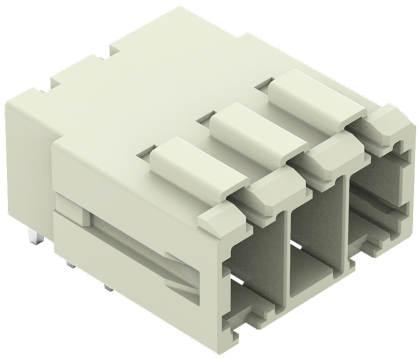
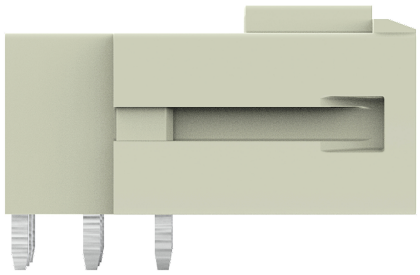
# Data Sheet | Item Number: 831-3623

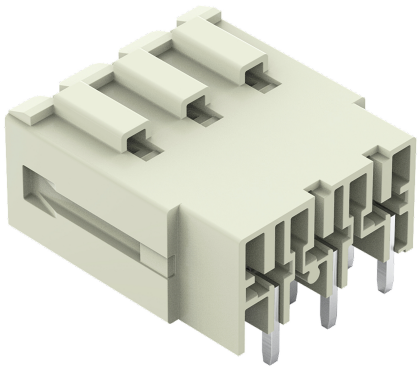
THT male header; 1.0 x 1.2 mm solder pin; angled; 100% protected against mismating; Pin spacing 7.62 mm; 3-pole; light gray

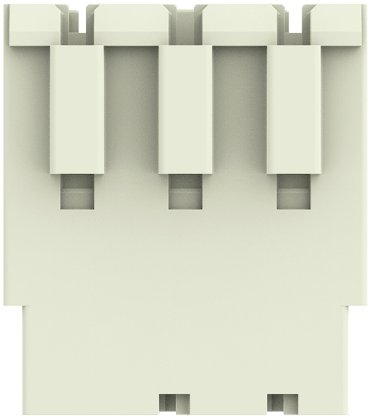
https://www.wago.com/831-3623

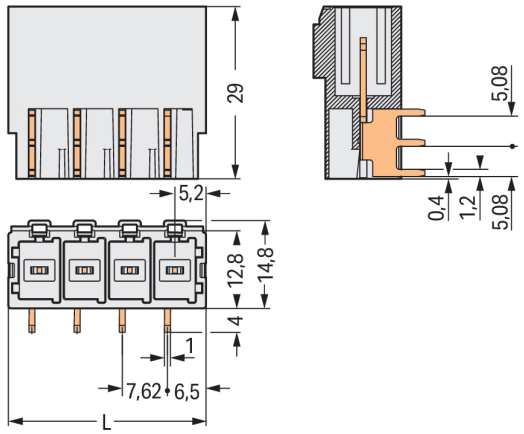


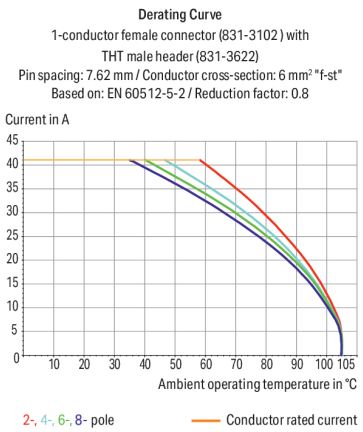


Color: light gray



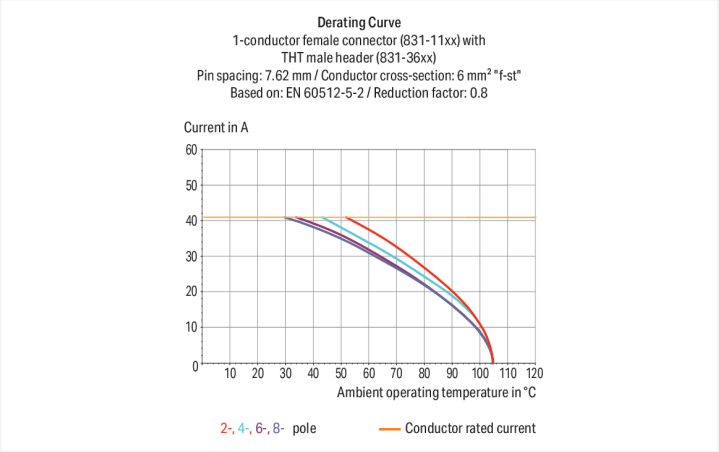





Dimensions in mm

L = (pole no. – 1) x pin spacing + 10.5 mm



Stiftleiste Serie 831 mit Rastermaß 7,62 mm

Die Stiftleiste mit der Artikelnummer 831-3623 ermöglicht eine fehlerfreie Elektroinstallation. Unsere Leiterplatten-Steckverbinder ermöglichen Ihnen die größtmögliche Flexibilität bei verschiedenen Montagearten. In Breite x Höhe x Tiefe sind die Maße (25,74 x 18,8 x 29) mm. Die Kontaktoberfläche besteht aus Zinn. Das "Multi Connection System" – MCS von WAGO ist das vielfältige Steckverbindersystem mit überzeugenden Lösungen für Ihre Anwendungen. Die Verlötung des Leiterplatten-Steckverbinders erfolgt mittels THT.

## 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<br>Protection against PCB mounting errors<br>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 | | |
|---|---|---|---|
| Overvoltage category | III | III | II |
| Pollution degree | 3 | 2 | 2 |
| Nominal voltage | 500 V | 630 V | 1000 V |
| Rated surge voltage | 6 kV | 6 kV | 6 kV |
| Rated current | 41 A | 41 A | 41 A |

| Approvals per | UL 1059 | | |
|---|---|---|---|
| Use group | B | C | D |
| Rated voltage | - | 300 V | 600 V |
| Rated current | - | 42 A | 5 A |

| Approvals per | CSA | | |
|---|---|---|---|
| Use group | B | C | D |
| Rated voltage | - | 300 V | 600 V |
| Rated current | - | 41 A | 5 A |

## Connection data

| | |
|---|---|
| Total number of potentials | 3 |
| Number of connection types | 1 |
| Number of levels | 1 |

### Connection 1

| | |
|---|---|
| Pole number | 3 |

## Physical data

| | |
|---|---|
| Pin spacing | 7.62 mm / 0.3 inches |
| Width | 25.74 mm / 1.013 inches |
| Height | 18.8 mm / 0.74 inches |
| Height from the surface | 14.8 mm / 0.583 inches |
| Depth | 29 mm / 1.142 inches |
| Solder pin length | 4 mm |
| Solder pin dimensions | 1 x 1.2 mm |
| Drilled hole diameter with tolerance | 1.7 $^{(+0.1)}$ 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 | Yes |
| Mating direction to the PCB | 0 ° |

## PCB contact

| | |
|---|---|
| PCB contact | THT |
| Solder pin arrangement | over the entire male connector (in-line) |
| Number of solder pins per potential | 3 |

## Material data

| | |
|---|---|
| Note (material data) | Information on material specifications can be found here |
| Color | light gray |
| Material group | I |
| Insulation material (main housing) | Polyamide (PA66) |
| Flammability class per UL94 | V0 |
| Contact material | Electrolytic copper ($E_{Cu}$) |
| Contact Plating | Tin |
| Fire load | 0.144 MJ |
| Weight | 8.2 g |

## Environmental requirements

| | |
|---|---|
| Limit temperature range | -60 … +105 °C |
| Processing temperature | -35 … +60 °C |

### Environmental Testing (Environmental Conditions)

| | |
|---|---|
| Test specification Railway applications – Rolling stock – Electronic equipment | DIN EN 50155 (VDE 0115-200):2022-06 |
| Test procedure Railway applications – Rolling stock equipment – Shock and vibration tests | DIN EN 61373 (VDE 0115-0106):2011-04 |
| Spectrum/Installation location | Service life test, Category 1, Class A/B |
| Function test with noise-like vibration | Test passed according to Section 8 of the standard |
| Frequency | $f_1$ = 5 Hz to $f_2$ = 150 Hz |
| Acceleration | 0.101g (highest test level used for all axes) |
| Test duration per axis | 10 min. |
| Test directions | X, Y and Z axes |
| Monitoring for contact faults/interruptions | Passed |
| Voltage drop measurement before and after each axis | Passed |
| Simulated service life test through increased levels of noise-like vibration | Test passed according to Section 9 of the standard |
| Frequency | $f_1$ = 5 Hz to $f_2$ = 150 Hz |
| Acceleration | 0.572g (highest test level used for all axes) |
| Test duration per axis | 5 h |
| Test directions | X, Y and Z axes |
| Extended test scope: Monitoring for contact faults/interruptions | Passed |
| Extended test scope: Voltage drop measurement before and after each axis | Passed |
| Shock test | Test passed according to Section 10 of the standard |
| Shock form | Half sine |
| Acceleration | 5g (highest test level used for all axes) |
| Shock duration | 30 ms |
| Number of shocks per axis | 3 pos. und 3 neg. |
| Test directions | X, Y and Z axes |
| Extended test scope: Monitoring for contact faults/interruptions | Passed |
| Extended test scope: Voltage drop measurement before and after each axis | Passed |
| Vibration and shock stress for rolling stock equipment | Passed |

## Commercial data

| | |
|---|---|
| Product Group | 3 (Multi Conn. System) |
| PU (SPU) | 48 pcs |
| Packaging type | Box |
| Country of origin | PL |
| GTIN | 4045454002183 |
| 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 8.0 | 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-61360/M1 |
| CSA<br>DEKRA Certification B.V. | C22.2 | 1466354 |
| KEMA/KEUR<br>DEKRA Certification B.V. | EN 61984 | 71-116057 |
| UR<br>Underwriters Laboratories Inc. | UL 1059 | E45172 |

### Declarations of conformity and manufacturer's declarations

| Approval | Standard | Certificate Name |
|---|---|---|
| Railway<br>WAGO GmbH & Co. KG | - | Railway Ready |

### Approvals for marine applications

| Approval | Standard | Certificate Name |
|---|---|---|
| LR<br>Lloyds Register | IEC 61984 | 96/20035 (E5) |

## Downloads

### Environmental Product Compliance

**Compliance Search**

Environmental Product Compliance 831-3623

### Documentation

**Additional Information**

| | | |
|---|---|---|
| Technical Section | 03.04.2019 | pdf 2027.26 KB |

### CAD/CAE-Data

**CAD data**

2D/3D Models 831-3623

**CAE data**

EPLAN Data Portal 831-3623

ZUKEN Portal 831-3623

**PCB Design**

Symbol and Footprint via SamacSys 831-3623

Symbol and Footprint via Ultra Librarian 831-3623

## 1 Compatible Products

### 1.1 System counterpart

#### 1.1.1 Female connector/socket

Item No.: 831-1103
1-conductor female connector; lever; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 3-pole; 100% protected against mismating; 10,00 mm²; light gray

Item No.: 831-1103/000-004
1-conductor female connector; lever; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 3-pole; 100% protected against mismating; black

Item No.: 831-1103/302-004
1-conductor female connector; lever; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 3-pole; 100% protected against mismating; Centered locking levers; 10,00 mm²; black

Item No.: 831-1103/320-000
1-conductor female connector; lever; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 3-pole; 100% protected against mismating; Centered locking levers; 10,00 mm²; light gray

Item No.: 831-1103/322-000
1-conductor female connector; lever; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 3-pole; 100% protected against mismating; Centered locking levers; 10,00 mm²; light gray

Item No.: 831-1103/037-000
1-conductor female connector; lever; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 3-pole; 100% protected against mismating; Lateral locking levers; 10,00 mm²; light gray

Item No.: 831-1103/038-000
1-conductor female connector; lever; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 3-pole; 100% protected against mismating; Lateral locking levers; 10,00 mm²; light gray

Item No.: 831-3103
1-conductor female connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 3-pole; 100% protected against mismating; 10,00 mm²; light gray

Item No.: 831-3103/000-9037
1-conductor female connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 3-pole; 100% protected against mismating; direct marking; 10,00 mm²; light gray

Item No.: 831-3103/133-000
1-conductor female connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 3-pole; 100% protected against mismating; Gripping plate; 10,00 mm²; light gray

Item No.: 831-3103/037-000
1-conductor female connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 3-pole; 100% protected against mismating; Lateral locking levers; 10,00 mm²; light gray

Item No.: 831-3103/037-9037
1-conductor female connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 3-pole; 100% protected against mismating; Lateral locking levers; direct marking; 10,00 mm²; light gray


Continued on next page

### 1.1.1 Female connector/socket

Item No.: 831-3523
THT female header; angled; Pin spacing 7.62 mm; 3-pole; 100% protected against mismating; 1.0 x 1.2 mm solder pin; light gray

Item No.: 831-3503
THT female header; straight; Pin spacing 7.62 mm; 3-pole; 100% protected against mismating; 1.0 x 1.2 mm solder pin; light gray

## 1.2 Optional Accessories

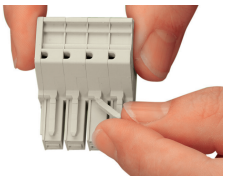
### 1.2.1 Coding

#### 1.2.1.1 Coding

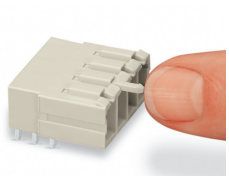
Item No.: 831-500
Coding pin carrier with six coding pins; orange

## Installation Notes

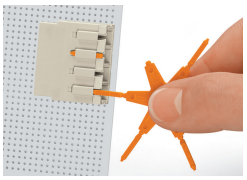
### Coding



Break or cut off coding pin from female connector.



Insert coding pin into male header (break first) until it engages.



Coding a THT male header by inserting a coding pin.