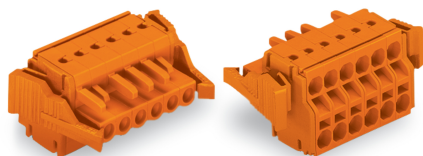


## Data Sheet | Item Number: 231-2303/037-000

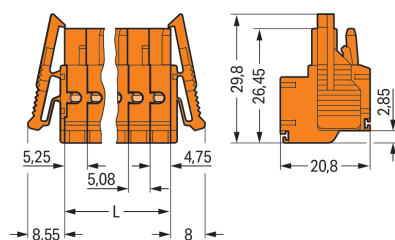
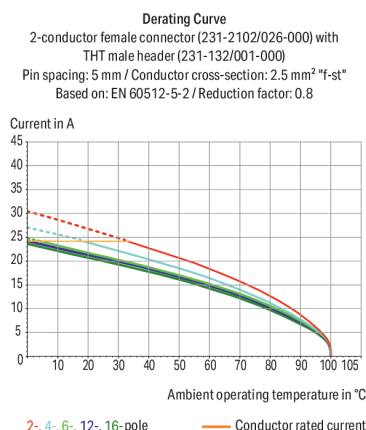
2-conductor female connector; Push-in CAGE CLAMP®; 2.5 mm<sup>2</sup>; Pin spacing 5.08 mm; 3-pole; Lateral locking levers; orange

<https://www.wago.com/231-2303/037-000>



Color: ■ orange

Similar to illustration



Dimensions in mm

L = (pole no. – 2) x pin spacing + 10 mm 2- to 3-pole female connectors – one latch only

Female connector, 231 Series, with 5.08 mm pin spacing

Seamless electrical installations are guaranteed with this female connector (item number 231-2303/037-000). 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 product is highly versatile. Our Push-in CAGE CLAMP® is a universal, maintenance-free connection solution for all conductor types, featuring a winning design: 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. Dimensions: (31.63 x 20.8 x 29.8) mm (width x height x depth). Depending on the conductor type, this female connector is designed for conductor cross sections ranging from 0.2 mm<sup>2</sup> to 2.5 mm<sup>2</sup>. 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                                    | 6                                     |  |
| Total number of potentials                        | 3                                     |  |
| 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                                       | 3                                     |  |
| Conductor entry direction to mating direction     | 0°                                    |  |

| Physical data |                         |
|---------------|-------------------------|
| Pin spacing   | 5.08 mm / 0.2 inches    |
| Width         | 31.63 mm / 1.245 inches |
| Height        | 20.8 mm / 0.819 inches  |
| Depth         | 29.8 mm / 1.173 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      | Locking lever           |

### 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                          | 0.157 MJ                                                                 |
| Weight                             | 8.4 g                                                                    |

### Environmental requirements

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

### Commercial data

|                       |                        |
|-----------------------|------------------------|
| Product Group         | 3 (Multi Conn. System) |
| PU (SPU)              | 50 pcs                 |
| Packaging type        | Box                    |
| Country of origin     | PL                     |
| GTIN                  | 4044918564397          |
| 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                                                                                                                                                                                                                                    |          |                  | Approvals for marine applications                                                                                                                                                                                                                        |          |                   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------------------|
|    |          |                  |    |          |                   |
| Approval                                                                                                                                                                                                                                             | Standard | Certificate Name | Approval                                                                                                                                                                                                                                                 | Standard | Certificate Name  |
| KEMA/KEUR<br>DEKRA Certification B.V.                                                                                                                                                                                                                | EN 61984 | 71-130478 REV.1  | ABS<br>American Bureau of Ship-<br>ping                                                                                                                                                                                                                  | -        | 24-0095975-PDA    |
| UL<br>UL International Germany<br>GmbH                                                                                                                                                                                                               | UL 1977  | E 45171          | DNV<br>DNV GL SE                                                                                                                                                                                                                                         | -        | TAE000016Z        |
| UL<br>UL International Germany<br>GmbH                                                                                                                                                                                                               | UL 1059  | E45172           | PRS<br>Polski Rejestr Statków                                                                                                                                                                                                                            | -        | TE/1095/880590/23 |

Downloads

| Environmental Product Compliance                        |                                                                                     |
|---------------------------------------------------------|-------------------------------------------------------------------------------------|
| Compliance Search                                       |                                                                                     |
| Environmental Product<br>Compliance<br>231-2303/037-000 |  |

Documentation

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

CAD/CAE-Data

| CAD data                         |                                                                                     | CAE data                              |                                                                                       |
|----------------------------------|-------------------------------------------------------------------------------------|---------------------------------------|---------------------------------------------------------------------------------------|
| 2D/3D Models<br>231-2303/037-000 |  | EPLAN Data Portal<br>231-2303/037-000 |  |
|                                  |                                                                                     | ZUKEN Portal<br>231-2303/037-000      |  |



1 Compatible Products

1.1 System counterpart

1.1.1 Male connector/plug



[Item No.: 231-633](#)  
1-conductor male connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5.08 mm; 3-pole; orange



[Item No.: 231-533/001-000](#)  
THT male header; 1.0 x 1.0 mm solder pin; angled; Pin spacing 5.08 mm; 3-pole; orange



[Item No.: 231-333/001-000](#)  
THT male header; 1.0 x 1.0 mm solder pin; straight; Pin spacing 5.08 mm; 3-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



**Item No.: 210-720**  
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured



**Item No.: 210-657**  
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short; multicoloured



**Item No.: 280-440**  
Operating tool; made of insulating material; 10-way; white



**Item No.: 209-130**  
Operating tool; made of insulating material; 1-way; for 264 Series (1-1/2-way), 280, 281 Series (up to 3-way); natural



**Item No.: 280-432**  
Operating tool; made of insulating material; 2-way; white



**Item No.: 280-433**  
Operating tool; made of insulating material; 3-way; white



**Item No.: 280-434**  
Operating tool; made of insulating material; 4-way; white



**Item No.: 280-435**  
Operating tool; made of insulating material; 5-way; gray



**Item No.: 280-436**  
Operating tool; made of insulating material; 6-way; white



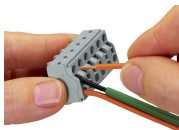
**Item No.: 280-437**  
Operating tool; made of insulating material; 7-way; white



**Item No.: 280-438**  
Operating tool; made of insulating material; 8-way; white

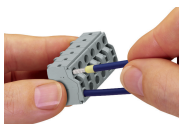
## Installation Notes

### 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  $< 0.5 \text{ mm}^2$  (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.