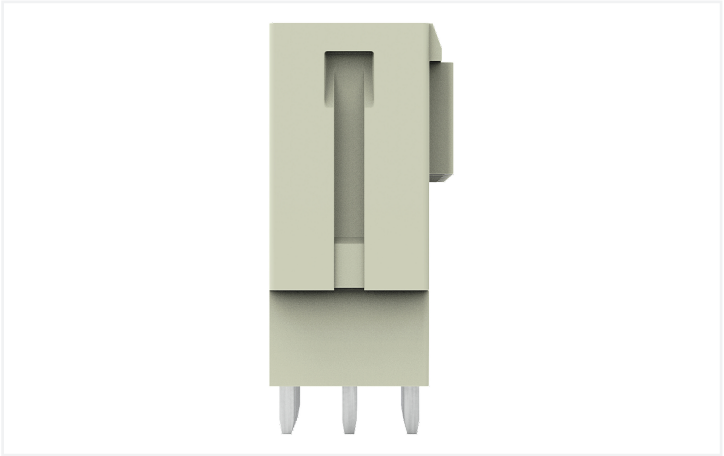
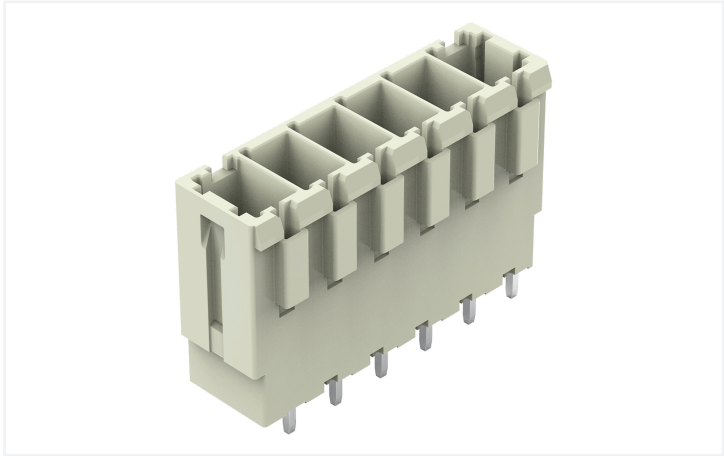


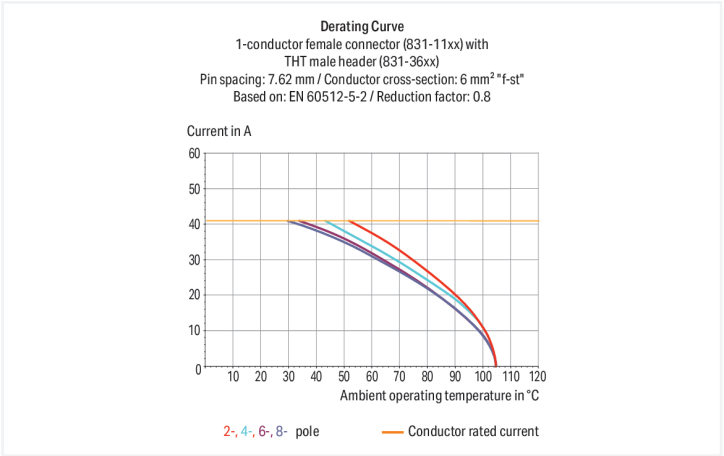
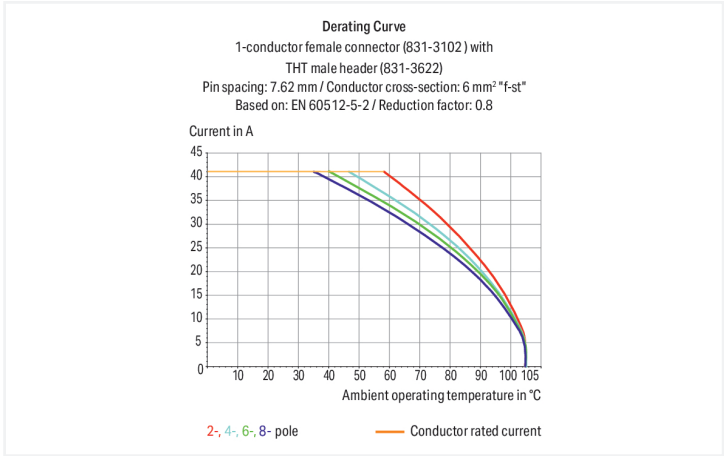
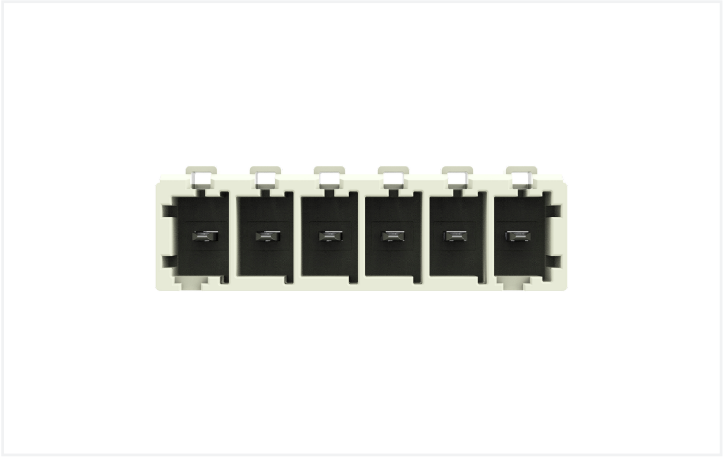
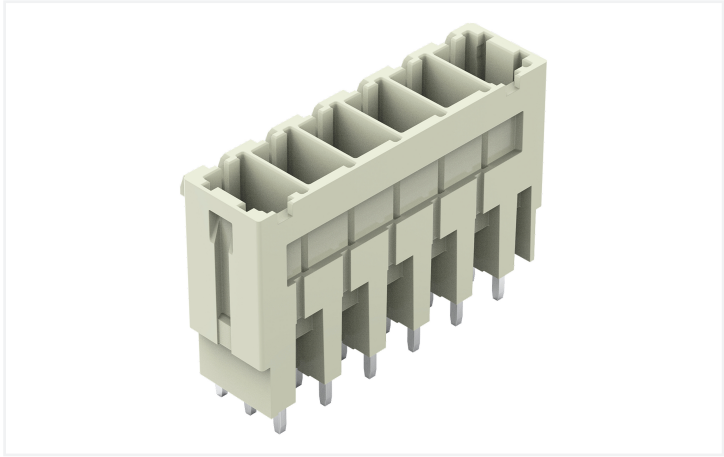
Data Sheet | Item Number: 831-3606

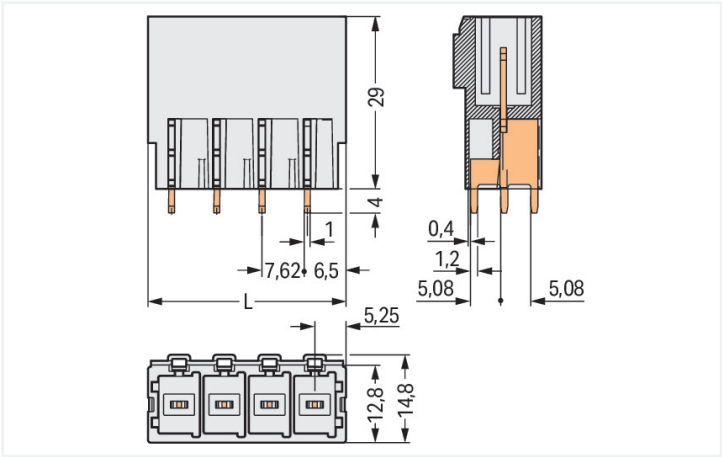
THT male header; 1.0 x 1.2 mm solder pin; straight; 100% protected against mismatching;
Pin spacing 7.62 mm; 6-pole; light gray

<https://www.wago.com/831-3606>



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 831-3606) simplifies electrical installations. The item's dimensions are (48.6 x 33 x 14.8) mm (width x height x depth).

The contact surface is coated with tin. THT is used to solder 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 Protection against PCB mounting errors 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		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		CSA		
Use group		B	C	D
Rated voltage		-	300 V	600 V
Rated current		-	41 A	5 A

Approvals per		UL 1059		
Use group		B	C	D
Rated voltage		-	300 V	600 V
Rated current		-	42 A	5 A

Connection Data		Connection 1	
Total number of potentials	6	Pole number	6
Number of connection types	1		
Number of levels	1		



Physical data		
Pin spacing		7.62 mm / 0.3 inches
Width		48.6 mm / 1.913 inches
Height		33 mm / 1.299 inches
Height from the surface		29 mm / 1.142 inches
Depth		14.8 mm / 0.583 inches
Solder pin length		4 mm
Solder pin dimensions		1 x 1.2 mm
Drilled hole diameter		1.7 ^(+0.1) 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		90 °

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)		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
Contact material		Electrolytic copper (E _{Cu})
Contact Plating		Tin
Fire load		0.239 MJ
Weight		16.8 g

Environmental requirements																				
Limit temperature range	-60 ... +105 °C	<table><tr><th colspan="2">Environmental Testing</th></tr><tr><td>Test specification: Railway applications – Rolling stock – Electronic equipment</td><td>DIN EN 50155 (VDE 0115-200):2022-06</td></tr><tr><td>Test procedure: Railway applications – Rolling stock equipment – Vibration and shock tests</td><td>DIN EN 61373 (VDE 0115-0106):2011-04</td></tr><tr><td>Spectrum/Mounting location</td><td>Service life test, Category 1, Class A/B</td></tr><tr><td>Functional test with noise-like oscillations</td><td>Test passed according to Section 8 of the standard</td></tr><tr><td>Frequency</td><td>f₁ = 5 Hz to f₂ = 150 Hz</td></tr><tr><td>Acceleration</td><td>0.101g (highest test level used for all axes)</td></tr><tr><td>Test duration per axis</td><td>10 min.</td></tr><tr><td>Test directions</td><td>X, Y and Z axes</td></tr></table>	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
Environmental Testing																				
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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																			
Processing temperature	-35 ... +60 °C																			



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 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)
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	4045454002145
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 DEKRA Certification B.V.	IEC 61984	NL-61360/M1
CSA DEKRA Certification B.V.	C22.2	1466354
KEMA/KEUR DEKRA Certification B.V.	EN 61984	71-129589 REV.1
UR Underwriters Laboratories Inc.	UL 1059	UL-US-2426356-0

Declarations of conformity and manufacturer's declarations



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

Approvals for marine applications



Approval	Standard	Certificate Name
LR Lloyds Register	IEC 61984	96/20035 (E5)

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 831-3606 

Documentation

Additional Information
Technical Section 03.04.2019 pdf 2027.26 KB 

CAD/CAE-Data

CAD data
2D/3D Models 831-3606 

CAE data
EPLAN Data Portal 831-3606 
ZUKEN Portal 831-3606 



PCB Design	
Symbol and Footprint via SamacSys 831-3606	
Symbol and Footprint via Ultra Librarian 831-3606	

1 Compatible Products

1.1 System counterpart

1.1.1 Female connector/socket

Item No.: 831-1106 1-conductor female connector; lever; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 6-pole; 100% protected against mis-mating; 10,00 mm²; light gray	Item No.: 831-1106/000-004 1-conductor female connector; lever; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 6-pole; 100% protected against mis-mating; black	Item No.: 831-1106/302-004 1-conductor female connector; lever; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 6-pole; 100% protected against mis-mating; Centered locking levers; 10,00 mm²; black	Item No.: 831-1106/322-004 1-conductor female connector; lever; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 6-pole; 100% protected against mis-mating; Centered locking levers; 10,00 mm²; black
Item No.: 831-1106/322-000 1-conductor female connector; lever; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 6-pole; 100% protected against mis-mating; Centered locking levers; 10,00 mm²; light gray	Item No.: 831-1106/037-000 1-conductor female connector; lever; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 6-pole; 100% protected against mis-mating; Lateral locking levers; 10,00 mm²; light gray	Item No.: 831-1106/038-000 1-conductor female connector; lever; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 6-pole; 100% protected against mis-mating; Lateral locking levers; 10,00 mm²; light gray	Item No.: 831-3106 1-conductor female connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 6-pole; 100% protected against mis-mating; 10,00 mm²; light gray
Item No.: 831-3106/000-9037 1-conductor female connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 6-pole; 100% protected against mis-mating; direct marking; 10,00 mm²; light gray	Item No.: 831-3106/135-000 1-conductor female connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 6-pole; 100% protected against mis-mating; Gripping plate; 10,00 mm²; light gray	Item No.: 831-3106/037-000 1-conductor female connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 6-pole; 100% protected against mis-mating; Lateral locking levers; 10,00 mm²; light gray	Item No.: 831-3106/037-9037 1-conductor female connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 6-pole; 100% protected against mis-mating; Lateral locking levers; direct marking; 10,00 mm²; light gray
Item No.: 831-3526 THT female header; angled; Pin spacing 7.62 mm; 6-pole; 100% protected against mis-mating; 1.0 x 1.2 mm solder pin; light gray	Item No.: 831-3506 THT female header; straight; Pin spacing 7.62 mm; 6-pole; 100% protected against mismating; 1.0 x 1.2 mm solder pin; light gray		

1.2 Optional Accessories

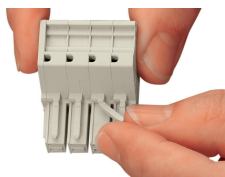
1.2.1 Coding

1.2.1.1 Coding

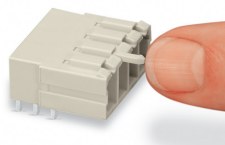
Item No.: 831-500 Coding pin carrier with six coding pins; orange

Installation Notes

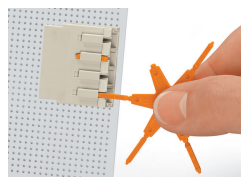
Coding



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.