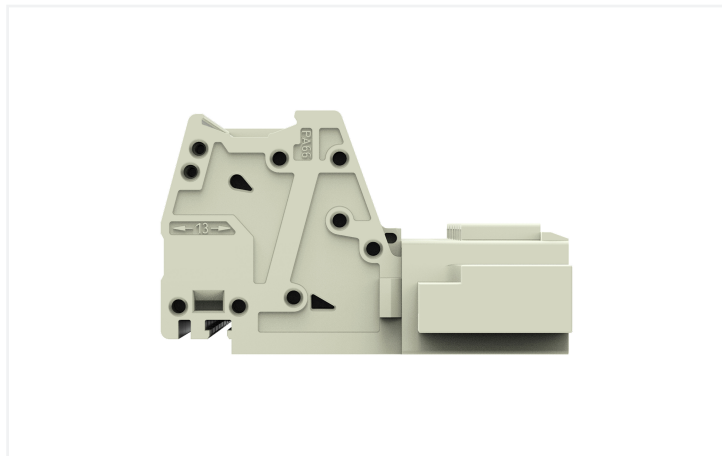


**Data Sheet | Item Number: 831-3209/109-000**

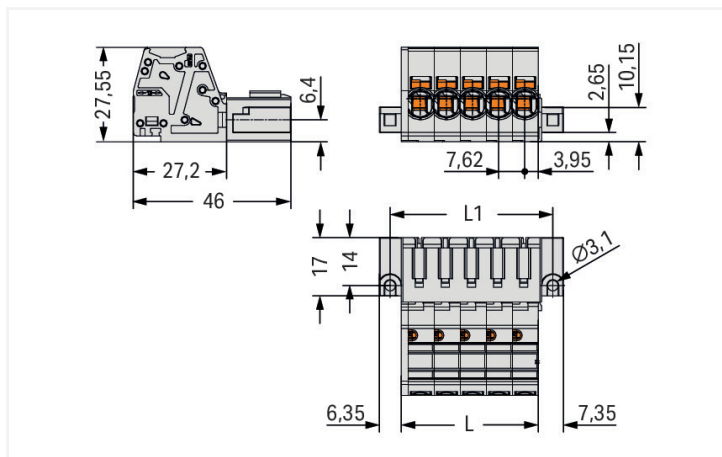
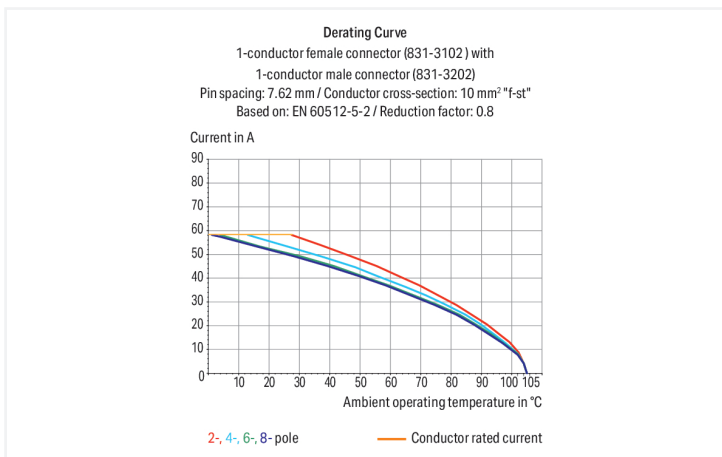
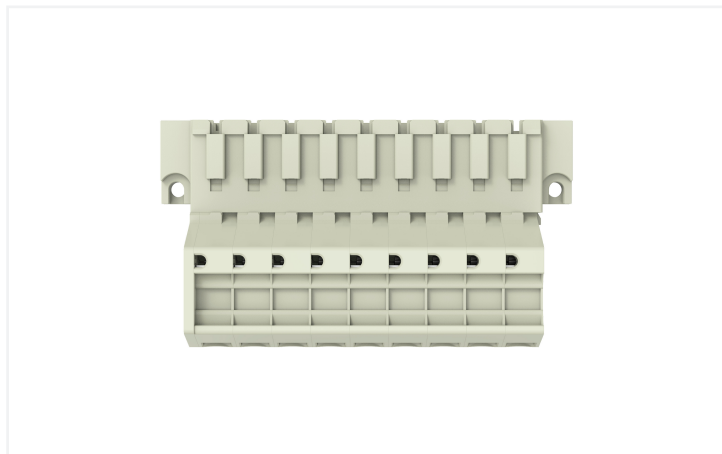
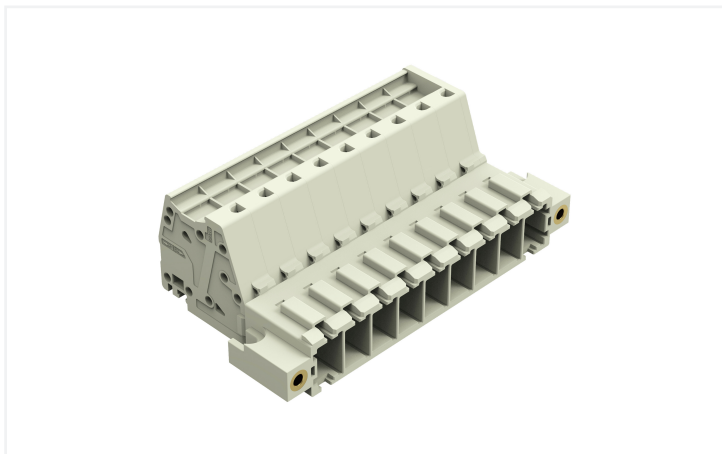
1-conductor male connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 9-pole; 100% protected against mismatching; Threaded flange; 10,00 mm²; light gray



<https://www.wago.com/831-3209/109-000>



Color: ■ light gray



Dimensions in mm  
 $L = \text{pole no.} \times \text{pin spacing} + 1.9 \text{ mm}$   
 $L1 = L + 7.5 \text{ mm}$

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

Our male connector (item number 831-3209/109-000) is designed for seamless electrical installations. Conductors should only be connected to this male connector if their strip length is between 13 and 15 mm. This product incorporates one conductor terminal and utilizes Push-in CAGE CLAMP®. Push-in CAGE CLAMP® connection technology is ideal for connecting all conductor types. Solid and fine-stranded conductors with ferrules can be inserted without needing to use any tools—all thanks to its pluggable design. The item's dimensions are (84.2 x 27.6 x 46) mm (width x height x depth). This male connector is suitable for conductor cross sections ranging from 0.5 mm² to 10 mm².

The contact surface is coated with tin.

**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  
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	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	9
Total number of potentials	9
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	9
Conductor entry direction to mating direction	0°

### Physical data

Pin spacing	7.62 mm / 0.3 inches
Width	84.2 mm / 3.314 inches
Height	27.6 mm / 1.087 inches
Depth	46 mm / 1.811 inches

### Mechanical data

Variable coding	Yes
Anti-rotation protection	Yes

### Plug-in connection

Contact type (pluggable connector)	Male connector/plug
Connector (connection type)	for conductor
Mismating protection	Yes
Locking of plug-in connection	Threaded flange

### 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	1.095 MJ
Weight	61.2 g

### Environmental requirements

Limit temperature range	-60 ... +105 °C
Processing temperature	-35 ... +60 °C

### Commercial data

PU (SPU)	12 pcs
Packaging type	Box
Country of origin	PL
GTIN	4066966091595
Customs tariff number	85366930000

### Product Classification

UNSPSC	39121409
ETIM 9.0	EC001284
ETIM 10.0	EC001284
ECCN	NO US CLASSIFICATION

## Environmental Product Compliance

CAS-No.	7439-92-1
REACH Candidate List Substance	Lead
RoHS Compliance Status	Compliant, No Exemption
SCIP notification number (Austria)	3597ee98-1e62-4b5c-a3e7-f50c19cf53c7
SCIP notification number (Belgium)	5b088f9c-fdc2-4c5d-ac93-6efa0e48a43e
SCIP notification number (Bulgaria)	4870d069-da6f-45e4-ac9e-5936b611ffce
SCIP notification number (Czech Republic)	d5c1375c-3fcf-4e43-bec9-1cedd6f58b56
SCIP notification number (Denmark)	a22adf40-e55c-4794-a9e8-87d540322407
SCIP notification number (Finland)	c80be167-529b-422a-8df1-e365120f625b
SCIP notification number (France)	0f2d8408-542c-47e2-be12-87fc416b4186
SCIP notification number (Germany)	07edf026-1f1e-405c-85ab-0f8193d19240
SCIP notification number (Hungary)	7c9e5f25-1823-4a92-8d40-da9b5639d2b6
SCIP notification number (Italy)	29dd9fd7-af66-4473-b3b3-46189845ce1d
SCIP notification number (Netherlands)	20b761ca-7229-4d80-a594-1ad59ecbcdcc
SCIP notification number (Poland)	034b3b96-140a-42f3-85e3-63cbea4ef7d3
SCIP notification number (Romania)	b3bf2521-0e39-4886-87a6-ecd121bf1542
SCIP notification number (Sweden)	6ed3a9e5-5091-4bf4-af8b-d70a90394a02

## Approvals / Certificates

### General approvals



Approval	Standard	Certificate Name
CB DEKRA Certification B.V.	IEC 61984	NL-61360/M1
KEMA/KEUR DEKRA Certification B.V.	EN 61984	71-116057
UR Underwriters Laboratories Inc.	UL 1059	UL-US-2426356-0

## Downloads

### Environmental Product Compliance

#### Compliance Search

Environmental Product  
Compliance  
831-3209/109-000



## Documentation

### Additional Information

Technical Section

03.04.2019

pdf  
2027.26 KB



## CAD/CAE-Data

### CAD data

2D/3D Models  
831-3209/109-000



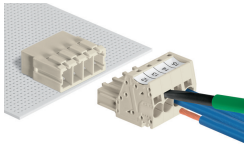
### CAE data

ZUKEN Portal  
831-3209/109-000

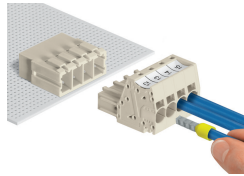


## Installation Notes

### Conductor termination

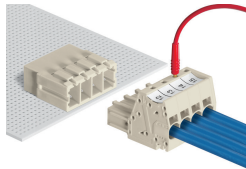


Inserting fine-stranded conductors via (5.5 x 0.8) mm screwdriver.



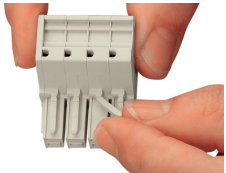
Solid and ferruled conductors are terminated by simply pushing them into unit.

## Testing

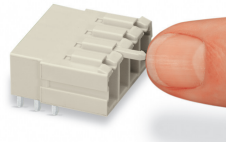


Testing with 2 mm Ø test plug.

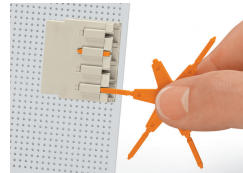
## Coding



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.