

Data sheet | Item number: 231-742/001-000

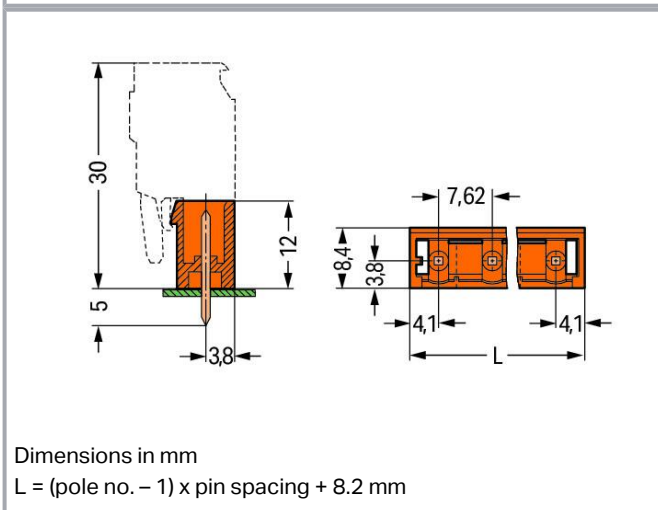
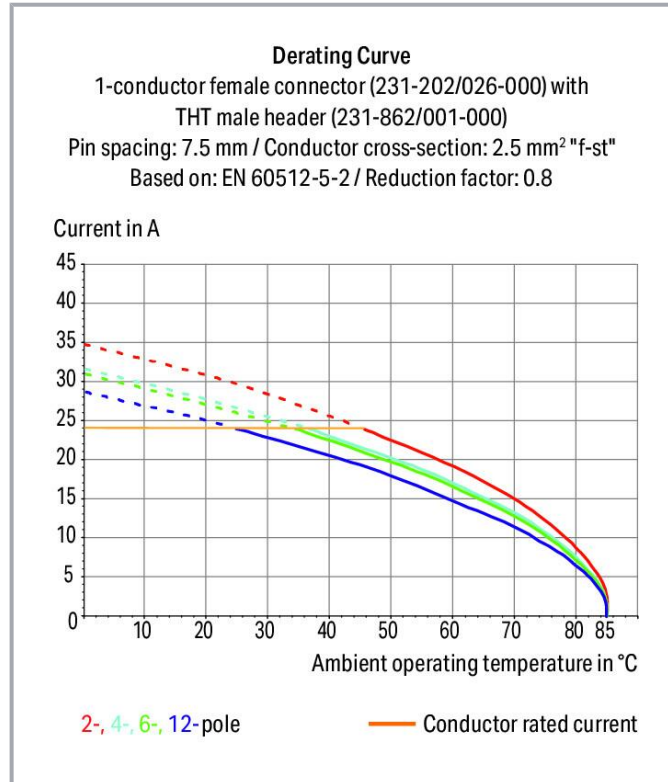
THT male header; 1.0 x 1.0 mm solder pin; straight; Pin spacing 7.62 mm; 12-pole; orange



[www.wago.com/231-742/001-000](http://www.wago.com/231-742/001-000)



**i** Picture differs from the item.



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

WAGO GmbH & Co. KG  
Hansastr. 27  
32423 Minden  
Phone: +49571 887-0 | Fax: +49571 887-169  
Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

Do you have any questions about our products?  
We are always happy to take your call at +49 (571) 887-44222.



## Item description

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

## Data

### 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

Ratings per	IEC/EN 60664-1
Nominal voltage (III/3)	500 V
Rated impulse voltage (III/3)	6 kV
Rated voltage (III/2)	630 V
Rated impulse voltage (III/2)	6 kV
Nominal voltage (II/2)	1000 V
Rated surge voltage (II/2)	6 kV
Rated current	12 A
Legend (ratings)	(III / 2) ≙ Overvoltage category III / Pollution degree 2

### Ratings per UL

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

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

WAGO GmbH & Co. KG  
Hansastr. 27  
32423 Minden  
Phone: +49571 887-0 | Fax: +49571 887-169  
Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

Do you have any questions about our products?  
We are always happy to take your call at +49 (571) 887-44222.



Rated current UL (Use Group D)	10 A
--------------------------------	------

### Ratings per UL 1977

Rated voltage (UL 1977)	600 V
Rated current UL 1977	10 A

### Ratings per CSA

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

Total number of potentials	12
Number of connection types	1
Number of levels	1

### Connection 1

Pole number	12
-------------	----

### Physical data

Pin spacing	7.62 mm / 0.3 inches
Width	92.02 mm / 3.623 inches
Height	17 mm / 0.669 inches
Height from the surface	12 mm / 0.472 inches
Depth	8.4 mm / 0.331 inches
Solder pin length	5 mm
Solder pin dimensions	1 x 1 mm
Drilled hole diameter with tolerance	1.4 <sup>(+0.1)</sup> mm

### Mechanical Data

Variable coding	Yes
Anti-rotation protection	Yes

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



## Plug-in connection

Contact type (pluggable connector)	Male connector/plug
Connector (connection type)	for PCB
Mismating protection	No
Plugging without loss of pin spacing	No
Mating direction to the PCB	90 °
Locking of plug-in connection	none

## 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	Polyamide (PA66)
Flammability class per UL94	V0
Contact material	Electrolytic copper (E <sub>Cu</sub> )
Contact plating	Tin
Fire load	0.093 MJ
Weight	4.6 g

## Environmental requirements

Limit temperature range	-60 ... +100 °C
Processing temperature	-35 ... +60 °C

## Commercial data

Product Group	3 (Multi Conn. System)
eCl@ss 10.0	27-44-04-02
eCl@ss 9.0	27-44-04-02
ETIM 8.0	EC002637
ETIM 7.0	EC002637

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

ECCN	NO DATA
PU (SPU)	50 pcs
Packaging type	box
Country of origin	PL
GTIN	4044918868020
Customs tariff number	85366930000

## Environmental Product Compliance


RoHS Compliance Status	Compliant, No Exemption
------------------------	-------------------------

## Approvals / Certificates

### General approvals

Logo	Approval	Additional Approval Text	Certificate name
	CB DEKRA Certification B.V.	IEC 61984	NL-39756/A1
	CCC CQC	GB/T 13140.1	CQC03003003013
	CSA DEKRA Certification B.V.	C22.2	1466354
	UR Underwriters Laboratories Inc.	UL 1977	E45171
	UR Underwriters Laboratories Inc.	UL 1059	E45172

### Declarations of conformity and manufacturer's declarations



Logo	Approval	Additional Approval Text	Certificate name
	Railway WAGO GmbH & Co. KG	-	Railway Ready

### Approvals for marine applications

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

WAGO GmbH & Co. KG  
 Hansastr. 27  
 32423 Minden  
 Phone: +49571 887-0 | Fax: +49571 887-169  
 Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

Do you have any questions about our products?  
 We are always happy to take your call at +49 (571) 887-44222.

Logo	Approval	Additional Approval Text	Certificate name
	<b>ABS</b> American Bureau of Shipping	-	19- HG1869876- PDA
	<b>BV</b> Bureau Veritas S.A.	IEC 60998	11915/DO BV

## Counterpart

	<b>Item no.231-712/026-000</b> 1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 7.62 mm; 12-pole; 2,50 mm²; orange	<a href="http://www.wago.com/231-712/026-000">www.wago.com/231-712/026-000</a>
	<b>Item no.231-2712/026-000</b> 2-conductor female connector; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 7.62 mm; 12-pole; with integrated end plate; 2,50 mm²; orange	<a href="http://www.wago.com/231-2712/026-000">www.wago.com/231-2712/026-000</a>
	<b>Item no.231-2712/037-000</b> 2-conductor female connector; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 7.62 mm; 12-pole; Lateral locking levers; 2,50 mm²; orange	<a href="http://www.wago.com/231-2712/037-000">www.wago.com/231-2712/037-000</a>
	<b>Item no.2231-712/026-000</b> 1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 7.62 mm; 12-pole; 2,50 mm²; orange	<a href="http://www.wago.com/2231-712/026-000">www.wago.com/2231-712/026-000</a>
	<b>Item no.2231-712/031-000</b> 1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 7.62 mm; 12-pole; clamping collar; 2,50 mm²; orange	<a href="http://www.wago.com/2231-712/031-000">www.wago.com/2231-712/031-000</a>
	<b>Item no.2231-712/037-000</b> 1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 7.62 mm; 12-pole; Lateral locking levers; 2,50 mm²; orange	<a href="http://www.wago.com/2231-712/037-000">www.wago.com/2231-712/037-000</a>
	<b>Item no.231-712/027-000</b> 1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 7.62 mm; 12-pole; clamping collar; 2,50 mm²; orange	<a href="http://www.wago.com/231-712/027-000">www.wago.com/231-712/027-000</a>
	<b>Item no.231-712/031-000</b> 1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 7.62 mm; 12-pole; clamping collar; 2,50 mm²; orange	<a href="http://www.wago.com/231-712/031-000">www.wago.com/231-712/031-000</a>

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



**Item no. 732-132/026-000**

1-conductor female connector, angled; CAGE CLAMP®; 2.5 mm²; Pin spacing 7.62 mm; 12-pole; 2,50 mm²; orange

[www.wago.com/732-132/026-000](http://www.wago.com/732-132/026-000)



**Item no. 231-712/037-000**

1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 7.62 mm; 12-pole; Lateral locking levers; 2,50 mm²; orange

[www.wago.com/231-712/037-000](http://www.wago.com/231-712/037-000)

**Optional accessories**

**Coding**

Intermediate plate



**Item no.: 231-500**

Spacer; for formation of groups; light gray

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

Coding



**Item no.: 231-130**

Coding key; snap-on type; light gray

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

**Downloads**

**Documentation**

**Additional Information**

Technical Section	2019 Apr 3	pdf	Download
Technical explanations		2.1 MB	

**CAD/CAE-Data**

**CAD data**

2D/3D Models 231-742/001-000	URL	Download
------------------------------	-----	----------

**CAE data**

EPLAN Data Portal 231-742/001-000	URL	Download
-----------------------------------	-----	----------

ZUKEN Portal 231-742/001-000	URL	Download
------------------------------	-----	----------

EPLAN Data Portal 231-742/001-000	URL	Download
-----------------------------------	-----	----------

**PCB Design**

Symbol and Footprint via Ultra Librarian 231-742/001-000

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

WAGO GmbH & Co. KG  
 Hansastr. 27  
 32423 Minden  
 Phone: +49571 887-0 | Fax: +49571 887-169  
 Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

Do you have any questions about our products?  
 We are always happy to take your call at +49 (571) 887-44222.



[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
- Altair
- Altium 6 to current version
- Autodesk Fusion 360
- 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
- Zuken CR-5000 and CR-8000
- Zuken eCADSTAR 2020 and 2021Zuken CR-5000 and CR-8000

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

---

Symbol and Footprint via SamacSys 231-742/001-000

[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:

—

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

---

WAGO GmbH & Co. KG

Hansastr. 27

32423 Minden

Phone: +49571 887-0 | Fax: +49571 887-169

Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

Do you have any questions about our products?

We are always happy to take your call at +49 (571) 887-44222.





- 3D (stp)
- Altium
- CADSTAR
- Capture
- CircuitStudio
- CR-5000
- CR-8000
- DEHDL
- DesignSpark PCB
- DesignSpark PCB PRO
- DipTrace
- EAGLE
- Easy-PC
- EasyEDA
- eCADSTAR
- KiCad
- OrCAD\_Allegro16
- PADS
- Proteus
- Pulsonix
- Quadcept
- SOLIDWORKS PCB
- TARGET 3001!
- xDX Designer
- Xpedition

PCB Component Libraries (EDA), PCB CAD Library SamacSys Electronic Component Search Engine

---

#### Asset Administration Shell

Asset Administration Shell 231-742/001-000	<a href="#">URL</a>	<a href="#">Download</a>
--	---------------------	--------------------------

---

#### Environmental Product Compliance

##### Compliance Search

Environmental Product Compliance 231-742/001-000	<a href="#">URL</a>	<a href="#">Download</a>
--	---------------------	--------------------------

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

---

WAGO GmbH & Co. KG  
Hansastr. 27  
32423 Minden  
Phone: +49571 887-0 | Fax: +49571 887-169  
Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

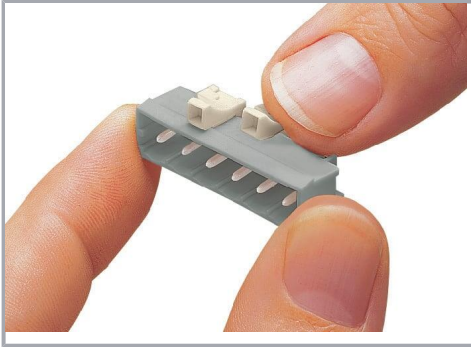
Do you have any questions about our products?  
We are always happy to take your call at +49 (571) 887-44222.

THT male header; 1.0 x 1.0 mm solder pin; straight; Pin spacing 7.62 mm; 12-pole;  
orange

---

## Installation Notes

### Coding



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

## Product family

**MCS MIDI Classic**

[Show all products from the family](#)

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