is made of polyamide (PA66) for insulation. An operating tool is used to operate this female connector/ socket. Conductors made of copper can be connected via front-entry wiring.

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		Connection 1	
Clamping units	4	Connection technology	CAGE CLAMP®
Total number of potentials	4	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	4



Connection 1	
Wiring direction	Front-entry wiring

Physical data		
Width		20 mm / 0.787 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
Material group	I
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.245 MJ
Halogen-free	Yes
Weight	12.5 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	4044918471442
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.	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 1977	E 45171			
UR Underwriters Laboratories Inc.	UL 1059	E45172			

Approvals for marine applications

Approval	Standard	Certificate Name
ABS American Bureau of Ship- ping	EN 60947	20-HG1941090-PDA
DNV GL Det Norske Veritas, Ger- manischer Lloyd	-	TAE00001V2



Downloads

Environmental Product Compliance

Compliance Search			
Environmental Product Compliance 769-104			

Documentation

Bid Text			
769-104	19.02.2019	xml 3.20 KB	
769-104	04.10.2017	doc 25.00 KB	

CAD/CAE-Data

CAD data	
2D/3D Models 769-104	

CAE data	
EPLAN Data Portal 769-104	
WSCAD Universe 769-104	
ZUKEN Portal 769-104	

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; 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

1.1.2.1 Ferrule



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

1.1.3 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.: 769-1604
Strain relief housing; for female and male
connectors; 2 parts; Pin spacing 5 mm; 4-
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

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



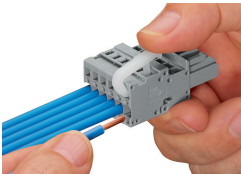
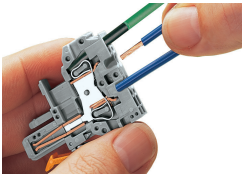
Item No.: 210-490
Operating tool



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

Installation Notes

Conductor termination

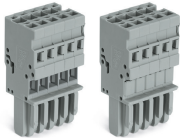
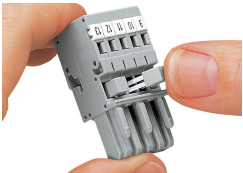


CAGE CLAMP® connection
Female plug: Inserting/removing a conductor via operating tool.
Operation 90° to conductor is also possible.
With ferruled conductors, it is necessary to use a terminal block one size smaller than the conductor's nominal cross-section.

Operating lever
Inserting a conductor – side-entry wiring (example shows a female plug).

Operating tool
Inserting a conductor – side-entry wiring (example shows a female plug).
With ferruled conductors, it is necessary to use a terminal block one size smaller than the conductor's nominal cross-section.

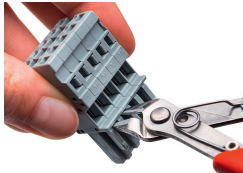
Commoning



Commoning 1-conductor female plugs via miniature adjacent jumpers.

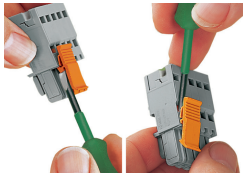
Jumper cover for 1-conductor female plugs

Coding



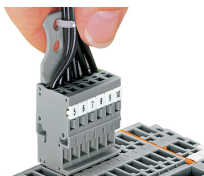
Coding a female plug by removing coding finger(s) via cutting tool. Do not remove the first and last coding fingers or use an additional locking lever.

Locking system



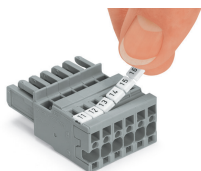
Locking/releasing a lever.

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.