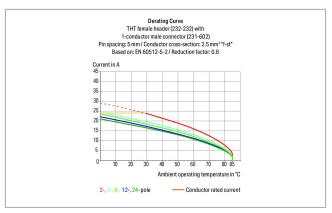
THT female header;  $0.6 \times 1.0 \text{ mm}$  solder pin; angled;  $2.5 \text{ mm}^2$ ; Pin spacing

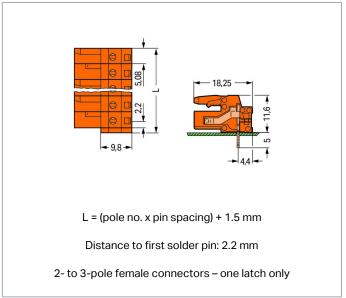
5.08 mm; 17-pole; orange

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## Item description

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

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- 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

#### 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.

# Data

#### Electrical data

## Ratings per IEC/EN

Ratings per	IEC/EN 60664-1
Nominal voltage (III/3)	320 V
Rated surge voltage (III/3)	4 kV
Rated voltage (III/2)	320 V
Rated surge voltage (III/2)	4 kV
Nominal voltage (II/2)	630 V
Rated surge voltage (II/2)	4 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)	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

 $\label{thm:condition} \textbf{Subject to changes. Please also observe the further product documentation!}$ 

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## Ratings per CSA

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

Pole No.	17
Total number of connection points	17
Total number of potentials	17
Number of connection types	1
Number of levels	1

# Physical data

Pin spacing	5.08 mm / 0.2 inch
Width	87.86 mm / 3.459 inch
Height	16.6 mm / 0.654 inch
Height from the surface	11.6 mm / 0.457 inch
Depth	18.25 mm / 0.719 inch
Solder pin length	5 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 connector/socket
Connector (connection type)	for PCB
Mismating protection	No
Mating direction to the PCB	0°

## **PCB** contact

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

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#### Material data

orange
1
Polyamide (PA66)
V0
Copper alloy
tin-plated
0.243 MJ
15.8 g

## **Environmental requirements**

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

#### Commercial data

Product Group	3 (Multi Conn. System)
Packaging type	BOX
Country of origin	DE
GTIN	4044918579612
Customs tariff number	85366990990

## Approvals / Certificates

#### **Country specific Approvals**

Logo	Approval	Additional Approval Text	Certificate name
	CB DEKRA Certification B.V.	IEC 61984	NL-39756
KEMA	KEMA/KEUR DEKRA Certification B.V.	EN 61984	2190761.01

### Ship Approvals

Logo	Approval	Additional Approval Text	Certificate name
ABS.	ABS American Bureau of Shipping	-	19- HG15869876- PDA
	LR	IEC 61984	96/20035 (E5)

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Logo	Approval	Additional Approval Text	Certificate name
	UL	UL 1977	E45171
<b>A</b> I	UL International Germany GmbH		
	UR	UL 1059	E45172
<b>A</b> I°	Underwriters Laboratories Inc.		sec. 18

## Counterpart



Item no.231-647

1-conductor male connector; 2.5 mm²; Pin spacing 5.08 mm; 17-pole; 2,50 mm²; orange

www.wago.com/231-647



Item no.231-647/019-000

1-conductor male connector; clamping collar; 2.5 mm<sup>2</sup>; Pin spacing 5.08 mm; 17-pole; 2,50 mm<sup>2</sup>; orange

www.wago.com/231-647/019-

000

# Compatible products

#### check



Item no.: 231-661

Test plugs for female connectors; for 5 mm and 5.08 mm pin spacing; 2,50 mm<sup>2</sup>; light gray

www.wago.com/231-661

#### **Downloads**

#### **Documentation**

# Additional Information

Technical explanations 3. 4. 2019 pdf Download 2.0 MB

## CAD/CAE-Data

#### **CAD** data

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2D/3D Models 232-277

CAE data

EPLAN Data Portal 232-277

URL Download

ZUKEN Portal 232-277

URL Download

PCB Design

Symbol and Footprint 232-277

URL Download

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

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

- 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

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## **Environmental Product Compliance**

Compliance Search

**Environmental Product Compliance 232-277** 

URL

Download

THT female header; 0.6 x 1.0 mm solder pin; angled; 2.5 mm $^{2}$ ; Pin spacing 5.08 mm;

17-pole; orange

## **Installation Notes**

## **Product family**

<i>MCS</i> MIDI Classic Show all products from the family

 $\label{thm:continuity} \textbf{Subject to changes. Please also observe the further product documentation!}$ 

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