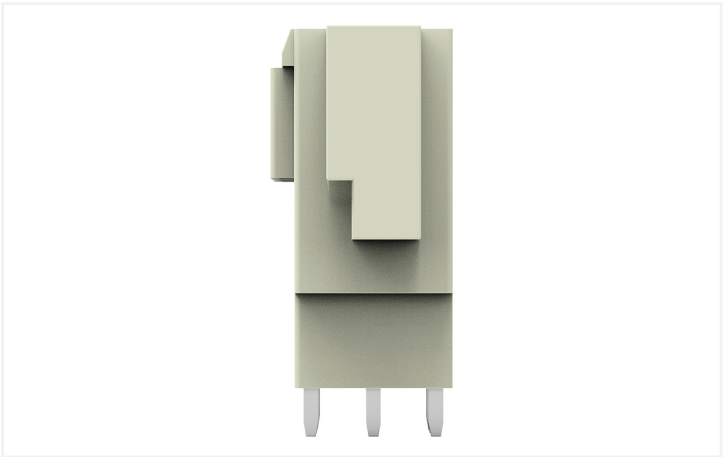
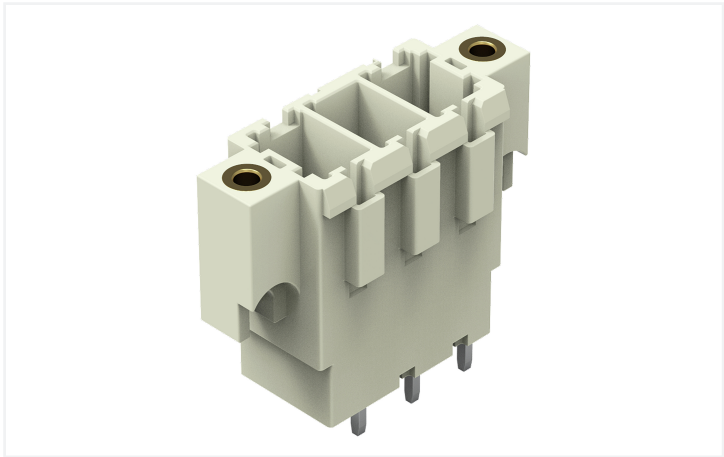
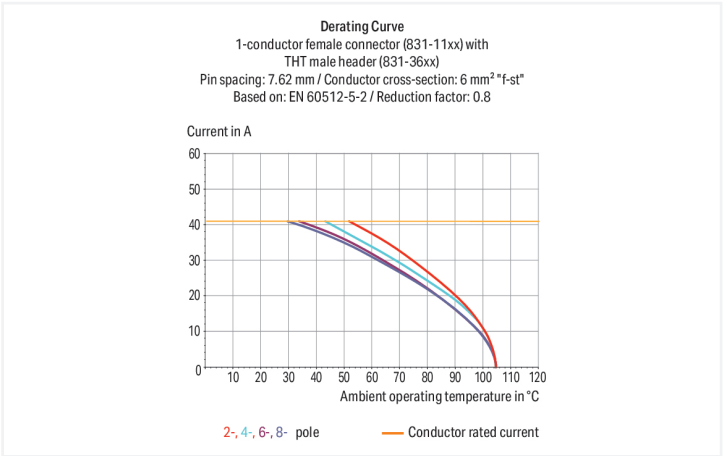
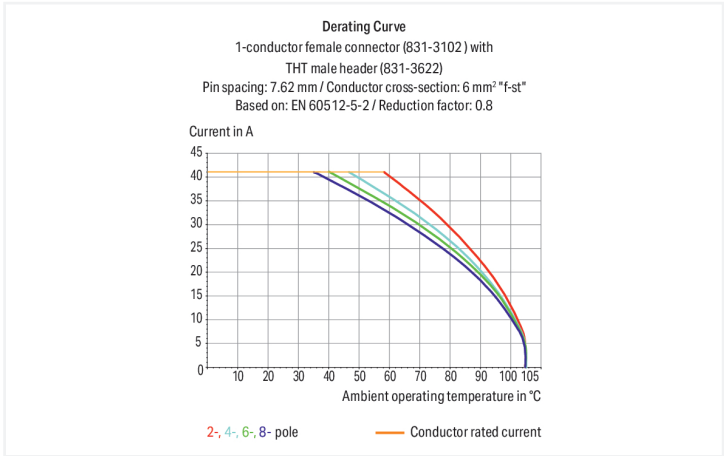
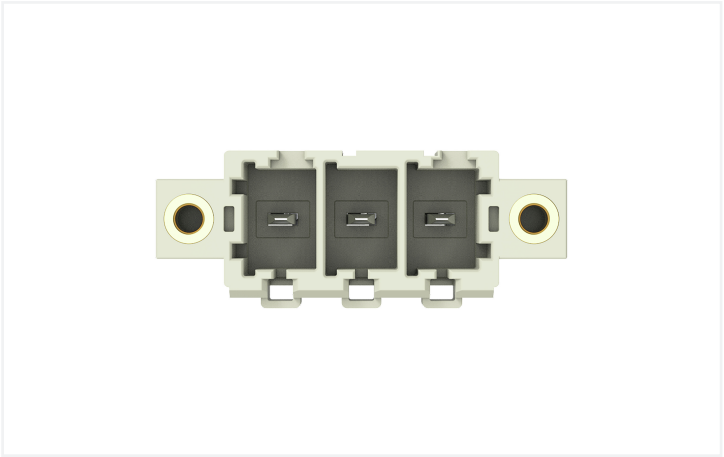
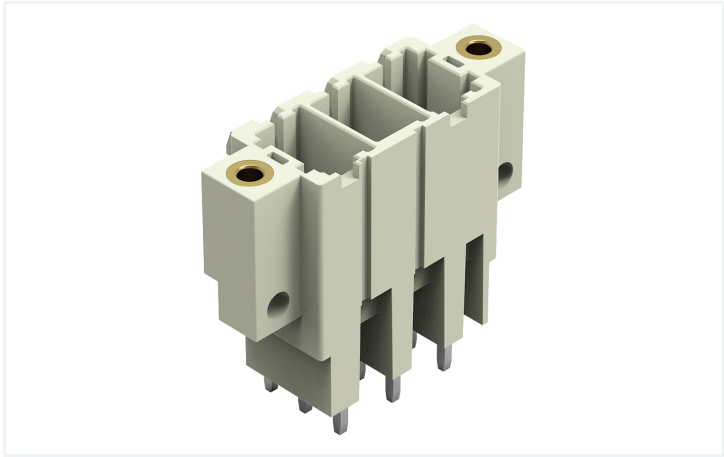
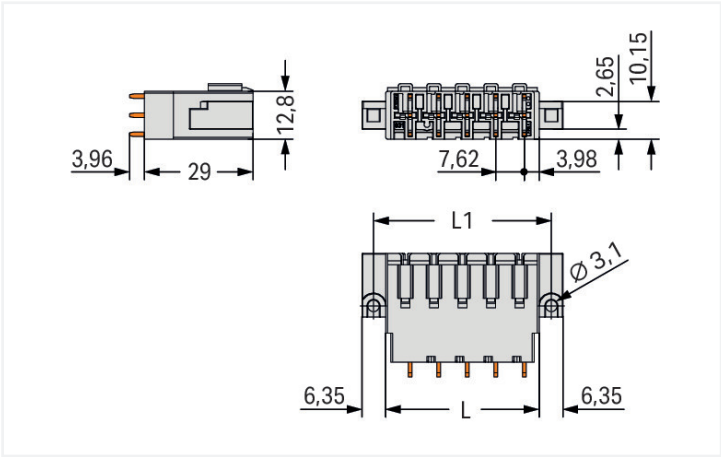




Color: ■ light gray





Dimensions in mm
L = pole no. x pin spacing + 2.9 mmL1 = L + 6.5 mm

Male connector, 831 Series, solder pin dimensions 1 x 1.2 mm

Our male connector (item number 831-3603/108-000) ensures effortless electrical installations. The item's dimensions are (38.5 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

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/>.

Variants:

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.

Electrical data									
Ratings per				IEC/EN 60664-1			Approvals per		
Overvoltage category	III	III	II				Use group	B	C
Pollution degree	3	2	2				Rated voltage	-	300 V
Nominal voltage	500 V	630 V	1000 V				Rated current	-	42 A
Rated impulse withstand voltage	6 kV	6 kV	6 kV						5 A
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			



Connection Data		
Total number of potentials	3	Connection 1
Number of connection types	1	
Number of levels	1	
		Pole number 3

Physical data		
Pin spacing	7.62 mm / 0.3 inches	
Width	38.5 mm / 1.514 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 with tolerance	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 °	
Locking of plug-in connection	Threaded flange	

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	0.188 MJ	
Weight	11.8 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	$f_1 = 5 \text{ Hz}$ to $f_2 = 150 \text{ Hz}$
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	$f_1 = 5 \text{ Hz}$ to $f_2 = 150 \text{ Hz}$
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

PU (SPU)	24 pcs
Packaging type	Box
Country of origin	PL
GTIN	4066966090802
Customs tariff number	85366930000



Product Classification	
UNSPSC	39121409
ETIM 9.0	EC002637
ETIM 10.0	EC002637
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)	56c43862-79a3-4d8c-a7b3-88331213b38d
SCIP notification number (Belgium)	5dbce935-c6fd-4c63-a744-4c8646afae2a
SCIP notification number (Bulgaria)	15e681fb-3f14-45d6-b7d0-adfbf0361675
SCIP notification number (Czech Republic)	1d76df98-6e68-4a18-bcc3-abeaf49106fe
SCIP notification number (Denmark)	f5579829-bb80-4000-8cbf-5d0b13a6a785
SCIP notification number (Finland)	6bc20f17-6e53-403a-8ff3-be155b84a9f9
SCIP notification number (France)	7b82646c-bd7e-492d-8e4a-5ee4dff17ff0
SCIP notification number (Germany)	a480d52c-9fab-4d79-8f99-43fa33260932
SCIP notification number (Hungary)	123bf67a-ec56-4544-a2df-433587e0a77a
SCIP notification number (Italy)	539ff510-8190-4bae-826d-3deec17e7007
SCIP notification number (Netherlands)	0f414178-82e3-4583-9991-c75073337248
SCIP notification number (Poland)	94762fe8-0367-4600-959d-523ffe20e768
SCIP notification number (Romania)	9b032ebc-f838-4a1e-bab4-b8ba01c24953
SCIP notification number (Sweden)	b82d68e9-3349-4489-a2e7-e45e24910077

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
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 831-3603/108-000	

Documentation

Additional Information			
Technical Section	03.04.2019	pdf 2027.26 KB	

CAD/CAE-Data

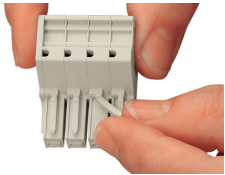
CAD data	
2D/3D Models 831-3603/108-000	

CAE data	
ZUKEN Portal 831-3603/108-000	

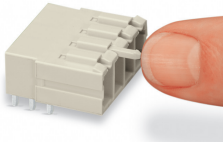
PCB Design	
Symbol and Footprint via SamacSys 831-3603/108-000	
Symbol and Footprint via Ultra Librarian 831-3603/108-000	

Installation Notes

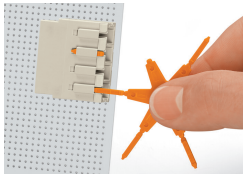
Coding



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.