

## Data sheet | Item number: 232-283

THT female header; 0.6 x 1.0 mm solder pin; angled; Pin spacing 5.08 mm;  
23-pole



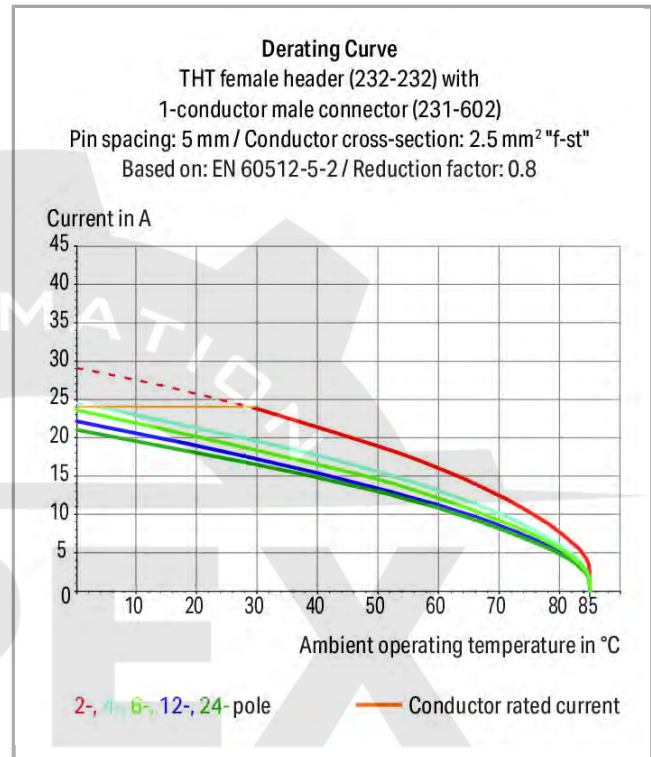
232-283

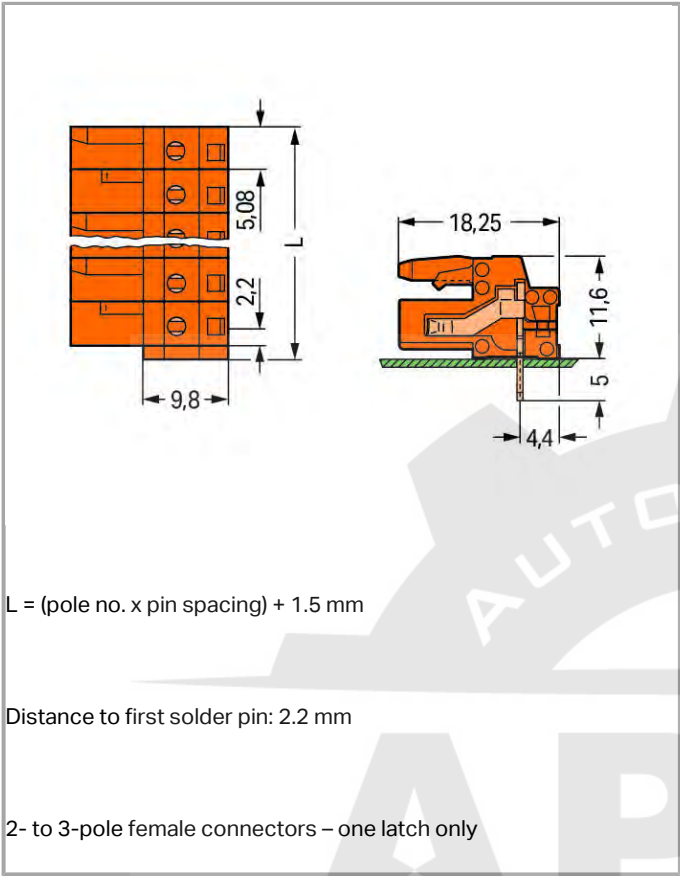


RoHS  
Compliant

BOMcheck.net

Color: ■





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 *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

|                                 |       |
|---------------------------------|-------|
| Rated voltage (III / 3)         | 320 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                   | 12 A  |

### 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 1977

|                                                 |       |
|-------------------------------------------------|-------|
| Rated voltage per UL 1977 (factory wiring only) | 600 V |
| Rated current per UL 1977 (factory wiring only) | 15 A  |

### 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                      | 23 |
| Total number of connection points | 23 |
| Total number of potentials        | 23 |
| Number of connection types        | 1  |
| Number of levels                  | 1  |

### Geometrical Data

|                                   |                                |
|-----------------------------------|--------------------------------|
| Pin spacing                       | 5.08 mm / 0.2 inch             |
| Width                             | 118.34 mm / 4.659 inch         |
| Height                            | 16.6 mm / 0.654 inch           |
| Height from the surface           | 11.6 mm / 0.457 inch           |
| Depth                             | 18.25 mm / 0.719 inch          |
| Solder pin length                 | 5 mm                           |
| Solder pin dimensions             | 0.6 x 1 mm                     |
| Drilled hole diameter (tolerance) | 1.3 <sup>(- ... +0.1)</sup> mm |

## Plug connection

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

## 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                    |
| Insulating material         | Polyamide 66 (PA 66) |
| Flammability class per UL94 | V0                   |
| Contact material            | Copper alloy         |
| Contact plating             | tin-plated           |
| Fire load                   | 0.327 MJ             |
| Weight                      | 19.91 g              |

## Environmental Requirements

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

## Commercial data

|                    |                        |
|--------------------|------------------------|
| Product Group      | 3 (Multi Conn. System) |
| Country of origin  | DE                     |
| GTIN               | 4044918579681          |
| Customs Tariff No. | 85366990990            |

## Approvals / Certificates

### Country specific Approvals

| Logo                                                                               | Approval                                     | Additional Approval Text | Certificate name |
|------------------------------------------------------------------------------------|----------------------------------------------|--------------------------|------------------|
|                                                                                    | <b>CB</b><br>DEKRA Certification B.V.        | IEC 61984                | NL-39756         |
|  | <b>KEMA/KEUR</b><br>DEKRA Certification B.V. | EN 61984                 | 2190761.01       |

#### Ship Approvals

| Logo                                                                             | Approval                                  | Additional Approval Text | Certificate name |
|----------------------------------------------------------------------------------|-------------------------------------------|--------------------------|------------------|
|  | <b>ABS</b><br>American Bureau of Shipping | -                        | 14-HG1241537-PDA |

#### UL-Approvals

| Logo                                                                             | Approval                                    | Additional Approval Text | Certificate name |
|----------------------------------------------------------------------------------|---------------------------------------------|--------------------------|------------------|
|  | <b>UR</b><br>Underwriters Laboratories Inc. | UL 1059                  | E45172 sec. 18   |

#### Compatible products

##### check

|                                                                                   |                                                                                         |         |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|---------|
|  | Item no.: 231-661<br>Test plugs for female connectors; for 5 mm and 5.08 mm pin spacing | 231-661 |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|---------|

#### Downloads

##### CAD/CAE - Smart Data

##### CAD data

|                     |     |          |
|---------------------|-----|----------|
| 3D Download 232-283 | URL | Download |
|---------------------|-----|----------|

##### PCB libraries

|                                                                                                                                              |                      |               |          |
|----------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------|----------|
| EAGLE Library for WAGO Pluggable PCB Connectors (MULTI CONNECTION SYSTEM)<br>Compatible with EAGLE PCB Design Software Version 6.x or higher | 2.1<br>Oct 6, 2014   | zip<br>6.2 MB | Download |
| TARGET Library for WAGO Pluggable PCB Connectors (Multi-Connection System)<br>Compatible with TARGET PCB Design Software Version 17.x        | 1.1.0<br>Oct 6, 2014 | zip<br>7.4 MB | Download |
| DesignSpark Library for WAGO Pluggable PCB Connectors (MULTI CONNECTION SYSTEM)<br>Compatible with DesignSpark PCB Version 4.x or higher     | 2.1<br>Oct 6, 2014   | zip<br>6.1 MB | Download |



Subject to changes.

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