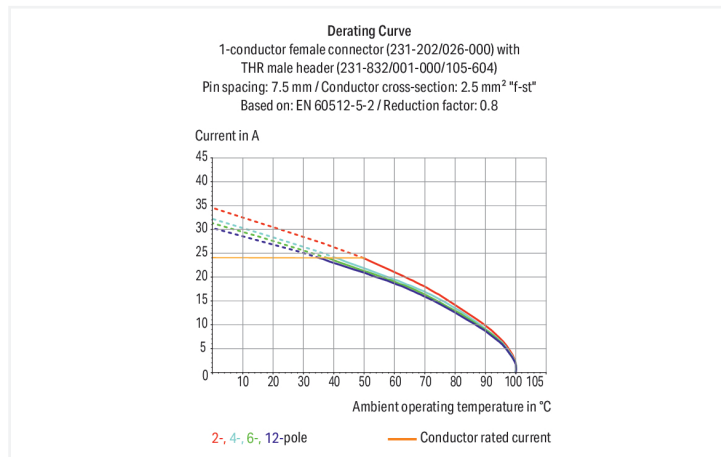
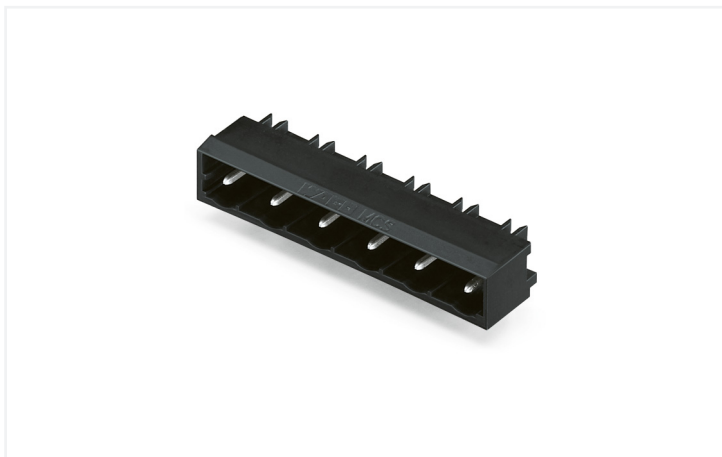


# Data Sheet | Item Number: 231-869/001-000/105-604

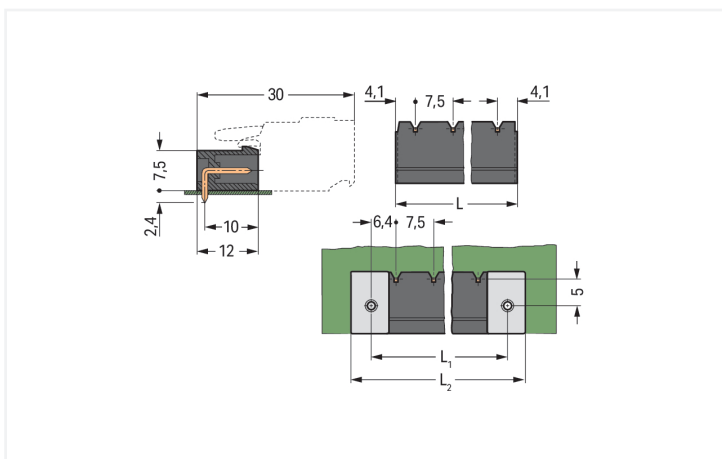
THR male header; 1.2 x 1.2 mm solder pin; angled; Pin spacing 7.5 mm; 9-pole; black

<https://www.wago.com/231-869/001-000/105-604>



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

Seamless electrical installations are guaranteed with this male connector (item number 231-869/001-000/105-604). The dimensions are (68 x 10.8 x 12) mm (width x height x depth).

The contact surface is coated with tin. 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                   | 16 A  | 16 A  | 16 A   |                       |       |   |       |

| Approvals per UL 1977 |       |
|-----------------------|-------|
| Rated voltage         | 600 V |
| Rated current         | 15 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 | 9 |
| Number of connection types | 1 |
| Number of levels           | 1 |
| Pole number                | 9 |

## Physical data

|                                    |                          |
|------------------------------------|--------------------------|
| Pin spacing                        | 7.5 mm / 0.295 inches    |
| Width                              | 68 mm / 2.677 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              | 1.2 x 1.2 mm             |
| Plated through-hole diameter (THR) | 1.7 <sup>(+0.1)</sup> 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)               | <a href="#">Information on material specifications can be found here</a> |
| Color                              | black  |
| Material group                     | I  |
| Insulation material (main housing) | Polyphthalamide (PPA GF)   |
| Flammability class per UL94        | V0   |
| Contact material                   | Electrolytic copper (E <sub>Cu</sub> )                                   |
| Contact Plating                    | Tin  |
| Fire load                          | 0.085 MJ   |
| Weight                             | 4.6 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                  | 4045454901417          |
| 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<br>DEKRA Certification B.V.        | IEC 61984 | NL-113351        |
| CSA<br>DEKRA Certification B.V.       | C22.2     | 1466354          |
| KEMA/KEUR<br>DEKRA Certification B.V. | EN 61984  | 71-130478 REV.1  |
| UR<br>Underwriters Laboratories Inc.  | UL 1059   | E45172           |
| UR<br>Underwriters Laboratories Inc.  | UL 1977   | E 45171          |

**Downloads**

**Environmental Product Compliance**

Compliance Search

[↓](#)

**Documentation**

Additional Information

|                   |            |                   |                   |
|-------------------|------------|-------------------|-------------------|
| Technical Section | 03.04.2019 | pdf<br>2027.26 KB | <a href="#">↓</a> |
|                   |            | pdf<br>535.32 KB  | <a href="#">↓</a> |

**CAD/CAE-Data**

CAD data

[↓](#)

CAE data

[↓](#)

PCB Design



1 Compatible Products

1.1 System counterpart

1.1.1 Female connector/socket



Item No.: [231-209/026-000](#)

1-conductor female connector; CAGE CLAMP®; 2.5 mm<sup>2</sup>; Pin spacing 7.5 mm; 9-pole; gray

1.2 Optional Accessories

1.2.1 Coding

1.2.1.1 Intermediate plate

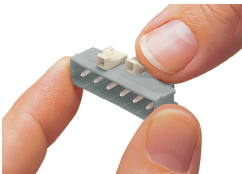


Item No.: [231-500](#)

Spacer; for formation of groups; light gray

Installation Notes

Coding



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