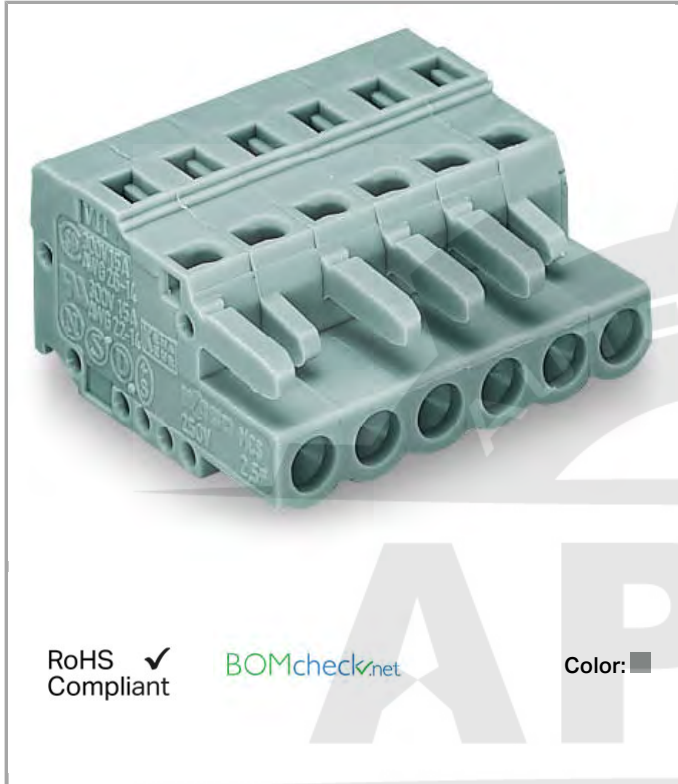


# Data sheet | Item number: 231-115/102-000

1-conductor female plug; with integrated end plate; 2.5 mm<sup>2</sup>; Pin spacing 5 mm; 15-pole



231-115/102-000



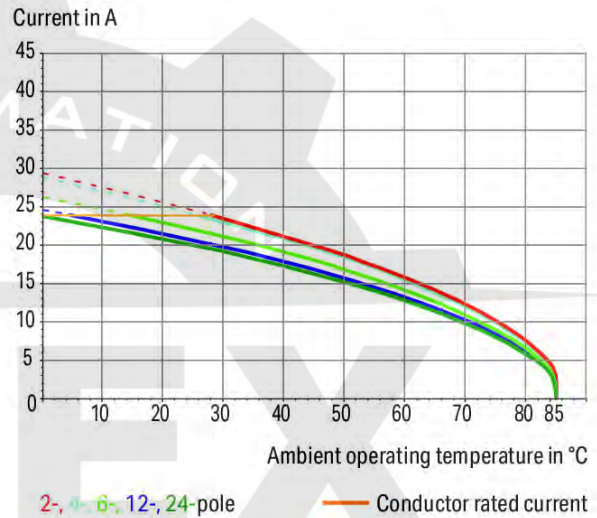
RoHS  
Compliant

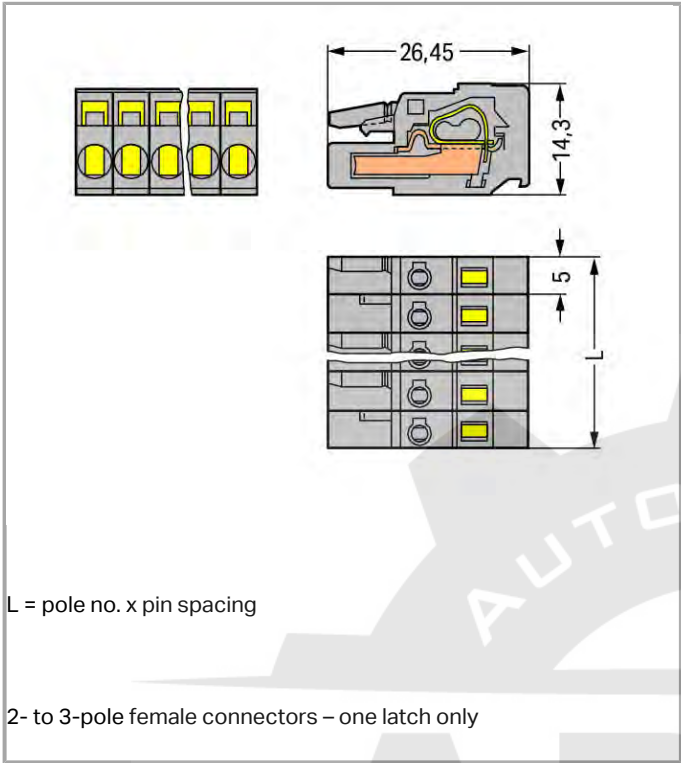
BOMcheck.net

Color: ■

## Derating Curve

1-conductor female connector (231-102/026-000) with  
THT male header (231-432/001-000)  
Pin spacing: 5 mm / Conductor cross-section: 2.5 mm<sup>2</sup> "f-st"  
Based on: EN 60512-5-2 / Reduction factor: 0.8





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

Data  
Electrical data

Ratings per IEC/EN 60664-1

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

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 UL 1977

|                                                 |       |
|-------------------------------------------------|-------|
| Rated voltage per UL 1977 (factory wiring only) | 600 V |
| Rated current per UL 1977 (factory wiring only) | 15 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

|                                                             |                                              |
|-------------------------------------------------------------|----------------------------------------------|
| Connection technology                                       | CAGE CLAMP®                                  |
| Actuation type                                              | Operating tool                               |
| Solid conductor                                             | 0.08 ... 2.5 mm <sup>2</sup> / 28 ... 12 AWG |
| Fine-stranded conductor                                     | 0.08 ... 2.5 mm <sup>2</sup> / 28 ... 12 AWG |
| Fine-stranded conductor with ferrule with plastic collar    | 0.25 ... 1.5 mm <sup>2</sup>                 |
| Fine-stranded conductor with ferrule without plastic collar | 0.25 ... 2.5 mm <sup>2</sup>                 |
| Strip length                                                | 8 ... 9 mm / 0.31 ... 0.35 inch              |
| No. of poles                                                | 15                                           |
| Total number of connection points                           | 15                                           |
| Total number of potentials                                  | 15                                           |
| Number of connection types                                  | 1                                            |
| Number of levels                                            | 1                                            |
| Conductor entry direction to mating direction               | 0°                                           |

### Geometrical Data

|             |                      |
|-------------|----------------------|
| Pin spacing | 5 mm / 0.197 inch    |
| Width       | 75 mm / 2.953 inch   |
| Height      | 14.3 mm / 0.563 inch |
| Depth       | 26.5 mm / 1.043 inch |

### Plug connection

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

Plugging without loss of pin spacing

1

## Material Data

|                             |                                   |
|-----------------------------|-----------------------------------|
| 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                   | 0.362 MJ                          |
| Weight                      | 26.1 g                            |

## Environmental Requirements

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

## Commercial data

|                    |                        |
|--------------------|------------------------|
| Product Group      | 3 (Multi Conn. System) |
| Country of origin  | DE                     |
| GTIN               | 4044918342094          |
| Customs Tariff No. | 85366990990            |

## Approvals / Certificates

### Country specific Approvals

| Logo                                                                               | Approval                               | Additional Approval Text | Certificate name |
|------------------------------------------------------------------------------------|----------------------------------------|--------------------------|------------------|
|                                                                                    | <b>CB</b><br>DEKRA Certification B.V.  | IEC 61984                | NL-39756         |
|  | <b>CSA</b><br>DEKRA Certification B.V. | C22.2                    | 1466354          |

### Ship Approvals

| Logo                                                                               | Approval                                                | Additional Approval Text | Certificate name         |
|------------------------------------------------------------------------------------|---------------------------------------------------------|--------------------------|--------------------------|
|  | <b>ABS</b><br>American Bureau of Shipping               | -                        | 14-<br>HG1241537-<br>PDA |
|                                                                                    | <b>DNV GL</b><br>Det Norske Veritas, Germanischer Lloyd | -                        | TAE000016Z               |



## UL-Approvals

| Logo                                                                             | Approval                            | Additional Approval Text | Certificate name |
|----------------------------------------------------------------------------------|-------------------------------------|--------------------------|------------------|
|  | UR<br>UL International Germany GmbH | UL 1977                  | E45171           |
|  | UR<br>UL International Germany GmbH | UL 1977                  | E45171           |

## Compatible products

### Insulation stop

|                                                                                    |                                                                                          |         |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|---------|
|  | Item no.: 231-670<br>Insulation stop; 0.08-0.2 mm <sup>2</sup> / 0.2 mm <sup>2</sup> "s" | 231-670 |
|  | Item no.: 231-671<br>Insulation stop; 0.25 - 0.5 mm <sup>2</sup>                         | 231-671 |
|  | Item no.: 231-672<br>Insulation stop; 0.75 - 1 mm <sup>2</sup>                           | 231-672 |

### check

|                                                                                    |                                                                                         |         |
|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|---------|
|  | Item no.: 210-136<br>Test plug; 2 mm Ø; with 500 mm cable                               | 210-136 |
|  | Item no.: 210-137<br>Test plug; 2.3 mm Ø; with 500 mm cable                             | 210-137 |
|  | Item no.: 231-661<br>Test plugs for female connectors; for 5 mm and 5.08 mm pin spacing | 231-661 |

### Marking accessories

|                                                                                                                                                                                         |                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| Item no.: 210-331/500-103<br>Marking strips; as a DIN A4 sheet; MARKED; 1-12 (300x); Height of marker strip: 2.3 mm/0.091 in;<br>Strip length 182 mm; Horizontal marking; Self-adhesive | 210-331<br>/500-103 |
| Item no.: 210-331/500-104                                                                                                                                                               |                     |

Marking strips; as a DIN A4 sheet; MARKED; 13-24 (300x); Height of marker strip: 2.3 mm/0.091 in;  
Strip length 182 mm; Horizontal marking; Self-adhesive

210-331

/500-104

**Item no.: 210-332/500-202**

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

210-332

/500-202

**Item no.: 210-332/500-204**

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

210-332

/500-204

**Item no.: 210-332/500-205**

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

210-332

/500-205

**Item no.: 210-332/500-206**

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

210-332

/500-206

**tools****Item no.: 209-130**

Operating tool; suitable for 264, 280 and 281 Series; 1-way; of insulating material

209-130

**Item no.: 209-132**

Operating tool; for connecting comb-style jumper bar; 2-way; of insulating material

209-132

**Item no.: 231-131**

Push-button; for female and male connectors; loose

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

231-159

**Item no.: 231-231**

Combination operating tool; for male and female connectors with CAGE CLAMP®

231-231

**Item no.: 231-291**

Operating tool; for male and female connectors with CAGE CLAMP®; loose

231-291

**Item no.: 280-432**

Operating tool; of insulating material; 2-way

280-432

**Item no.: 280-433**

Operating tool; of insulating material; 3-way

280-433

**Item no.: 280-434**

Operating tool; of insulating material; 4-way

280-434

**Item no.: 280-435**

Operating tool; of insulating material; 5-way

280-435

**Item no.: 280-436**

Operating tool; of insulating material; 6-way

280-436

**Item no.: 280-437**

Operating tool; of insulating material; 7-way

280-437

**Item no.: 280-438**



Operating tool; of insulating material; 8-way

280-438

**Item no.: 280-440**

Operating tool; of insulating material; 10-way

280-440

## ferrule

**Item no.: 216-101**

Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated

216-101

**Item no.: 216-102**

Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated

216-102

**Item no.: 216-103**

Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated

216-103

**Item no.: 216-104**

Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin plated

216-104

**Item no.: 216-106**

Ferrule; Sleeve for 2.5 mm² / AWG 14; uninsulated; electro-tin plated

216-106

**Item no.: 216-121**

Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated

216-121

**Item no.: 216-122**

Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated

216-122

**Item no.: 216-123**

Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated

216-123

**Item no.: 216-124**

Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin plated

216-124

**Item no.: 216-131**

Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated

216-131

**Item no.: 216-132**

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

216-132

**Item no.: 216-141**

Ferrule; Sleeve for 0.5 mm² / 20 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92

216-141

**Item no.: 216-142**

Ferrule; Sleeve for 0.75 mm² / 18 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92

216-142

**Item no.: 216-143**

Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92

216-143

**Item no.: 216-144**

Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92

216-144

**Item no.: 216-151**

Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated

216-151

**Item no.: 216-152**

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

216-152

|                                                                                   |                                                                                                                                                                          |         |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
|    | <b>Item no.: 216-201</b><br>Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated                                                                          | 216-201 |
|    | <b>Item no.: 216-202</b><br>Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated                                                                         | 216-202 |
|    | <b>Item no.: 216-203</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated                                                                            | 216-203 |
|    | <b>Item no.: 216-204</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated                                                                          | 216-204 |
|    | <b>Item no.: 216-221</b><br>Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated                                                                          | 216-221 |
|    | <b>Item no.: 216-222</b><br>Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated                                                                         | 216-222 |
|    | <b>Item no.: 216-223</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated                                                                            | 216-223 |
|    | <b>Item no.: 216-224</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated                                                                          | 216-224 |
|    | <b>Item no.: 216-241</b><br>Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90  | 216-241 |
|   | <b>Item no.: 216-242</b><br>Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90 | 216-242 |
|  | <b>Item no.: 216-243</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90    | 216-243 |
|  | <b>Item no.: 216-244</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90  | 216-244 |
|  | <b>Item no.: 216-262</b><br>Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90 | 216-262 |
|  | <b>Item no.: 216-263</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90    | 216-263 |
|  | <b>Item no.: 216-264</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90  | 216-264 |
|  | <b>Item no.: 216-284</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90  | 216-284 |
|                                                                                   | <b>Item no.: 216-301</b><br>Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated                                                                         | 216-301 |
|  | <b>Item no.: 216-302</b><br>Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated                                                                         | 216-302 |
|                                                                                   | <b>Item no.: 216-321</b><br>Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated                                                                         | 216-321 |

**Item no.: 216-322**Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated

216-322

**General accessories****Item no.: 231-668**

Lockout caps; for covering unused clamping units

231-668

**Jumper****Item no.: 231-902**

Comb-style jumper bar; for 5 mm and 5.08 mm pin spacing; reduces conductor size to 1.5 mm

231-902

**Item no.: 231-903**

Comb-style jumper bar; 3-way; suitable for 231 Series female connectors; with 5 mm pin spacing; insulated

231-903

**Item no.: 231-905**

Comb-style jumper bar; 5-way; suitable for 231 Series female connectors; with 5 mm pin spacing; insulated

231-905

**Item no.: 231-907**

Comb-style jumper bar; 7-way; suitable for 231 Series female connectors; with 5 mm pin spacing; insulated

231-907

**Item no.: 231-910**

Comb-style jumper bar; 10-way; suitable for 231 Series female connectors; with 5 mm pin spacing; insulated

231-910

**Downloads****CAD/CAE - Smart Data****CAD data**

3D Download 231-115/102-000

URL

Download

Subject to changes.