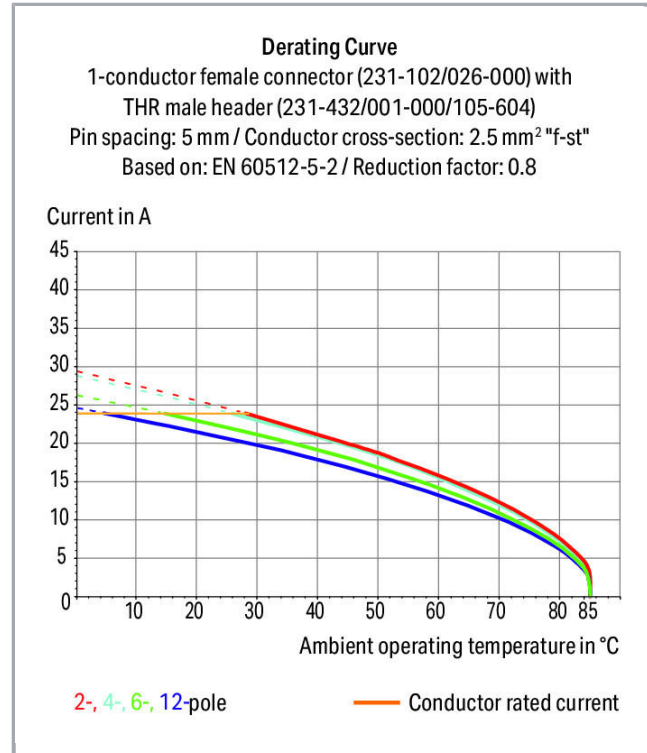


Data sheet | Item number: 231-433/001-000/105-604/997-405

THR male header; 1.0 x 1.0 mm solder pin; angled; in tape-and-reel packaging; Pin spacing 5 mm; 3-pole; black



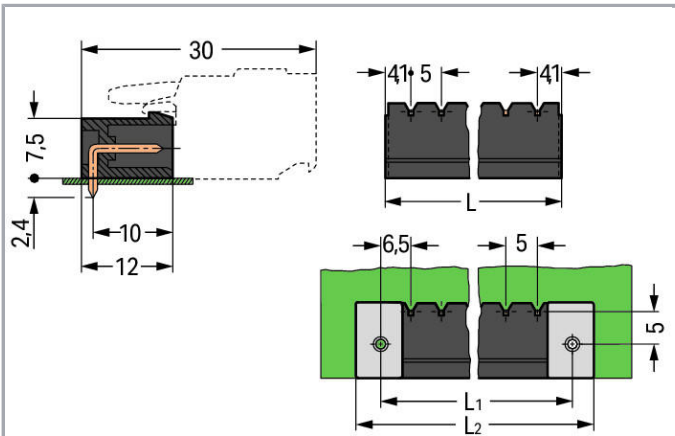
[www.wago.com/231-433/001-000/105-604/997-405](http://www.wago.com/231-433/001-000/105-604/997-405)



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](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

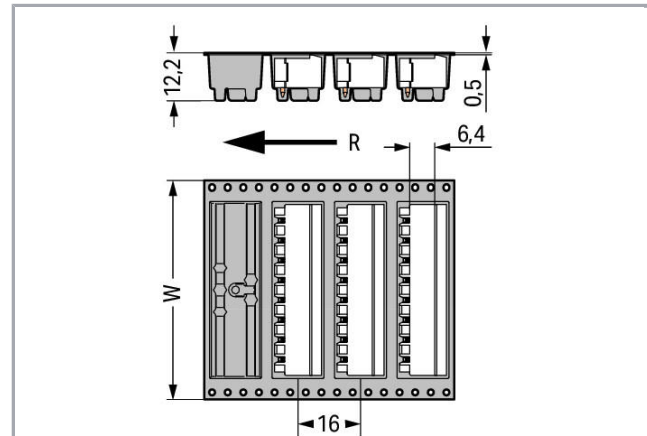
Do you have any questions about our products?  
We are always happy to take your call at +49 (571) 887-44222.



$$L = (\text{pole no.} - 1) \times \text{pin spacing} + 8.2 \text{ mm}$$

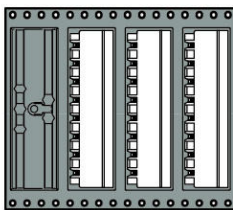
$$L_1 = L + 4.8 \text{ mm}$$

$$L_2 = L_1 + 7.2 \text{ mm}$$

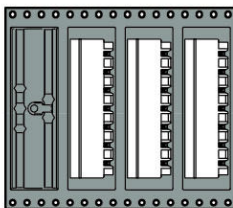


W= Tape width

R = Feed direction



Position with even number of poles



Position with odd number of poles

Pin position in tape-and-reel packaging

## Item description

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](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

Do you have any questions about our products?  
 We are always happy to take your call at +49 (571) 887-44222.



- 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

#### 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

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



### 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	3
Total number of potentials	3
Number of connection types	1
Number of levels	1

### Geometrical Data

Pin spacing	5 mm / 0.197 inch
Width	18.2 mm / 0.717 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
Reel diameter of tape-and-reel packaging	330 mm
Tape width	32 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

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

## 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	0.027 MJ
Weight	1 g

## Environmental Requirements


Limit temperature range	-60 ... +100 °C
-------------------------	-----------------

## Commercial data

Packaging type	BOX
Country of origin	DE
GTIN	4044918936491
Customs Tariff No.	85366990990

## Approvals / Certificates

### Country specific Approvals

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

## Counterpart



Item no.231-103/026-000

1-conductor female plug; 2.5 mm<sup>2</sup>; Pin spacing 5 mm; 3-pole; 2,50 mm<sup>2</sup>; gray[www.wago.com/231-103/026-000](http://www.wago.com/231-103/026-000)

## Compatible products

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

WAGO Kontakttechnik GmbH &amp; Co. KG

Hansastr. 27

32423 Minden


Phone: +49571 887-0 | Fax: +49571 887-169

Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

Do you have any questions about our products?

We are always happy to take your call at +49 (571) 887-44222.

## Marking accessories

	<b>Item no.: 210-833</b> Marking strips; on reel; 6 mm wide; plain; Self-adhesive; white	<a href="http://www.wago.com/210-833">www.wago.com/210-833</a>
--	---	--

	<b>Item no.: 210-834</b> Marking strips; on reel; 5 mm wide; plain; Self-adhesive; white	<a href="http://www.wago.com/210-834">www.wago.com/210-834</a>
--	---	--

## Coding

<b>Item no.: 231-129</b> Coding key; snap-on type; light gray	<a href="http://www.wago.com/231-129">www.wago.com/231-129</a>
--	--

<b>Item no.: 231-500</b> Spacer; for formation of groups; light gray	<a href="http://www.wago.com/231-500">www.wago.com/231-500</a>
---	--

## Downloads

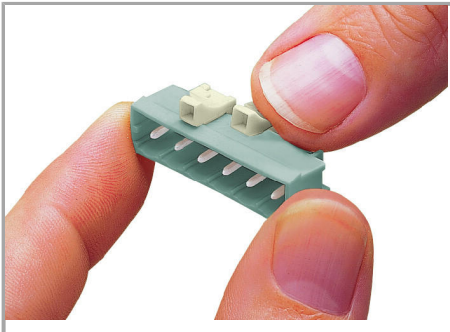
### CAD/CAE-Data

#### CAE data

EPLAN Data Portal 231-433/001-000/105-604/997-405	URL	Download
---	-----	----------

## Installation Notes

### Coding



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

## Product family

**<i>MCS</i> MIDI Classic**

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

[Show all products from the family](#)

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](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

Do you have any questions about our products?  
We are always happy to take your call at +49 (571) 887-44222.