

## Data Sheet | Item Number: 231-2304/107-000

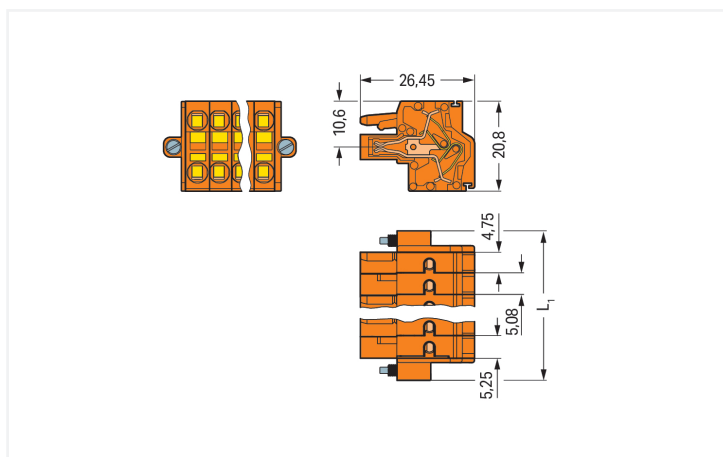
2-conductor female connector; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5.08 mm; 4-pole; Screw flange; orange

<https://www.wago.com/231-2304/107-000>



Color: ■ orange

Similar to illustration



Dimensions in mm

L1 = (pole no. - 2) x pin spacing + 20 mm 2- to 3-pole female connectors – one latch only

### Female connector, 231 Series, orange

This female connector (item number 231-2304/107-000) provides hassle-free electrical installations. Ensure that the strip lengths are between 9 and 10 mm when connecting conductors to this female connector. Featuring one conductor terminal along with Push-in CAGE CLAMP®, this connector outperforms the competition. Push-in CAGE CLAMP® connection technology is ideal for connecting all conductor types. Solid and fine-stranded conductors with ferrules can be pushed in without needing to use any tools—all thanks to its pluggable design. The item's dimensions are (30.16 x 20.8 x 26.45) mm (width x height x depth). Depending on the conductor type, this female connector is suitable for conductor cross sections ranging from 0.2 mm² to 2.5 mm².

Tin is used for coating the contact surfaces.



| Notes              |                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Safety Information | The MCS – MULTI CONNECTION SYSTEM includes connectors without breaking capacity in accordance with DIN EN 61984. When used as intended, these connectors must not be connected/disconnected when live or under load. When used as intended, these connectors must not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live when unmated. |
| Variants:          | Gold-plated or partially gold-plated contact surfaces<br>Other versions (or variants) can be requested from WAGO Sales or configured at <a href="https://configurator.wago.com/">https://configurator.wago.com/</a> .                                                                                                                                                                                                   |

| Electrical data                 |  |                |       |       |
|---------------------------------|--|----------------|-------|-------|
| Ratings per                     |  | IEC/EN 60664-1 |       |       |
| Overvoltage category            |  | III            | III   | II    |
| Pollution degree                |  | 3              | 2     | 2     |
| Nominal voltage                 |  | 320 V          | 320 V | 630 V |
| Rated impulse withstand voltage |  | 4 kV           | 4 kV  | 4 kV  |
| Rated current                   |  | 16 A           | 16 A  | 16 A  |
| Approvals per                   |  | UL 1059        |       |       |
| Use group                       |  | B              | C     | D     |
| Rated voltage                   |  | 300 V          | -     | 300 V |
| Rated current                   |  | 20 A           | -     | 10 A  |
| Approvals per                   |  | UL 1977        |       |       |
| Rated voltage                   |  | 600 V          |       |       |
| Rated current                   |  | 20 A           |       |       |
| Approvals per                   |  | CSA            |       |       |
| Use group                       |  | B              | C     | D     |
| Rated voltage                   |  | 300 V          | -     | 300 V |
| Rated current                   |  | 15 A           | -     | 10 A  |

| Connection Data                                   |                                       |  |
|---------------------------------------------------|---------------------------------------|--|
| Clamping units                                    | 4                                     |  |
| Total number of potentials                        | 4                                     |  |
| Number of connection types                        | 1                                     |  |
| Number of levels                                  | 1                                     |  |
| Connection 1                                      |                                       |  |
| Connection technology                             | Push-in CAGE CLAMP®                   |  |
| Actuation type                                    | Operating tool                        |  |
| Actuation direction 1                             | Operation parallel to conductor entry |  |
| Solid conductor                                   | 0.2 ... 2.5 mm² / 24 ... 12 AWG       |  |
| Fine-stranded conductor                           | 0.2 ... 2.5 mm² / 24 ... 12 AWG       |  |
| Fine-stranded conductor; with insulated ferrule   | 0.25 ... 1.5 mm²                      |  |
| Fine-stranded conductor; with uninsulated ferrule | 0.25 ... 2.5 mm²                      |  |
| Strip length                                      | 9 ... 10 mm / 0.35 ... 0.39 inches    |  |
| Pole number                                       | 4                                     |  |
| Conductor entry direction to mating direction     | 0°                                    |  |

| Physical data |                         |
|---------------|-------------------------|
| Pin spacing   | 5.08 mm / 0.2 inches    |
| Width         | 30.16 mm / 1.187 inches |
| Height        | 20.8 mm / 0.819 inches  |
| Depth         | 26.45 mm / 1.041 inches |

### Mechanical data

|                          |     |
|--------------------------|-----|
| Variable coding          | Yes |
| 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      | Screw flange            |

### Material data

|                                    |                                                                          |
|------------------------------------|--------------------------------------------------------------------------|
| Note (material data)               | <a href="#">Information on material specifications can be found here</a> |
| Color                              | orange                                                                   |
| Material group                     | I                                                                        |
| Insulation material (main housing) | Polyamide (PA66)                                                         |
| Flammability class per UL94        | V0                                                                       |
| Clamping spring material           | Chrome-nickel spring steel (CrNi)                                        |
| Contact material                   | Copper alloy                                                             |
| Contact Plating                    | Tin                                                                      |
| Fire load                          | 0.165 MJ                                                                 |
| Weight                             | 10.1 g                                                                   |

### Environmental requirements

|                         |                 |
|-------------------------|-----------------|
| Limit temperature range | -60 ... +100 °C |
| Processing temperature  | -35 ... +60 °C  |

### Commercial data

|                       |               |
|-----------------------|---------------|
| PU (SPU)              | 50 pcs        |
| Packaging type        | Box           |
| Country of origin     | PL            |
| GTIN                  | 4045454356507 |
| Customs tariff number | 85366990990   |

### Product Classification

|             |                      |
|-------------|----------------------|
| UNSPSC      | 39121409             |
| eCl@ss 10.0 | 27-44-03-09          |
| eCl@ss 9.0  | 27-44-03-09          |
| ETIM 9.0    | EC002638             |
| ETIM 10.0   | EC002638             |
| ECCN        | NO US CLASSIFICATION |



| Environmental Product Compliance |                         |
|----------------------------------|-------------------------|
| RoHS Compliance Status           | Compliant, No Exemption |

Approvals / Certificates

General approvals



| Approval                              | Standard | Certificate Name |
|---------------------------------------|----------|------------------|
| KEMA/KEUR<br>DEKRA Certification B.V. | EN 61984 | 71-130478 REV.1  |

Downloads

Environmental Product Compliance

| Compliance Search                                    |  |
|------------------------------------------------------|--|
| Environmental Product Compliance<br>231-2304/107-000 |  |

Documentation

| Additional Information |            |                   |  |
|------------------------|------------|-------------------|--|
| Technical Section      | 03.04.2019 | pdf<br>2027.26 KB |  |

CAD/CAE-Data

| CAD data                         | CAE data                              |
|----------------------------------|---------------------------------------|
| 2D/3D Models<br>231-2304/107-000 | EPLAN Data Portal<br>231-2304/107-000 |
|                                  | ZUKEN Portal<br>231-2304/107-000      |

1 Compatible Products

1.1 System counterpart

1.1.1 Male connector/plug



[Item No.: 231-634/109-000](#)  
1-conductor male connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5.08 mm; 4-pole; Threaded flange; orange



[Item No.: 231-534/108-000](#)  
THT male header; 1.0 x 1.0 mm solder pin; angled; Threaded flange; Pin spacing 5.08 mm; 4-pole; orange



[Item No.: 231-334/108-000](#)  
THT male header; 1.0 x 1.0 mm solder pin; straight; Threaded flange; Pin spacing 5.08 mm; 4-pole; orange



1.2 Optional Accessories

1.2.1 Ferrule

1.2.1.1 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.: 216-141**  
Ferrule; Sleeve for 0.5 mm² / 20 AWG; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92



**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.: 216-262**  
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.: 216-142**  
Ferrule; Sleeve for 0.75 mm² / 18 AWG; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92



**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



**Item No.: 216-263**  
Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red



**Item No.: 216-143**  
Ferrule; Sleeve for 1 mm² / AWG 18; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92



**Item No.: 216-244**  
Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black



**Item No.: 216-264**  
Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black



**Item No.: 216-284**  
Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black



**Item No.: 216-144**  
Ferrule; Sleeve for 1.5 mm² / AWG 16; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92; silver-colored



**Item No.: 216-106**  
Ferrule; Sleeve for 2.5 mm² / AWG 14; un-insulated; electro-tin plated; silver-colored

1.2.2 Insulation stop

1.2.2.1 Insulation stop



**Item No.: 231-670**  
Insulation stop; 0.08-0.2 mm² / 0.2 mm² "s"; white



**Item No.: 231-671**  
Insulation stop; 0.25 - 0.5 mm²; light gray



**Item No.: 231-672**  
Insulation stop; 0.75 - 1 mm²; dark gray

1.2.3 Marking

1.2.3.1 Marking strip



**Item No.: 210-331/508-103**  
Marking strips; as a DIN A4 sheet; MARKED; 1-12 (200x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white



**Item No.: 210-332/508-202**  
Marking strips; as a DIN A4 sheet; MARKED; 1-16 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



**Item No.: 210-332/508-205**  
Marking strips; as a DIN A4 sheet; MARKED; 1-32 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



**Item No.: 210-331/508-104**  
Marking strips; as a DIN A4 sheet; MARKED; 13-24 (200x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white



**Item No.: 210-332/508-204**  
Marking strips; as a DIN A4 sheet; MARKED; 17-32 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



**Item No.: 210-332/508-206**  
Marking strips; as a DIN A4 sheet; MARKED; 33-48 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white

1.2.4 Strain relief

1.2.4.1 Strain relief plate



**Item No.: 734-228**  
Strain relief plate; for female and male connectors; 12.5 mm wide; 1 part; Pin spacing 3.81 mm; orange

1.2.5 Test and measurement

1.2.5.1 Testing accessories



**Item No.: 231-661**  
Test plugs for female connectors; for 5 mm and 5.08 mm pin spacing; 2,50 mm<sup>2</sup>; light gray

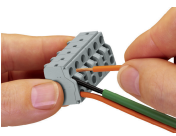
1.2.6 Tool

1.2.6.1 Operating tool

|                                                                                                                                                                                                             |                                                                                                                                                                                                                    |                                                                                                                                                                                    |                                                                                                                                                                                                                                                |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <p><b>Item No.: 210-720</b><br/>Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured</p> |  <p><b>Item No.: 210-657</b><br/>Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short; multicoloured</p> |  <p><b>Item No.: 280-440</b><br/>Operating tool; made of insulating material; 10-way; white</p> |  <p><b>Item No.: 209-130</b><br/>Operating tool; made of insulating material; 1-way; for 264 Series (1-/2-way), 280, 281 Series (up to 3-way); natural</p> |
|  <p><b>Item No.: 280-432</b><br/>Operating tool; made of insulating material; 2-way; white</p>                           |  <p><b>Item No.: 280-433</b><br/>Operating tool; made of insulating material; 3-way; white</p>                                  |  <p><b>Item No.: 280-434</b><br/>Operating tool; made of insulating material; 4-way; white</p> |  <p><b>Item No.: 280-435</b><br/>Operating tool; made of insulating material; 5-way; gray</p>                                                             |
|  <p><b>Item No.: 280-436</b><br/>Operating tool; made of insulating material; 6-way; white</p>                           |  <p><b>Item No.: 280-437</b><br/>Operating tool; made of insulating material; 7-way; white</p>                                  |  <p><b>Item No.: 280-438</b><br/>Operating tool; made of insulating material; 8-way; white</p> |                                                                                                                                                                                                                                                |

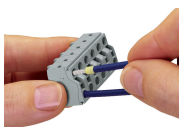
Installation Notes

Conductor termination



Operating Push-in CAGE CLAMP® is easy, fast and identical to that of CAGE CLAMP®. The screwdriver is fully inserted into the operating slot, holding Push-in CAGE CLAMP® open. After the conductor has been inserted into the clamping unit and the screwdriver been withdrawn, the conductor is clamped safely. Solid and fine-stranded conductors < 0.5 mm<sup>2</sup> (20 AWG) are terminated and removed using a screwdriver.

## Conductor termination



Solid conductors  $\geq 0.5 \text{ mm}^2$  (20 AWG), as well as ferruled, fine-stranded conductors can be terminated by simply pushing them into unit. Integrated test ports allow touch contact with current bar via test probes in both horizontal and vertical directions.