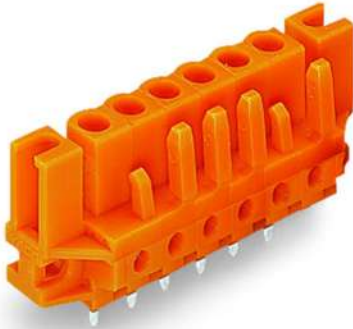


Data sheet | Item number: 232-163/047-000

THT female header; 0.6 x 1.0 mm solder pin; straight; Spacer flange; Pin spacing 5.08 mm; 3-pole; orange



www.wago.com/232-163_047-000



 Picture differs from the item.

RoHS 
Compliant



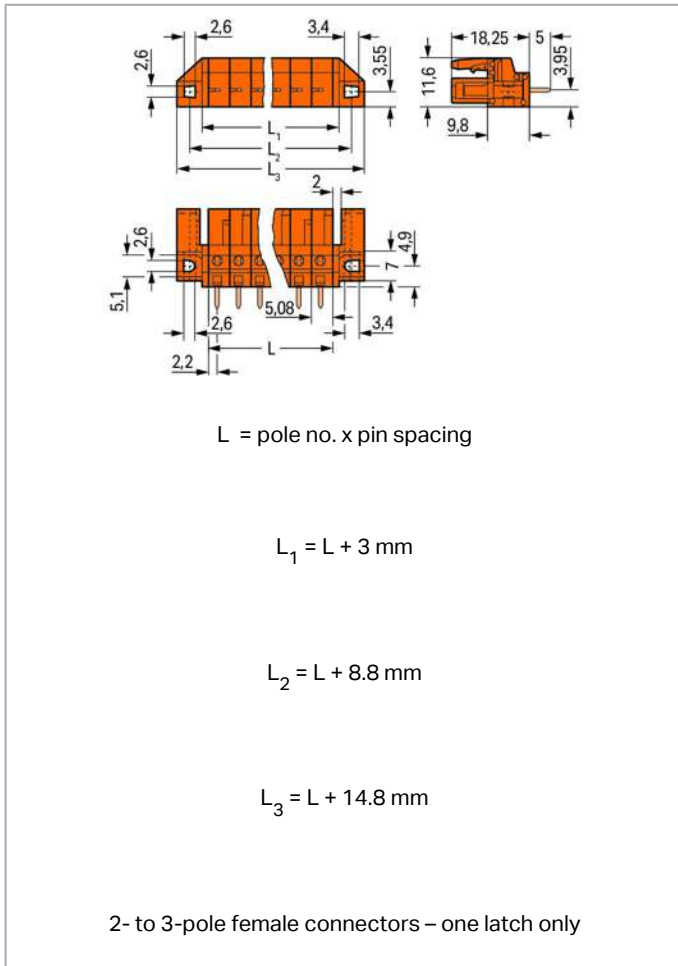
Color: 



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

WAGO Corporation
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Item description

- Horizontal or vertical PCB mounting via straight or angled solder pins
- For board-to-board and board-to-wire connections
- Touch-proof PCB outputs
- Easy-to-identify PCB inputs and outputs
- With coding fingers

Safety information 1:

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. 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 surge voltage (III/3) | 4 kV |
| Rated voltage (III/2) | 320 V |
| Rated surge voltage (III/2) | 4 kV |
| Nominal voltage (II/2) | 630 V |
| Rated surge voltage (II/2) | 4 kV |
| Rated current | 12 A |
| Legend (ratings) | (III / 2) \triangleq Overvoltage category III / Pollution degree 2 |

Ratings per UL 1059

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

Ratings per UL 1977

| | |
|-----------------------|-------|
| Rated voltage UL 1977 | 600 V |
| Rated current UL 1977 | 15 A |

Ratings per CSA

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

| | |
|-----------------------------------|---|
| Pole No. | 3 |
| Total number of connection points | 3 |
| Total number of potentials | 3 |
| Number of connection types | 1 |
| Number of levels | 1 |

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

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Physical data

| | |
|--------------------------------------|--------------------------|
| Pin spacing | 5.08 mm / 0.2 inch |
| Width | 30.04 mm / 1.183 inch |
| Height | 23.25 mm / 0.915 inch |
| Height from the surface | 18.25 mm / 0.719 inch |
| Depth | 11.6 mm / 0.457 inch |
| Solder pin length | 5 mm |
| Solder pin dimensions | 0.6 x 1 mm |
| Drilled hole diameter with tolerance | 1.3 ^(+0.1) mm |

Mechanical data

| | |
|---------------|---|
| Mounting type | Mounting flange |
| Mounting type | Flush feed-through mounting Panel mounting |

Plug-in connection

| | |
|------------------------------------|-------------------------|
| Contact type (pluggable connector) | Female connector/socket |
| Connector (connection type) | for PCB |
| Mismating protection | No |
| Mating direction to the PCB | 90° |

PCB contact

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

Material Data

| | |
|-----------------------------|------------------|
| Color | orange |
| Material group | I |
| Insulation material | Polyamide (PA66) |
| Flammability class per UL94 | V0 |
| Contact material | Copper alloy |
| Contact plating | tin-plated |
| Fire load | 0.073 MJ |
| Weight | 3.6 g |

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

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Environmental Requirements




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

Commercial data



| | |
|-----------------------|------------------------|
| Product Group | 3 (Multi Conn. System) |
| Packaging type | BOX |
| Country of origin | DE |
| GTIN | 4044918623810 |
| Customs tariff number | 85366990990 |

Approvals / Certificates

Ship Approvals

| Logo | Approval | Additional Approval Text | Certificate name |
|--|---|--------------------------|---------------------------|
|  | ABS American Bureau of Shipping | - | 19- HG15869876- PDA |
|  | BV Bureau Veritas S.A. | IEC 60998 | 11915/D0 BV |
|  | DNV GL Det Norske Veritas, Germanischer Lloyd | - | TAE 000016Z |

UL-Approvals

| Logo | Approval | Additional Approval Text | Certificate name |
|--|---|--------------------------|-------------------|
|  | UL UL International Germany GmbH | UL 1977 | E45171 |
|  | UR Underwriters Laboratories Inc. | UL 1059 | E45172 sec. 18 |

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

Counterpart



Item no.231-633

1-conductor male connector; 2.5 mm²; Pin spacing 5.08 mm; 3-pole; 2,50 mm²; orange

www.wago.com/231-633

Compatible products

check



Item no.: 231-661

Test plugs for female connectors; for 5 mm and 5.08 mm pin spacing; 2,50 mm²; light gray

www.wago.com/231-661

Downloads

Documentation

Additional Information

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

CAD files

CAD data

| | | |
|------------------------------|-----|----------|
| 2D/3D Models 232-163/047-000 | URL | Download |
|------------------------------|-----|----------|

CAE data

| | | |
|-----------------------------------|-----|----------|
| EPLAN Data Portal 232-163/047-000 | URL | Download |
|-----------------------------------|-----|----------|

| | | |
|------------------------------|-----|----------|
| ZUKEN Portal 232-163/047-000 | URL | Download |
|------------------------------|-----|----------|

PCB Design

| | | |
|--------------------------------------|-----|----------|
| Symbol and Footprint 232-163/047-000 | 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

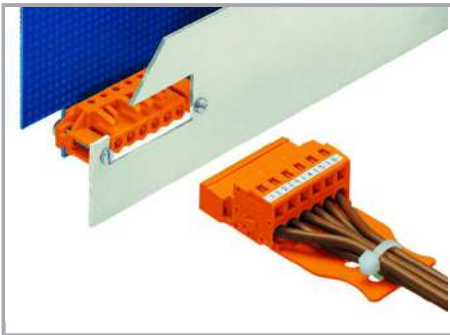
Subject to changes. Please also observe the further product documentation!

- 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

Application



The innovative flange design provides standard panel mounting options or various through-panel mounting configurations. Depending on the type of application and flange, female headers can be used either for through-panel or flush mount applications.

Product family

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

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<i>MCS</i> MIDI Classic

Show all products from the family

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