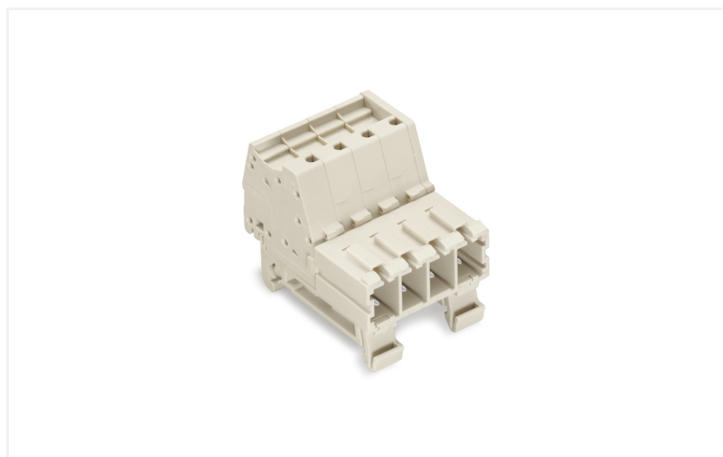


## Data Sheet | Item Number: 831-3208/007-000

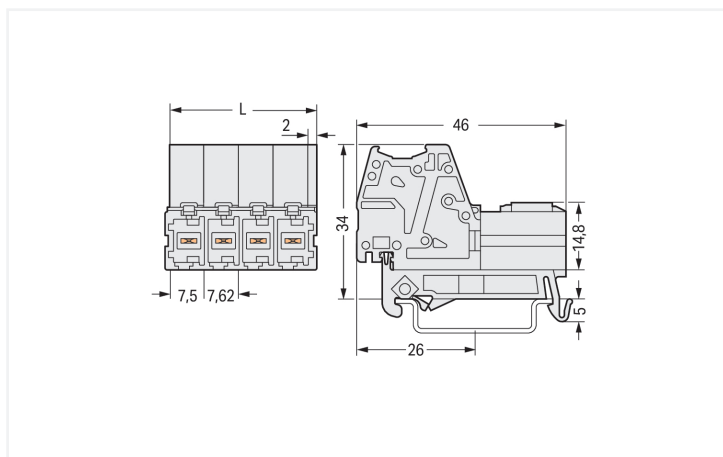
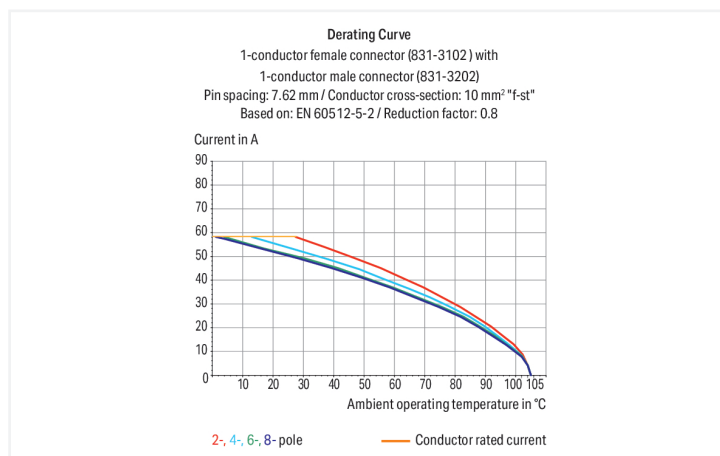
1-conductor male connector; Push-in CAGE CLAMP®; 10 mm<sup>2</sup>; Pin spacing 7.62 mm; 8-pole; 100% protected against mismating; DIN-35 rail mounting; 10,00 mm<sup>2</sup>; light gray

<https://www.wago.com/831-3208/007-000>



Color: ■ light gray

Similar to illustration



Dimensions in mm

L = (pole no. - 1) x pin spacing + 9.5 mm

Male connector, 831 Series, Push-in CAGE CLAMP®

This male connector (item number 831-3208/007-000) simplifies electrical installations. Ensure that the strip lengths are between 13 and 15 mm when connecting conductors to this male connector. Featuring one conductor terminal along with Push-in CAGE CLAMP®, this product delivers reliable performance. Push-in CAGE CLAMP® connection technology is ideal for connecting all conductor types. Solid and fine-stranded conductors with ferrules can be inserted without the need for tools—all thanks to its pluggable design. Dimensions: (62.84 x 39 x 46) mm (width x height x depth). This male connector is suitable for conductor cross sections ranging from 0.5 mm<sup>2</sup> to 10 mm<sup>2</sup>.

Tin is used for coating the contact surfaces.

| Notes              |                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Safety Information | The MCS – <i>MULTI CONNECTION SYSTEM</i> 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>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                 |  | 800 V          | 1000 V | 1000 V |
| Rated impulse withstand voltage |  | 8 kV           | 8 kV   | 8 kV   |
| Rated current                   |  | 41 A           | 41 A   | 41 A   |
| Approvals per                   |  | UL 1059        |        |        |
| Use group                       |  | B              | C      | D      |
| Rated voltage                   |  | -              | 600 V  | -      |
| Rated current                   |  | -              | 42 A   | -      |

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

| Connection Data            |   |
|----------------------------|---|
| Clamping units             | 8 |
| Total number of potentials | 8 |
| Number of connection types | 1 |
| Number of levels           | 1 |

| Connection 1                                      |                                       |
|---------------------------------------------------|---------------------------------------|
| Connection technology                             | Push-in CAGE CLAMP®                   |
| Actuation type                                    | Operating tool                        |
| Actuation direction 1                             | Operation parallel to conductor entry |
| Solid conductor                                   | 0.5 ... 10 mm² / 20 ... 8 AWG         |
| Fine-stranded conductor                           | 0.5 ... 10 mm² / 20 ... 8 AWG         |
| Fine-stranded conductor; with insulated ferrule   | 0.5 ... 6 mm²                         |
| Fine-stranded conductor; with uninsulated ferrule | 0.5 ... 6 mm²                         |
| Strip length                                      | 13 ... 15 mm / 0.51 ... 0.59 inches   |
| Pole number                                       | 8                                     |
| Conductor entry direction to mating direction     | 0°                                    |

| Physical data                      |                         |
|------------------------------------|-------------------------|
| Pin spacing                        | 7.62 mm / 0.3 inches    |
| Width                              | 62.84 mm / 2.474 inches |
| Height                             | 39 mm                   |
| Height from upper-edge of DIN-rail | 34 mm / 1.339 inches    |
| Depth                              | 46 mm / 1.811 inches    |



| Mechanical data          |             |
|--------------------------|-------------|
| Variable coding          | Yes         |
| Mounting type            | DIN-35 rail |
| Anti-rotation protection | Yes         |

| Plug-in connection                 |                     |
|------------------------------------|---------------------|
| Contact type (pluggable connector) | Male connector/plug |
| Connector (connection type)        | for conductor       |
| Mismating protection               | Yes                 |

| 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                                                                       |
| Clamping spring material           | Chrome-nickel spring steel (CrNi)                                        |
| Contact material                   | Electrolytic copper (E <sub>Cu</sub> )                                   |
| Contact Plating                    | Tin                                                                      |
| Fire load                          | 0.934 MJ                                                                 |
| Weight                             | 54.9 g                                                                   |

| Environmental requirements                                                                          |                                                     |
|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------|
| Limit temperature range                                                                             | -60 ... +105 °C                                     |
| Processing temperature                                                                              | -35 ... +60 °C                                      |
| Environmental Testing                                                                               |                                                     |
| 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                                     |
| 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)           |



| Environmental Testing                                                 |                   |
|-----------------------------------------------------------------------|-------------------|
| 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                  | 4045454333829          |
| Customs tariff number | 85366930000            |

| Product Classification |                      |
|------------------------|----------------------|
| UNSPSC                 | 39121409             |
| eCl@ss 10.0            | 27-14-11-06          |
| eCl@ss 9.0             | 27-14-11-06          |
| ETIM 9.0               | EC001284             |
| ETIM 10.0              | EC001284             |
| ECCN                   | NO US CLASSIFICATION |

| Environmental Product Compliance |                         |
|----------------------------------|-------------------------|
| RoHS Compliance Status           | Compliant, No Exemption |

Approvals / Certificates

General approvals

Declarations of conformity and manufacturer's declarations

|     |           |                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------------|
| Approval                                                                                                                                                                                                                                                                                                                                       | Standard  | Certificate Name |
| CB<br>DEKRA Certification B.V.                                                                                                                                                                                                                                                                                                                 | IEC 61984 | NL-124478        |
| CSA<br>DEKRA Certification B.V.                                                                                                                                                                                                                                                                                                                | C22.2     | 1466354          |
| DEKRA<br>DEKRA Certification B.V.                                                                                                                                                                                                                                                                                                              | EN 61984  | 71-173515        |
| KEMA/KEUR<br>DEKRA Certification B.V.                                                                                                                                                                                                                                                                                                          | EN 61984  | 71-129589 REV.1  |
| UR<br>Underwriters Laboratories Inc.                                                                                                                                                                                                                                                                                                           | UL 1059   | UL-US-2426356-0  |

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



Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance  
831-3208/007-000

↓

Documentation

Additional Information

Technical Section

03.04.2019

pdf  
2027.26 KB

↓

CAD/CAE-Data

CAD data

2D/3D Models  
831-3208/007-000

↓

CAE data

EPLAN Data Portal  
831-3208/007-000

↓

ZUKEN Portal  
831-3208/007-000

↓

1 Compatible Products

1.1 System counterpart

1.1.1 Female connector/socket



**Item No.: 831-3108**  
1-conductor female connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 8-pole; 100% protected against mismatching; 10,00 mm²; 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

## 1.2.2 Marking

## 1.2.2.1 Marker

**Item No.: 2009-145/000-006**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue

**Item No.: 2009-145/000-007**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray

**Item No.: 2009-145/000-023**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green

**Item No.: 2009-145/000-012**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange

**Item No.: 2009-145/000-005**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; red

**Item No.: 2009-145/000-024**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet

**Item No.: 2009-145**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

**Item No.: 2009-145/000-002**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow

**Item No.: 248-501/000-006**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; blue

**Item No.: 248-501/000-007**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; gray

**Item No.: 248-501/000-023**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; green

**Item No.: 248-501/000-017**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; light green

**Item No.: 248-501/000-012**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; orange

**Item No.: 248-501/000-005**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; red

**Item No.: 248-501**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white

**Item No.: 248-501/000-002**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; yellow

**Item No.: 793-5501/000-006**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; blue

**Item No.: 793-5501/000-007**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; gray

**Item No.: 793-5501/000-023**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; green

**Item No.: 793-5501/000-017**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; light green

**Item No.: 793-5501/000-012**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; orange

**Item No.: 793-5501/000-005**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; red

**Item No.: 793-5501/000-024**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; violet

**Item No.: 793-5501**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; white

**Item No.: 793-5501/000-002**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; yellow

**Item No.: 793-501/000-006**

WMB marking card; as card; not stretchable; plain; snap-on type; blue

**Item No.: 793-501/000-007**

WMB marking card; as card; not stretchable; plain; snap-on type; gray

**Item No.: 793-501/000-023**

WMB marking card; as card; not stretchable; plain; snap-on type; green

**Item No.: 793-501/000-017**

WMB marking card; as card; not stretchable; plain; snap-on type; light green

**Item No.: 793-501/000-012**

WMB marking card; as card; not stretchable; plain; snap-on type; orange

**Item No.: 793-501/000-005**

WMB marking card; as card; not stretchable; plain; snap-on type; red

**Item No.: 793-501/000-024**

WMB marking card; as card; not stretchable; plain; snap-on type; violet

**Item No.: 793-501**

WMB marking card; as card; not stretchable; plain; snap-on type; white

**Item No.: 793-501/000-002**

WMB marking card; as card; not stretchable; plain; snap-on type; yellow

**Item No.: 2009-115/000-006**

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue

**Item No.: 2009-115/000-007**

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray

**Item No.: 2009-115/000-023**

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green

**Item No.: 2009-115/000-017**

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; light green

**Item No.: 2009-115/000-012**

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange

**Item No.: 2009-115/000-024**

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet

**Item No.: 2009-115**

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

**Item No.: 2009-115/000-002**

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow

1.2.2.2 Marking strip



**Item No.: 2009-110/762-852**  
Marking strips; for Smart Printer; cut to a defined length; MARKED; not stretchable; snap-on type; white



**Item No.: 2009-110/762-853**  
Marking strips; for Smart Printer; cut to a defined length; MARKED; not stretchable; snap-on type; white



**Item No.: 2009-110/762-854**  
Marking strips; for Smart Printer; cut to a defined length; MARKED; not stretchable; snap-on type; white



**Item No.: 2009-110/762-855**  
Marking strips; for Smart Printer; cut to a defined length; MARKED; not stretchable; snap-on type; white



**Item No.: 2009-110/762-856**  
Marking strips; for Smart Printer; cut to a defined length; MARKED; not stretchable; snap-on type; white



**Item No.: 2009-110/762-857**  
Marking strips; for Smart Printer; cut to a defined length; MARKED; not stretchable; snap-on type; white



**Item No.: 2009-110/762-858**  
Marking strips; for Smart Printer; cut to a defined length; MARKED; not stretchable; snap-on type; white



**Item No.: 2009-110/762-859**  
Marking strips; for Smart Printer; cut to a defined length; MARKED; not stretchable; snap-on type; white



**Item No.: 2009-110**  
Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white

1.2.3 Test and measurement

1.2.3.1 Testing accessories



**Item No.: 210-136**  
Test plug; 2 mm Ø; with 500 mm cable; red

1.2.4 Tool

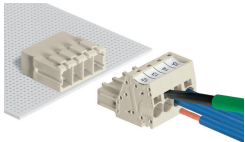
1.2.4.1 Operating tool



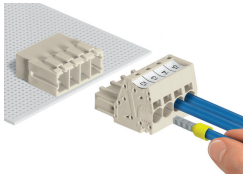
**Item No.: 210-721**  
Operating tool; Blade: 5.5 x 0.8 mm; with a partially insulated shaft; multicoloured

Installation Notes

Conductor termination

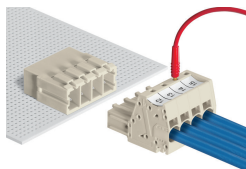


Inserting fine-stranded conductors via (5.5 x 0.8) mm screwdriver.



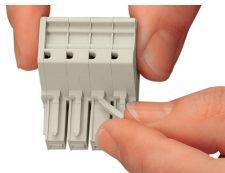
Solid and ferruled conductors are terminated by simply pushing them into unit.

## Testing

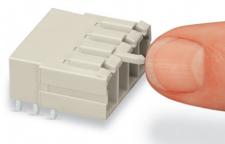


Testing with 2 mm Ø test plug.

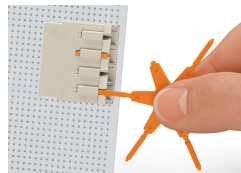
## Coding



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.

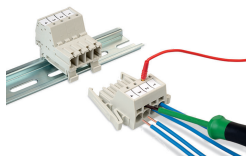
## Marking



Direct marking of female and male connectors



MCS MAXI male and female connectors can also be marked via Mini-WSB or WMB markers.



Male connector mounted on a DIN-35 rail via integrated mounting adapter