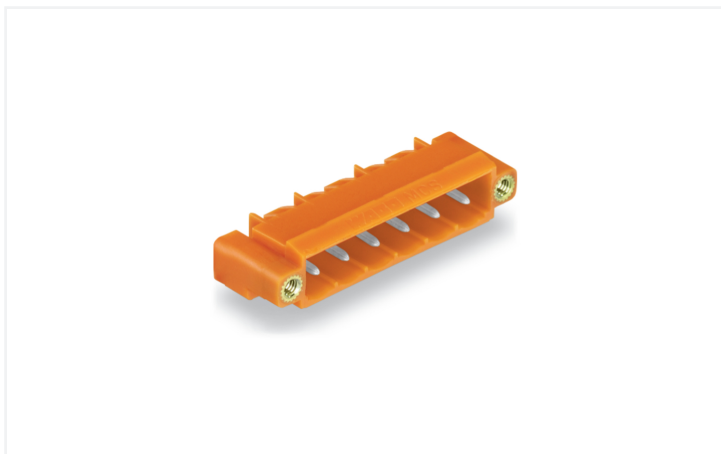


Data Sheet | Item Number: 231-563/108-000

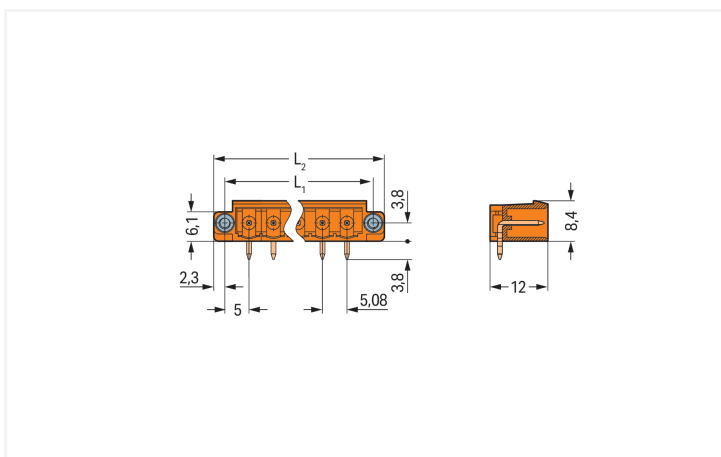
THT male header; 1.2 x 1.2 mm solder pin; angled; Threaded flange; Pin spacing 5.08 mm; 3-pole; orange

<https://www.wago.com/231-563/108-000>



Color: ■ orange

Similar to illustration



Dimensions in mm

L1 = (pole no. x pin spacing) + 5.4 mm L2 = (pole no. x pin spacing) + 10 mm

Male connector, 231 Series, orange

Easy electrical installations are guaranteed with this male connector (item number 231-563/108-000). The dimensions are (25.24 x 12.2 x 12) mm (width x height x depth).

The contact surface is coated with tin. THT is used to assemble 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	UL 1977
Rated voltage	600 V
Rated current	15 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	3
Number of connection types	1
Number of levels	1

Connection 1	
Pole number	3

Physical data

Pin spacing	5.08 mm / 0.2 inches
Width	25.24 mm / 0.994 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
!	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	0.033 MJ
Weight	2 g

Environmental requirements

Limit temperature range	-60 ... +100 °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

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)	200 pcs
Packaging type	Box
Country of origin	DE
GTIN	4045454843724
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)	3fb8c5f9-c0a1-4e0a-bf50-55800fe088c1
SCIP notification number (Belgium)	26d311ab-c318-4aeb-8bae-d7262e8b90de
SCIP notification number (Bulgaria)	cb990534-6cc6-43d9-91d0-b3c5c52aaec5
SCIP notification number (Czech Republic)	823a16b0-bd0d-4315-9392-b37adb2191d2
SCIP notification number (Denmark)	22a5d87f-471f-483f-8762-c2b874e8616c
SCIP notification number (Finland)	227800f3-94ce-41d1-8ca9-1f035aaf0fe8
SCIP notification number (France)	f2294126-e67e-4c56-b029-6871ec49f4c1
SCIP notification number (Germany)	22e41761-a54a-4d7a-b6f7-962b7ce49c69
SCIP notification number (Hungary)	50b62315-f4a1-43f1-8215-630045fb065
SCIP notification number (Italy)	ae4f4c21-2808-49eb-844a-b88271299a08
SCIP notification number (Netherlands)	b8f453c5-0622-4029-b3c1-2f2809ae66ea
SCIP notification number (Poland)	628adf8d-c716-4976-8847-1c4b27bc4da1
SCIP notification number (Romania)	c3505917-b77f-405a-97a3-8294f83d9fe4
SCIP notification number (Sweden)	e58b3538-a16f-488f-9a49-b1c8413fb18b

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 231-563/108-000	↓
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Documentation

Additional Information

Technical Section	03.04.2019	pdf 2027.26 KB	↓
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CAD/CAE-Data

CAD data

2D/3D Models 231-563/108-000	↓
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CAE data

ZUKEN Portal 231-563/108-000	↓
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PCB Design

Symbol and Footprint
via SamacSys
231-563/108-000



Symbol and Footprint
via Ultra Librarian
231-563/108-000



1 Compatible Products

1.1 System counterpart

1.1.1 Female connector/socket



Item No.: [231-303/107-000](#)

1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5.08 mm; 3-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

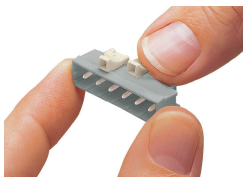


Item No.: [231-500](#)

Spacer; for formation of groups; light gray

Installation Notes

Coding



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