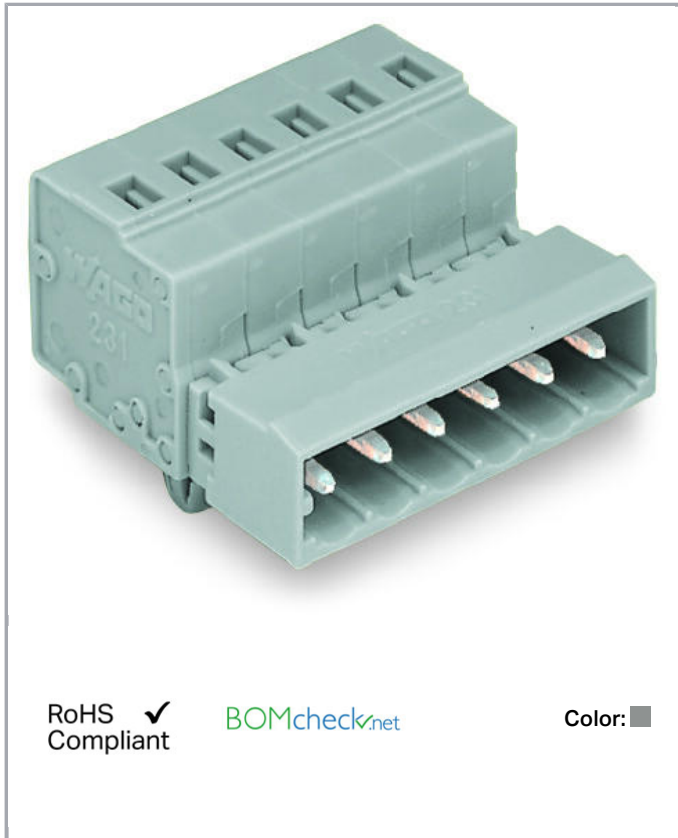


Data sheet | Item number: 231-624/018-000

1-conductor male connector; Snap-in mounting feet; 2.5 mm²; Pin spacing 5 mm; 24-pole; 2,50 mm²; gray

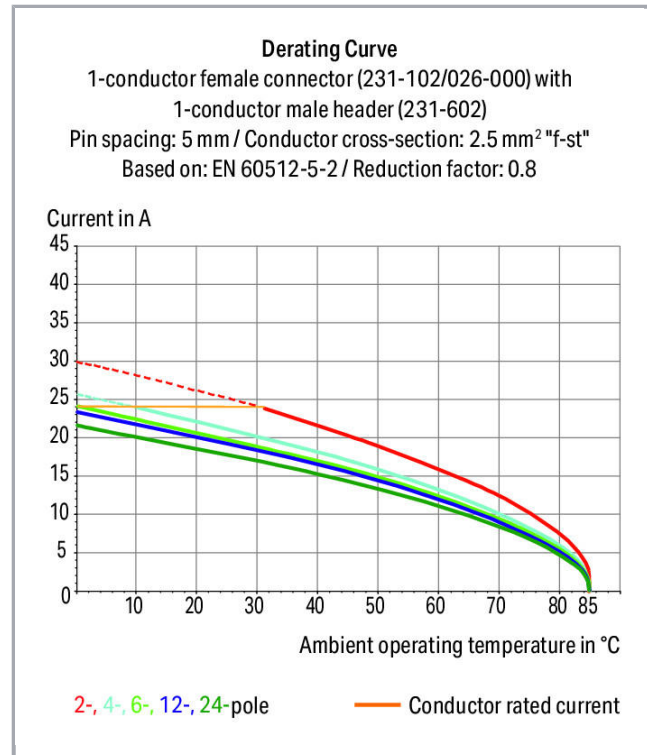
www.wago.com/231-624/018-000



RoHS Compliant

BOMcheck.net

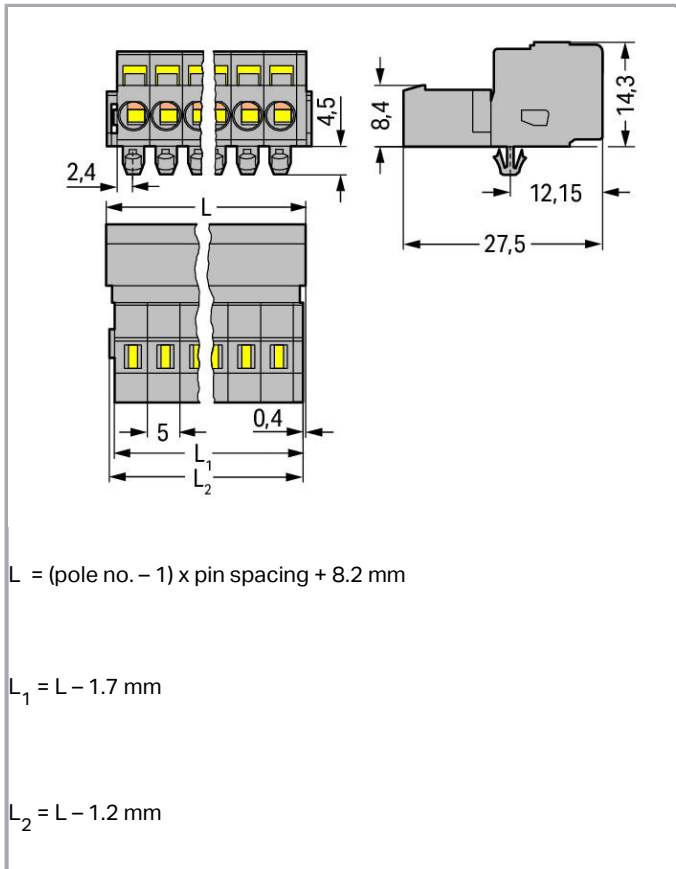
Color: ■



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

WAGO Kontakttechnik GmbH & Co. KG
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32423 Minden
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Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.



Item description

- Universal connection for all conductor types
- Easy cable pre-assembly and on-unit wiring via vertical and horizontal CAGE CLAMP® actuation
- For wire-to-wire and board-to-wire connections
- Versions available with snap-in mounting feet or flanges for panel or through-panel mounting
- With coding fingers

Safety information 1:

The *MULTI CONNECTION SYSTEM (MCS)* is designed without breaking capacity for compliance with DIN EN 61984. When used as intended, MCS Connectors shall 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.

Data

Electrical data

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



Ratings per IEC/EN 60664-1

| 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 | 12 A |
| Legend (ratings) | (III / 2) $\hat{=}$ 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 | UL 1059 |

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 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 |

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

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Do you have any questions about our products?
 We are always happy to take your call at +49 (571) 887-44222.



| | |
|---|----|
| No. of poles | 24 |
| Total number of connection points | 24 |
| Total number of potentials | 24 |
| 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 | 123.2 mm / 4.85 inch |
| Height | 18.8 mm / 0.74 inch |
| Height from the surface | 14.3 mm / 0.563 inch |
| Depth | 27.5 mm / 1.083 inch |

Mechanical data

| | |
|--------------------|---------------------------------------|
| Gehäuseblechstärke | 0.6 ... 1.2 mm / 0.024 ... 0.047 inch |
| Mounting type | Snap-in mounting foot |
| Type of mounting | Panel mounting |

Plug connection

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

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 | Electrolytic copper (E _{Cu}) |
| Contact plating | tin-plated |
| Fire load | 0.645 MJ |
| Weight | 36.8 g |

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

Environmental Requirements


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

Commercial data



| | |
|--------------------|------------------------|
| Product Group | 3 (Multi Conn. System) |
| Packaging type | BOX |
| Country of origin | DE |
| GTIN | 4044918259347 |
| Customs Tariff No. | 85366990990 |

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 |

Ship Approvals

| Logo | Approval | Additional Approval Text | Certificate name |
|--|---|--------------------------|--------------------------|
|  | ABS American Bureau of Shipping | - | 19- HG1869876- PDA |
|  | DNV GL Det Norske Veritas, Germanischer Lloyd | - | TAE000016Z |

UL-Approvals

| Logo | Approval | Additional Approval Text | Certificate name |
|--|---|--------------------------|---------------------|
|  | UL Underwriters Laboratories Inc. | UL 1059 | E45172- 19911118 |

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



UR
UL International Germany GmbH

UL 1977

E45171

Counterpart



Item no. 231-124/026-000
1-conductor female plug; 2.5 mm²; Pin spacing 5 mm; 24-pole; 2,50 mm²; gray

www.wago.com/231-124/026-000

Compatible products

Insulation stop

Item no.: 231-670
Insulation stop; 0.08-0.2 mm² / 0.2 mm² "s"; white www.wago.com/231-670



Item no.: 231-671
Insulation stop; 0.25 - 0.5 mm²; light gray www.wago.com/231-671

Item no.: 231-672
Insulation stop; 0.75 - 1 mm²; dark gray www.wago.com/231-672

Mounting adapter

Item no.: 209-148
Multi mounting adapter; for male and female connectors with snap-in mounting feet www.wago.com/209-148

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; gray 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; gray 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; gray www.wago.com/231-905

Item no.: 231-907

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

| | | |
|--|--|--|
|  | Comb-style jumper bar; 7-way; suitable for 231 Series female connectors; with 5 mm pin spacing; insulated; gray | 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; gray | www.wago.com/231-910 |
| tools | | |
| | 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.: 210-250 Operating tool; for MCS MINI & MIDI with CAGE CLAMP® connection; red | www.wago.com/210-250 |
| | Item no.: 210-657 Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short | www.wago.com/210-657 |
| | Item no.: 210-720 Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft | www.wago.com/210-720 |
|  | Item no.: 231-131 Push-button; loose | www.wago.com/231-131 |
|  | Item no.: 231-159 Operating tool; natural | www.wago.com/231-159 |
| | Item no.: 231-231 Combination operating tool; red | www.wago.com/231-231 |
|  | Item no.: 231-291 Operating tool; loose; red | www.wago.com/231-291 |
| | Item no.: 280-432 Operating tool; made of insulating material; 2-way | www.wago.com/280-432 |
| | Item no.: 280-433 Operating tool; made of insulating material; 3-way | www.wago.com/280-433 |
| | Item no.: 280-434 Operating tool; made of insulating material; 4-way | www.wago.com/280-434 |
| | 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.: 280-437 Operating tool; made of insulating material; 7-way | www.wago.com/280-437 |
|  | Item no.: 280-438 Operating tool; made of insulating material; 8-way | www.wago.com/280-438 |

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



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

www.wago.com/280-440

assembling



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

www.wago.com/209-137

General accessories



Item no.: 231-668
Lockout caps; for covering unused clamping units; gray

www.wago.com/231-668

Marking accessories

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

www.wago.com/210-331/500-103

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; white

www.wago.com/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; white

www.wago.com/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; white

www.wago.com/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; white

www.wago.com/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; white

www.wago.com/210-332/500-206



Item no.: 210-833
Marking strips; on reel; 6 mm wide; plain; Self-adhesive; white

www.wago.com/210-833



Item no.: 210-834
Marking strips; on reel; 5 mm wide; plain; Self-adhesive; white

www.wago.com/210-834

ferrule



Item no.: 216-101
Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated

www.wago.com/216-101



Item no.: 216-102
Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated












www.wago.com/216-102



Item no.: 216-103
Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated

www.wago.com/216-103

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

| | | |
|--|--|--|
| | Item no.: 216-104 Ferrule; Sleeve for 1.5 mm ² / AWG 16; uninsulated; electro-tin plated | www.wago.com/216-104 |
|  | 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 / 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.: 216-142 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.: 216-143 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 / 20 AWG; insulated; electro-tin plated; white | www.wago.com/216-201 |
| | 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.: 216-203 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; red | www.wago.com/216-203 |
| | Item no.: 216-204 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; black | www.wago.com/216-204 |

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



| | | |
|--|--|--|
|  | 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.: 216-222 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; gray | www.wago.com/216-222 |
|  | Item no.: 216-223 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; red | www.wago.com/216-223 |
| | Item no.: 216-224 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; black | www.wago.com/216-224 |
| | 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.: 216-243 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.: 216-262 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.: 216-263 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 crimped; acc. to DIN 46228, Part 4/09.90; black | www.wago.com/216-284 |
| | 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.: 216-302 Ferrule; Sleeve for 0.34 mm ² / 22 AWG; insulated; electro-tin plated; green | www.wago.com/216-302 |
| | 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 |

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

Coding

Item no.: 231-129
Coding key; snap-on type; light gray

www.wago.com/231-129

Downloads Documentation

Additional Information

| | | | |
|------------------------|-------------|---------------|----------|
| Technical explanations | Apr 3, 2019 | pdf 3.6 MB | Download |
|------------------------|-------------|---------------|----------|

CAD/CAE-Data

CAD data

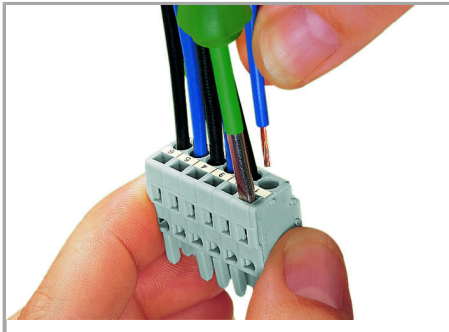
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|------------------------------|-----|----------|
| 2D/3D Models 231-624/018-000 | URL | Download |
|------------------------------|-----|----------|

CAE data

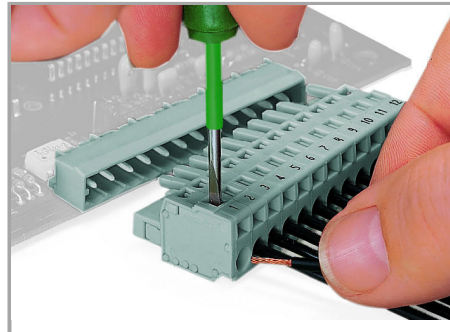
| | | |
|-----------------------------------|-----|----------|
| EPLAN Data Portal 231-624/018-000 | URL | Download |
|-----------------------------------|-----|----------|

Installation Notes

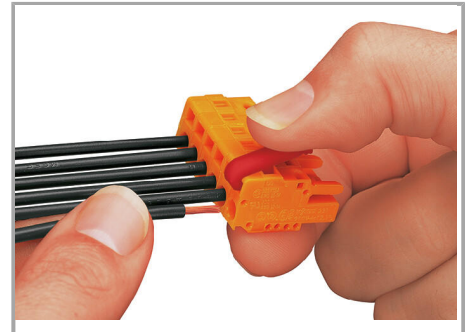
Inserting a conductor



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

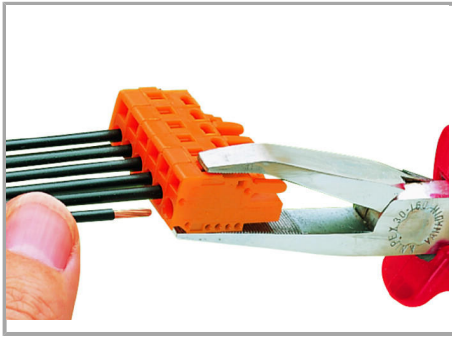


Inserting a conductor via 3.5 mm screwdriver – CAGE CLAMP® actuation perpendicular to conductor entry.



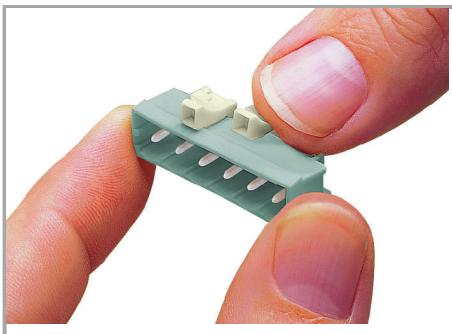
Inserting a conductor into CAGE CLAMP® unit via operating lever (231-291).

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



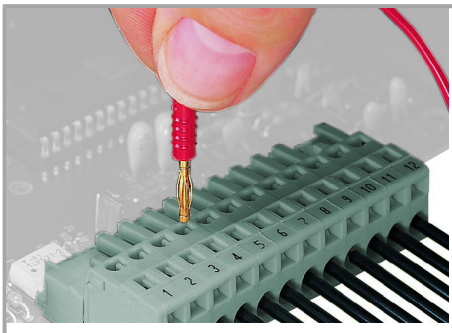
Inserting a conductor via operating tool.

Coding



Coding a male header – fitting coding key(s).

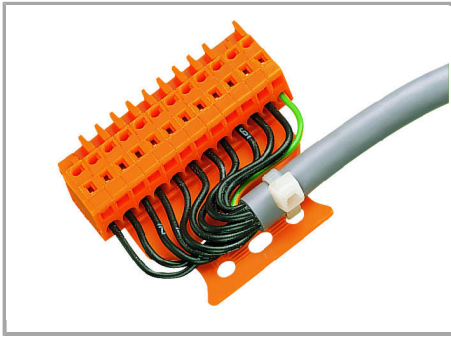
Testing



Testing perpendicular to conductor entry via 2 or 2.3 mm Ø test plug – female connector with CAGE CLAMP®.

Assembly

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



Male connector with strain relief plate



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

Marking



Labeling via direct marking or self-adhesive strips.

Product family

MCS MIDI Classic

[Learn more about the product family.](#)

[Show all products from the family](#)

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