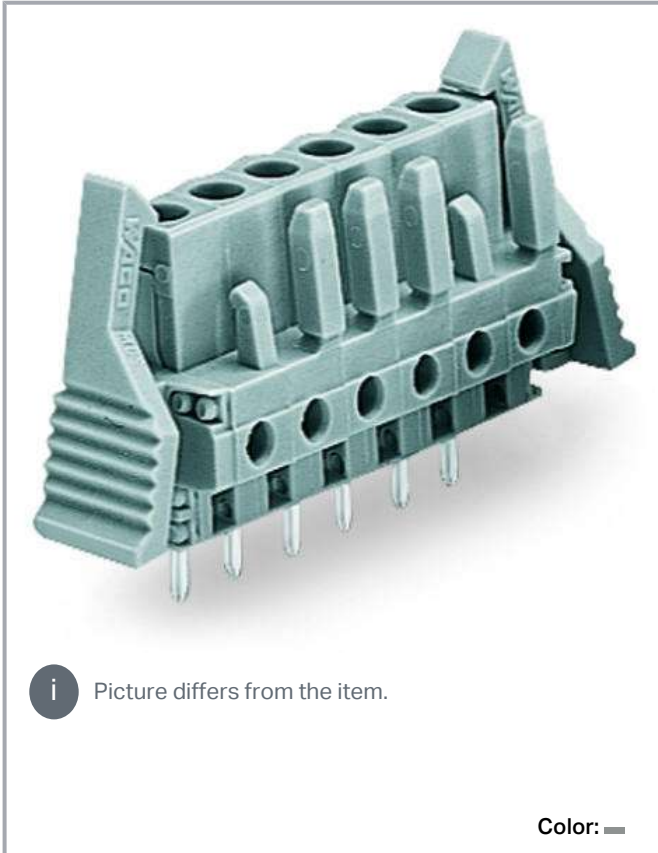


**Data sheet | Item number: 232-143/039-000**

THT female header; straight; Pin spacing 5 mm; 13-pole; Locking lever; 0.6 x 1.0 mm solder pin; gray



[www.wago.com/232-143\\_039-000](http://www.wago.com/232-143_039-000)



**i** Picture differs from the item.

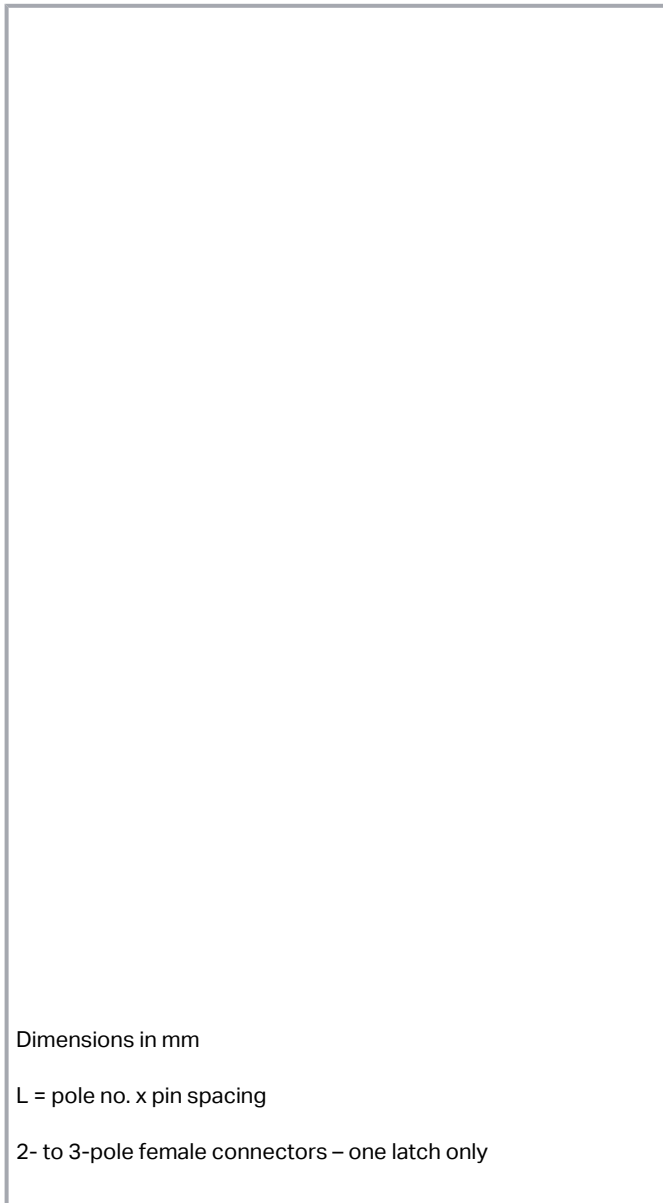
Color:



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
- 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)	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) $\triangleq$ 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

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## 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	13
Number of connection types	1
Number of levels	1

## Connection 1

Number of poles	13
-----------------	----

## Physical data

Pin spacing	5 mm / 0.197 inch
Width	80.8 mm / 3.181 inch
Height	26.6 mm / 1.047 inch
Height from the surface	21.6 mm / 0.85 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

## Plug-in connection

Contact type (pluggable connector)	Female header
Connector (connection type)	for PCB
Mismating protection	No
Mating direction to the PCB	90°
Locking of plug-in connection	locking lever

## 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
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### Material data

Color	gray
Material group	I
Insulation material	Polyamide (PA66)
Flammability class per UL94	V0
Contact material	Copper alloy
Contact plating	tin-plated
Fire load	0.236 MJ
Weight	12.9 g

### Environmental requirements


Limit temperature range	-60 ... +85 °C
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### Commercial data


Product Group	3 (Multi Conn. System)
PU (SPU)	25 Stück
Packaging type	box
Country of origin	DE
GTIN	4044918623582
Customs tariff number	85366990990

### Approvals / Certificates

#### Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate name
	CSA DEKRA Certification B.V.	C22.2	1466354

#### Ship Approvals

Logo	Approval	Additional Approval Text	Certificate name
	ABS American Bureau of Shipping	-	19- HG15869876- PDA

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**BV**  
Bureau Veritas S.A.

IEC 60998

11915/D0 BV

**UL-Approvals**

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

**Counterpart**



**Item no.231-613**  
Male connector; 13-pole; Pin spacing 5 mm; gray

[www.wago.com/231-613](http://www.wago.com/231-613)

**Optional accessories**

**Testing accessories**

Testing accessories



**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](http://www.wago.com/231-661)

**Downloads**

**Documentation**

**Additional Information**

Technical explanations	2019 Apr 3	pdf 2.0 MB	Download
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**CAD files**

**CAD data**

2D/3D Models 232-143/039-000	URL	Download
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#### CAE data

EPLAN Data Portal 232-143/039-000	<a href="#">URL</a>	<a href="#">Download</a>
ZUKEN Portal 232-143/039-000	<a href="#">URL</a>	<a href="#">Download</a>
EPLAN Data Portal 232-143/039-000	<a href="#">URL</a>	<a href="#">Download</a>

#### PCB Design

Symbol and Footprint 232-143/039-000 [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
- 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 232-143/039-000

URL

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THT female header; straight; Pin spacing 5 mm; 13-pole; Locking lever; 0.6 x 1.0 mm solder pin; gray

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## Installation Notes

### Product family

**MCS MIDI Classic**

[Show all products from the family](#)

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