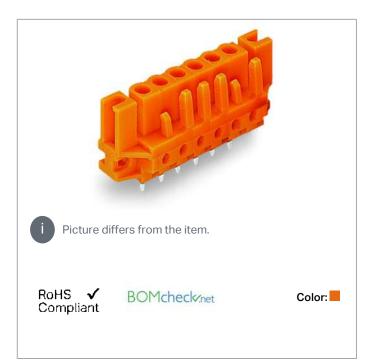
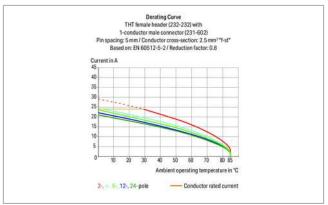
THT female header; 0.6 x 1.0 mm solder pin; straight; Spacer flange; Pin

spacing 5.08 mm; 10-pole; orange

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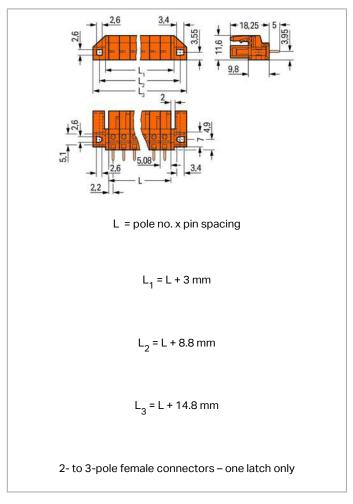






 $\label{thm:continuity} \textbf{Subject to changes. Please also observe the further product documentation!}$ 





## 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

#### 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

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

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# Ratings per IEC/EN 60664-1

Ratings per	IEC/EN 60664-1	
Rated 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 1059

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 1977

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

# 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.	10
Total number of connection points	10
Total number of potentials	10
Number of connection types	1
Number of levels	1

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

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# Physical data

Pin spacing	5.08 mm / 0.2 inch
Width	65.6 mm / 2.583 inch
Height	23.25 mm / 0.915 inch
Height from the surface	18.25 mm / 0.719 inch
Depth	11.6 mm / 0.457 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

#### Mechanical data

Mounting type	Mounting flange
Mounting type	Flush feed-through mounting
	Panel mounting

# 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**

Color	orange
Material group	I
Insulation material	Polyamide (PA66)
Flammability class per UL94	V0
Contact material	Copper alloy
Contact plating	tin-plated
Fire load	0.171 MJ
Weight	9.6 g

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

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# **Environmental Requirements**

Limit temperature range	-60 +85 °C	
Commercial data		
Product Group	3 (Multi Conn. System)	
Packaging type	BOX	
Country of origin	DE	
GTIN	4044918624244	
Customs tariff number	85366990990	

Ship Approval	ds		
Logo	Approval	Additional Approval Text	Certificate name
ABS.	ABS American Bureau of Shipping	-	19- HG15869876 PDA
<b>VERTICAL</b>	BV Bureau Veritas S.A.	IEC 60998	11915/D0 BV
DNV-GL MARITIME	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE 000016Z
JL-Approvals			
Logo	Approval	Additional Approval Text	Certificate name
<b>A</b> 1°	UL UL International Germany GmbH	UL 1977	E45171

UL 1059

Do you have any questions about our products?

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

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Underwriters Laboratories Inc.

We are always happy to take your call at {0}.

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UR

E45172

sec. 18

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## Counterpart



#### Item no.231-640

1-conductor male connector; 2.5 mm<sup>2</sup>; Pin spacing 5.08 mm; 10-pole; 2,50 mm<sup>2</sup>; orange

www.wago.com/231-640

# 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

Apr 3, 2019

pdf 3.6 MB Download

## **CAD** files

#### CAD data

2D/3D Models 232-170/047-000

URL

Download

#### CAE data

EPLAN Data Portal 232-170/047-000

URL

Download

ZUKEN Portal 232-170/047-000

URL

Download

#### **PCB** Design

Symbol and Footprint 232-170/047-000

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

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- 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

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

#### **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 mount applications.

### **Product family**

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

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

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

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