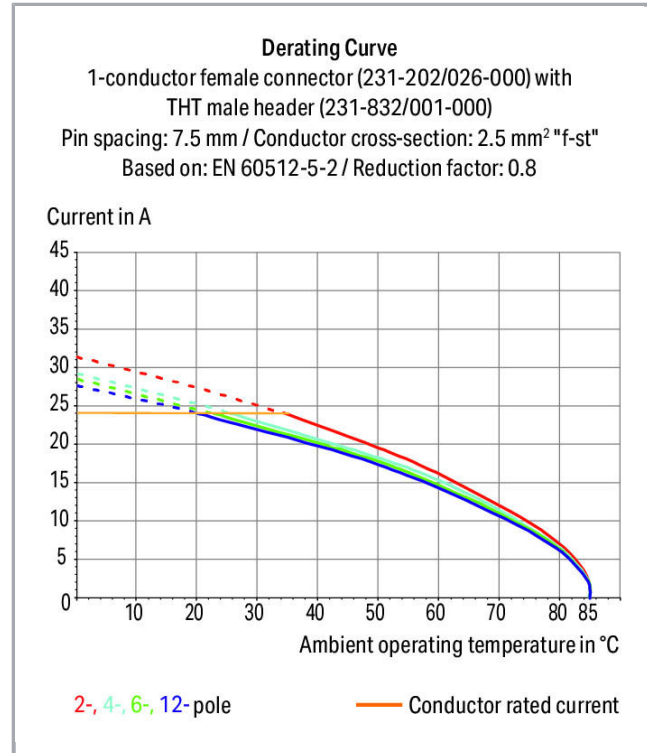


Data sheet | Item number: 231-709/008-000

1-conductor female plug; Snap-in mounting feet; 2.5 mm²; Pin spacing 7.62 mm; 9-pole; 2,50 mm²; orange

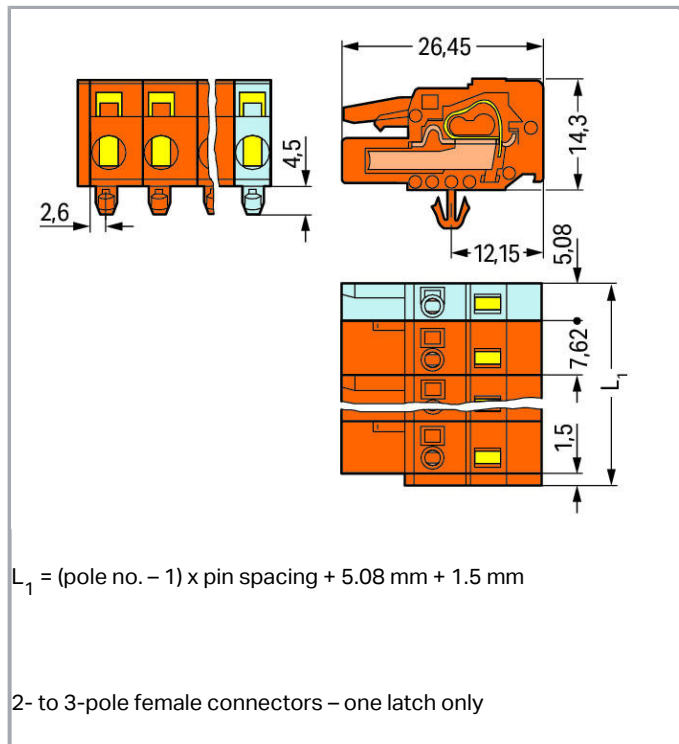
www.wago.com/231-709/008-000



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.



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

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

Ratings per IEC/EN 60664-1

| Ratings per | IEC/EN 60664-1 |
|---------------------------------|----------------|
| Rated voltage (III / 3) | 500 V |
| Rated impulse voltage (III / 3) | 6 kV |

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

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| | |
|---------------------------------|---|
| Rated voltage (III / 2) | 630 V |
| Rated impulse voltage (III / 2) | 6 kV |
| Rated voltage (II / 2) | 1000 V |
| Rated impulse voltage (II / 2) | 6 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 | 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 |
| No. of poles | 9 |
| Total number of connection points | 9 |
| Total number of potentials | 9 |
| Number of connection types | 1 |

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



| | |
|---|----|
| Number of levels | 1 |
| Conductor entry direction to mating direction | 0° |

Geometrical Data

| | |
|-------------------------|-----------------------|
| Pin spacing | 7.62 mm / 0.3 inch |
| Width | 67.54 mm / 2.659 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

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

Material Data

| | |
|-----------------------------|-----------------------------------|
| Color | orange |
| 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 | 0.324 MJ |
| Weight | 19.2 g |

Environmental Requirements

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

Commercial data


| | |
|---------------|------------------------|
| Product Group | 3 (Multi Conn. System) |
|---------------|------------------------|

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


| | |
|--------------------|---------------|
| Packaging type | BOX |
| Country of origin | DE |
| GTIN | 4044918375771 |
| Customs Tariff No. | 85366990990 |

Approvals / Certificates



Country specific Approvals

| Logo | Approval | Additional Approval Text | Certificate name |
|--|---------------------------------|--------------------------|------------------|
|  | 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 |

UL-Approvals

| Logo | Approval | Additional Approval Text | Certificate name |
|--|--------------------------------------|--------------------------|---------------------|
|  | UR Underwriters Laboratories Inc. | UL 1059 | E45172 |
|  | UR Underwriters Laboratories Inc. | UL 1977 | 20130906- E45171 |

Counterpart



Item no.731-639

1-conductor male connector; 2.5 mm²; Pin spacing 7.62 mm; 9-pole; 2,50 mm²; orangewww.wago.com/731-639

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

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Compatible products

Test Accessories

| | | |
|--|---|--|
|  | Item no.: 210-136 Test plug; 2 mm Ø; with 500 mm cable; red | www.wago.com/210-136 |
|  | Item no.: 210-137 Test plug; 2.3 mm Ø; with 500 mm cable; yellow | www.wago.com/210-137 |
| | Item no.: 231-662 Test plugs for female connectors; for 7.5 mm and 7.62 mm pin spacing; 2,50 mm ² ; light gray | www.wago.com/231-662 |

Insulation stop

| | | |
|--|--|--|
|  | Item no.: 231-673 Insulation stop; 0.08-0.2 mm ² / 0.2 mm ² "s"; white | www.wago.com/231-673 |
|  | Item no.: 231-674 Insulation stop; 0.25 - 0.5 mm ² ; light gray | www.wago.com/231-674 |
|  | Item no.: 231-675 Insulation stop; 0.75 - 1 mm ² ; dark gray | www.wago.com/231-675 |


General accessories

| | | |
|--|--|--|
|  | Item no.: 231-669 Lockout caps; for covering unused clamping units; orange | www.wago.com/231-669 |
|--|--|--|


Marking accessories

| | | |
|--|--|--|
| | 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 | www.wago.com/210-331/762-202 |
| | 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 | www.wago.com/210-332/762-020 |







Mounting adapter

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








ferrule

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

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

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

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

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

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

Item no.: 216-321

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

www.wago.com/216-321



Item no.: 216-322

Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; green

www.wago.com/216-322

tools

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

assembling



Item no.: 209-137

Mounting adapter; can be used as end plate; 6.5 mm wide; gray

www.wago.com/209-137

Downloads

Documentation

Additional Information

Technical explanations

Apr 3, 2019

pdf
3.6 MB

Download

CAD/CAE-Data

CAD data

2D/3D Models 231-709/008-000

URL

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CAE data

EPLAN Data Portal 231-709/008-000

URL

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Installation Notes

Inserting a conductor

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

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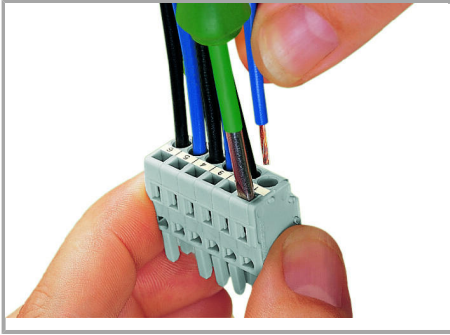
32423 Minden

Phone: +49571 887-0 | Fax: +49571 887-169

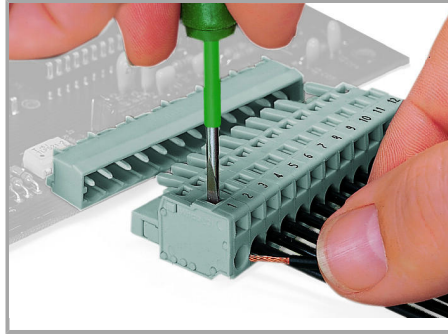
Email: info.de@wago.com | Web: www.wago.com

Do you have any questions about our products?

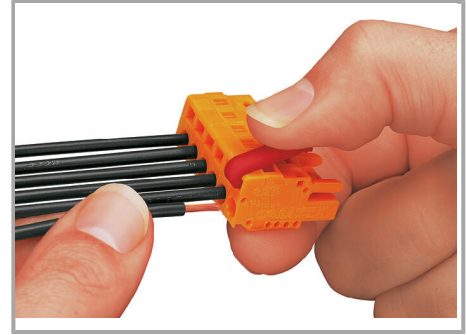
We are always happy to take your call at +49 (571) 887-44222.



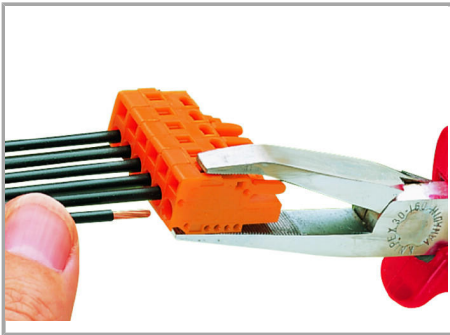
Inserting a conductor via 3.5 mm screwdriver – CAGE CLAMP® actuation parallel to conductor entry.



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.

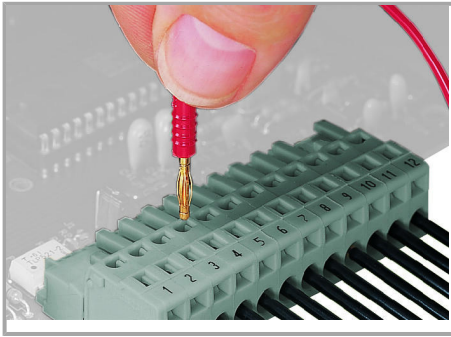
Coding



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

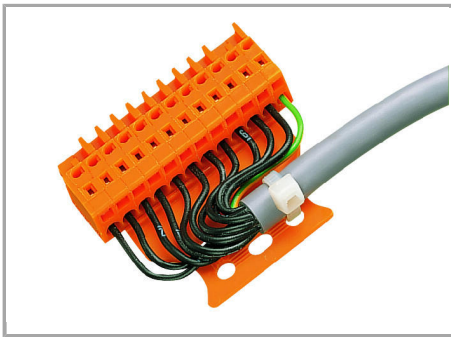
Testing

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

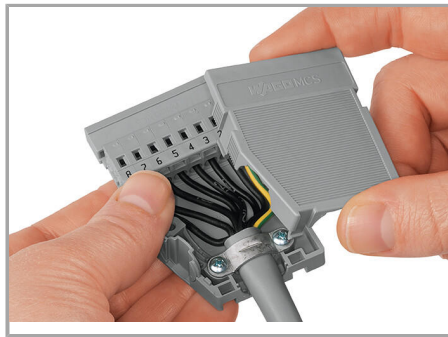


Testing perpendicular to conductor entry via 2 or 2.3 mm Ø test plug – female connector with CAGE CLAMP®.

Assembly

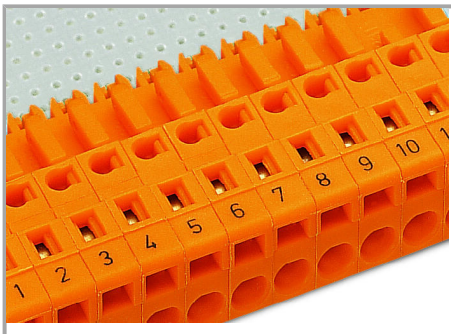


Male connector with strain relief plate



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

Marking



Labeling via direct marking or self-adhesive strips.

Product family

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



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!

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