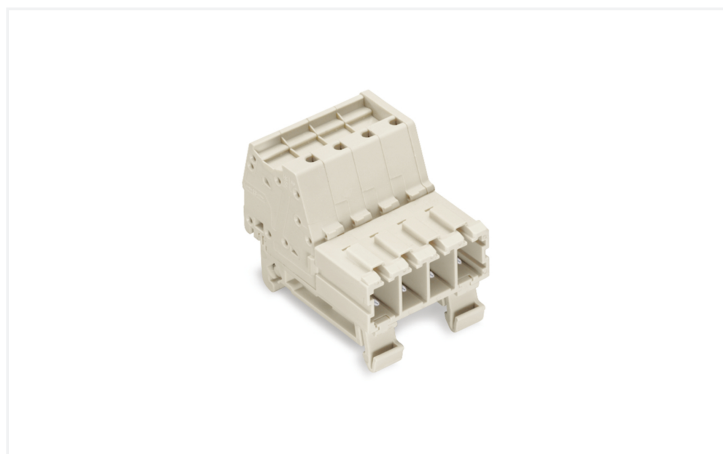


Data Sheet | Item Number: 831-3205/007-000

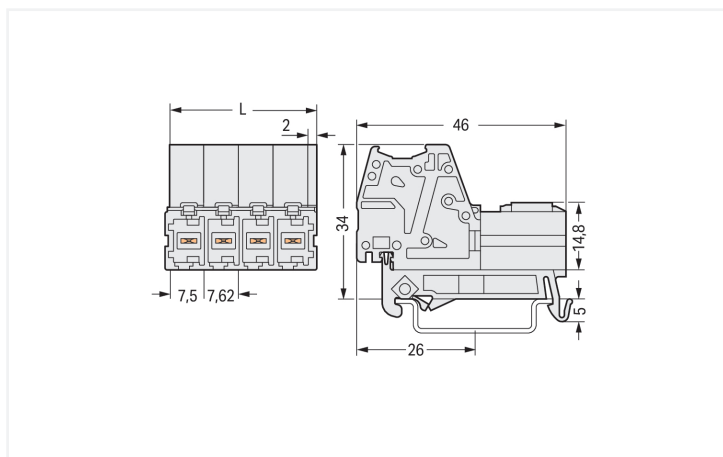
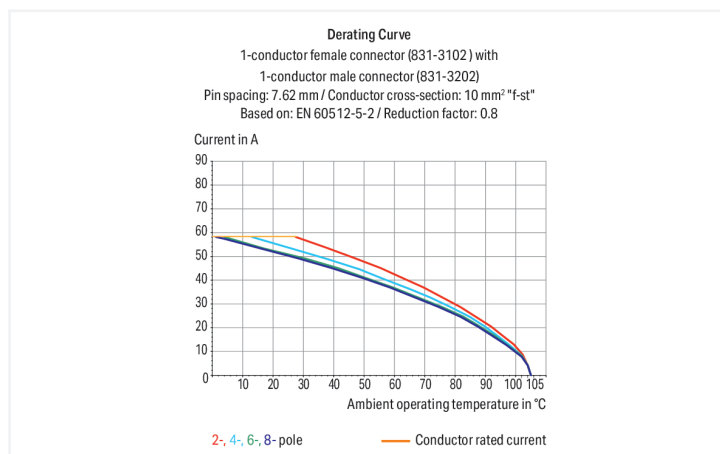
1-conductor male connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 5-pole; 100% protected against mismating; DIN-35 rail mounting; 10,00 mm²; light gray

<https://www.wago.com/831-3205/007-000>



Color: ■ light gray

Similar to illustration



Dimensions in mm

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

Male connector, 831 Series, operating tool

Our male connector (item number 831-3205/007-000) simplifies electrical installations. Conductors can 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® technology provides a universal connection solution for all conductor types. It allows both solid and fine-stranded conductors with ferrules to be inserted directly into the clamping point without the need for tools. The dimensions are (39.98 x 39 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.

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 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	5	Connection 1 <table><tr><td>Connection technology</td><td>Push-in CAGE CLAMP®</td></tr><tr><td>Actuation type</td><td>Operating tool</td></tr><tr><td>Actuation direction 1</td><td>Operation parallel to conductor entry</td></tr><tr><td>Solid conductor</td><td>0.5 ... 10 mm² / 20 ... 8 AWG</td></tr><tr><td>Fine-stranded conductor</td><td>0.5 ... 10 mm² / 20 ... 8 AWG</td></tr><tr><td>Fine-stranded conductor; with insulated fer- rule</td><td>0.5 ... 6 mm²</td></tr><tr><td>Fine-stranded conductor; with uninsulated ferrule</td><td>0.5 ... 6 mm²</td></tr><tr><td>Strip length</td><td>13 ... 15 mm / 0.51 ... 0.59 inches</td></tr><tr><td>Pole number</td><td>5</td></tr><tr><td>Conductor entry direction to mating direc- tion</td><td>0°</td></tr></table>	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 fer- rule	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	5	Conductor entry direction to mating direc- tion	0°
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 fer- rule	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	5																					
Conductor entry direction to mating direc- tion	0°																					
Total number of potentials	5																					
Number of connection types	1																					
Number of levels	1																					

Physical data	
Pin spacing	7.62 mm / 0.3 inches
Width	39.98 mm / 1.574 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)	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
Clamping spring material	Chrome-nickel spring steel (CrNi)
Contact material	Electrolytic copper (E _{Cu})
Contact Plating	Tin
Fire load	0.635 MJ
Weight	36.1 g

Environmental requirements	
Limit temperature range	-60 ... +105 °C
Processing temperature	-35 ... +60 °C
Environmental Testing	
Test specification: Railway applications – Rolling stock – Electronic equipment	DIN EN 50155 (VDE 0115-200):2022-06
Test procedure: Railway applications – Rolling stock equipment – 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 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 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 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 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)	24 pcs
Packaging type	Box
Country of origin	PL
GTIN	4045454333799
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 DEKRA Certification B.V.	IEC 61984	NL-124478
CSA DEKRA Certification B.V.	C22.2	1466354
DEKRA DEKRA Certification B.V.	EN 61984	71-173515
KEMA/KEUR DEKRA Certification B.V.	EN 61984	71-129589 REV.1
UR Underwriters Laboratories Inc.	UL 1059	UL-US-2426356-0

		
Approval	Standard	Certificate Name
Railway WAGO GmbH & Co. KG	-	Railway Ready



Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance
831-3205/007-000

↓

Documentation

Additional Information

Technical Section

03.04.2019

pdf
2027.26 KB

↓

CAD/CAE-Data

CAD data

2D/3D Models
831-3205/007-000

↓

CAE data

EPLAN Data Portal
831-3205/007-000

↓

ZUKEN Portal
831-3205/007-000

↓

1 Compatible Products

1.1 System counterpart

1.1.1 Female connector/socket



Item No.: 831-3105
1-conductor female connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 5-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 Strain relief

1.2.3.1 Strain relief plate



Item No.: 831-505
Strain relief plate; for female and male connectors; 30 mm wide; 1 part; Pin spacing 7.62 mm; light gray

1.2.4 Test and measurement

1.2.4.1 Testing accessories



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

1.2.5 Tool

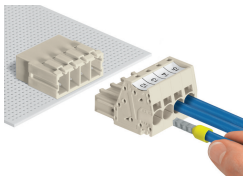
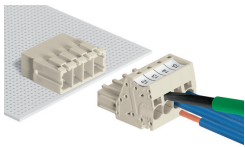
1.2.5.1 Operating tool



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

Installation Notes

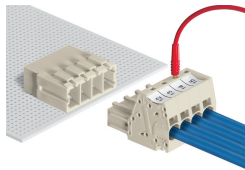
Conductor termination



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

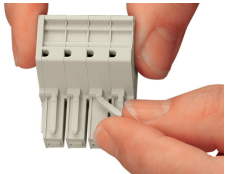
Solid and ferruled conductors are terminated by simply pushing them into unit.

Testing

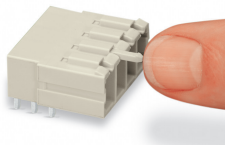


Testing with 2 mm Ø test plug.

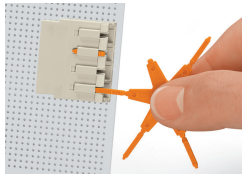
Coding



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.

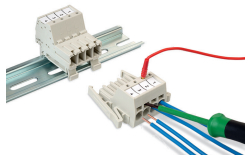
Marking



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