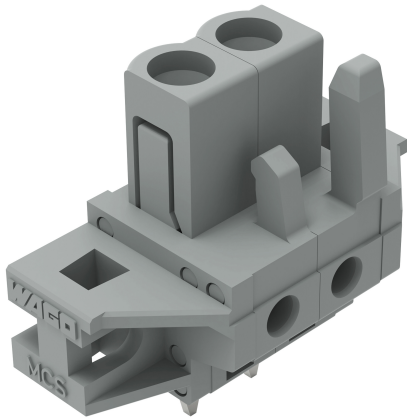


Data Sheet | Item Number: 232-132/031-000
THT female header; straight; Pin spacing 5 mm; 2-pole; clamping collar; 0.6 x 1.0 mm solder pin; gray

<https://www.wago.com/232-132/031-000>



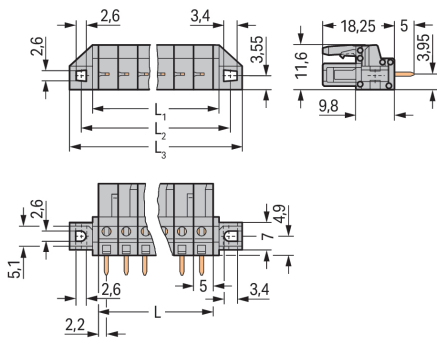
Derating Curve
THT female header (232-232) with
1-conductor male connector (231-602)
Pin spacing: 5 mm / Conductor cross-section: 2.5 mm² *F-st*
Based on: EN 60512-5-2 / Reduction factor: 0.8

Current in A

Ambient operating temperature in °C

2; 4; 12; 24-pole

Conductor rated current



L = pole no. x pin spacing
L1 = L + 3 mm
L2 = L + 8.8 mm
L3 = L + 14.8 mm
2- to 3-pole female connectors – one latch only

The contact surface is coated with tin. THT is used to solder the pcb connector.

Notes	
Safety Information	The MCS – <i>MULTI CONNECTION SYSTEM</i> 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		320 V	320 V	630 V
Rated impulse withstand voltage		4 kV	4 kV	4 kV
Rated current		12 A	12 A	12 A
Approvals per		UL 1059		
Use group		B	C	D
Rated voltage		300 V	-	300 V
Rated current		16 A	-	10 A

Ratings	
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		
Clamping units	2	
Total number of potentials	2	
Number of connection types	1	
Number of levels	1	

Connection 1	
Pole number	2

Physical data	
Pin spacing	5 mm / 0.197 inches
Width	24.8 mm / 0.976 inches
Height	23.25 mm / 0.915 inches
Height from the surface	18.25 mm / 0.719 inches
Depth	11.6 mm / 0.457 inches
Solder pin length	5 mm
Solder pin dimensions	0.6 x 1 mm
Drilled hole diameter	1.3 ^(+0.1) mm

Mechanical data	
Variable coding	Yes
Mounting type	Mounting flange
Mounting type	Feed-through mounting Panel mounting
Anti-rotation protection	Yes
Suitable for through-panel applications	Yes



Plug-in connection	
Contact type (pluggable connector)	Female connector/socket
Connector (connection type)	for PCB
Mismating protection	No
Mating direction to the PCB	90 °

PCB contact	
PCB contact	THT
Solder pin arrangement	over the entire female connector (in-line)
Number of solder pins per potential	1

Material data	
Note (material data)	Information on material specifications can be found here
Color	gray
Material group	I
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Contact material	Copper alloy
Contact Plating	Tin
Fire load	0.048 MJ
Weight	2.5 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
Shock pulse form	Half sine
Acceleration	5g (highest test level used for all axes)



Environmental Testing	
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	DE
GTIN	4044918622929
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
CSA CSA Group	C22.2	1466354	Railway WAGO GmbH & Co. KG	-	Railway Ready
UR Underwriters Laboratories Inc.	UL 1977	E45171			

Approvals for marine applications

		
Approval	Standard	Certificate Name
ABS American Bureau of Shipping	-	24-0095975-PDA
BV Bureau Veritas S.A.	IEC 60998	11915/E0 BV
DNV DNV GL SE	-	TAE000016Z

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance

232-132/031-000

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Documentation

Additional Information

Technical Section

03.04.2019

pdf

2027.26 KB

↓

CAD/CAE-Data

CAD data

2D/3D Models

232-132/031-000

↓

CAE data

EPLAN Data Portal

232-132/031-000

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ZUKEN Portal

232-132/031-000

↓

PCB Design

Symbol and Footprint via SamacSys

232-132/031-000

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Symbol and Footprint via Ultra Librarian

232-132/031-000

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1 Compatible Products

1.1 System counterpart

1.1.1 Male connector/plug



Item No.: 231-602

1-conductor male connector; CAGE CLAMP®;
2.5 mm²; Pin spacing 5 mm; 2-pole; gray



1.2 Optional Accessories

1.2.1 Installation

1.2.1.1 Mounting accessories



Item No.: 231-295
Screw with nut



Item No.: 231-195
Screw with nut; M2x12; for fixing element



Item No.: 209-147
Self-tapping screw



Item No.: 231-194
Self-tapping screw; B 2.2x13, fixing hole 1.8 mm Ø

1.2.2 Test and measurement

1.2.2.1 Testing accessories



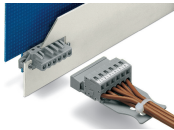
Item No.: 210-136
Test plug; 2 mm Ø; with 500 mm cable; red



Item No.: 231-661
Test plugs for female connectors; for 5 mm and 5.08 mm pin spacing; 2,50 mm²; light gray

Installation Notes

Application



The innovative flange design provides standard panel mounting options or various through-panel mounting configurations. Depending on the type of application and flange, female headers can be used either for through-panel or flush mounted applications.