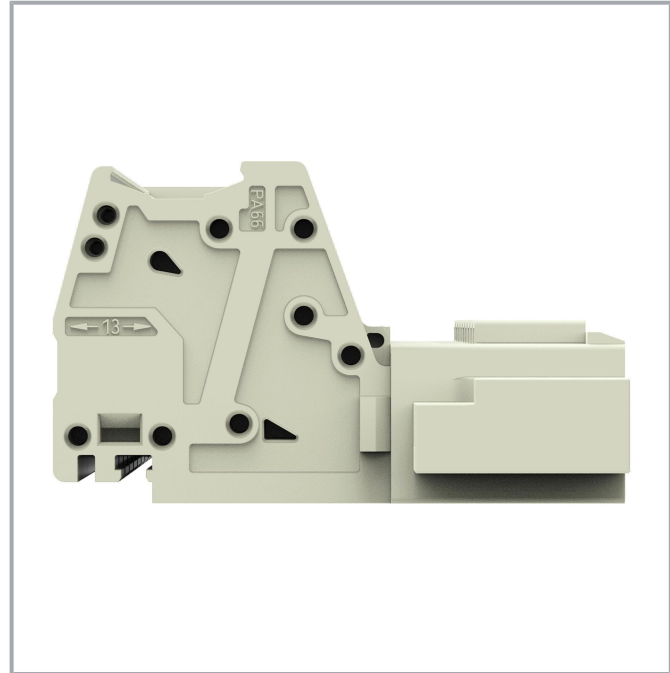
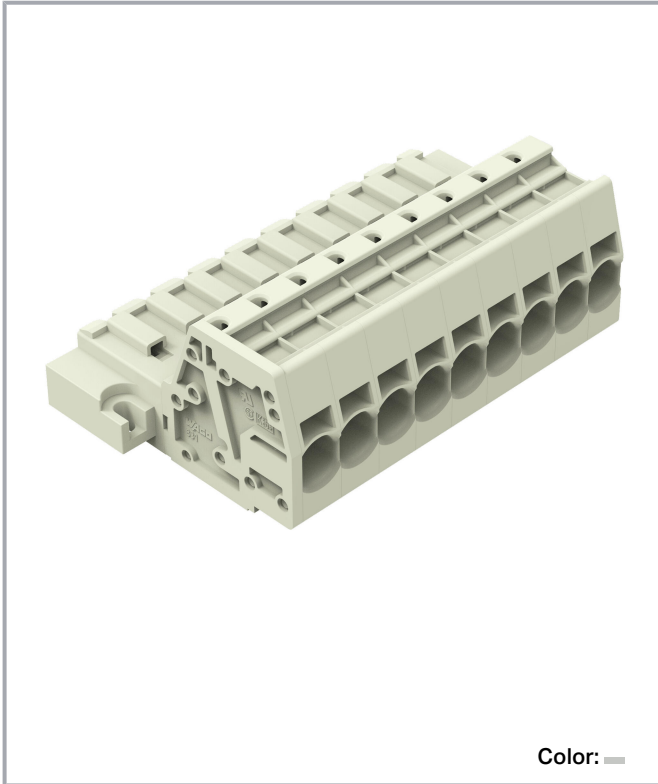


**Data sheet | Item number: 831-3209/109-000**

1-conductor male connector; Push-in CAGE CLAMP®; 10 mm<sup>2</sup>; Pin spacing 7.62 mm; 9-pole; 100% protected against mismatching; Threaded flange; 10,00 mm<sup>2</sup>; light gray

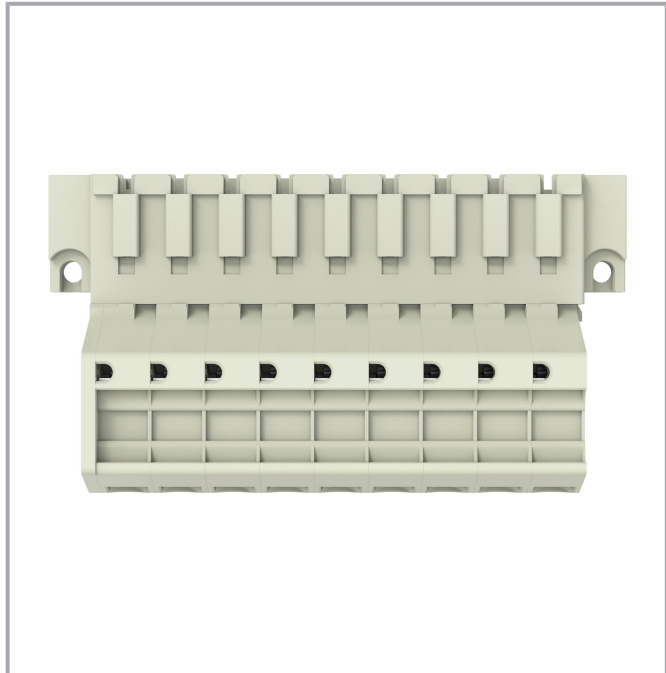
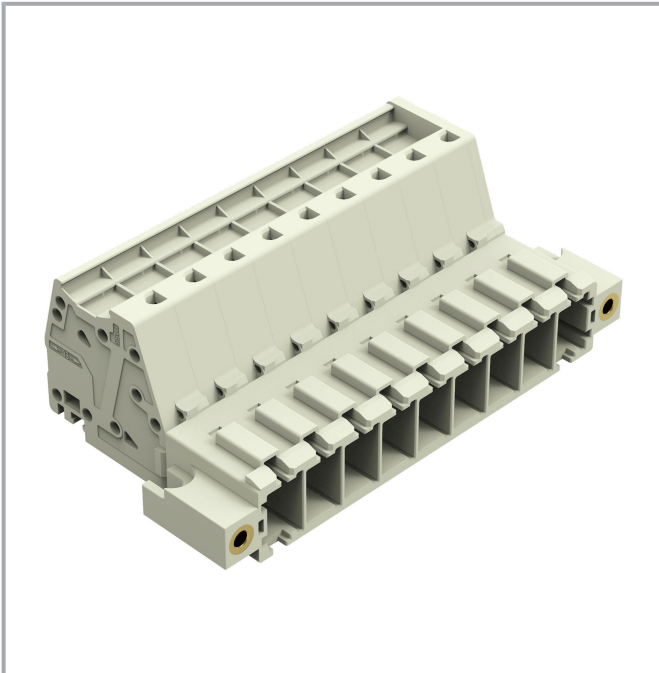
[www.wago.com/831-3209/109-000](http://www.wago.com/831-3209/109-000)



Subject to changes. Please also observe the further product documentation!

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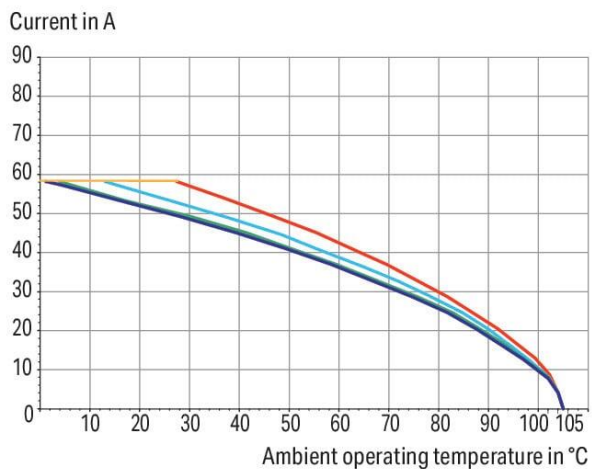
### Derating Curve

1-conductor female connector (831-3102) with

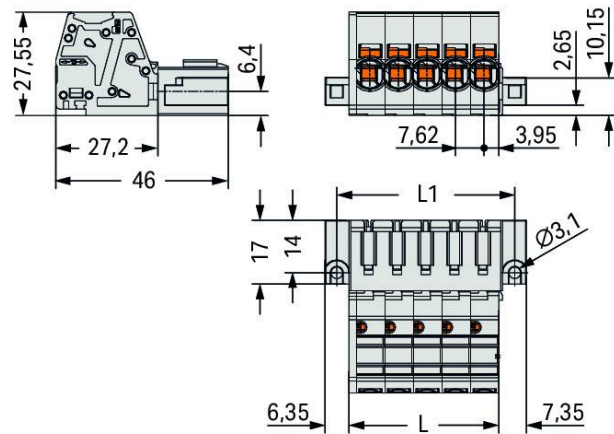
1-conductor male connector (831-3202)

Pin spacing: 7.62 mm / Conductor cross-section: 10 mm<sup>2</sup> "f-st"

Based on: EN 60512-5-2 / Reduction factor: 0.8



2-, 4-, 6-, 8- pole      ——— Conductor rated current



Dimensions in mm

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

$L1 = L + 7.5 \text{ mm}$

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## Item description

- Universal connection for all conductor types
- Push-in termination of solid or ferruled conductors
- Integrated test ports for 2 mm Ø test plugs
- 600 V UL per UL 1059
- 100 % protected against mismatching
- Coding via coding fingers

## Data

### 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

Ratings per	IEC/EN 60664-1
Nominal voltage (III/3)	800 V
Rated impulse voltage (III/3)	8 kV
Rated voltage (III/2)	1000 V
Rated impulse voltage (III/2)	8 kV
Nominal voltage (II/2)	1000 V
Rated surge voltage (II/2)	8 kV
Rated current	41 A
Legend (ratings)	(III / 2) ≙ Overvoltage category III / Pollution degree 2

### Ratings per UL

Approvals per	UL 1059
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Rated voltage UL (Use Group C)	600 V
Rated current UL (Use Group C)	42 A

### Ratings per CSA

Approvals per	CSA
Rated voltage CSA (Use Group C)	600 V
Rated current CSA (Use Group C)	41 A

### Connection data

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 mm <sup>2</sup> / 20 ... 8 AWG
Fine-stranded conductor	0.5 ... 10 mm <sup>2</sup> / 20 ... 8 AWG
Fine-stranded conductor; with insulated ferrule	0.5 ... 6 mm <sup>2</sup>
Fine-stranded conductor; with uninsulated ferrule	0.5 ... 6 mm <sup>2</sup>
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

Subject to changes. Please also observe the further product documentation!



## Plug-in connection

Contact type (pluggable connector)	Male connector/plug
Connector (connection type)	for conductor
Mismatching protection	Yes
Plugging without loss of pin spacing	No
Locking of plug-in connection	Threaded flange

## Material data

Note (material data)

Information on material specifications can be found here

Color	light gray
Material group	I
Insulation material	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	0.787 MJ
Weight	61.2 g

## Environmental requirements

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

## Commercial data

ETIM 8.0	EC001284
ETIM 7.0	EC001284
ECCN	NO DATA
PU (SPU)	12 pcs
Country of origin	PL
GTIN	4066966091595
Customs tariff number	85366930000

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## Environmental Product Compliance

RoHS Compliance Status

Compliant, No Exemption

## Approvals / Certificates

### General approvals

Logo	Approval	Additional Approval Text	Certificate name
	<b>CB</b> DEKRA Certification B.V.	IEC 61984	NL-61360 /M1
	<b>KEMA/KEUR</b> DEKRA Certification B.V.	EN 61984	71-116057
	<b>UR</b> Underwriters Laboratories Inc.	UL 1059	E45172

## Counterpart



Item no. 831-3109/107-000

1-conductor female connector; Push-in CAGE CLAMP®; 10 mm<sup>2</sup>; Pin spacing 7.62 mm; 9-pole; 100% protected against mismatching; Screw flange; 10,00 mm<sup>2</sup>; light gray[www.wago.com/831-3109/107-000](http://www.wago.com/831-3109/107-000)

## Downloads

### Documentation

#### Additional Information

Technical Section	2019 Apr 3	pdf	Download
Technical explanations		2.1 MB	

## CAD/CAE-Data

### CAD data

2D/3D Models 831-3209/109-000	URL	Download
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### CAE data

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ZUKEN Portal 831-3209/109-000

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### Asset Administration Shell

Asset Administration Shell 831-3209/109-000

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## Environmental Product Compliance

### Compliance Search

Environmental Product Compliance 831-3209/109-000

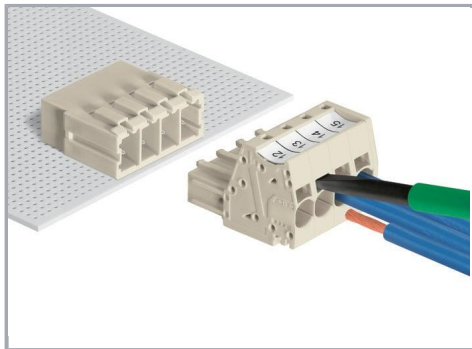
[URL](#)

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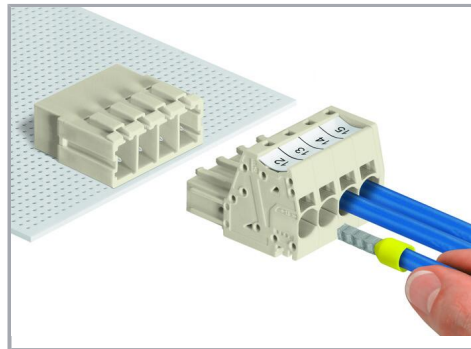
1-conductor male connector; Push-in CAGE CLAMP®; 10 mm<sup>2</sup>; Pin spacing 7.62 mm;  
9-pole; 100% protected against mismatching; Threaded flange; 10,00 mm<sup>2</sup>; light gray

## Installation Notes

### Conductor termination



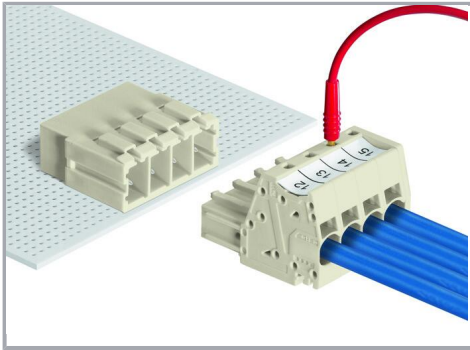
Inserting fine-stranded conductors via (5.5 x 0.8) mm screwdriver.



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

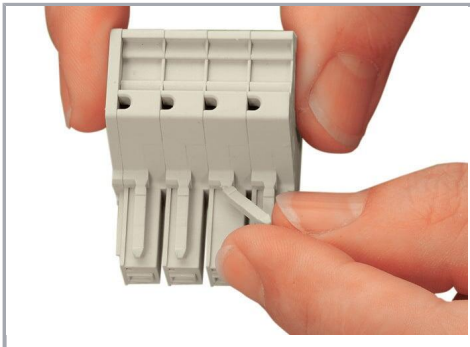
### Testing

Subject to changes. Please also observe the further product documentation!

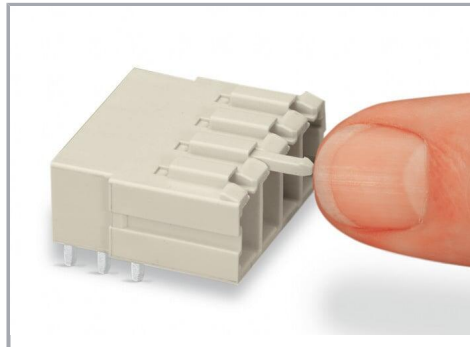


Testing with 2 mm Ø test plug.

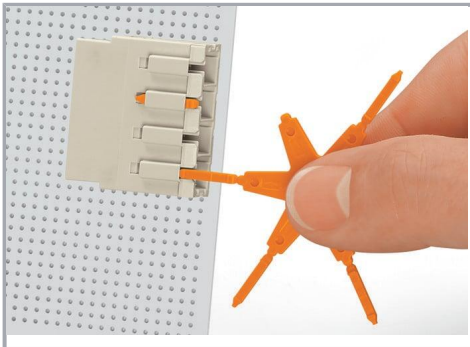
### Coding



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

Subject to changes. Please also observe the further product documentation!





Direct marking of female and male connectors



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

## Product family

### MCS MAXI 6

[Show all products from the family](#)

Subject to changes. Please also observe the further product documentation!