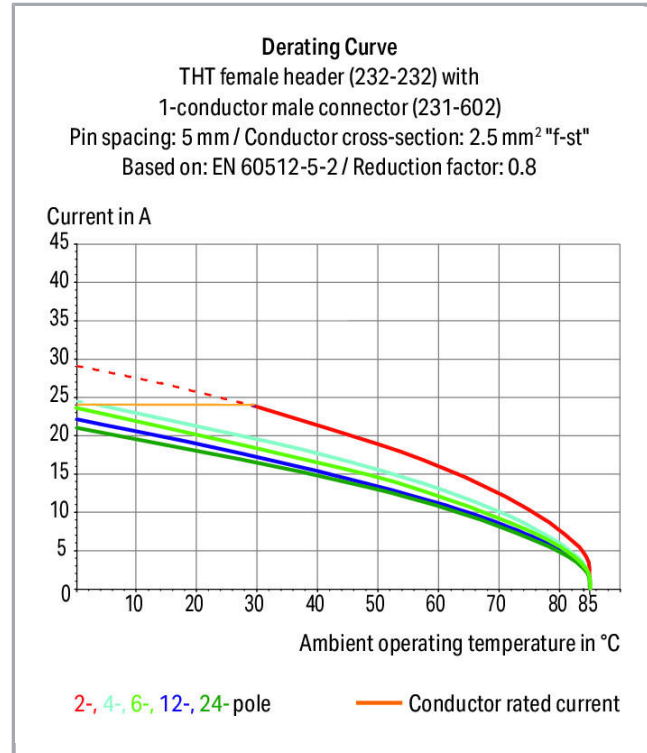
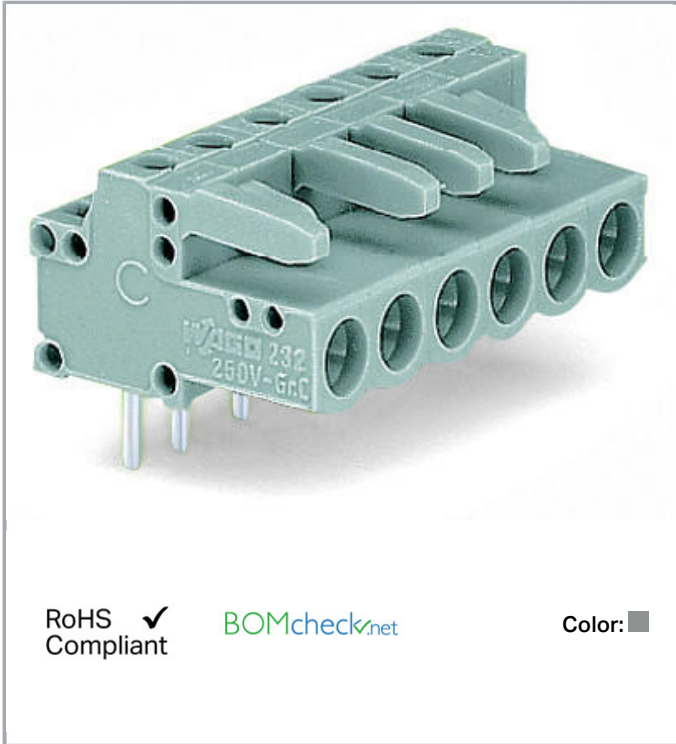


Data sheet | Item number: 232-248

THT female header; 0.6 x 1.0 mm solder pin; angled; Pin spacing 5 mm; 18-pole; gray

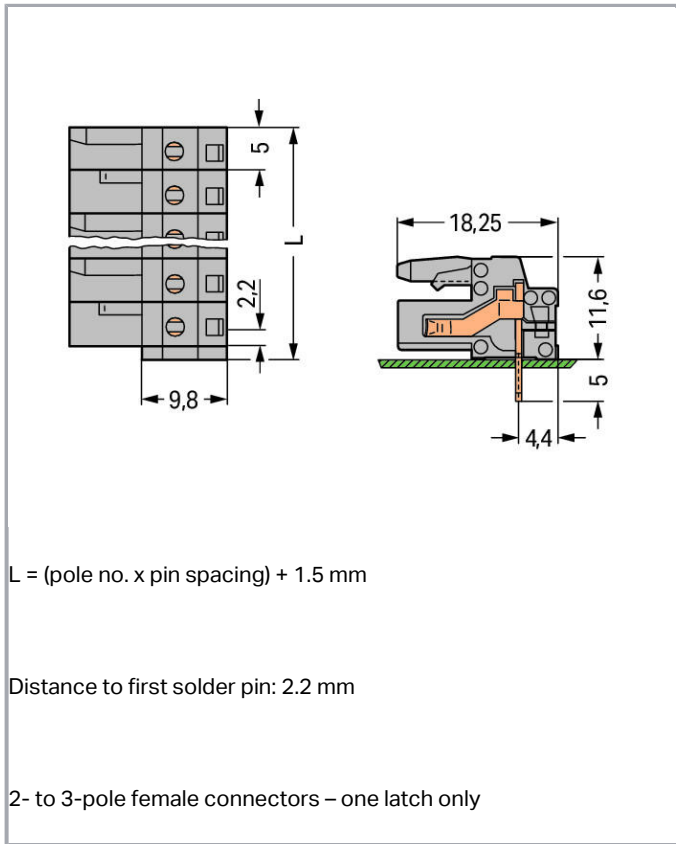
www.wago.com/232-248



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

WAGO Kontakttechnik GmbH & Co. KG
Hansastr. 27
32423 Minden
Phone: +49571 887-0 | Fax: +49571 887-169
Email: info.de@wago.com | Web: www.wago.com

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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

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!



Ratings per IEC/EN 60664-1

Ratings per	IEC/EN 60664-1
Rated voltage (III / 3)	320 V
Rated impulse voltage (III / 3)	4 kV
Rated voltage (III / 2)	320 V
Rated impulse voltage (III / 2)	4 kV
Rated voltage (II / 2)	630 V
Rated impulse voltage (II / 2)	4 kV
Rated current	12 A
Legend (ratings)	(III / 2) $\hat{=}$ Overvoltage category III / Pollution degree 2

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
Approvals per	UL 1059

Approvals per UL 1977

Rated voltage per UL 1977 (factory wiring only)	600 V
Rated current per UL 1977 (factory wiring only)	15 A

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

No. of poles	18
Total number of potentials	18
Number of connection types	1
Number of levels	1

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Geometrical Data

Pin spacing	5 mm / 0.197 inch
Width	91,5 mm / 3.602 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 (tolerance)	1,3 ^(+0,1) mm

Plug 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

Material Data

Color	gray
Material group	I
Insulating material	Polyamide 66 (PA 66)
Flammability class per UL94	V0
Contact material	Copper alloy
Contact plating	tin-plated
Fire load	0.291 MJ
Weight	16.5 g

Environmental Requirements

Limit temperature range	-60 ... +85 °C
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Subject to changes. Please also observe the further product documentation!

Commercial data

Product Group	3 (Multi Conn. System)
Packaging type	BOX
Country of origin	DE
GTIN	4044918579360
Customs Tariff No.	85366990990

Counterpart



Item no.231-618

1-conductor male connector; 2.5 mm²; Pin spacing 5 mm; 18-pole; 2,50 mm²; gray

www.wago.com/231-618



Item no.231-618/019-000

1-conductor male connector; clamping collar; 2.5 mm²; Pin spacing 5 mm; 18-pole; 2,50 mm²; gray

www.wago.com/231-618/019-000

Compatible products

Test Accessories

Item no.: 231-661

Test plugs for female connectors; for 5 mm and 5.08 mm pin spacing; 2,50 mm²; light gray

www.wago.com/231-661

Downloads

Documentation

Additional Information

Technical explanations	Apr 3, 2019	pdf 3.6 MB	Download
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CAD/CAE-Data

CAD data

2D/3D Models 232-248	URL	Download
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CAE data

EPLAN Data Portal 232-248	URL	Download
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PCB Design

Symbol and Footprint 232-248

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

Installation Notes

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Product family

<i>MCS</i> MIDI Classic

[Learn more about the product family.](#)

[Show all products from the family](#)

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