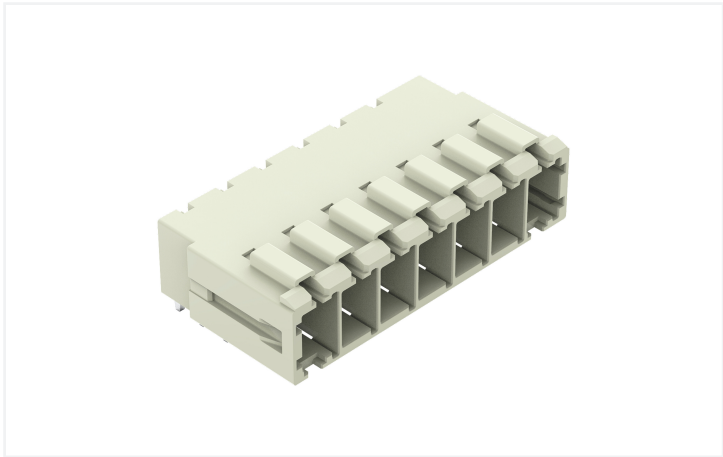


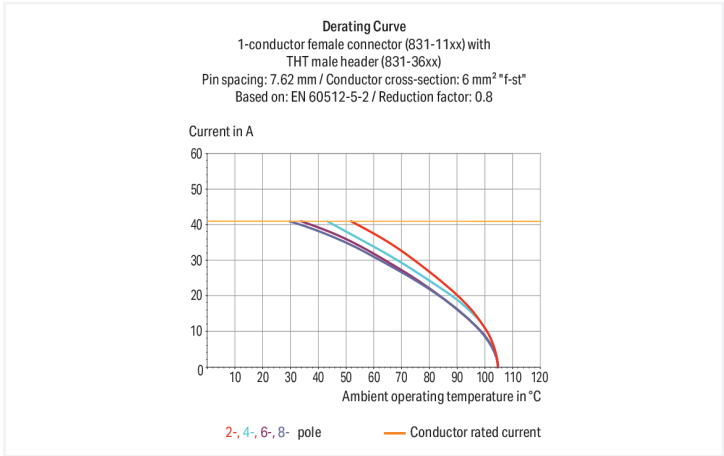
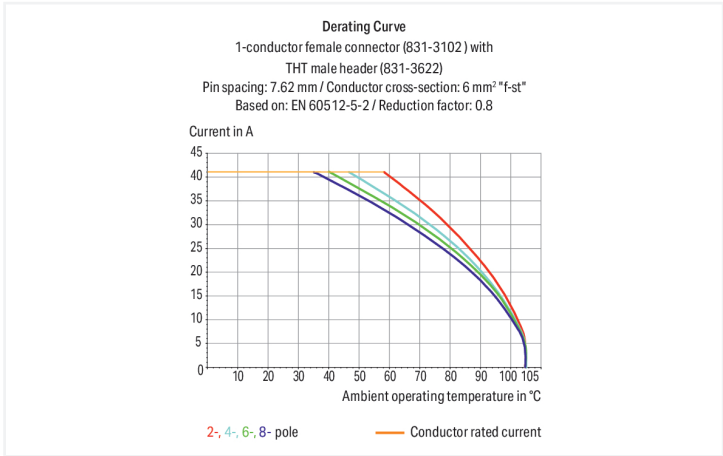
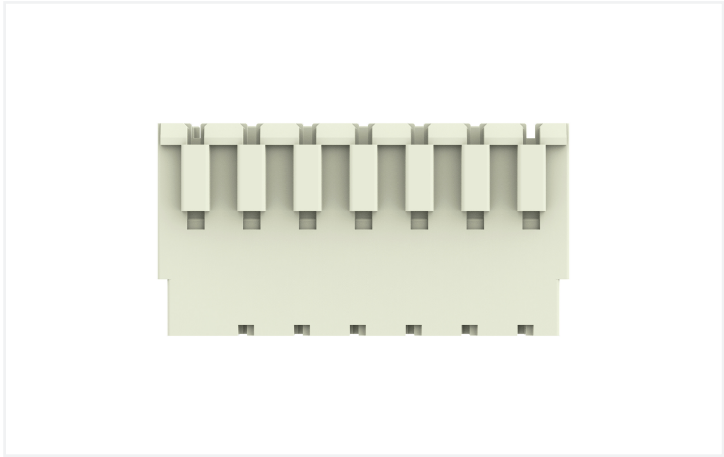
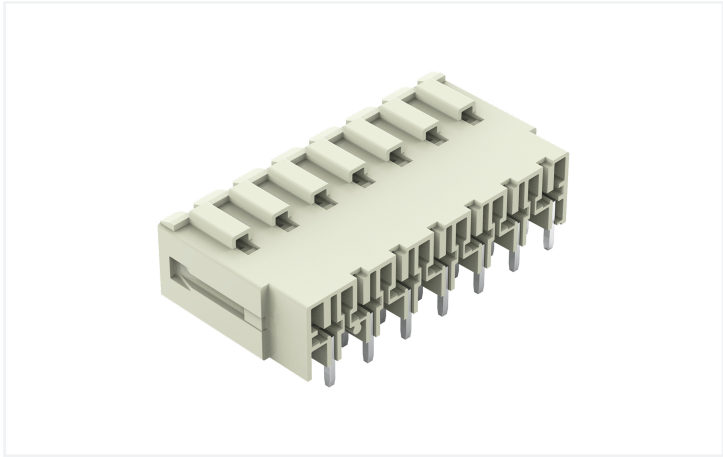
Data Sheet | Item Number: 831-3627

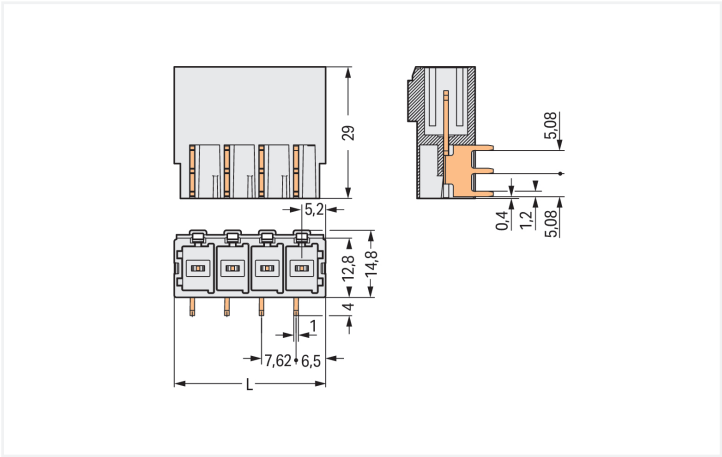
THT male header; 1.0 x 1.2 mm solder pin; angled; 100% protected against mis-mating; Pin spacing 7.62 mm; 7-pole; light gray

<https://www.wago.com/831-3627>



Color: ■ light gray





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

Male connector, 831 Series, with 7.62 mm pin spacing

This male connector (item number 831-3627) simplifies electrical installations. Dimensions: (56.22 x 18.8 x 29) mm (width x height x depth).

The contact surface is coated with tin. THT is used to assemble the pcb connector.

| 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 <a href="https://configurator.wago.com/">https://configurator.wago.com/</a> .                                                                                                                                                                                            |

| 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 impulse withstand 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 | 7 |
| Number of connection types | 1 |
| Number of levels           | 1 |
| Connection 1               |   |
| Pole number                | 7 |



| Physical data                        |  |                          |
|--------------------------------------|--|--------------------------|
| Pin spacing                          |  | 7.62 mm / 0.3 inches     |
| Width                                |  | 56.22 mm / 2.213 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 <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               |  | 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)               |  | <a href="#">Information on material specifications can be found here</a> |
| Color                              |  | light gray                                                               |
| Material group                     |  | I                                                                        |
| Insulation material (main housing) |  | Polyamide (PA66)                                                         |
| Flammability class per UL94        |  | V0                                                                       |
| Contact material                   |  | Electrolytic copper (E <sub>Cu</sub> )                                   |
| Contact Plating                    |  | Tin                                                                      |
| Fire load                          |  | 0.3 MJ                                                                   |
| Weight                             |  | 17.9 g                                                                   |

| Environmental requirements |                 |                                                                                                     |                                                    |
|----------------------------|-----------------|-----------------------------------------------------------------------------------------------------|----------------------------------------------------|
| Limit temperature range    | -60 ... +105 °C | <b>Environmental Testing</b>                                                                        |                                                    |
| Processing temperature     | -35 ... +60 °C  |                                                                                                     |                                                    |
|                            |                 | Test specification:<br>Railway applications –<br>Rolling stock –<br>Electronic equipment            | DIN EN 50155 (VDE 0115-200):2022-06                |
|                            |                 | Test procedure:<br>Railway applications –<br>Rolling stock equipment –<br>Vibration and shock tests | DIN EN 61373 (VDE 0115-0106):2011-04               |
|                            |                 | Spectrum/Mounting location                                                                          | Service life test, Category 1, Class A/B           |
|                            |                 | Functional test with noise-like oscillations                                                        | Test passed according to Section 8 of the standard |
|                            |                 | Frequency                                                                                           | f <sub>1</sub> = 5 Hz to f <sub>2</sub> = 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                                    |



| Environmental Testing                                                           |                                                     |
|---------------------------------------------------------------------------------|-----------------------------------------------------|
| Monitoring of contact faults and interruptions                                  | Passed                                              |
| Voltage drop measurement before and after each axis                             | Passed                                              |
| Simulated service life test through increased levels of noise-like oscillations | Test passed according to Section 9 of the standard  |
| Frequency                                                                       | f <sub>1</sub> = 5 Hz to f <sub>2</sub> = 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 testing: Monitoring of contact faults and interruptions                | Passed                                              |
| Extended testing: Voltage drop measurement before and after each axis           | Passed                                              |
| Shock test                                                                      | Test passed according to Section 10 of the standard |
| Shock pulse 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 testing: Monitoring of contact faults and interruptions                | Passed                                              |
| Extended testing: 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)              | 12 pcs                 |
| Packaging type        | Box                    |
| Country of origin     | PL                     |
| GTIN                  | 4045454002220          |
| 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-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   | UL-US-2426356-0  |

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 831-3627  |

Documentation

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

CAD/CAE-Data

| CAD data                                                                                                  |
|-----------------------------------------------------------------------------------------------------------|
| 2D/3D Models 831-3627  |

| CAE data                                                                                                         |
|------------------------------------------------------------------------------------------------------------------|
| EPLAN Data Portal 831-3627  |
| ZUKEN Portal 831-3627       |



|                                                         |                                                                                   |
|---------------------------------------------------------|-----------------------------------------------------------------------------------|
| PCB Design                                              |                                                                                   |
| Symbol and Footprint<br>via SamacSys<br>831-3627        |  |
| Symbol and Footprint<br>via Ultra Librarian<br>831-3627 |  |

1 Compatible Products

1.1 System counterpart

1.1.1 Female connector/socket

|                                                                                                                                                                                                                       |                                                                                                                                                                                                                                 |                                                                                                                                                                                                                        |                                                                                                                                                                                                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                       |                                                                                                                                                                                                                                 |                                                                                                                                                                                                                        |                                                                                                                                                                                                                       |
| <b>Item No.: 831-1107</b><br>1-conductor female connector; lever; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 7-pole; 100% protected against mismatching; 10,00 mm²; light gray                                 | <b>Item No.: 831-1107/000-004</b><br>1-conductor female connector; lever; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 7-pole; 100% protected against mismatching; black                                                   | <b>Item No.: 831-1107/322-000</b><br>1-conductor female connector; lever; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 7-pole; 100% protected against mismatching; Centered locking levers; 10,00 mm²; light gray | <b>Item No.: 831-1107/037-000</b><br>1-conductor female connector; lever; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 7-pole; 100% protected against mismatching; Lateral locking levers; 10,00 mm²; light gray |
|                                                                                                                                                                                                                       |                                                                                                                                                                                                                                 |                                                                                                                                                                                                                        |                                                                                                                                                                                                                       |
| <b>Item No.: 831-1107/038-000</b><br>1-conductor female connector; lever; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 7-pole; 100% protected against mismatching; Lateral locking levers; 10,00 mm²; light gray | <b>Item No.: 831-3107</b><br>1-conductor female connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 7-pole; 100% protected against mismatching; 10,00 mm²; light gray                                                  | <b>Item No.: 831-3107/000-9037</b><br>1-conductor female connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 7-pole; 100% protected against mismatching; direct marking; 10,00 mm²; light gray                | <b>Item No.: 831-3107/136-000</b><br>1-conductor female connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 7-pole; 100% protected against mismatching; Gripping plate; 10,00 mm²; light gray                |
|                                                                                                                                                                                                                       |                                                                                                                                                                                                                                 |                                                                                                                                                                                                                        |                                                                                                                                                                                                                       |
| <b>Item No.: 831-3107/037-000</b><br>1-conductor female connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 7-pole; 100% protected against mismatching; Lateral locking levers; 10,00 mm²; light gray        | <b>Item No.: 831-3107/037-9037</b><br>1-conductor female connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 7-pole; 100% protected against mismatching; Lateral locking levers; direct marking; 10,00 mm²; light gray | <b>Item No.: 831-1107/320-000</b><br>1-conductor female plug; 100% protected against mismatching; lever; Locking lever; 10 mm²; Pin spacing 7.62 mm; 7-pole                                                            | <b>Item No.: 831-3527</b><br>THT female header; angled; Pin spacing 7.62 mm; 7-pole; 100% protected against mismatching; 1.0 x 1.2 mm solder pin; light gray                                                          |
|                                                                                                                                                                                                                       |                                                                                                                                                                                                                                 |                                                                                                                                                                                                                        |                                                                                                                                                                                                                       |
| <b>Item No.: 831-3507</b><br>THT female header; straight; Pin spacing 7.62 mm; 7-pole; 100% protected against mismatching; 1.0 x 1.2 mm solder pin; light gray                                                        |                                                                                                                                                                                                                                 |                                                                                                                                                                                                                        |                                                                                                                                                                                                                       |

1.2 Optional Accessories

1.2.1 Coding

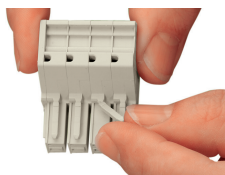
1.2.1.1 Coding



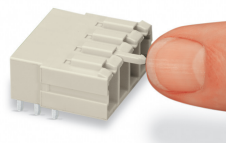
|                                                                             |
|-----------------------------------------------------------------------------|
| <b>Item No.: 831-500</b><br>Coding pin carrier with six coding pins; orange |
|-----------------------------------------------------------------------------|

## Installation Notes

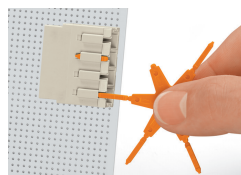
### Coding



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.