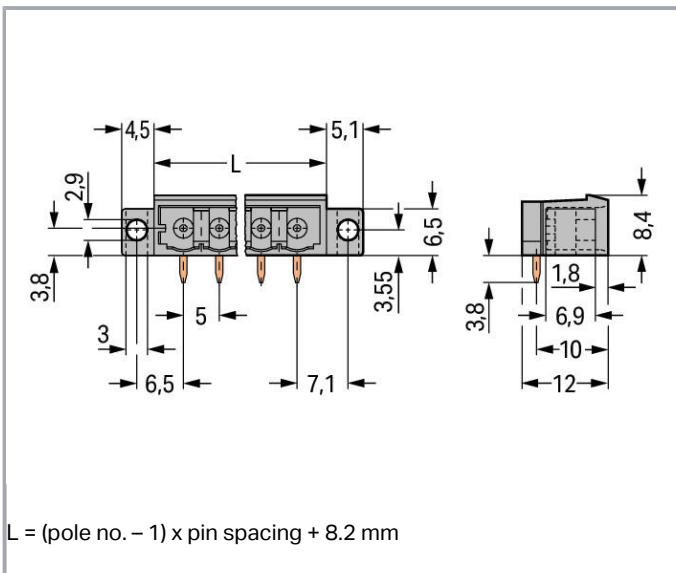


Data sheet | Item number: 231-474/040-000

THT male header; 1.2 x 1.2 mm solder pin; angled; clamping collar; Pin spacing 5 mm; 14-pole; gray



www.wago.com/231-474/040-000



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

- Horizontal or vertical PCB mounting via straight or angled solder pins
- 1.2 x 1.2 mm solder pins allow nominal current up to 16 A, enhancing stability of shorter headers
- 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) | 250 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) $\hat{=}$ 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 |

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



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

| | |
|----------------------------|----|
| No. of poles | 14 |
| Total number of potentials | 14 |
| Number of connection types | 1 |
| Number of levels | 1 |

Geometrical Data

| | |
|-----------------------------------|--------------------------|
| Pin spacing | 5 mm / 0.197 inch |
| Width | 82.8 mm / 3.26 inch |
| Height | 12.2 mm / 0.48 inch |
| Height from the surface | 8.4 mm / 0.331 inch |
| Depth | 12 mm / 0.472 inch |
| Solder pin length | 3.8 mm |
| Solder pin dimensions | 1.2 x 1.2 mm |
| Drilled hole diameter (tolerance) | 1.7 ^(+0.1) mm |

Mechanical data

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

Plug connection

| | |
|------------------------------------|---------------------|
| Contact type (pluggable connector) | Male connector/plug |
| Connector connection type | for PCBs |
| Mismating protection | No |
| Mating direction to the PCB | 0° |

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

PCB contact

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

Material Data

| | |
|-----------------------------|--|
| Color | gray |
| Material group | I |
| Insulating material | Polyamide 66 (PA 66) |
| Flammability class per UL94 | V0 |
| Contact material | Electrolytic copper (E _{Cu}) |
| Contact plating | tin-plated |
| Fire load | 0.121 MJ |
| Weight | 6.7 g |

Environmental Requirements


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

Commercial data

| | |
|--------------------|------------------------|
| Product Group | 3 (Multi Conn. System) |
| Packaging type | BOX |
| Country of origin | PL |
| GTIN | 4044918930710 |
| 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 |

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

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 | 20190731- E45172 |
|  | UR UL International Germany GmbH | UL 1977 | E45171 |

Counterpart





Item no. 231-114/026-000




1-conductor female plug; 2.5 mm²; Pin spacing 5 mm; 14-pole; 2,50 mm²; graywww.wago.com/231-114/026-000

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 |

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

| | | |
|--|---|--|
|  | Item no.: 231-295 Screw with nut | www.wago.com/231-295 |
| Marking accessories | | |
|  | 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 |
| Coding | | |
| | Item no.: 231-129 Coding key; snap-on type; light gray | www.wago.com/231-129 |
| | Item no.: 231-500 Spacer; for formation of groups; light gray | www.wago.com/231-500 |

Downloads

Documentation

Additional Information

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

CAD/CAE-Data

CAE data

| | | |
|-----------------------------------|-----|----------|
| EPLAN Data Portal 231-474/040-000 | URL | Download |
|-----------------------------------|-----|----------|

PCB Design

| | | |
|--------------------------------------|-----|----------|
| Symbol and Footprint 231-474/040-000 | 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
- Altium 6 to current version
- Cadence Allegro
- DesignSpark
- Eagle Libraries

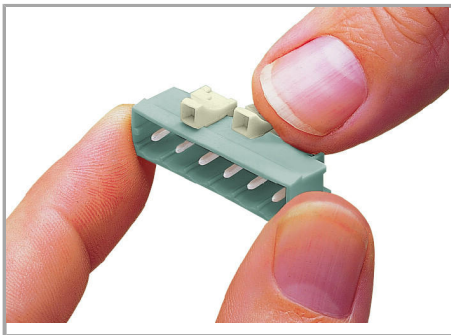
—
Subject to changes. Please also observe the further product documentation!

- 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

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

Installation Notes

Coding



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

Product family

<i>MCS</i> 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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