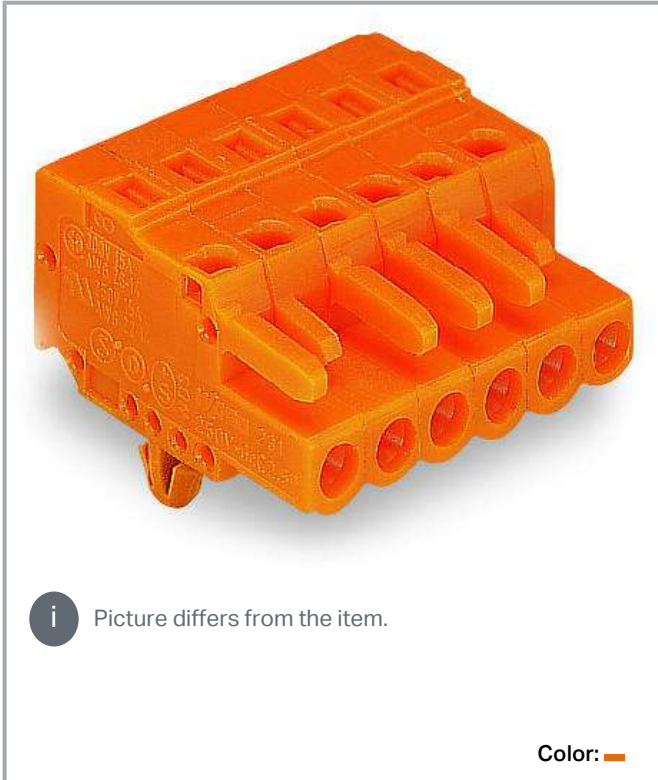


Data sheet | Item number: 231-311/008-000

1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5.08 mm; 11-pole; Snap-in mounting feet; 2,50 mm²; orange

www.wago.com/231-311_008-000



Subject to changes. Please also observe the further product documentation!

WAGO Corporation
Germantown, WI 53022
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Email: info.us@wago.com | Web: www.wago.us

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We are always happy to take your call at +49 (571) 887-44222.



Dimensions in mm

$L = (\text{pole no.} \times \text{pin spacing}) + 1.5 \text{ mm}$

2- to 3-pole female connectors – one latch only

Item description

- Universal connection for all conductor types
- Easy cable pre-assembly and on-unit wiring via vertical and horizontal CAGE CLAMP® actuation
- Integrated test ports
- With coding fingers

Subject to changes. Please also observe the further product documentation!

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Data

Notes

Safety information 1

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. 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

IEC Approvals

| Ratings per | IEC/EN 60664-1 |
|-----------------------------|---|
| Rated voltage (III / 3) | 320 V |
| Rated surge voltage (III/3) | 4 kV |
| Rated voltage (III/2) | 320 V |
| Rated surge voltage (III/2) | 4 kV |
| Nominal voltage (II/2) | 630 V |
| Rated surge voltage (II/2) | 4 kV |
| Rated current | 16 A |
| Legend (ratings) | (III / 2) $\hat{=}$ Overvoltage category III / Pollution degree 2 |

UL Approvals

| Approvals per | UL 1059 |
|--------------------------------|---------|
| Rated voltage UL (Use Group B) | 300 V |
| Rated current UL (Use Group B) | 15 A |
| Rated voltage UL (Use Group D) | 300 V |
| Rated current UL (Use Group D) | 10 A |

Ratings per UL

| | |
|-----------------------|-------|
| Rated voltage UL 1977 | 600 V |
| Rated current UL 1977 | 15 A |

CSA Approvals

| Approvals per | CSA |
|---------------|-----|
|---------------|-----|

Subject to changes. Please also observe the further product documentation!

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| | |
|---------------------------------|-------|
| Rated voltage CSA (Use Group B) | 300 V |
| Rated current CSA (Use Group B) | 15 A |
| Rated voltage CSA (Use Group D) | 300 V |
| Rated current CSA (Use Group D) | 10 A |

Connection data

| | |
|-----------------------------------|----|
| Total number of connection points | 11 |
| Total number of potentials | 11 |
| Number of connection types | 1 |
| Number of levels | 1 |

Connection 1

| | |
|---|--|
| Connection technology | CAGE CLAMP® |
| Actuation type | Operating tool |
| Solid conductor | 0.08 ... 2.5 mm ² / 28 ... 12 AWG |
| Fine-stranded conductor | 0.08 ... 2.5 mm ² / 28 ... 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 | 8 ... 9 mm / 0.31 ... 0.35 inch |
| Number of poles | 11 |
| Conductor entry direction to mating direction | 0° |

Physical data

| | |
|-------------------------|-----------------------|
| Pin spacing | 5.08 mm / 0.2 inch |
| Width | 2.38 mm / 0.094 inch |
| Height | 18.8 mm / 0.74 inch |
| Height from the surface | 14.3 mm / 0.563 inch |
| Depth | 26.45 mm / 1.041 inch |

Mechanical data

| | |
|-------------------------|---------------------------------------|
| Housing sheet thickness | 0.6 ... 1.2 mm / 0.024 ... 0.047 inch |
| Mounting type | Snap-in foot |
| Mounting type | Panel mounting |

Plug-in connection

| | |
|------------------------------------|-------------------------|
| Contact type (pluggable connector) | Female connector/socket |
|------------------------------------|-------------------------|

Subject to changes. Please also observe the further product documentation!

| | |
|-------------------------------|---------------|
| Connector (connection type) | for conductor |
| Mismating protection | No |
| Locking of plug-in connection | Without |

Material data

| | |
|-----------------------------|-----------------------------------|
| Color | orange |
| Material group | I |
| Insulation material | Polyamide (PA66) |
| Flammability class per UL94 | V0 |
| Clamping spring material | Chrome nickel spring steel (CrNi) |
| Contact material | Copper alloy |
| Contact plating | tin-plated |
| Fire load | 0.294 MJ |
| Weight | 20.2 g |

Environmental requirements


| | |
|-------------------------|----------------|
| Limit temperature range | -60 ... +85 °C |
|-------------------------|----------------|

Commercial data

| | |
|-----------------------|------------------------|
| Product Group | 3 (Multi Conn. System) |
| PU (SPU) | 25 Stück |
| Packaging type | box |
| Country of origin | DE |
| GTIN | 4044918348249 |
| Customs tariff number | 8536694040 |

Approvals / Certificates


Country specific Approvals

| Logo | Approval | Additional Approval Text | Certificate name |
|--|--|--------------------------|------------------|
| | CB DEKRA Certification B.V. | IEC 61984 | NL-39756 |
|  | CSA DEKRA Certification B.V. | C22.2 | 1466354 |
| | KEMA/KEUR DEKRA Certification B.V. | EN 61984 | 2190761.01 |



Subject to changes. Please also observe the further product documentation!



Ship Approvals

| Logo | Approval | Additional Approval Text | Certificate name |
|--|---|--------------------------|--------------------------|
|  | ABS American Bureau of Shipping | - | 19- HG1869876- PDA |

UL-Approvals

| Logo | Approval | Additional Approval Text | Certificate name |
|---|---|--------------------------|------------------|
|  | UL UL International Germany GmbH | UL 1977 | E45171 |
|  | UR Underwriters Laboratories Inc. | UL 1059 | E45172 |

Counterpart







Item no.231-641
Male connector; 11-pole; Pin spacing 5.08 mm ; orange

www.wago.com/231-641

Optional accessories

Tools

| Operating tool | | |
|--|--|--|
|  | Item no.: 209-130 Operating tool; suitable for 264, 280 and 281 Series; 1-way; of insulating material; white | www.wago.com/209-130 |
|  | Item no.: 209-132 Operating tool; for connecting comb-style jumper bar; 2-way; of insulating material | www.wago.com/209-132 |
|  | Item no.: 231-159 Operating tool; natural | www.wago.com/231-159 |
|  | Item no.: 231-231 | |

Subject to changes. Please also observe the further product documentation!

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Combination operating tool; red

www.wago.com/231-231



Item no.: 231-131
Operating tool; made of insulating material; 1-way; loose; white

www.wago.com/231-131



Item no.: 231-291
Operating tool; made of insulating material; 1-way; loose; red

www.wago.com/231-291



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

www.wago.com/280-432



Item no.: 280-434
Operating tool; made of insulating material; 4-way

www.wago.com/280-434



Item no.: 280-437
Operating tool; made of insulating material; 7-way

www.wago.com/280-437



Item no.: 280-440
Operating tool; made of insulating material; 10-way

www.wago.com/280-440



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

www.wago.com/280-435



Item no.: 280-436
Operating tool; made of insulating material; 6-way

www.wago.com/280-436



Item no.: 280-438
Operating tool; made of insulating material; 8-way

www.wago.com/280-438



Item no.: 280-433
Operating tool; made of insulating material; 3-way

www.wago.com/280-433

Cover

Cover



Item no.: 231-669
Lockout caps; for covering unused clamping units; orange

www.wago.com/231-669

Mounting

Mounting accessories



Item no.: 209-137
Mounting adapter; can be used as end stop; 6.5 mm wide; gray

www.wago.com/209-137

Mounting adapter

Mounting accessories



Item no.: 209-148
Multi mounting adapter; for DIN-35 rail; 25 mm wide; gray

www.wago.com/209-148

Marking accessories




Subject to changes. Please also observe the further product documentation!

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 | www.wago.com/210-331/508-103 |
| 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 | www.wago.com/210-331/508-104 |
| 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 | www.wago.com/210-332/508-202 |
| 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 | www.wago.com/210-332/508-204 |
| 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 | www.wago.com/210-332/508-206 |
| 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 | www.wago.com/210-332/508-205 |




Insulations stops

Insulation stop

| | |
|---|--|
|  Item no.: 231-672 Insulation stop; 0.75 - 1 mm ² ; dark gray | www.wago.com/231-672 |
|  Item no.: 231-670 Insulation stop; 0.08-0.2 mm ² / 0.2 mm ² "s"; white | www.wago.com/231-670 |
|  Item no.: 231-671 Insulation stop; 0.25 - 0.5 mm ² ; light gray | www.wago.com/231-671 |

Jumpers

Jumper

| | |
|--|--|
|  Item no.: 231-905 Jumper; for conductor entry; 5-way; insulated; gray | www.wago.com/231-905 |
|  Item no.: 231-903 Jumper; for conductor entry; 3-way; insulated; gray | www.wago.com/231-903 |
|  Item no.: 231-907 Jumper; for conductor entry; 7-way; insulated; gray | www.wago.com/231-907 |

Subject to changes. Please also observe the further product documentation!



Item no.: 231-910
Jumper; for conductor entry; 10-way; insulated; gray

www.wago.com/231-910


















Item no.: 231-902
Jumper; for conductor entry; 2-way; insulated; gray

www.wago.com/231-902

Ferrules

Ferrule

| | | |
|---|--|--|
|  | Item no.: 216-101 Ferrule; Sleeve for 0.5 mm ² / AWG 22; uninsulated; electro-tin plated; silver-colored | www.wago.com/216-101 |
|  | Item no.: 216-104 Ferrule; Sleeve for 1.5 mm ² / AWG 16; uninsulated; electro-tin plated; silver-colored | www.wago.com/216-104 |
|  | Item no.: 216-106 Ferrule; Sleeve for 2.5 mm ² / AWG 14; uninsulated; electro-tin plated; silver-colored | www.wago.com/216-106 |
|  | Item no.: 216-102 Ferrule; Sleeve for 0.75 mm ² / AWG 20; uninsulated; electro-tin plated; silver-colored | www.wago.com/216-102 |
|  | Item no.: 216-103 Ferrule; Sleeve for 1 mm ² / AWG 18; uninsulated; electro-tin plated | www.wago.com/216-103 |
|  | Item no.: 216-123 Ferrule; Sleeve for 1 mm ² / AWG 18; uninsulated; electro-tin plated; silver-colored | www.wago.com/216-123 |
|  | Item no.: 216-122 Ferrule; Sleeve for 0.75 mm ² / AWG 20; uninsulated; electro-tin plated; silver-colored | www.wago.com/216-122 |
|  | Item no.: 216-124 Ferrule; Sleeve for 1.5 mm ² / AWG 16; uninsulated; electro-tin plated | www.wago.com/216-124 |
|  | Item no.: 216-142 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92 | www.wago.com/216-142 |
|  | Item no.: 216-132 Ferrule; Sleeve for 0.34 mm ² / AWG 24; uninsulated; electro-tin plated | www.wago.com/216-132 |
|  | Item no.: 216-121 Ferrule; Sleeve for 0.5 mm ² / AWG 22; uninsulated; electro-tin plated; silver-colored | www.wago.com/216-121 |
|  | Item no.: 216-143 Ferrule; Sleeve for 1 mm ² / AWG 18; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92 | www.wago.com/216-143 |
|  | Item no.: 216-131 Ferrule; Sleeve for 0.25 mm ² / AWG 24; uninsulated; electro-tin plated; silver-colored | www.wago.com/216-131 |
|  | Item no.: 216-141 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92 | www.wago.com/216-141 |
|  | Item no.: 216-152 | www.wago.com/216-152 |

Subject to changes. Please also observe the further product documentation!




Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated

| | | |
|---|---|--|
|  | Item no.: 216-203 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; red | www.wago.com/216-203 |
|  | Item no.: 216-202 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; gray | www.wago.com/216-202 |
|  | Item no.: 216-151 Ferrule; Sleeve for 0.25 mm ² / AWG 24; uninsulated; electro-tin plated | www.wago.com/216-151 |
|  | Item no.: 216-204 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; black | www.wago.com/216-204 |
|  | Item no.: 216-144 Ferrule; Sleeve for 1.5 mm ² / AWG 16; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92; silver-colored | www.wago.com/216-144 |
|  | Item no.: 216-201 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; white | www.wago.com/216-201 |
|  | Item no.: 216-223 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; red | www.wago.com/216-223 |
|  | Item no.: 216-241 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white | www.wago.com/216-241 |
|  | Item no.: 216-242 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray | www.wago.com/216-242 |
|  | Item no.: 216-222 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; gray | www.wago.com/216-222 |
|  | Item no.: 216-221 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; white | www.wago.com/216-221 |
|  | Item no.: 216-224 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; black | www.wago.com/216-224 |
|  | Item no.: 216-243 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red | www.wago.com/216-243 |
|  | Item no.: 216-244 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black | www.wago.com/216-244 |
|  | Item no.: 216-263 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red | www.wago.com/216-263 |
|  | Item no.: 216-264 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black | www.wago.com/216-264 |
|  | Item no.: 216-284 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight | www.wago.com/216-284 |

Subject to changes. Please also observe the further product documentation!



crimped; acc. to DIN 46228, Part 4/09.90; black

| | | |
|---|--|--|
|  | Item no.: 216-262 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray | www.wago.com/216-262 |
|  | Item no.: 216-301 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated; yellow | www.wago.com/216-301 |
|  | Item no.: 216-321 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated; yellow | www.wago.com/216-321 |
|  | Item no.: 216-322 Ferrule; Sleeve for 0.34 mm ² / 22 AWG; insulated; electro-tin plated; green | www.wago.com/216-322 |
|  | Item no.: 216-302 Ferrule; Sleeve for 0.34 mm ² / 22 AWG; insulated; electro-tin plated; light turquoise | www.wago.com/216-302 |

Testing accessories

Testing accessories



Item no.: 210-136
Test plug; 2 mm Ø; with 500 mm cable

www.wago.com/210-136



Item no.: 231-661
Test plugs for female connectors; for 5 mm and 5.08 mm pin spacing; 2,50 mm²; light gray

www.wago.com/231-661

Downloads

Documentation

Additional Information

| | | | |
|------------------------|------------|---------------|----------|
| Technical explanations | 2019 Apr 3 | pdf 2.0 MB | Download |
|------------------------|------------|---------------|----------|

CAD files

CAD data

| | | |
|------------------------------|-----|----------|
| 2D/3D Models 231-311/008-000 | URL | Download |
|------------------------------|-----|----------|

CAE data

| | | |
|-----------------------------------|-----|----------|
| EPLAN Data Portal 231-311/008-000 | URL | Download |
|-----------------------------------|-----|----------|

| | | |
|-----------------------------------|-----|----------|
| EPLAN Data Portal 231-311/008-000 | URL | Download |
|-----------------------------------|-----|----------|

| | | |
|------------------------------|-----|----------|
| ZUKEN Portal 231-311/008-000 | URL | Download |
|------------------------------|-----|----------|

Subject to changes. Please also observe the further product documentation!

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Environmental Product Compliance

Compliance Search

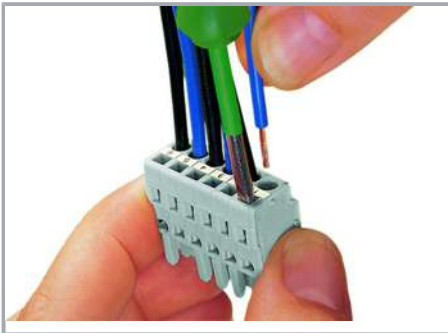
Environmental Product Compliance 231-311/008-000

URL

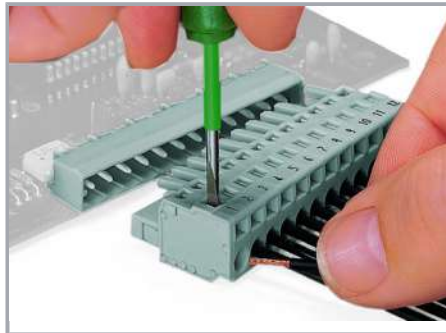
Download

1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5.08 mm; 11-pole; Snap-in mounting feet; 2,50 mm²; orange

Installation Notes



Inserting a conductor via 3.5 mm screwdriver – CAGE CLAMP® actuation parallel to conductor entry.



Inserting a conductor via 3.5 mm screwdriver – CAGE CLAMP® actuation perpendicular to conductor entry.



Inserting a conductor into CAGE CLAMP® unit via operating lever (231-291).



Inserting a conductor via operating tool.

Subject to changes. Please also observe the further product documentation!



Coding a female connector by removing coding finger(s).



Testing – female connector with CAGE CLAMP®

Integrated test ports for testing perpendicular to conductor entry via 2 or 2.3 mm Ø test plug

Installation



Male connector with strain relief plate



Strain relief housing shown with a male connector equipped with CAGE CLAMP®

Subject to changes. Please also observe the further product documentation!

Marking



Labeling via direct marking or self-adhesive strips.

Product family

MCS MIDI Classic

[Show all products from the family](#)

Subject to changes. Please also observe the further product documentation!