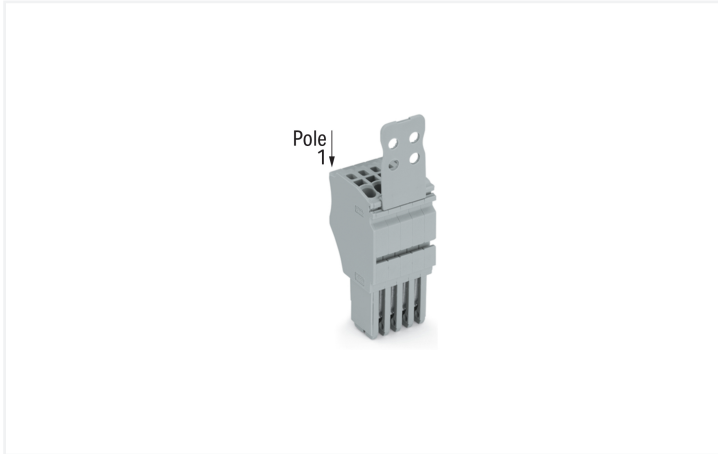


## Data Sheet | Item Number: 2020-110/135-000

1-conductor female connector; Push-in CAGE CLAMP®; 1.5 mm<sup>2</sup>; Pin spacing 3.5 mm; 10-pole; Strain relief plate; 1,50 mm<sup>2</sup>; gray

<https://www.wago.com/2020-110/135-000>



Color: ■ gray

Similar to illustration

Female connector, 2020 Series, gray

Enjoy seamless electrical installations with this female connector (item number 2020-110/135-000). Conductors should only be connected to this female connector if their strip length is between 9 and 11 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 to create the perfect solution. Variable wiring systems make pre-assembly easy, which saves both time and money in production, installation, operation, and maintenance. This product features conductor terminals and utilizes Push-in CAGE CLAMP®. Push-in CAGE CLAMP® connection technology is ideal for connecting all conductor types. It allows direct insertion of both solid and fine-stranded conductors with ferrules without the need for tools—all thanks to its pluggable design. The item's dimensions are (35.7 x 69 x 22.4) mm (width x height x depth). Depending on the type of conductor, this female connector is suitable for conductor cross sections ranging from 0.14 mm<sup>2</sup> to 1.5 mm<sup>2</sup>.

This female connector/socket is operated with an operating tool. The strain relief plate secures the connected conductors, simplifying wire handling..

### 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

Notice: An appropriate end plate must be applied to the carrier terminal blocks after each female plug.

### Electrical data

| Ratings per                     | IEC/EN 61984 |     |    | Approvals per | UL 1059 |       |       |
|---------------------------------|--------------|-----|----|---------------|---------|-------|-------|
|                                 | III          | III | II |               | B       | C     | D     |
| Overvoltage category            | III          | III | II | Use group     | B       | C     | D     |
| Pollution degree                | 3            | 2   | 2  | Rated voltage | 300 V   | 300 V | 300 V |
| Nominal voltage                 | 500 V        | -   | -  | Rated current | 15 A    | 15 A  | 15 A  |
| Rated impulse withstand voltage | 6 kV         | -   | -  |               |         |       |       |
| Rated current                   | 13.5 A       | -   | -  |               |         |       |       |

| Approvals per | CSA 22.2 No 158 |       |       |
|---------------|-----------------|-------|-------|
| Use group     | B               | C     | D     |
| Rated voltage | 300 V           | 300 V | 300 V |
| Rated current | 10 A            | 10 A  | 10 A  |

| General information |                    |
|---------------------|--------------------|
| Wiring direction    | Front-entry wiring |

### Connection Data

|                            |    |
|----------------------------|----|
| Clamping units             | 10 |
| Total number of potentials | 10 |

| Connection 1                                               |                                                                                                                                   |
|------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Connection technology                                      | Push-in CAGE CLAMP®                                                                                                               |
| Actuation type                                             | Operating tool                                                                                                                    |
| Connectable conductor materials                            | Copper                                                                                                                            |
| Nominal cross-section                                      | 1 mm <sup>2</sup>                                                                                                                 |
| Solid conductor                                            | 0.14 ... 1.5 mm <sup>2</sup> / 24 ... 16 AWG                                                                                      |
| Solid conductor; push-in termination                       | 0.5 ... 1.5 mm <sup>2</sup> / 20 ... 16 AWG                                                                                       |
| Fine-stranded conductor                                    | 0.14 ... 1.5 mm <sup>2</sup> / 24 ... 16 AWG                                                                                      |
| Fine-stranded conductor; with insulated ferrule            | 0.14 ... 0.75 mm <sup>2</sup> / 24 ... 18 AWG                                                                                     |
| Fine-stranded conductor; with ferrule; push-in termination | 0.5 ... 0.75 mm <sup>2</sup> / 20 ... 18 AWG                                                                                      |
| Note (conductor cross-section)                             | Depending on the conductor characteristic, a conductor with a smaller cross-section can also be inserted via push-in termination. |
| Strip length                                               | 9 ... 11 mm / 0.35 ... 0.43 inches                                                                                                |
| Pole number                                                | 10                                                                                                                                |
| Wiring direction                                           | Front-entry wiring                                                                                                                |

### Physical data

|              |                        |
|--------------|------------------------|
| Width        | 35.7 mm / 1.406 inches |
| Height       | 69 mm / 2.717 inches   |
| Depth        | 22.4 mm / 0.882 inches |
| Module width | 3.5 mm / 0.138 inches  |

### Mechanical data

|                          |              |
|--------------------------|--------------|
| Variable coding          | Yes          |
| Marking level            | Side marking |
| Anti-rotation protection | Yes          |

### Plug-in connection

|                                    |                         |
|------------------------------------|-------------------------|
| Contact type (pluggable connector) | Female connector/socket |
| Connector (connection type)        | for conductor           |
| Mismatching protection             | No                      |
| Strain relief                      | Strain relief plate     |

### Material data

|                                    |                                                                          |
|------------------------------------|--------------------------------------------------------------------------|
| Note (material data)               | <a href="#">Information on material specifications can be found here</a> |
| Color                              | gray                                                                     |
| Material group                     | I                                                                        |
| Insulation material (main housing) | Polyamide (PA66)                                                         |
| Flammability class per UL94        | V0                                                                       |
| Fire load                          | 0.393 MJ                                                                 |
| Weight                             | 23.9 g                                                                   |

### Environmental requirements

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

### Commercial data

|                       |                   |
|-----------------------|-------------------|
| Product Group         | 18 (X-COM-System) |
| PU (SPU)              | 25 pcs            |
| Packaging type        | Box               |
| Country of origin     | DE                |
| GTIN                  | 4050821092339     |
| 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 |
|-------------------------------------|----------|------------------|
| CCA<br>DEKRA Certification B.V.     | EN 60947 | NTR NL 7617      |
| UL<br>UL International Germany GmbH | UL 1059  | E 45172          |

#### Declarations of conformity and manufacturer's declarations

| Approval                                           | Standard | Certificate Name |
|----------------------------------------------------|----------|------------------|
| EU-Declaration of Conformity<br>WAGO GmbH & Co. KG | -        | -                |
| UK-Declaration of Conformity<br>WAGO GmbH & Co. KG | -        | -                |

## Downloads

### Environmental Product Compliance

#### Compliance Search

Environmental Product Compliance  
2020-110/135-000



## Documentation

### Bid Text

|                  |            |                  |  |
|------------------|------------|------------------|--|
| 2020-110/135-000 | 19.02.2019 | xml<br>3.96 KB   |  |
| 2020-110/135-000 | 06.08.2018 | docx<br>15.29 KB |  |

## CAD/CAE-Data

### CAD data

2D/3D Models  
2020-110/135-000



### CAE data

EPLAN Data Portal  
2020-110/135-000



WSCAD Universe  
2020-110/135-000



ZUKEN Portal  
2020-110/135-000



## 1 Compatible Products

### 1.1 Optional Accessories

#### 1.1.1 Ferrule

##### 1.1.1.1 Ferrule



#### Item No.: 216-241

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white



#### Item No.: 216-242

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray



#### Item No.: 216-243

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red

### 1.1.2 Marking

#### 1.1.2.1 Marker



#### Item No.: 793-3501

WMB marking card; as card; plain; snap-on type; white



#### Item No.: 2009-113

WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; white

### 1.1.2.2 Marking strip



**Item No.: 210-833**

Marking strips; 25 m on roll; 6 mm wide; plain; Self-adhesive; white



**Item No.: 2009-110**

Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white



**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

### 1.1.3 Protective warning marker

#### 1.1.3.1 Cover



**Item No.: 2000-115**

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

### 1.1.4 Tool

#### 1.1.4.1 Operating tool



**Item No.: 210-719**

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft



**Item No.: 210-648**

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; angled; short

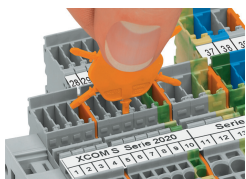


**Item No.: 210-647**

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; multicoloured

### Installation Notes

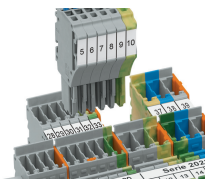
#### Coding



Insert coding pin into the corresponding slot and twist it off.



Coding a female plug: remove coding finger using a suitable tool.



Insert coded female plug into X-COM®S-SYSTEM terminal block assembly.