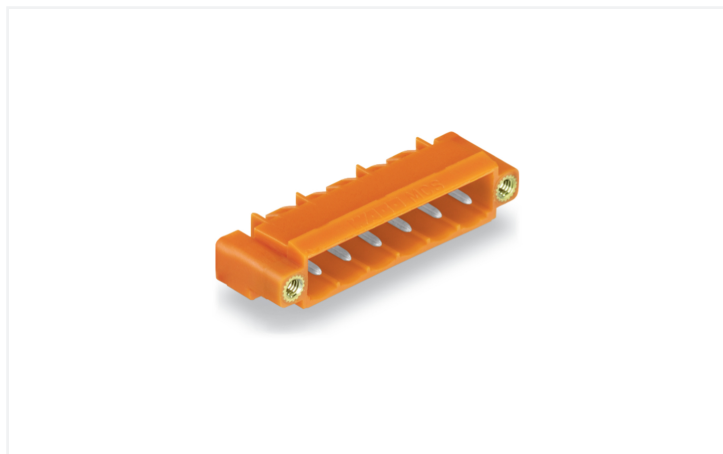


Data Sheet | Item Number: 231-562/108-000

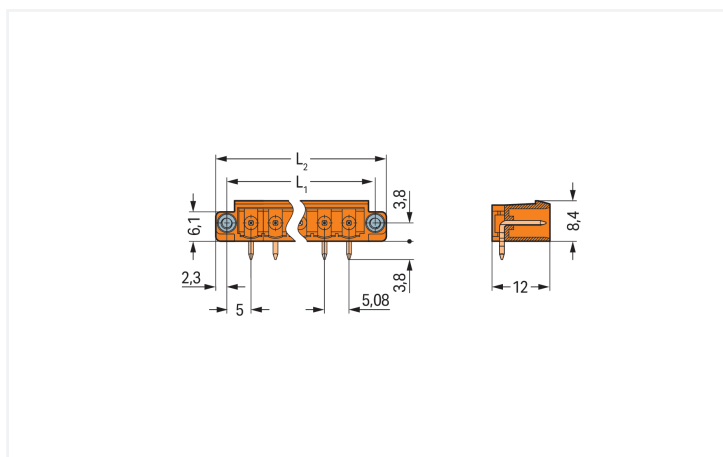
THT male header; 1.2 x 1.2 mm solder pin; angled; Threaded flange; Pin spacing 5.08 mm; 2-pole; orange

<https://www.wago.com/231-562/108-000>



Color: ■ orange

Similar to illustration



Dimensions in mm

$L1 = (\text{pole no.} \times \text{pin spacing}) + 5.4 \text{ mm}$
 $L2 = (\text{pole no.} \times \text{pin spacing}) + 10 \text{ mm}$

Male connector, 231 Series, solder pin dimensions 1.2 x 1.2 mm

This male connector (item number 231-562/108-000) is designed for seamless electrical installations. The dimensions are (20.16 x 12.2 x 12) 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 3.8 mm pin projection for male headers with straight solder pins Gold-plated or partially gold-plated contact surfaces 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	250 V	320 V	630 V
Rated impulse withstand voltage	4 kV	4 kV	4 kV
Rated current	16 A	16 A	16 A

Approvals per		UL 1059	
Use group	B	C	D
Rated voltage	300 V	-	300 V
Rated current	15 A	-	10 A

Approvals per		CSA	
Use group	B	C	D
Rated voltage	300 V	-	300 V
Rated current	15 A	-	10 A

Connection Data	
Total number of potentials	2
Number of connection types	1
Number of levels	1

Connection 1	
Pole number	2

Physical data	
Pin spacing	5.08 mm / 0.2 inches
Width	20.16 mm / 0.794 inches
Height	12.2 mm / 0.48 inches
Height from the surface	8.4 mm / 0.331 inches
Depth	12 mm / 0.472 inches
Solder pin length	3.8 mm
Solder pin dimensions	1.2 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	No
Mating direction to the PCB	0°
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	1

Material data	
Note (material data)	Information on material specifications can be found here
Color	orange
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	0.024 MJ
Weight	1.6 g

Environmental requirements																																								
Limit temperature range	-60 ... +100 °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><tr><td>Monitoring of contact faults and interruptions</td><td>Passed</td></tr><tr><td>Voltage drop measurement before and after each axis</td><td>Passed</td></tr><tr><td>Simulated service life test through increased levels of noise-like oscillations</td><td>Test passed according to Section 9 of the standard</td></tr><tr><td>Frequency</td><td>f₁ = 5 Hz to f₂ = 150 Hz</td></tr><tr><td>Acceleration</td><td>0.572g (highest test level used for all axes)</td></tr><tr><td>Test duration per axis</td><td>5 h</td></tr><tr><td>Test directions</td><td>X, Y and Z axes</td></tr><tr><td>Extended testing: Monitoring of contact faults and interruptions</td><td>Passed</td></tr><tr><td>Extended testing: Voltage drop measurement before and after each axis</td><td>Passed</td></tr><tr><td>Shock test</td><td>Test passed according to Section 10 of the standard</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	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
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																																							
Processing temperature	-35 ... +60 °C																																							



Environmental Testing	
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)	100 pcs
Packaging type	Box
Country of origin	PL
GTIN	4045454843717
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,With Exemption
RoHS Exemption	6(c)
SCIP notification number (Austria)	0d3280fa-1749-4d9e-9648-c399d60d2b78
SCIP notification number (Belgium)	65be087b-ae4a-437d-9fff-7bb8dfa5f6e6
SCIP notification number (Bulgaria)	a1e3e355-141f-49ef-b16d-8dbbd055dd44
SCIP notification number (Czech Republic)	ecf0abdb-eb7a-4c9f-858c-0e08cb8035c4
SCIP notification number (Denmark)	3bc91f2d-987e-4ff0-9fb7-5d7129bd6a47
SCIP notification number (Finland)	38e0d155-5172-49b3-83c4-41c67f6f24dc
SCIP notification number (France)	f5f5802e-51d0-45e3-a4f2-f6608faf325f
SCIP notification number (Germany)	24e77486-5b8a-4f5c-89a4-e9b462380cba
SCIP notification number (Hungary)	57d7d746-dca7-4c72-b03a-659772a17997
SCIP notification number (Italy)	7ef4e1b2-d2f6-4eb7-9db6-0a80e1a6cbac
SCIP notification number (Netherlands)	dae6995e-42cc-4f55-af9e-6b60cbd941f1
SCIP notification number (Poland)	fec1815a-fb1b-44e1-9b68-054295607716
SCIP notification number (Romania)	90debd39-ea55-471d-8138-2139963738c6
SCIP notification number (Sweden)	083a10f1-1468-4ae8-8ddf-b65290a56374



Approvals / Certificates

General approvals



Approval	Standard	Certificate Name
CSA DEKRA Certification B.V.	C22.2	1466354
KEMA/KEUR DEKRA Certification B.V.	EN 61984	71-130478 REV.1
UR Underwriters Laboratories Inc.	UL 1059	E45172

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
BV Bureau Veritas S.A.	IEC 60998	11915/E0 BV

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 231-562/108-000	
---	--

Documentation

Additional Information

Technical Section	03.04.2019	pdf 2027.26 KB	
-------------------	------------	-------------------	--

CAD/CAE-Data

CAD data

2D/3D Models 231-562/108-000	
---------------------------------	--

CAE data

ZUKEN Portal 231-562/108-000	
---------------------------------	--



PCB Design	
Symbol and Footprint via SamacSys 231-562/108-000	
Symbol and Footprint via Ultra Librarian 231-562/108-000	

1 Compatible Products

1.1 System counterpart

1.1.1 Female connector/socket



Item No.: [231-302/107-000](#)
1-conductor female connector; CAGE
CLAMP®; 2.5 mm²; Pin spacing 5.08 mm;
2-pole; Screw flange; orange

1.2 Optional Accessories

1.2.1 Coding

1.2.1.1 Coding



Item No.: [231-129](#)
Coding key; snap-on type; light gray

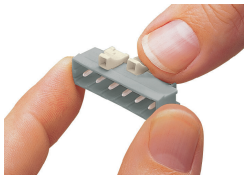
1.2.1.2 Intermediate plate



Item No.: [231-500](#)
Spacer; for formation of groups; light gray

Installation Notes

Coding



Coding a male header – fitting coding key
(s).