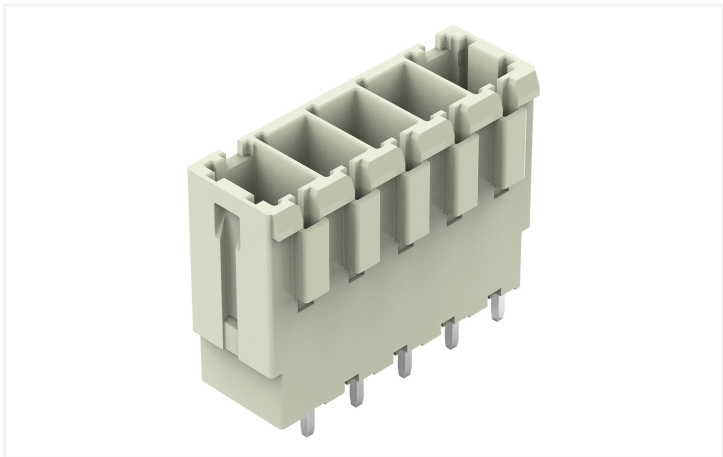


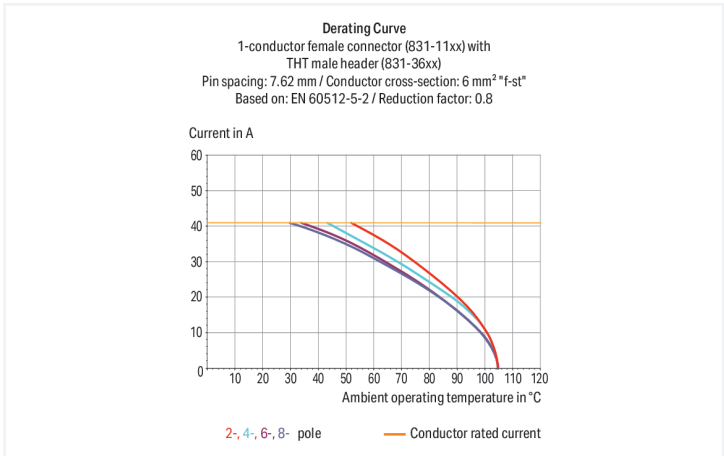
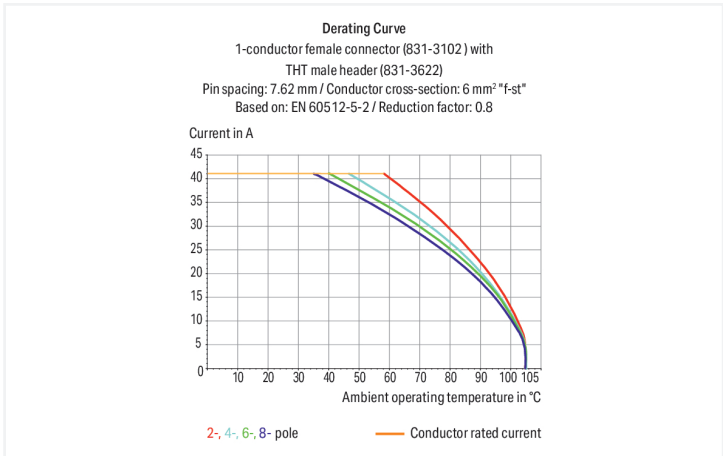
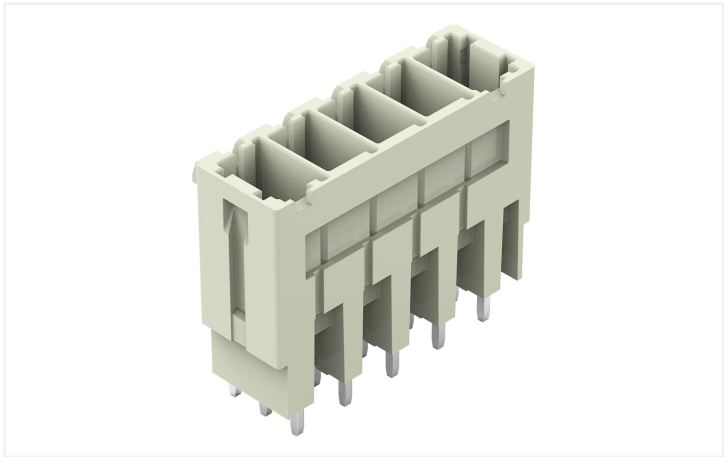
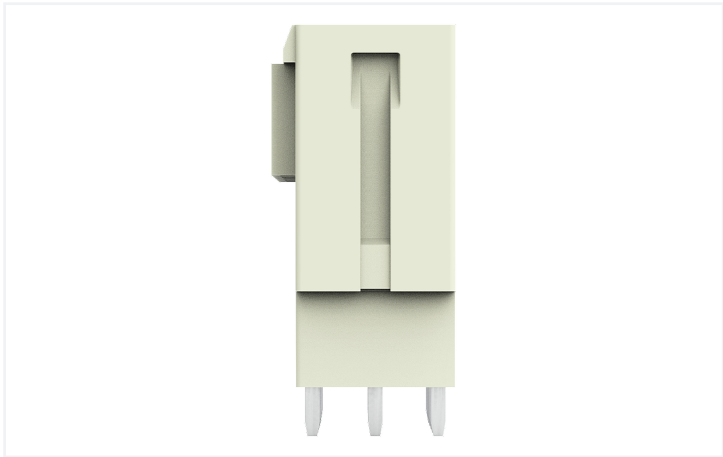
Data Sheet | Item Number: 831-3605

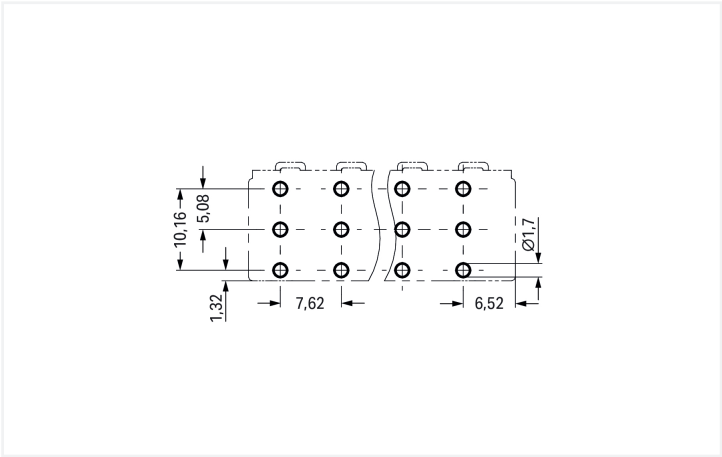
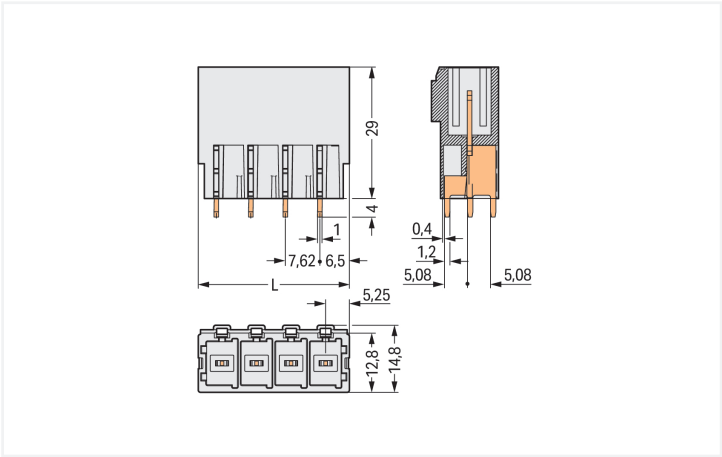
THT male header; 1.0 x 1.2 mm solder pin; straight; 100% protected against mismatching;
Pin spacing 7.62 mm; 5-pole; light gray

<https://www.wago.com/831-3605>



Color: ■ light gray





Dimensions in mm
L = (Polzahl – 1) x Rastermaß + 10,5 mm

Male connector, 831 Series, with 7.62 mm pin spacing

Seamless electrical installations are guaranteed with this male connector (item number 831-3605). The dimensions are (40.98 x 33 x 14.8) mm (width x height x depth).

The contact surface is coated with tin. The pcb connector is designed for THT soldering.

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		
Total number of potentials	5	Connection 1
Number of connection types	1	
Number of levels	1	
		Pole number 5

Physical data		
Pin spacing	7.62 mm / 0.3 inches	
Width	40.98 mm / 1.613 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	0.203 MJ	
Weight	14.2 g	

Environmental requirements		
Limit temperature range	-60 ... +105 °C	Environmental Testing
Processing temperature	-35 ... +60 °C	
		Test specification: DIN EN 50155 (VDE 0115-200):2022-06
		Railway applications – Rolling stock – Electronic equipment



Environmental Testing	
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)
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	4045454002138
Customs tariff number	85366990990

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			Declarations of conformity and manufacturer's declarations		
					
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
CB DEKRA Certification B.V.	IEC 61984	NL-61360/M1	Railway WAGO GmbH & Co. KG	-	Railway Ready
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			

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 831-3605	

Documentation

Additional Information			
Technical Section	03.04.2019	pdf 2027.26 KB	



CAD/CAE-Data

CAD data	CAE data
2D/3D Models 831-3605	EPLAN Data Portal 831-3605
	ZUKEN Portal 831-3605

PCB Design

Symbol and Footprint via SamacSys 831-3605
Symbol and Footprint via Ultra Librarian 831-3605

1 Compatible Products

1.1 System counterpart

1.1.1 Female connector/socket

 Item No.: 831-1105 1-conductor female connector; lever; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 5-pole; 100% protected against mis-mating; 10,00 mm²; light gray	 Item No.: 831-1105/000-004 1-conductor female connector; lever; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 5-pole; 100% protected against mis-mating; black	 Item No.: 831-1105/320-000 1-conductor female connector; lever; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 5-pole; 100% protected against mis-mating; Centered locking levers; 10,00 mm²; light gray	 Item No.: 831-1105/322-000 1-conductor female connector; lever; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 5-pole; 100% protected against mis-mating; Centered locking levers; 10,00 mm²; light gray
 Item No.: 831-1105/322-004 1-conductor female connector; lever; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 5-pole; 100% protected against mis-mating; Centered locking levers; black	 Item No.: 831-1105/037-000 1-conductor female connector; lever; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 5-pole; 100% protected against mis-mating; Lateral locking levers; 10,00 mm²; light gray	 Item No.: 831-1105/038-000 1-conductor female connector; lever; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 5-pole; 100% protected against mis-mating; Lateral locking levers; 10,00 mm²; light gray	 Item No.: 831-3105 1-conductor female connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 5-pole; 100% protected against mis-mating; 10,00 mm²; light gray
 Item No.: 831-3105/000-9035 1-conductor female connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 5-pole; 100% protected against mis-mating; direct marking; 10,00 mm²; light gray	 Item No.: 831-3105/000-9037 1-conductor female connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 5-pole; 100% protected against mis-mating; direct marking; 10,00 mm²; light gray	 Item No.: 831-3105/135-000 1-conductor female connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 5-pole; 100% protected against mis-mating; Gripping plate; 10,00 mm²; light gray	 Item No.: 831-3105/037-000 1-conductor female connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 5-pole; 100% protected against mis-mating; Lateral locking levers; 10,00 mm²; light gray
 Item No.: 831-3105/037-9037 1-conductor female connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 5-pole; 100% protected against mis-mating; Lateral locking levers; direct marking; 10,00 mm²; light gray	 Item No.: 831-3525 THT female header; angled; Pin spacing 7.62 mm; 5-pole; 100% protected against mismatching; 1.0 x 1.2 mm solder pin; light gray	 Item No.: 831-3505 THT female header; straight; Pin spacing 7.62 mm; 5-pole; 100% protected against mismatching; 1.0 x 1.2 mm solder pin; light gray	

1.2 Optional Accessories

1.2.1 Coding

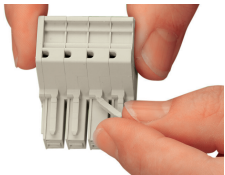
1.2.1.1 Coding



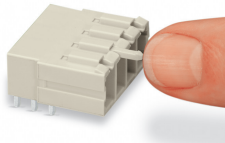
Item No.: 831-500
Coding pin carrier with six coding pins; or-
ange

Installation Notes

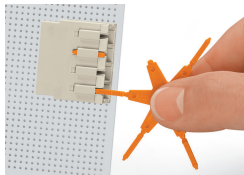
Coding



Break or cut off coding pin from female con-
nector.



Insert coding pin into male header (break
first) until it engages.



Coding a THT male header by inserting a
coding pin.