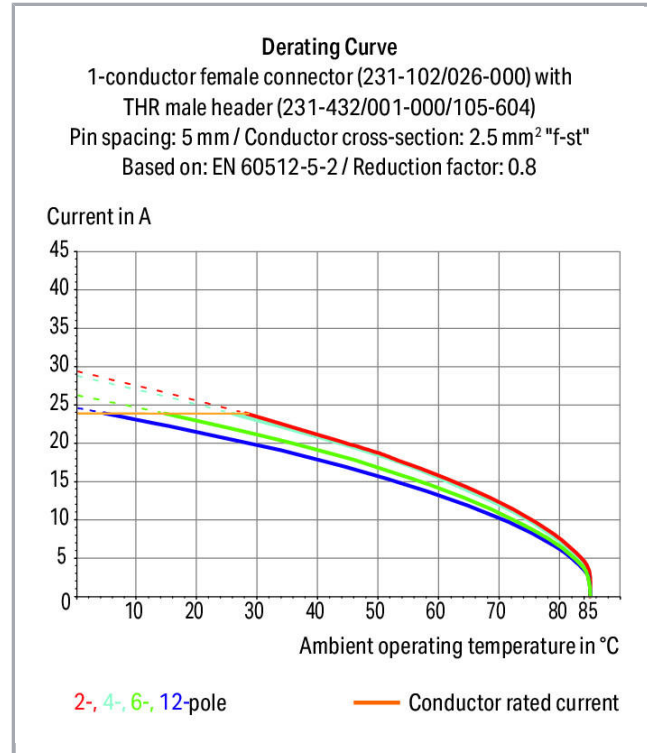


Data sheet | Item number: 231-435/001-000/105-604

THR male header; 1.0 x 1.0 mm solder pin; angled; Pin spacing 5 mm; 5-pole;  
black



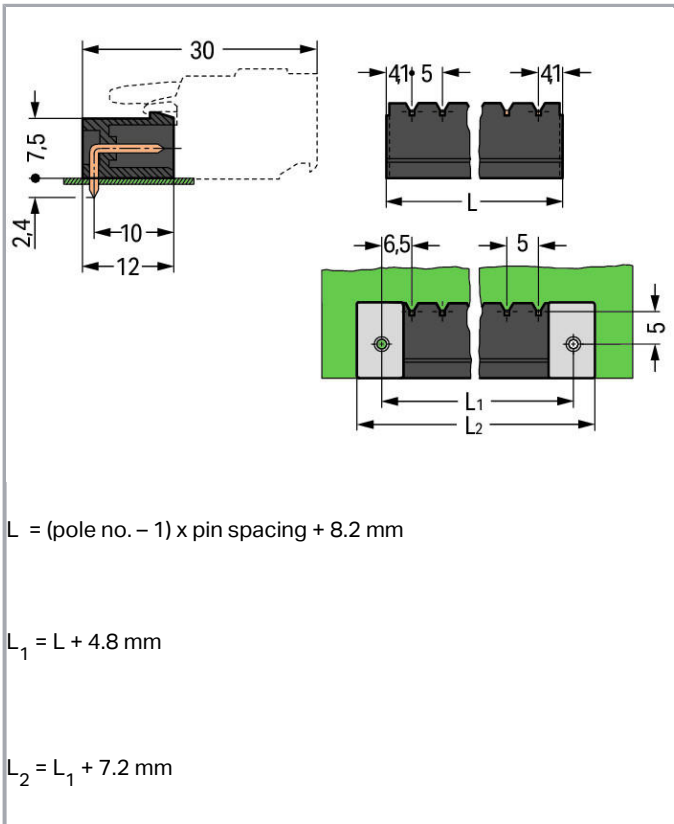
[www.wago.com/231-435/001-000/105-604](http://www.wago.com/231-435/001-000/105-604)



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

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## Item description

- THR male headers for reflow soldering in SMT applications
- Available in tape-and-reel packaging for automated pick-and-place PCB assembly
- Also available in bulk packaging for manual placement
- Male headers may be mounted horizontally or vertically
- With coding fingers

### Safety information 1:

The *MULTI CONNECTION SYSTEM (MCS)* is designed without breaking capacity for compliance with DIN EN 61984. When used as intended, MCS Connectors shall 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)	10 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)	10 A

### Approvals per CSA

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

### Connection data

No. of poles	5
Total number of potentials	5
Number of connection types	1
Number of levels	1

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## Geometrical Data

Pin spacing	5 mm / 0.197 inch
Width	28.2 mm / 1.11 inch
Height	10.8 mm / 0.425 inch
Height from the surface	8.4 mm / 0.331 inch
Depth	12 mm / 0.472 inch
Solder pin length	2.4 mm
Solder pin dimensions	1 x 1 mm
Plated through-hole diameter (THR)	1.4 <sup>(+0.1)</sup> mm

## Plug connection

Contact type (pluggable connector)	Male connector/plug
Connector connection type	for PCBs
Mismating protection	No
Mating direction to the PCB	0°

## PCB contact

PCB contact	THR
Solder pin arrangement	over the entire male connector, in line
Number of solder pins per potential	1

## Material Data

Color	black
Material group	I
Insulating material	Polyphthalamide (PPA GF)
Flammability class per UL94	V0
Contact material	Electrolytic copper (E <sub>Cu</sub> )
Contact plating	tin-plated
Fire load	0.039 MJ
Weight	1.9 g

## Environmental Requirements

Limit temperature range	-60 ... +100 °C
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## Commercial data


Product Group	3 (Multi Conn. System)
Packaging type	BOX
Country of origin	DE
GTIN	4044918988681
Customs Tariff No.	85366990990

## Approvals / Certificates



### Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate name
	<b>CB</b> DEKRA Certification B.V.	IEC 61984	NL-39756
	<b>CSA</b> DEKRA Certification B.V.	C22.2	1466354

### Ship Approvals

Logo	Approval	Additional Approval Text	Certificate name
	<b>ABS</b> American Bureau of Shipping	-	19- HG1869876- PDA

### UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	<b>UL</b> Underwriters Laboratories Inc.	UL 1059	20190731- E45172
	<b>UR</b> UL International Germany GmbH	UL 1977	E45171

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## Counterpart



Item no. 231-105/026-000

1-conductor female plug; 2.5 mm<sup>2</sup>; Pin spacing 5 mm; 5-pole; 2,50 mm<sup>2</sup>; gray

[www.wago.com/231-105/026-000](http://www.wago.com/231-105/026-000)

## Compatible products

### Marking accessories



Item no.: 210-833

Marking strips; on reel; 6 mm wide; plain; Self-adhesive; white

[www.wago.com/210-833](http://www.wago.com/210-833)



Item no.: 210-834

Marking strips; on reel; 5 mm wide; plain; Self-adhesive; white

[www.wago.com/210-834](http://www.wago.com/210-834)

### Coding

Item no.: 231-129

Coding key; snap-on type; light gray

[www.wago.com/231-129](http://www.wago.com/231-129)

Item no.: 231-500

Spacer; for formation of groups; light gray

[www.wago.com/231-500](http://www.wago.com/231-500)

## 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 231-435/001-000/105-604	URL	Download
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#### CAE data

EPLAN Data Portal 231-435/001-000/105-604	URL	Download
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#### PCB Design

Symbol and Footprint 231-435/001-000/105-604	URL	Download
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Subject to changes. Please also observe the further product documentation!



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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## Installation Notes

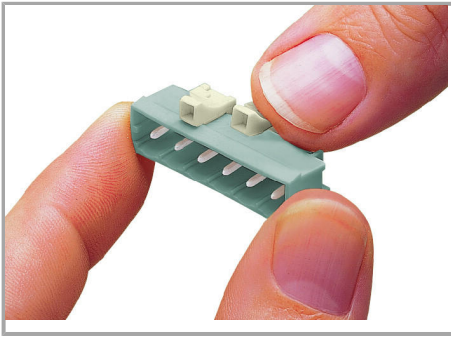
### Coding

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Coding a male header – fitting coding key(s).

## Product family

*MCS* MIDI Classic

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

[Show all products from the family](#)

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