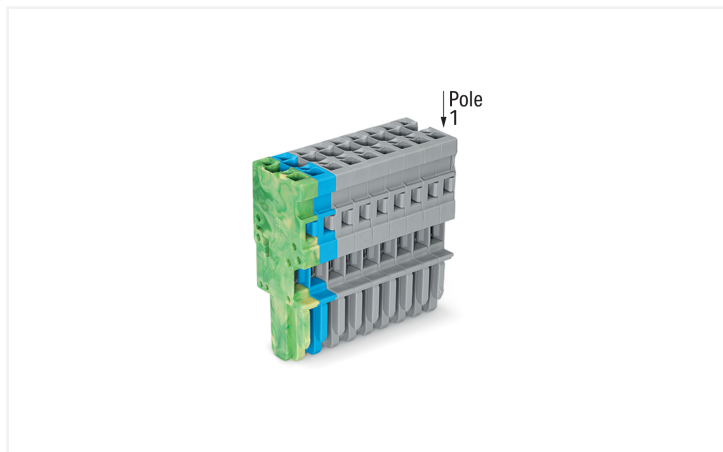


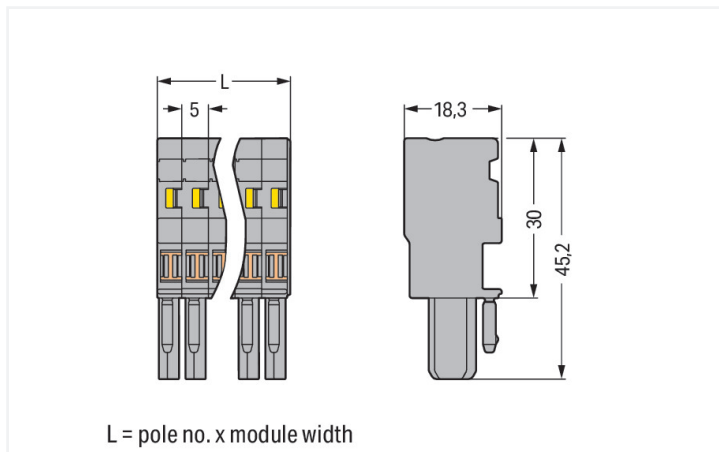
Data Sheet | Item Number: 769-109/000-039

1-conductor female connector; CAGE CLAMP®; 4 mm²; Pin spacing 5 mm; 9-pole; coding finger; 4,00 mm²; gray/blue/green-yellow

<https://www.wago.com/769-109/000-039>



Color: gray/blue/green-yellow



L = pole no. x module width

Dimensions in mm

Female connector, 769 Series, CAGE CLAMP®

Enjoy seamless electrical installations with this female connector (item number 769-109/000-039). 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 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. This product incorporates 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. The dimensions are (45 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 | | |
|---------------------------------|--------------|-----|----|
| 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 | 9 |
| Total number of potentials | 9 |

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 | 9 |
| Wiring direction | Front-entry wiring |

Physical data

| | |
|--------------|-----------------------|
| Width | 45 mm / 1.772 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/blue/green-yellow |
| Material group | I |
| Insulation material (main housing) | Polyamide (PA66) |
| Flammability class per UL94 | V0 |
| Fire load | 0.468 MJ |
| Halogen-free | Yes |
| Weight | 28.5 g |

Environmental requirements

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

Commercial data

| | |
|-----------------------|---------------|
| PU (SPU) | 25 pcs |
| Packaging type | Box |
| Country of origin | DE |
| GTIN | 4050821653493 |
| 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



| Approval | Standard | Certificate Name |
|---|----------|------------------|
| CSA CSA Group | C22.2 | 1101144 |
| UL Underwriters Laboratories Inc. | UL 1059 | E45172 |
| UL Underwriters Laboratories Inc. | UL 1977 | E 45171 |

Declarations of conformity and manufacturer's declarations



| Approval | Standard | Certificate Name |
|-------------------------------|----------|------------------|
| Railway WAGO GmbH & Co. KG | - | Z00004428.000 |

Downloads

Environmental Product Compliance

| | |
|---|-------------------|
| Compliance Search | |
| Environmental Product Compliance 769-109/000-039 | ↓ |

Documentation

Bid Text

| | | | |
|-----------------|------------|-----------------|--|
| 769-109/000-039 | 19.02.2019 | xml 3.25 KB | |
| 769-109/000-039 | 04.10.2017 | doc 26.00 KB | |

CAD/CAE-Data

CAE data

| | |
|--------------------------------------|--|
| EPLAN Data Portal 769-109/000-039 | |
| WSCAD Universe 769-109/000-039 | |

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



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.: 769-1609

Strain relief housing; for female and male connectors; 2 parts; Pin spacing 5 mm; 9-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

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.

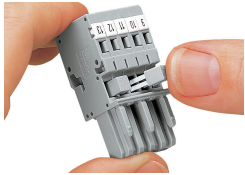


Operating lever
Inserting a conductor – side-entry wiring (example shows a female plug).



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.

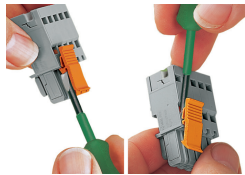
Jumper cover for 1-conductor female plugs

Coding



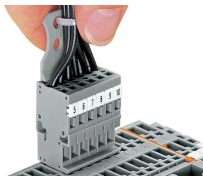
Coding a female plug by removing coding finger(s) via cutting tool. Do not remove the first and last coding fingers or use an additional locking lever.

Locking system



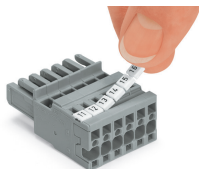
Locking/releasing a lever.

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.