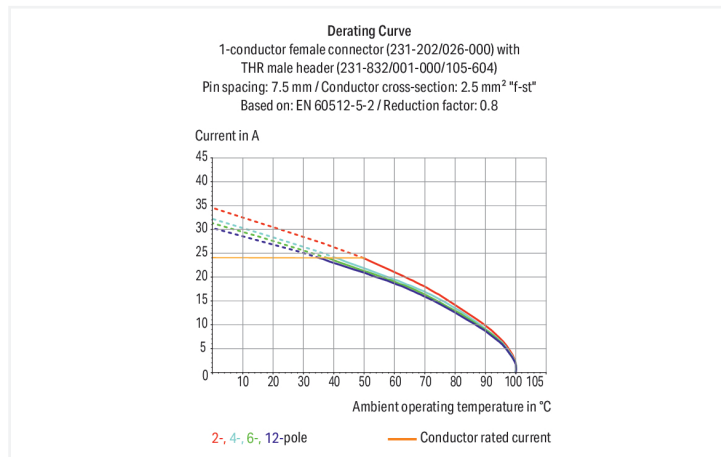
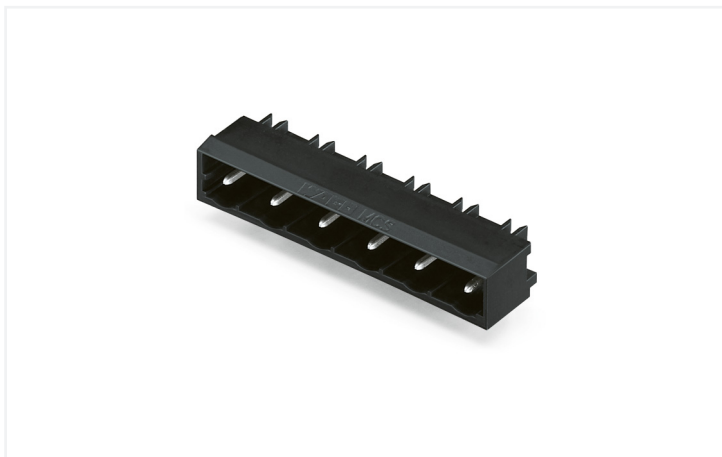


Data Sheet | Item Number: 231-838/001-000/105-604

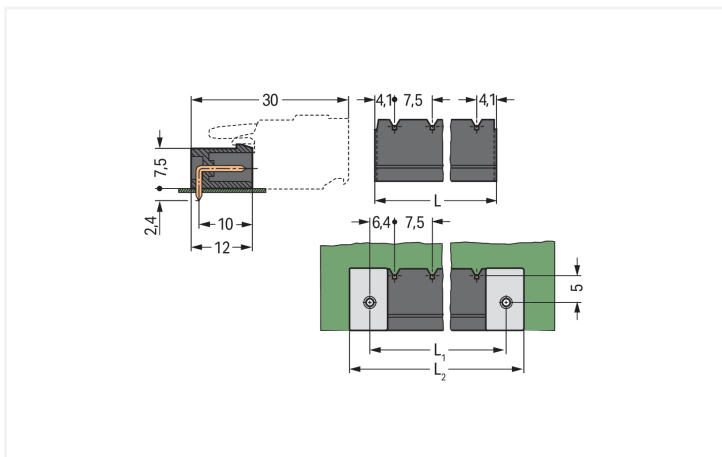
THR male header; 1.0 x 1.0 mm solder pin; angled; Pin spacing 7.5 mm; 8-pole; black

<https://www.wago.com/231-838/001-000/105-604>



Color: ■ black

Similar to illustration



Dimensions in mm

$L = (\text{pole no.} - 1) \times \text{pin spacing} + 8.2 \text{ mm}$
 $L_1 = L + 5 \text{ mm}$
 $L_2 = L_1 + 7.4 \text{ mm}$

Male connector, 231 Series, black

This male connector (item number 231-838/001-000/105-604) is designed for fault-free electrical installations. Dimensions: (60.5 x 10.8 x 12) mm (width x height x depth).

Tin is used for coating the contact surfaces. The pcb connector is designed for THR soldering.

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
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 60664-1 | | | | Approvals per UL 1059 | | | |
|---------------------------------|-------|-------|--------|-----------------------|-------|---|-------|
| | III | III | II | Use group | B | C | D |
| Overvoltage category | III | III | II | Rated voltage | 300 V | - | 300 V |
| Pollution degree | 3 | 2 | 2 | Rated current | 10 A | - | 10 A |
| Nominal voltage | 500 V | 630 V | 1000 V | | | | |
| Rated impulse withstand voltage | 6 kV | 6 kV | 6 kV | | | | |
| Rated current | 12 A | 12 A | 12 A | | | | |

| Approvals per UL 1977 | |
|-----------------------|-------|
| Rated voltage | 600 V |
| Rated current | 10 A |

| Approvals per CSA | | | |
|-------------------|-------|---|-------|
| Use group | B | C | D |
| Rated voltage | 300 V | - | 300 V |
| Rated current | 10 A | - | 10 A |

Connection Data

| Connection 1 | |
|----------------------------|---|
| Total number of potentials | 8 |
| Number of connection types | 1 |
| Number of levels | 1 |
| Pole number | 8 |

Physical data

| | |
|------------------------------------|--------------------------|
| Pin spacing | 7.5 mm / 0.295 inches |
| Width | 60.5 mm / 2.382 inches |
| Height | 10.8 mm / 0.425 inches |
| Height from the surface | 8.4 mm / 0.331 inches |
| Depth | 12 mm / 0.472 inches |
| Solder pin length | 2.4 mm |
| Solder pin dimensions | 1 x 1 mm |
| Plated through-hole diameter (THR) | 1.4 ^(+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 |
| Mismating protection | No |
| Mating direction to the PCB | 0° |

PCB contact

| | |
|-------------------------------------|--|
| PCB contact | THR |
| 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 (main housing) | Polyphthalamide (PPA GF) |
| Flammability class per UL94 | V0 |
| Contact material | Electrolytic copper (E _{Cu}) |
| Contact Plating | Tin |
| Fire load | 0.077 MJ |
| Weight | 3.6 g |
| MSL per J-STD 020D | 1 |

Environmental requirements

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

Commercial data

| | |
|-----------------------|------------------------|
| Product Group | 3 (Multi Conn. System) |
| PU (SPU) | 50 pcs |
| Packaging type | Box |
| Country of origin | PL |
| GTIN | 4045454901172 |
| Customs tariff number | 85366930000 |

Product Classification

| | |
|-------------|----------------------|
| UNSPSC | 39121409 |
| eCl@ss 10.0 | 27-44-04-02 |
| eCl@ss 9.0 | 27-44-04-02 |
| ETIM 9.0 | EC002637 |
| ETIM 10.0 | EC002637 |
| ECCN | NO US CLASSIFICATION |

Environmental Product Compliance

RoHS Compliance Status Compliant, No Exemption

Approvals / Certificates

General approvals



| Approval | Standard | Certificate Name |
|---------------------------------------|-----------|------------------|
| CB DEKRA Certification B.V. | IEC 61984 | NL-113351 |
| CSA DEKRA Certification B.V. | C22.2 | 1466354 |
| KEMA/KEUR DEKRA Certification B.V. | EN 61984 | 71-130478 REV.1 |
| UR Underwriters Laboratories Inc. | UL 1977 | E 45171 |
| UR Underwriters Laboratories Inc. | UL 1059 | E45172 |

Approvals for marine applications



| Approval | Standard | Certificate Name |
|------------------------------------|----------|------------------|
| ABS American Bureau of Shipping | - | 24-0095975-PDA |

Downloads

Environmental Product Compliance

Compliance Search ↓

Documentation

| Additional Information | | | |
|------------------------|------------|-------------------|---|
| Technical Section | 03.04.2019 | pdf 2027.26 KB | ↓ |
| | | pdf 535.32 KB | ↓ |

CAD/CAE-Data

CAD data ↓

CAE data ↓

PCB Design



1 Compatible Products

1.1 System counterpart

1.1.1 Female connector/socket



Item No.: 231-208/026-000

1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 7.5 mm; 8-pole; gray

1.2 Optional Accessories

1.2.1 Coding

1.2.1.1 Coding



Item No.: 231-129

Coding key; snap-on type; light gray

1.2.1.2 Intermediate plate



Item No.: 231-500

Spacer; for formation of groups; light gray

1.2.2 Installation

1.2.2.1 Mounting accessories

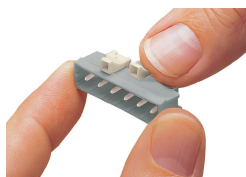


Item No.: 231-193

Locking device; for male connectors; 1 part; gray

Installation Notes

Coding



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