

# Data sheet | Item number: 232-282/031-000

THT female header; 0.6 x 1.0 mm solder pin; angled; clamping collar; Pin spacing 5.08 mm; 22-pole



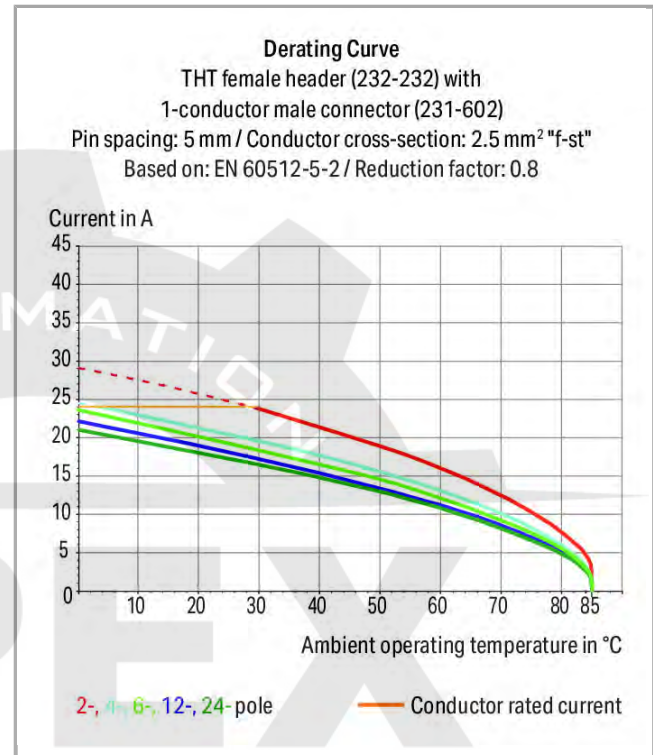
232-282/031-000

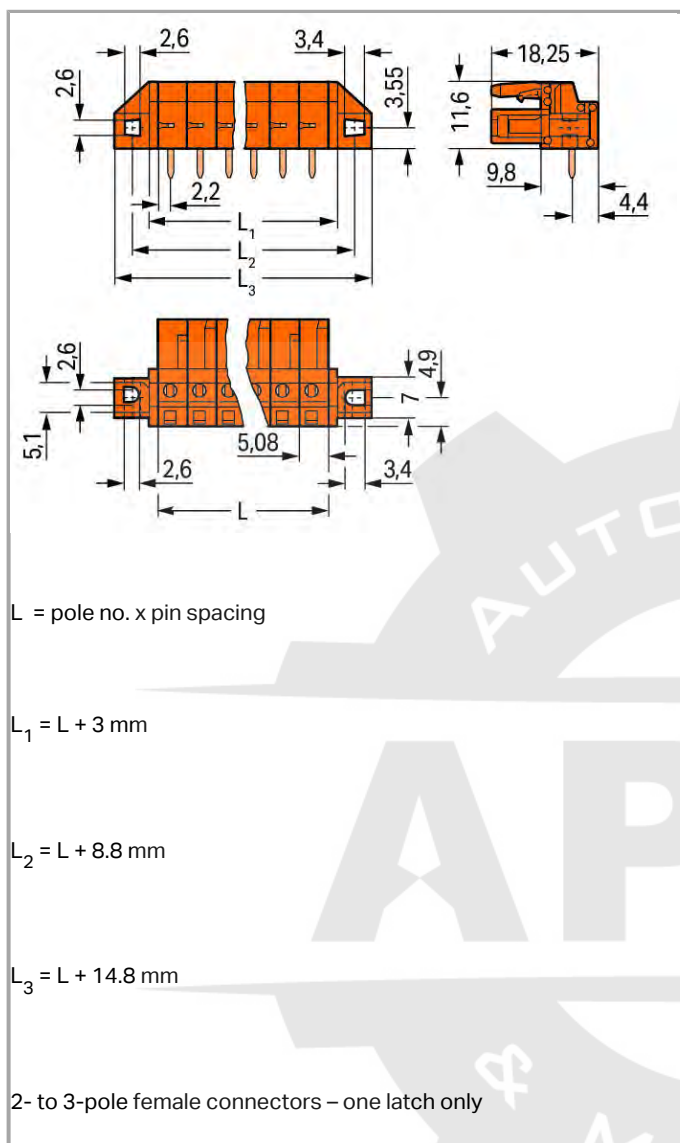


RoHS  
Compliant

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               | 22 |
| Total number of potentials | 22 |
| Number of connection types | 1  |
| Number of levels           | 1  |

#### Geometrical Data

|             |                        |
|-------------|------------------------|
| Pin spacing | 5.08 mm / 0.2 inch     |
| Width       | 126.56 mm / 4.983 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 |

## Mechanical data

|                  |                                         |
|------------------|-----------------------------------------|
| Mounting type    | Mounting flange                         |
| Type of mounting | Feed-through mounting<br>Panel mounting |

## 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                   | 0.33 MJ              |
| Weight                      | 19.62 g              |

## Environmental Requirements

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

## Commercial data

|                   |                        |
|-------------------|------------------------|
| Product Group     | 3 (Multi Conn. System) |
| Country of origin | DE                     |
| GTIN              | 4044918625692          |

Customs Tariff No.

85366990990

## Approvals / Certificates

### Ship Approvals

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

### UL-Approvals

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

## Compatible products

### assembling

|                                                                                    |                                                                                |         |
|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|---------|
|  | <b>Item no.: 231-194</b><br>Self-tapping screw; B 2.2x13, fixing hole 1.8 mm Ø | 231-194 |
|  | <b>Item no.: 231-195</b><br>Screw with nut; M2x12; for fixing element          | 231-195 |
|  | <b>Item no.: 231-295</b><br>Screw with nut                                     | 231-295 |

### check

|                                                                                    |                                                                                                |         |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------|
|  | <b>Item no.: 210-136</b><br>Test plug; 2 mm Ø; with 500 mm cable                               | 210-136 |
|  | <b>Item no.: 210-137</b><br>Test plug; 2.3 mm Ø; with 500 mm cable                             | 210-137 |
|  | <b>Item no.: 231-661</b><br>Test plugs for female connectors; for 5 mm and 5.08 mm pin spacing | 231-661 |

## Downloads

### CAD/CAE - Smart Data

#### PCB libraries

|                                                                               |             |          |
|-------------------------------------------------------------------------------|-------------|----------|
| EAGLE Library for WAGO Pluggable PCB Connectors (MULTI CONNECTION SYSTEM) 2.1 | zip         | Download |
| Compatible with EAGLE PCB Design Software Version 6.x or higher               | Oct 6, 2014 | 6.2 MB   |



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



Subject to changes.