

**Data sheet | Item number: 232-870/045-000**

THT female header; angled; Pin spacing 7.62 mm; 10-pole; 0.6 x 1.0 mm solder pin; orange



[www.wago.com/232-870\\_045-000](http://www.wago.com/232-870_045-000)



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

WAGO Corporation  
Germantown, WI 53022  
Phone: 1-800-DIN-RAIL (346-7245) | Fax: (262) 255-6222  
Email: [info.us@wago.com](mailto:info.us@wago.com) | Web: [www.wago.us](http://www.wago.us)

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



Dimensions in mm

$L = (\text{pole no.} - 1) \times \text{pin spacing} + 5.08 \text{ mm} + 1.5 \text{ mm}$

2- to 3-pole female connectors – one latch only

## Item description

- Horizontal or vertical PCB mounting via straight or angled solder pins
- For board-to-board and board-to-wire connections
- Touch-proof PCB outputs
- Easy-to-identify PCB inputs and outputs
- With coding fingers

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



## Data

### Notes

#### Safety information 1

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. 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

### IEC Approvals

Ratings per	IEC/EN 60664-1
Rated voltage (III / 3)	500 V
Rated surge voltage (III/3)	6 kV
Rated voltage (III/2)	630 V
Rated surge 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) $\hat{=}$ Overvoltage category III / Pollution degree 2

### UL Approvals

Approvals per	UL 1059
Rated voltage UL (Use Group B)	300 V
Rated current UL (Use Group B)	15 A
Rated voltage UL (Use Group D)	300 V
Rated current UL (Use Group D)	10 A

### Ratings per UL

Rated voltage UL 1977	600 V
Rated current UL 1977	15 A

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

WAGO Corporation  
Germantown, WI 53022  
Phone: 1-800-DIN-RAIL (346-7245) | Fax: (262) 255-6222  
Email: [info.us@wago.com](mailto:info.us@wago.com) | Web: [www.wago.us](http://www.wago.us)

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



## CSA Approvals

Approvals per	CSA
Rated voltage CSA (Use Group B)	300 V
Rated current CSA (Use Group B)	15 A
Rated voltage CSA (Use Group D)	300 V
Rated current CSA (Use Group D)	10 A

## Connection data

Total number of potentials	10
Number of connection types	1
Number of levels	1

## Connection 1

Number of poles	10
-----------------	----

## Physical data

Pin spacing	7.62 mm / 0.3 inch
Width	75.16 mm / 2.959 inch
Height	15.4 mm / 0.606 inch
Height from the surface	11.6 mm / 0.457 inch
Depth	18.25 mm / 0.719 inch
Solder pin length	3.8 mm
Solder pin dimensions	0.6 x 1 mm
Drilled hole diameter with tolerance	1.3 <sup>(+0.1)</sup> mm

## Plug-in connection

Contact type (pluggable connector)	Female header
Connector (connection type)	for PCB
Mismating protection	No
Mating direction to the PCB	0°
Locking of plug-in connection	Without

## PCB contact

PCB Contact	THT
Solder pin arrangement	over the entire female connector (in-line)

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

Number of solder pins per potential	1
-------------------------------------	---

### Material data

Color	orange
Material group	I
Insulation material	Polyamide (PA66)
Flammability class per UL94	V0
Contact material	Copper alloy
Contact plating	tin-plated
Fire load	0.21 MJ
Weight	10.9 g

### Environmental requirements



Limit temperature range	-60 ... +85 °C
-------------------------	----------------

### Commercial data

PU (SPU)	25 Stück
Packaging type	box
Country of origin	DE
GTIN	4055143034364
Customs tariff number	85366990990

### Approvals / Certificates

#### UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	UR Underwriters Laboratories Inc.	UL 1977	E45171
	UR Underwriters Laboratories Inc.	UL 1059	E45172

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

## Counterpart



Item no. 731-640

1-conductor male connector; CAGE CLAMP®; 2.5 mm<sup>2</sup>; Pin spacing 7.62 mm; 10-pole; 2,50 mm<sup>2</sup>; orange

[www.wago.com/731-640](http://www.wago.com/731-640)

## Optional accessories

### Testing accessories

#### Testing accessories



Item no.: 210-136

Test plug; 2 mm Ø; with 500 mm cable

[www.wago.com/210-136](http://www.wago.com/210-136)



Item no.: 231-662

Test plugs for female connectors; for 7.5 mm and 7.62 mm pin spacing; 2,50 mm<sup>2</sup>; light gray

[www.wago.com/231-662](http://www.wago.com/231-662)

## Downloads

### Documentation

#### Additional Information

Technical explanations

2019 Apr 3

pdf  
2.0 MB

[Download](#)

## CAD files

### PCB Design

Symbol and Footprint 232-870/045-000

[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

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



- 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

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

---

## Environmental Product Compliance

### Compliance Search

Environmental Product Compliance 232-870/045-000	URL	Download
THT female header; angled; Pin spacing 7.62 mm; 10-pole; 0.6 x 1.0 mm solder pin; orange		

---

## Installation Notes

### Product family

**MCS MIDI Classic**  
[Show all products from the family](#)

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

---

WAGO Corporation  
Germantown, WI 53022  
Phone: 1-800-DIN-RAIL (346-7245) | Fax: (262) 255-6222  
Email: [info.us@wago.com](mailto:info.us@wago.com) | Web: [www.wago.us](http://www.wago.us)

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