

Data sheet | Item number: 231-121/031-000

1-conductor female plug; clamping collar; 2.5 mm²; Pin spacing 5 mm; 21-pole



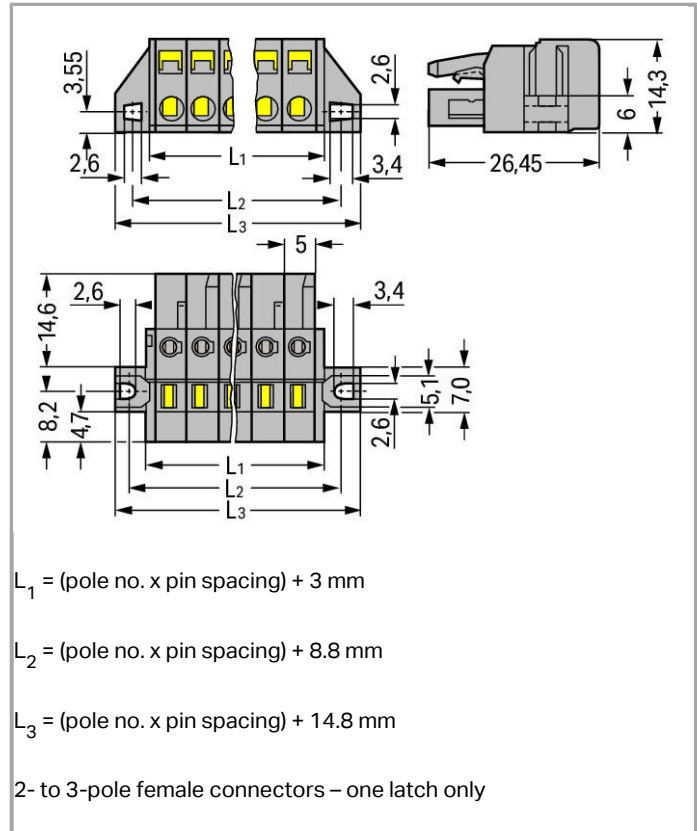
www.wago.com/231-121/031-000



RoHS Compliant

BOMcheck.net

Color: ■



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

Other variants can be requested via the WAGO sales department or, if necessary, configured at <https://configurator.wago.com/>: Gold-plated or partially gold-plated contact surfaces

Data

Electrical data

Ratings per IEC/EN 60664-1

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|---------------------------------|-------|
| Rated voltage (III / 3) | 320 V |
| Rated impulse voltage (III / 3) | 4 kV |



| | |
|---------------------------------|---|
| Rated voltage (III / 2) | 320 V |
| Rated impulse voltage (III / 2) | 4 kV |
| Rated voltage (II / 2) | 630 V |
| Rated impulse voltage (II / 2) | 4 kV |
| Rated current | 16 A |
| Legend (ratings) | (III / 2) ≙ Overvoltage category III / Pollution degree 2 |

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 |

Approvals per CSA

| | |
|---------------------------------|-------|
| 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

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|---|--|
| 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 ferrule with plastic collar | 0.25 ... 1.5 mm ² |
| Fine-stranded conductor with ferrule without plastic collar | 0.25 ... 2.5 mm ² |
| Strip length | 8 ... 9 mm / 0.31 ... 0.35 Inch |
| No. of poles | 21 |
| Total number of connection points | 21 |
| Total number of potentials | 21 |
| Number of connection types | 1 |
| Number of levels | 1 |
| Conductor entry direction to mating direction | 0° |

Geometrical Data

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|-------------|-----------------------|
| Pin spacing | 5 mm (0.197 inch) |
| Width | 119.8 mm / 4.717 inch |
| Height | 14.3 mm / 0.563 inch |
| Depth | 26.45 mm / 1.041 inch |

Mechanical data

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|------------------|---|
| Mounting type | Mounting flange |
| Type of mounting | Feed-through mounting Panel mounting |

Plug connection

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|------------------------------------|-------------------------|
| Contact type (pluggable connector) | Female connector/socket |
| Connector connection type | for conductors |
| Mismating protection | No |

Material Data

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|-----------------------------|-----------------------------------|
| Color | gray |
| Material group | I |
| Insulating material | Polyamide 66 (PA 66) |
| Flammability class per UL94 | V0 |
| Clamping spring material | Chrome nickel spring steel (CrNi) |
| Contact material | Copper alloy |
| Contact plating | tin-plated |
| Fire load | 0.536 MJ |
| Weight | 38.53 g |

Environmental Requirements


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

Commercial data



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|--------------------|------------------------|
| Country of origin | DE |
| GTIN | 4044918343008 |
| Customs Tariff No. | 85366990990 |
| Product Group | 3 (Multi Conn. System) |

Approvals / Certificates




Country specific Approvals

| Logo | Approval | Certificate name |
|--|---------------------------------|------------------|
| | CB DEKRA Certification B.V. | NL-39756 |
|  | CSA DEKRA Certification B.V. | 1466354 |

Ship Approvals


| Logo | Approval | Certificate name |
|--|---|------------------|
|  | ABS American Bureau of Shipping | 14-HG1241537-PDA |
|  | DNV GL Det Norske Veritas, Germanischer Lloyd | TAE000016Z |

UL-Approvals





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




















Compatible products


















assembling

| | | |
|--|--|--|
|  | Item no.: 209-147 Self-tapping screw | www.wago.com/209-147 |
|  | Item no.: 231-194 Self-tapping screw; B 2.2x13, fixing hole 1.8 mm Ø | www.wago.com/231-194 |
|  | Item no.: 231-195 Screw with nut; M2x12; for fixing element | www.wago.com/231-195 |






ferrule

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|  | Item no.: 216-101 Ferrule; Sleeve for 0.5 mm ² / AWG 22; uninsulated; electro-tin plated | www.wago.com/216-101 |
|  | Item no.: 216-102 Ferrule; Sleeve for 0.75 mm ² / AWG 20; uninsulated; electro-tin plated | 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.: 216-104 Ferrule; Sleeve for 1.5 mm ² / AWG 16; uninsulated; electro-tin plated | www.wago.com/216-104 |




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|  | Item no.: 216-106 Ferrule; Sleeve for 2.5 mm ² / AWG 14; uninsulated; electro-tin plated | www.wago.com/216-106 |
|  | Item no.: 216-121 Ferrule; Sleeve for 0.5 mm ² / AWG 22; uninsulated; electro-tin plated | www.wago.com/216-121 |
|  | Item no.: 216-122 Ferrule; Sleeve for 0.75 mm ² / AWG 20; uninsulated; electro-tin plated | www.wago.com/216-122 |
|  | Item no.: 216-123 Ferrule; Sleeve for 1 mm ² / AWG 18; uninsulated; electro-tin plated | www.wago.com/216-123 |
|  | Item no.: 216-124 Ferrule; Sleeve for 1.5 mm ² / AWG 16; uninsulated; electro-tin plated | www.wago.com/216-124 |
|  | Item no.: 216-131 Ferrule; Sleeve for 0.25 mm ² / AWG 24; uninsulated; electro-tin plated | www.wago.com/216-131 |
|  | Item no.: 216-132 Ferrule; Sleeve for 0.34 mm ² / AWG 24; uninsulated; electro-tin plated | www.wago.com/216-132 |
|  | Item no.: 216-141 Ferrule; Sleeve for 0.5 mm ² / AWG 22; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92 | www.wago.com/216-141 |
|  | Item no.: 216-142 Ferrule; Sleeve for 0.75 mm ² / AWG 20; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92 | www.wago.com/216-142 |
|  | 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.: 216-144 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 | www.wago.com/216-144 |
|  | Item no.: 216-151 Ferrule; Sleeve for 0.25 mm ² / AWG 24; uninsulated; electro-tin plated | www.wago.com/216-151 |
|  | Item no.: 216-152 Ferrule; Sleeve for 0.34 mm ² / AWG 24; uninsulated; electro-tin plated | www.wago.com/216-152 |
|  | Item no.: 216-201 Ferrule; Sleeve for 0.5 mm ² / AWG 22; insulated; electro-tin plated | www.wago.com/216-201 |
|  | Item no.: 216-202 Ferrule; Sleeve for 0.75 mm ² / AWG 20; insulated; electro-tin plated | www.wago.com/216-202 |
|  | Item no.: 216-203 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated | www.wago.com/216-203 |
|  | Item no.: 216-204 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated | www.wago.com/216-204 |
|  | Item no.: 216-221 Ferrule; Sleeve for 0.5 mm ² / AWG 22; insulated; electro-tin plated | www.wago.com/216-221 |
|  | Item no.: 216-222 Ferrule; Sleeve for 0.75 mm ² / AWG 20; insulated; electro-tin plated | www.wago.com/216-222 |
| | Item no.: 216-223 | |

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|  | Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated | www.wago.com/216-223 |
|  | Item no.: 216-224 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated | www.wago.com/216-224 |
|  | Item no.: 216-241 Ferrule; Sleeve for 0.5 mm ² / AWG 22; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90 | www.wago.com/216-241 |
|  | Item no.: 216-242 Ferrule; Sleeve for 0.75 mm ² / AWG 20; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90 | www.wago.com/216-242 |
|  | 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 | 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 | www.wago.com/216-244 |
|  | Item no.: 216-262 Ferrule; Sleeve for 0.75 mm ² / AWG 20; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90 | www.wago.com/216-262 |
|  | 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 | 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 | 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 crimped; acc. to DIN 46228, Part 4/09.90 | www.wago.com/216-284 |
|  | Item no.: 216-301 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated | www.wago.com/216-301 |
|  | Item no.: 216-302 Ferrule; Sleeve for 0.34 mm ² / AWG 24; insulated; electro-tin plated | www.wago.com/216-302 |
|  | Item no.: 216-321 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated | www.wago.com/216-321 |
|  | Item no.: 216-322 Ferrule; Sleeve for 0.34 mm ² / AWG 24; insulated; electro-tin plated | www.wago.com/216-322 |
| check | | |
|  | Item no.: 210-136 Test plug; 2 mm Ø; with 500 mm cable | www.wago.com/210-136 |
|  | Item no.: 210-137 Test plug; 2.3 mm Ø; with 500 mm cable | www.wago.com/210-137 |
|  | Item no.: 231-661 Test plugs for female connectors; for 5 mm and 5.08 mm pin spacing | www.wago.com/231-661 |

Jumper

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|  | Item no.: 231-902 Comb-style jumper bar; for 5 mm and 5.08 mm pin spacing; reduces conductor size to 1.5 mm | www.wago.com/231-902 |
|  | Item no.: 231-903 Comb-style jumper bar; 3-way; suitable for 231 Series female connectors; with 5 mm pin spacing; insulated | www.wago.com/231-903 |
|  | Item no.: 231-905 Comb-style jumper bar; 5-way; suitable for 231 Series female connectors; with 5 mm pin spacing; insulated | www.wago.com/231-905 |
|  | Item no.: 231-907 Comb-style jumper bar; 7-way; suitable for 231 Series female connectors; with 5 mm pin spacing; insulated | www.wago.com/231-907 |
|  | Item no.: 231-910 Comb-style jumper bar; 10-way; suitable for 231 Series female connectors; with 5 mm pin spacing; insulated | www.wago.com/231-910 |

Insulation stop



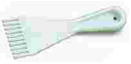





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|  | Item no.: 231-670 Insulation stop; 0.08-0.2 mm ² / 0.2 mm ² "s" | www.wago.com/231-670 |
|  | Item no.: 231-671 Insulation stop; 0.25 - 0.5 mm ² | www.wago.com/231-671 |
|  | Item no.: 231-672 Insulation stop; 0.75 - 1 mm ² | www.wago.com/231-672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

General accessories

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|  | Item no.: 231-668 Lockout caps; for covering unused clamping units | www.wago.com/231-668 |
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tools

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|  | Item no.: 209-130 Operating tool; suitable for 264, 280 and 281 Series; 1-way; of insulating material | 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.: 210-657 Operating tool with partially insulated shaft; Blade (3.5 x 0.5) mm; short | www.wago.com/210-657 |
|  | Item no.: 210-720 Operating tool with partially insulated shaft; Type 2, blade (3.5 x 0.5) mm | www.wago.com/210-720 |
|  | Item no.: 231-131 Push-button; for female and male connectors; loose | www.wago.com/231-131 |
|  | Item no.: 231-159 Operating tool; for male and female connectors with CAGE CLAMP®; of Series 231, 232, 721, 722, 723, 731, 732 | www.wago.com/231-159 |
|  | Item no.: 231-231 Combination operating tool; for male and female connectors with CAGE CLAMP® | www.wago.com/231-231 |
|  | Item no.: 231-291 Operating tool; for male and female connectors with CAGE CLAMP®; loose | www.wago.com/231-291 |

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|  | Item no.: 280-432 Operating tool; of insulating material; 2-way | www.wago.com/280-432 |
|  | Item no.: 280-433 Operating tool; of insulating material; 3-way | www.wago.com/280-433 |
|  | Item no.: 280-434 Operating tool; of insulating material; 4-way | www.wago.com/280-434 |
|  | Item no.: 280-435 Operating tool; of insulating material; 5-way | www.wago.com/280-435 |
|  | Item no.: 280-436 Operating tool; of insulating material; 6-way | www.wago.com/280-436 |
|  | Item no.: 280-437 Operating tool; of insulating material; 7-way | www.wago.com/280-437 |
|  | Item no.: 280-438 Operating tool; of insulating material; 8-way | www.wago.com/280-438 |
|  | Item no.: 280-440 Operating tool; of insulating material; 10-way | www.wago.com/280-440 |

Downloads smartDATA

CAD data

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| 3D Download 231-121/031-000 | URL | Download |
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Subject to changes.