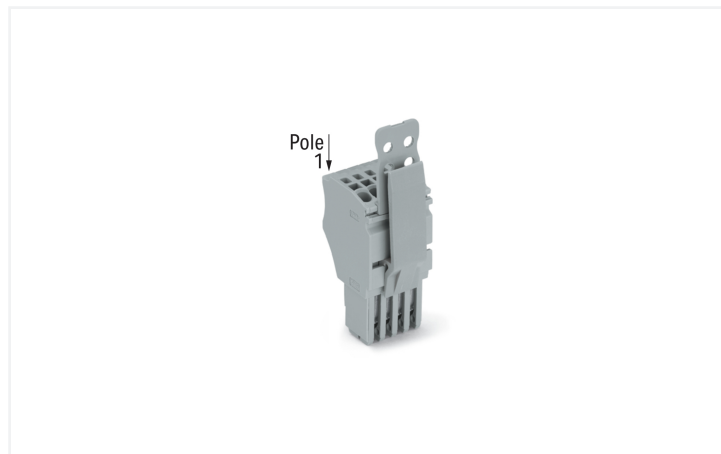
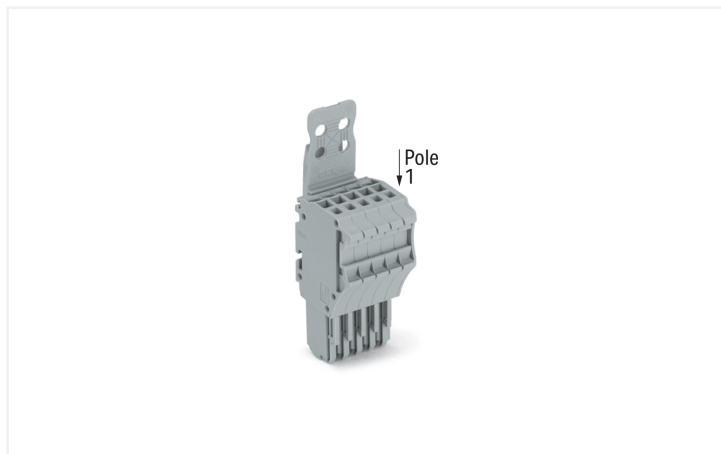


Data Sheet | Item Number: 2020-105/143-000

1-conductor female connector; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 5-pole; Centered locking levers; Strain relief plate; 1,50 mm²; gray

<https://www.wago.com/2020-105/143-000>



Color: ■ gray

Female connector, 2020 Series, operating tool

This female connector (item number 2020-105/143-000) simplifies electrical installations. Strip lengths must be between 9 and 11 mm when connecting conductors to this female connector. Pluggable rail-mount terminal blocks are mainly used in switchgear units and control systems (e.g., in railroad technology). They are essentially a combination of rail-mount terminal blocks and pluggable connectors. You can also pre-assemble installations thanks to the variable wiring system. This saves both time and money during manufacture, installation, operation, and maintenance. This product incorporates conductor terminals and utilizes Push-in CAGE CLAMP®. Our Push-in CAGE CLAMP® is a universal, maintenance-free connection solution for all conductor types, offering a key advantage: both solid and fine-stranded conductors with ferrules can be directly inserted without the need for tools or any preparation, such as crimping the ferrule. The item's dimensions are (18.2 x 59 x 27.2) mm (width x height x depth). Depending on the type of conductor, this female connector is ideal for conductor cross sections ranging from 0.14 mm² to 1.5 mm².

This female connector/socket is operated with an operating tool. You can secure connected conductors using the strain relief plate to make cables easier to handle.

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 | 5 |
| Total number of potentials | 5 |

| Connection 1 | |
|--|---|
| Connection technology | Push-in CAGE CLAMP® |
| Actuation type | Operating tool |
| Connectable conductor materials | Copper |
| Nominal cross-section | 1 mm ² |
| Solid conductor | 0.14 ... 1.5 mm ² / 24 ... 16 AWG |
| Solid conductor; push-in termination | 0.5 ... 1.5 mm ² / 20 ... 16 AWG |
| Fine-stranded conductor | 0.14 ... 1.5 mm ² / 24 ... 16 AWG |
| Fine-stranded conductor; with insulated ferrule | 0.14 ... 0.75 mm ² / 24 ... 18 AWG |
| Fine-stranded conductor; with ferrule; push-in termination | 0.5 ... 0.75 mm ² / 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 | 5 |
| Wiring direction | Front-entry wiring |

Physical data

| | |
|--------------|------------------------|
| Width | 18.2 mm / 0.717 inches |
| Height | 59 mm / 2.323 inches |
| Depth | 27.2 mm / 1.071 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 |
| Mismating protection | No |
| Locking of plug-in connection | Locking lever |
| Strain relief | Strain relief plate |

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 | 0.216 MJ |
| Weight | 12.7 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 | 4050821092568 |
| 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 DEKRA Certification B.V. | EN 60947 | NTR NL 7617 |
| UL UL International Germany GmbH | UL 1059 | E 45172 |

Declarations of conformity and manufacturer's declarations

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

Downloads

Environmental Product Compliance

| Compliance Search | | | |
|----------------------------------|--|--|-------------------|
| Environmental Product Compliance | | | ↓ |
| 2020-105/143-000 | | | |

Documentation

| Bid Text | | | |
|------------------|------------|------------------|-------------------|
| 2020-105/143-000 | 19.02.2019 | xml 4.01 KB | ↓ |
| 2020-105/143-000 | 06.08.2018 | docx 15.28 KB | ↓ |

CAD/CAE-Data

| CAD data | |
|------------------|-------------------|
| 2D/3D Models | ↓ |
| 2020-105/143-000 | |

| CAE data | |
|-------------------|-------------------|
| EPLAN Data Portal | ↓ |
| 2020-105/143-000 | |
| WSCAD Universe | ↓ |
| 2020-105/143-000 | |
| ZUKEN Portal | ↓ |
| 2020-105/143-000 | |

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 mm² / 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 mm² / 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 mm² / 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

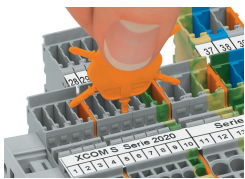


Item No.: 210-647

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

Installation Notes

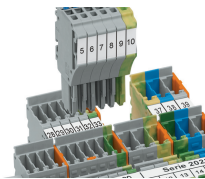
Coding



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.