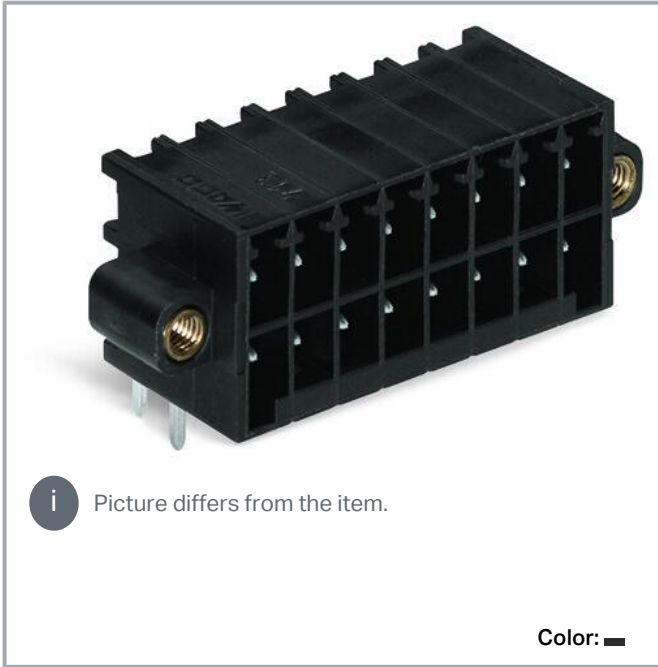


Data sheet | Item number: 713-1431/107-000

THT male header, 2-row; 0.8 x 0.8 mm solder pin; angled; 100% protected against mismatching; Threaded flange; Pin spacing 3.5 mm; 22-pole; black

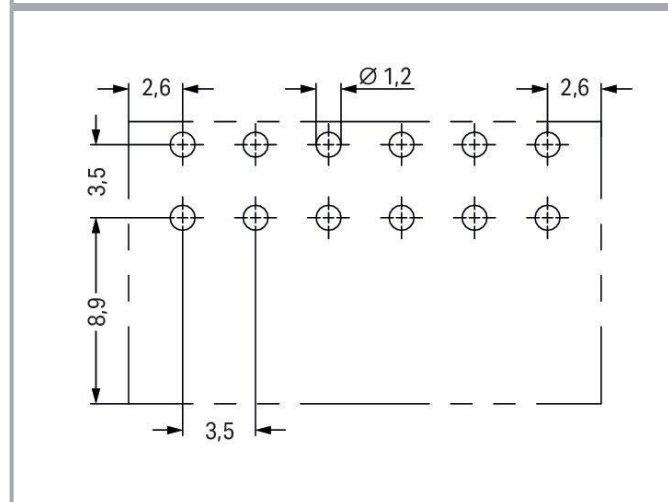
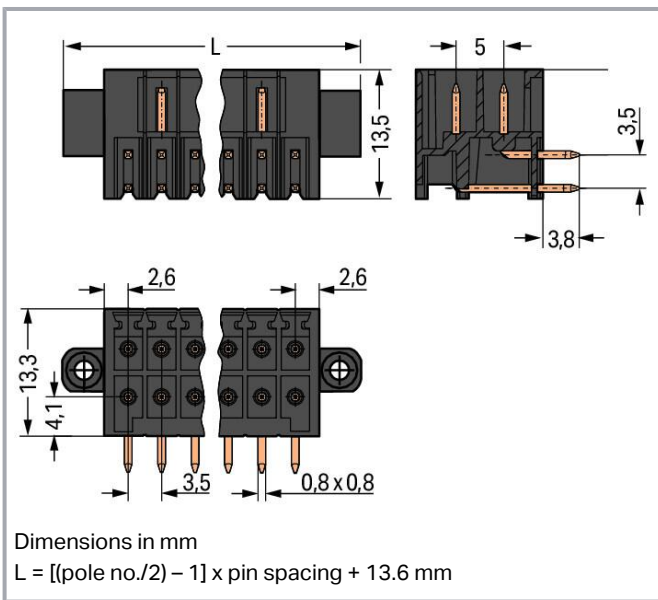
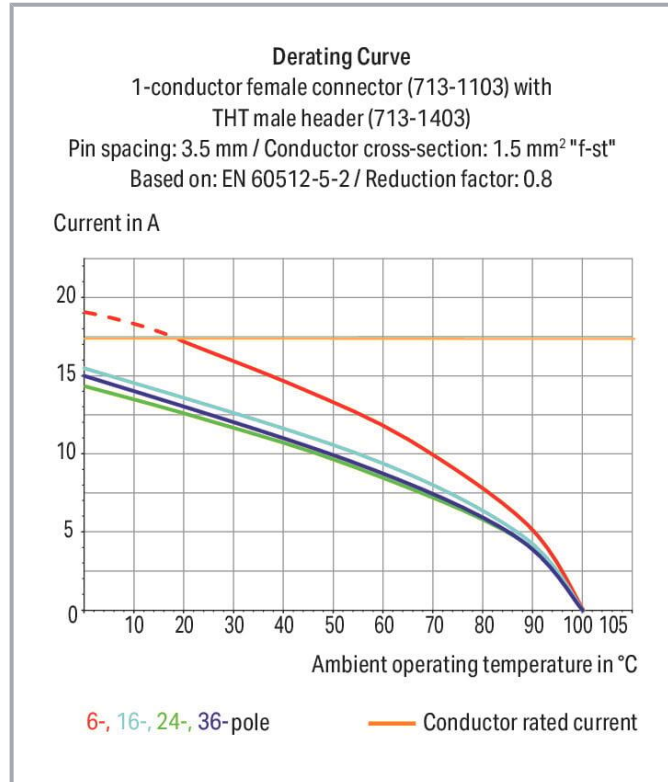


www.wago.com/713-1431/107-000



i Picture differs from the item.

Color: ■



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

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Item description

- Male headers may be mounted horizontally or vertically via straight or angled solder pins
- Header housing is molded of THT-compatible insulation material for lead-free reflow soldering
- Separated pin slots prevent damage and make the headers touch-proof when unplugged
- 100% protected against mismatching
- Coding option available

Data

Notes

Safety information

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. 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:

Other pole numbers
Other solder pin lengths
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

Ratings per IEC/EN

| Ratings per | IEC/EN 60664-1 |
|-------------------------------|---|
| Nominal voltage (III/3) | 80 V |
| Rated impulse voltage (III/3) | 2.5 kV |
| Rated voltage (III/2) | 160 V |
| Rated impulse voltage (III/2) | 2.5 kV |
| Nominal voltage (II/2) | 250 V |
| Rated surge voltage (II/2) | 2.5 kV |
| Rated current | 10 A |
| Legend (ratings) | (III / 2) ≙ Overvoltage category III / Pollution degree 2 |

Ratings per UL

| | |
|---------------|---------|
| Approvals per | UL 1059 |
|---------------|---------|

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| | |
|--------------------------------|-------|
| Rated voltage UL (Use Group B) | 150 V |
| Rated current UL (Use Group B) | 10 A |
| Rated voltage UL (Use Group C) | 50 V |
| Rated current UL (Use Group C) | 10 A |

Ratings per CSA

| | |
|---------------------------------|-------|
| Approvals per | CSA |
| Rated voltage CSA (Use Group B) | 150 V |
| Rated current CSA (Use Group B) | 12 A |

Connection data

| | |
|----------------------------|----|
| Total number of potentials | 22 |
| Number of connection types | 1 |
| Number of levels | 2 |

Connection 1

| | |
|-------------|----|
| Pole number | 22 |
|-------------|----|

Physical data

| | |
|--------------------------------------|--------------------------|
| Pin spacing | 3.5 mm / 0.138 inches |
| Width | 48.6 mm / 1.913 inches |
| Height | 17.1 mm / 0.673 inches |
| Height from the surface | 13.3 mm / 0.524 inches |
| Depth | 13.5 mm / 0.531 inches |
| Solder pin length | 3.8 mm |
| Solder pin dimensions | 0.8 x 0.8 mm |
| Drilled hole diameter with tolerance | 1.2 ^(+0.1) mm |

Mechanical Data

| | |
|--------------------------|-----|
| Variable coding | Yes |
| Anti-rotation protection | Yes |

Plug-in connection

| | |
|------------------------------------|---------------------|
| Contact type (pluggable connector) | Male connector/plug |
| Connector (connection type) | for PCB |

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



| | |
|--------------------------------------|-----------------|
| Mismating protection | Yes |
| Plugging without loss of pin spacing | No |
| Mating direction to the PCB | 0° |
| Locking of plug-in connection | Threaded flange |

PCB contact

| | |
|-------------------------------------|--|
| PCB contact | THT |
| Solder pin arrangement | over the entire male connector (in-line) |
| Number of solder pins per potential | 1 |

Material data

Note (material data)

Information on material specifications can be found here

| | |
|-----------------------------|--|
| Color | black |
| Material group | I |
| Insulation material | Polyphthalamide (PPA GF) |
| Flammability class per UL94 | V0 |
| Contact material | Electrolytic copper (E _{Cu}) |
| Contact plating | Tin |
| Fire load | 0.125 MJ |
| Weight | 6.7 g |

Environmental requirements

| | |
|-------------------------|-----------------|
| Limit temperature range | -60 ... +100 °C |
| Processing temperature | -35 ... +60 °C |

Commercial data

| | |
|-------------------|------------------------|
| Product Group | 3 (Multi Conn. System) |
| eCl@ss 10.0 | 27-44-04-02 |
| eCl@ss 9.0 | 27-44-04-02 |
| ETIM 8.0 | EC002637 |
| ETIM 7.0 | EC002637 |
| ECCN | NO DATA |
| PU (SPU) | 20 pcs |
| Packaging type | box |
| Country of origin | PL |

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| | |
|-----------------------|---------------|
| GTIN | 4045454809188 |
| Customs tariff number | 85366930000 |

Environmental Product Compliance

| | |
|---|--------------------------------------|
| CAS-No. | 7439-92-1 |
| REACH Candidate List Substance | Lead |
| RoHS Compliance Status | Compliant,With Exemption |
| RoHS Exemption | 6(c) |
| SCIP notification number (Austria) | a3a6bc60-ff0f-412f-bae2-0e1b21e2c6c0 |
| SCIP notification number (Belgium) | f87b035e-026c-4510-94b4-fae26b627af8 |
| SCIP notification number (Bulgaria) | f7586640-6f70-4a8a-bf0b-9c9217779901 |
| SCIP notification number (Czech Republic) | 6a02742e-f6fe-4d18-b517-3bf8ea8026fe |
| SCIP notification number (Denmark) | a6fec053-2619-435b-8c61-e6069d32107d |
| SCIP notification number (Finland) | d51fca14-a92c-490f-a769-9693641b31c5 |
| SCIP notification number (France) | 15bf16a2-22bb-409f-a323-2dad0186e7e4 |
| SCIP notification number (Germany) | b141597d-fcfd-4113-9fdb-b43b0093bdae |
| SCIP notification number (Hungary) | 2f1d683f-9718-4dc8-afc9-cd7b202183e4 |
| SCIP notification number (Italy) | 359f7258-7ce4-4b62-8610-9de5d76c1287 |
| SCIP notification number (Netherlands) | 1573bfdc-75cb-4961-8d3d-45d06f164297 |
| SCIP notification number (Poland) | 18c40d1b-ed08-44e0-abca-044055cad5f3 |
| SCIP notification number (Romania) | 20a274f5-fc35-4159-9461-db832457ebba |
| SCIP notification number (Sweden) | 8f641c29-215c-4cab-9d7c-b7c51c4cd331 |






Approvals / Certificates

General approvals

| Logo | Approval | Additional Approval Text | Certificate name |
|--|---------------------------------------|--------------------------|------------------|
|  | CSA CSA Group | C22.2 | 2315087 |
|  | KEMA/KEUR DEKRA Certification B.V. | EN 61984 | 71- 126089 |
|  | UR Underwriters Laboratories Inc. | UL 1059 | E45172 |

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Counterpart

| | | |
|--|--|--|
|  | Item no.713-1111/107-000 1-conductor female connector, 2-row; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 22-pole; 100% protected against mismatching; Screw flange; 1,50 mm²; black | www.wago.com/713-1111/107-000 |
|  | Item no.713-1111/107-047 1-conductor female connector, 2-row; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 22-pole; 100% protected against mismatching; Screw flange; direct marking; 1,50 mm²; black | www.wago.com/713-1111/107-047 |
|  | Item no.713-1111/107-047/034-000 1-conductor female connector, 2-row; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 22-pole; 100% protected against mismatching; Screw flange; Strain relief plate; direct marking; 1,50 mm²; black | www.wago.com/713-1111/107-047/034-000 |
|  | Item no.713-1111/107-9037/034-000 1-conductor female connector, 2-row; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 22-pole; 100% protected against mismatching; Screw flange; Strain relief plate; direct marking; 1,50 mm²; black | www.wago.com/713-1111/107-9037/034-000 |
|  | Item no.713-1111/107-9037 1-conductor female connector, 2-row; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 22-pole; 100% protected against mismatching; Screw flange; direct marking; 1,50 mm²; black | www.wago.com/713-1111/107-9037 |

Optional accessories

Coding

Coding



Item no.: 714-101
Coding key; orange

www.wago.com/714-101

Downloads

Documentation

Additional Information

| | | | |
|------------------------|------------|--------|----------|
| Technical Section | 2019 Apr 3 | pdf | Download |
| Technical explanations | | 2.1 MB | |

CAD/CAE-Data

CAD data

| | | |
|-------------------------------|-----|----------|
| 2D/3D Models 713-1431/107-000 | URL | Download |
|-------------------------------|-----|----------|

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PCB Design

Symbol and Footprint via Ultra Librarian 713-1431/107-000

[URL](#)

[Download](#)

CAX data for your PCB design, consisting of "schematic symbols and PCB footprints", allow easy integration of the WAGO component into your development environment.

Supported formats:

- Accel EDA 14 & 15
- Altair
- Altium 6 to current version
- Autodesk Fusion 360
- Cadence Allegro
- DesignSpark
- Eagle Libraries
- KiCad
- Mentor Graphics
- BoardStation
- Mentor Graphics Design Architect
- Mentor Graphics Design
- Expedition 99 and 2000
- OrCAD 9.X PCB and Capture
- PADS PowerPCB 3, 3.5, 4.X, and 5.X
- PADS PowerPCB and PowerLogic 3.0
- PCAD 2000, 2001, 2002, 2004, and 2006
- Pulsonix 8.5 or newer
- STL
- 3D STEP
- TARGET 3001!
- View Logic ViewDraw
- Quadcept
- Zuken CadStar 3 and 4
- Zuken CR-5000 and CR-8000
- Zuken eCADSTAR 2020 and 2021 Zuken CR-5000 and CR-8000

PCB Component Libraries (EDA), PCB CAD Library Ultra Librarian

Symbol and Footprint via SamacSys 713-1431/107-000

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Supported formats:

- 3D (stp)
- Altium
- CADSTAR
- Capture
- CircuitStudio
- CR-5000
- CR-8000
- DEHDL
- DesignSpark PCB
- DesignSpark PCB PRO
- DipTrace
- EAGLE
- Easy-PC
- EasyEDA
- eCADSTAR
- KiCad
- OrCAD_Allegro16
- PADS
- Proteus
- Pulsonix
- Quadcept
- SOLIDWORKS PCB
- TARGET 3001!
- xDX Designer
- Xpedition

PCB Component Libraries (EDA), PCB CAD Library SamacSys Electronic Component Search Engine

CAE data

ZUKEN Portal 713-1431/107-000

[URL](#)

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Asset Administration Shell

Asset Administration Shell 713-1431/107-000

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Environmental Product Compliance

Compliance Search

Environmental Product Compliance 713-1431/107-000

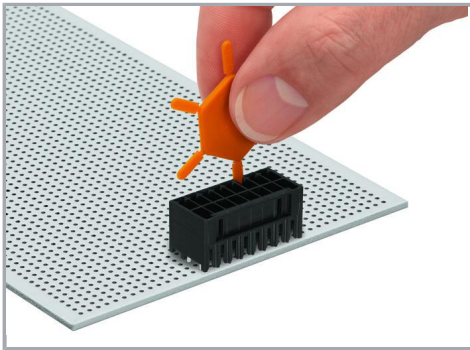
[URL](#)

[Download](#)

THT male header, 2-row; 0.8 x 0.8 mm solder pin; angled; 100% protected against mismatching; Threaded flange; Pin spacing 3.5 mm; 22-pole; black

Installation Notes

Coding



Coding a male header by inserting a coding pin.

Product family

MCS MINI HD

[Show all products from the family](#)

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