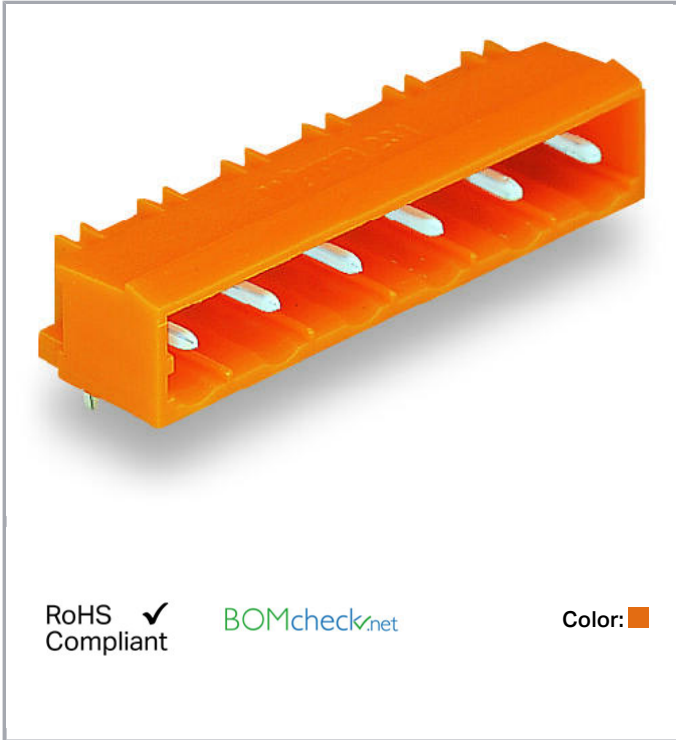


Data sheet | Item number: 231-938/001-000

THT male header; 1.0 x 1.0 mm solder pin; angled; Pin spacing 7.62 mm; 8-pole; orange



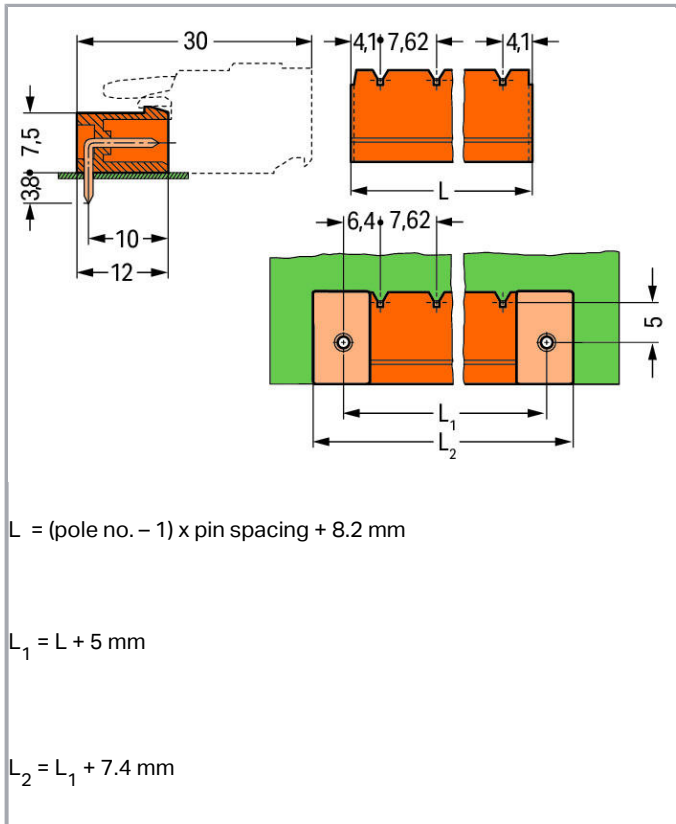
[www.wago.com/231-938/001-000](http://www.wago.com/231-938/001-000)



Subject to changes. Please also observe the further product documentation!

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### Item description

- Horizontal or vertical PCB mounting via straight or angled solder pins
- Pin cross-section: 1 x 1 mm
- With coding fingers

### Safety information 1:

The *MULTI CONNECTION SYSTEM (MCS)* is designed without breaking capacity for compliance with DIN EN 61984. When used as intended, MCS Connectors shall 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.

### Data

#### Electrical data

#### Ratings per IEC/EN 60664-1

Ratings per	IEC/EN 60664-1
Rated voltage (III / 3)	500 V

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Rated impulse voltage (III / 3)	6 kV
Rated voltage (III / 2)	630 V
Rated impulse voltage (III / 2)	6 kV
Rated voltage (II / 2)	1000 V
Rated impulse voltage (II / 2)	6 kV
Rated current	12 A
Legend (ratings)	(III / 2) $\hat{=}$ Overvoltage category III / Pollution degree 2

### Approvals per UL 1059

Rated voltage UL (Use Group B)	300 V
Rated current UL (Use Group B)	10 A
Rated voltage UL (Use Group D)	300 V
Rated current UL (Use Group D)	10 A
Approvals per	UL 1059

### Approvals per UL 1977

Rated voltage per UL 1977 (factory wiring only)	600 V
Rated current per UL 1977 (factory wiring only)	10 A

### Approvals per CSA

Rated voltage CSA (Use Group B)	300 V
Rated current CSA (Use Group B)	10 A
Rated voltage CSA (Use Group D)	300 V
Rated current CSA (Use Group D)	10 A

### Connection data

No. of poles	8
Total number of potentials	8
Number of connection types	1
Number of levels	1

### Geometrical Data

Pin spacing	7.62 mm / 0.3 inch
Width	61.54 mm / 2.423 inch
Height	12.2 mm / 0.48 inch
Height from the surface	8.4 mm / 0.331 inch

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Depth	12 mm / 0.472 inch
Solder pin length	3.8 mm
Solder pin dimensions	1 x 1 mm
Drilled hole diameter (tolerance)	1.4 <sup>(+0.1)</sup> mm

### Plug connection

Contact type (pluggable connector)	Male connector/plug
Connector connection type	for PCBs
Mismating protection	No
Mating direction to the PCB	0°

### PCB contact

PCB contact	THT
Solder pin arrangement	over the entire male connector, in line
Number of solder pins per potential	1

### Material Data

Color	orange
Material group	I
Insulating material	Polyamide 66 (PA 66)
Flammability class per UL94	V0
Contact material	Electrolytic copper (E <sub>Cu</sub> )
Contact plating	tin-plated
Fire load	0.063 MJ
Weight	3.1 g

### Environmental Requirements

Limit temperature range	-60 ... +100 °C
-------------------------	-----------------

### Commercial data

Product Group	3 (Multi Conn. System)
Packaging type	BOX
Country of origin	PL
GTIN	4044918868587
Customs Tariff No.	85366990990


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## Approvals / Certificates



### Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate name
	<b>CB</b> DEKRA Certification B.V.	IEC 61984	NL-39756
	<b>CSA</b> DEKRA Certification B.V.	C22.2	1466354




### Ship Approvals

Logo	Approval	Additional Approval Text	Certificate name
	<b>ABS</b> American Bureau of Shipping	-	19- HG1869876- PDA

### UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	<b>UR</b> Underwriters Laboratories Inc.	UL 1059	E45172
	<b>UR</b> Underwriters Laboratories Inc.	UL 1977	20130906- E45171

## Counterpart

	<b>Item no.231-708/026-000</b> 1-conductor female plug; 2.5 mm <sup>2</sup> ; Pin spacing 7.62 mm; 8-pole; 2,50 mm <sup>2</sup> ; orange	<a href="http://www.wago.com/231-708/026-000">www.wago.com/231-708/026-000</a>
	<b>Item no.231-2708/026-000</b> 2-conductor female connector; 2.5 mm <sup>2</sup> ; Pin spacing 7.62 mm; 8-pole; 2,50 mm <sup>2</sup> ; orange	<a href="http://www.wago.com/231-2708/026-000">www.wago.com/231-2708/026-000</a>
	<b>Item no.231-2708/037-000</b> 2-conductor female connector; Locking lever; 2.5 mm <sup>2</sup> ; Pin spacing 7.62 mm; 8-pole; 2,50 mm <sup>2</sup> ; orange	<a href="http://www.wago.com/231-2708/037-000">www.wago.com/231-2708/037-000</a>

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Item no. 2231-708/026-000

1-conductor female plug; push-button; 2.5 mm<sup>2</sup>; Pin spacing 7.62 mm; 8-pole; 2,50 mm<sup>2</sup>; orange

[www.wago.com/2231-708/026-000](http://www.wago.com/2231-708/026-000)



Item no. 2231-708/031-000

1-conductor female plug; push-button; clamping collar; 2.5 mm<sup>2</sup>; Pin spacing 7.62 mm; 8-pole; 2,50 mm<sup>2</sup>; orange

[www.wago.com/2231-708/031-000](http://www.wago.com/2231-708/031-000)



Item no. 2231-708/037-000

1-conductor female plug; push-button; Locking lever; 2.5 mm<sup>2</sup>; Pin spacing 7.62 mm; 8-pole; 2,50 mm<sup>2</sup>; orange

[www.wago.com/2231-708/037-000](http://www.wago.com/2231-708/037-000)



Item no. 231-708/027-000

1-conductor female plug; clamping collar; 2.5 mm<sup>2</sup>; Pin spacing 7.62 mm; 8-pole; 2,50 mm<sup>2</sup>; orange

[www.wago.com/231-708/027-000](http://www.wago.com/231-708/027-000)



Item no. 231-708/031-000

1-conductor female plug; clamping collar; 2.5 mm<sup>2</sup>; Pin spacing 7.62 mm; 8-pole; 2,50 mm<sup>2</sup>; orange

[www.wago.com/231-708/031-000](http://www.wago.com/231-708/031-000)



Item no. 231-708/037-000

1-conductor female plug; Locking lever; 2.5 mm<sup>2</sup>; Pin spacing 7.62 mm; 8-pole; 2,50 mm<sup>2</sup>; orange

[www.wago.com/231-708/037-000](http://www.wago.com/231-708/037-000)



Item no. 732-128/026-000

1-conductor female plug; angled; 2.5 mm<sup>2</sup>; Pin spacing 7.62 mm; 8-pole; 2,50 mm<sup>2</sup>; orange

[www.wago.com/732-128/026-000](http://www.wago.com/732-128/026-000)

## Compatible products

### Marking accessories

Item no.: 210-833

Marking strips; on reel; 6 mm wide; plain; Self-adhesive; white

[www.wago.com/210-833](http://www.wago.com/210-833)



Item no.: 210-834

Marking strips; on reel; 5 mm wide; plain; Self-adhesive; white

[www.wago.com/210-834](http://www.wago.com/210-834)

### Coding



Item no.: 231-130

Coding key; snap-on type; light gray

[www.wago.com/231-130](http://www.wago.com/231-130)

Item no.: 231-500

Spacer; for formation of groups; light gray

[www.wago.com/231-500](http://www.wago.com/231-500)

## Downloads

### Documentation

### Additional Information

Subject to changes. Please also observe the further product documentation!

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Technical explanations

Apr 3, 2019

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3.6 MB

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## CAD/CAE-Data

### CAD data

2D/3D Models 231-938/001-000

URL

Download

### CAE data

EPLAN Data Portal 231-938/001-000

URL

Download

### PCB Design

Symbol and Footprint 231-938/001-000

URL

Download

CAX data for your PCB design, consisting of "schematic symbols and PCB footprints", allow easy integration of the WAGO component into your development environment.

### Supported formats:

- Accel EDA 14 & 15
- Altium 6 to current version
- Cadence Allegro
- DesignSpark
- Eagle Libraries
- KiCad
- Mentor Graphics BoardStation
- Mentor Graphics Design Architect
- Mentor Graphics Design Expedition 99 and 2000
- OrCAD 9.X PCB and Capture
- PADS PowerPCB 3, 3.5, 4.X, and 5.X
- PADS PowerPCB and PowerLogic 3.0
- PCAD 2000, 2001, 2002, 2004, and 2006
- Pulsonix 8.5 or newer
- STL
- 3D STEP
- TARGET 3001!
- View Logic ViewDraw
- Quadcept
- Zuken CadStar 3 and 4

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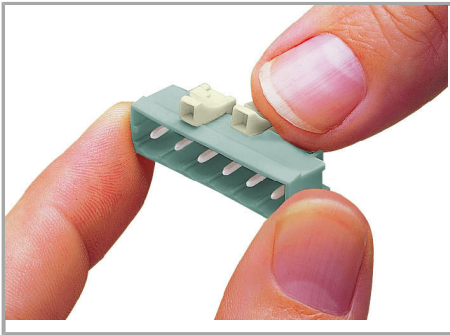
- Zuken CR-5000 and CR-8000

PCB Component Libraries (EDA), PCB CAD Library Ultra Librarian

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## Installation Notes

### Coding



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

## Product family

**<i>MCS</i> MIDI Classic**

[Learn more about the product family.](#)

[Show all products from the family](#)

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