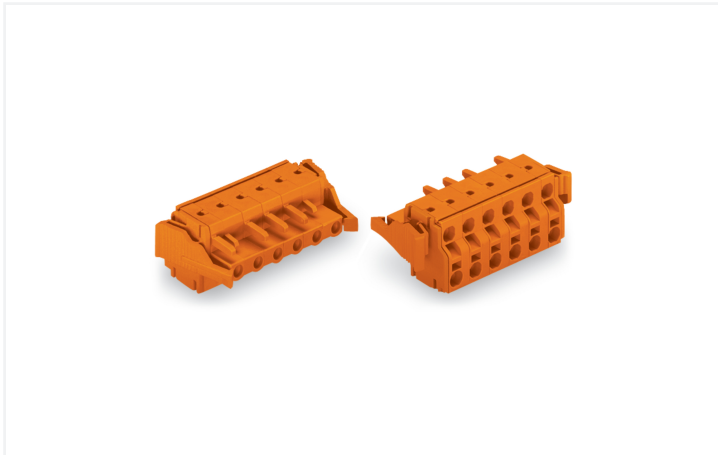


Data Sheet | Item Number: 231-2709/037-000

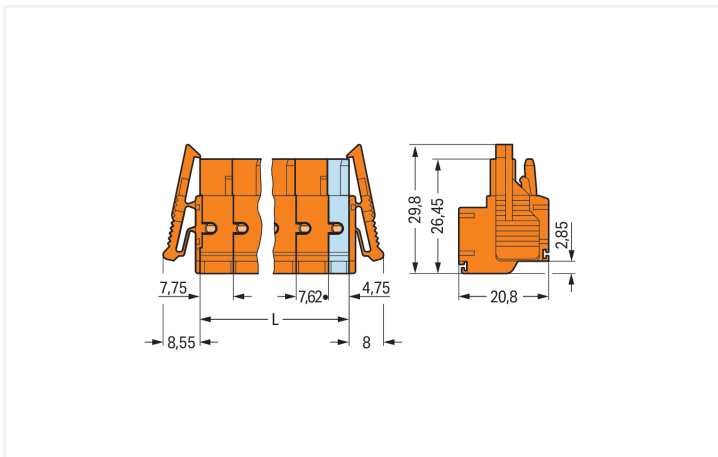
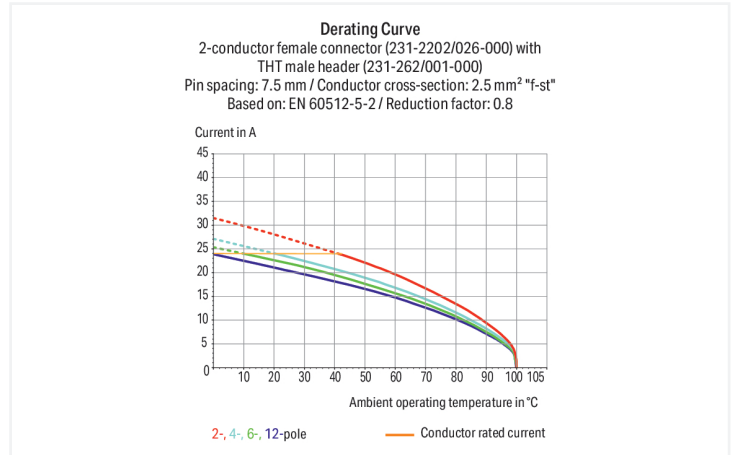
2-conductor female connector; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 7.62 mm; 9-pole; Lateral locking levers; orange

<https://www.wago.com/231-2709/037-000>



Color: ■ orange

Similar to illustration



Dimensions in mm

L = (pole no. - 2) x pin spacing + 12.5 mm²- to 3-pole female connectors - one latch only

Female connector, 231 Series, Push-in CAGE CLAMP®

This female connector (item number 231-2709/037-000) simplifies electrical installations. Ensure that the strip lengths are between 9 and 10 mm when connecting conductors to this female connector. This product features one conductor terminal and utilizes Push-in CAGE CLAMP®. Push-in CAGE CLAMP® technology provides a universal connection solution for all conductor types. It allows both solid and fine-stranded conductors with ferrules to be inserted directly into the clamping point without the need for tools. The item's dimensions are (82.39 x 20.8 x 29.8) mm (width x height x depth). Depending on the type of conductor, this female connector is designed for conductor cross sections ranging from 0.2 mm² to 2.5 mm². The contact surface is coated with tin.

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
Other versions (or variants) can be requested from WAGO Sales or configured at <https://configurator.wago.com/>.

Electrical data

| Ratings per | IEC/EN 60664-1 | | |
|---------------------------------|----------------|-------|--------|
| Overvoltage category | III | III | II |
| Pollution degree | 3 | 2 | 2 |
| Nominal voltage | 500 V | 630 V | 1000 V |
| Rated impulse withstand voltage | 6 kV | 6 kV | 6 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 | 18 |
| Total number of potentials | 9 |
| 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 mm ² / 24 ... 12 AWG |
| Fine-stranded conductor | 0.2 ... 2.5 mm ² / 24 ... 12 AWG |
| Fine-stranded conductor; with insulated ferrule | 0.25 ... 1.5 mm ² |
| Fine-stranded conductor; with uninsulated ferrule | 0.25 ... 2.5 mm ² |
| Strip length | 9 ... 10 mm / 0.35 ... 0.39 inches |
| Pole number | 9 |
| Conductor entry direction to mating direction | 0° |

Physical data

| | |
|-------------|-------------------------|
| Pin spacing | 7.62 mm / 0.3 inches |
| Width | 82.39 mm / 3.244 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 |
| Mismatching protection | No |
| Locking of plug-in connection | Locking lever |

Material data

| | |
|------------------------------------|--|
| Note (material data) | Information on material specifications can be found here |
| 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 | 0.46 MJ |
| Weight | 26.6 g |

Environmental requirements

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

Commercial data

| | |
|-----------------------|------------------------|
| Product Group | 3 (Multi Conn. System) |
| PU (SPU) | 25 pcs |
| Packaging type | Box |
| Country of origin | PL |
| GTIN | 4044918565653 |
| 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 |
| CB DEKRA Certification B.V. | IEC 61984 | NL-113351 | ABS American Bureau of Ship- ping | - | 24-0095975-PDA |
| UL UL International Germany GmbH | UL 1977 | E45171 | | | |
| UL UL International Germany GmbH | UL 1059 | E45172 | | | |

Downloads

| Environmental Product Compliance | |
|--|-------------------|
| Compliance Search | |
| Environmental Product Compliance 231-2709/037-000 | ↓ |

Documentation

| Additional Information | | | |
|------------------------|------------|-------------------|-------------------|
| Technical Section | 03.04.2019 | pdf 2027.26 KB | ↓ |

CAD/CAE-Data

| CAD data | | CAE data | |
|----------------------------------|-------------------|---------------------------------------|-------------------|
| 2D/3D Models 231-2709/037-000 | ↓ | EPLAN Data Portal 231-2709/037-000 | ↓ |
| | | ZUKEN Portal 231-2709/037-000 | ↓ |

1 Compatible Products

1.1 System counterpart

1.1.1 Male connector/plug



Item No.: 731-639

1-conductor male connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 7.62 mm; 9-pole; 2,50 mm²; orange



Item No.: 231-939/001-000

THT male header; 1.0 x 1.0 mm solder pin; angled; Pin spacing 7.62 mm; 9-pole; orange



Item No.: 231-739/001-000

THT male header; 1.0 x 1.0 mm solder pin; straight; Pin spacing 7.62 mm; 9-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.: 216-142

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.: 216-143

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.: 216-144

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.: 231-673

Insulation stop; 0.08-0.2 mm² / 0.2 mm² "s"; white



Item No.: 231-674

Insulation stop; 0.25 - 0.5 mm²; light gray



Item No.: 231-675

Insulation stop; 0.75 - 1 mm²; dark gray

1.2.3 Marking

1.2.3.1 Marking strip



Item No.: 210-331/762-202

Marking strips; as a DIN A4 sheet; MARKED; 1-16 (100x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-332/762-020

Marking strips; as a DIN A4 sheet; MARKED; 1-20 (80x); 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.: 734-226

Strain relief plate; for female and male connectors; 35 mm wide; 1 part; Pin spacing 3.81 mm; orange

1.2.5 Test and measurement

1.2.5.1 Testing accessories

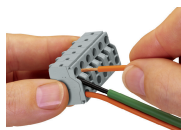


Item No.: 231-662

Test plugs for female connectors; for 7.5 mm and 7.62 mm pin spacing; 2,50 mm²; light gray

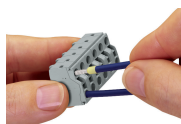
Installation Notes

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 <math>< 0.5 \text{ mm}^2</math> (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.