

Data sheet | Item number: 231-545/001-000

THT male header; 1.0 x 1.0 mm solder pin; angled; Pin spacing 5.08 mm; 15-pole; orange

www.wago.com/231-545_001-000



RoHS
Compliant

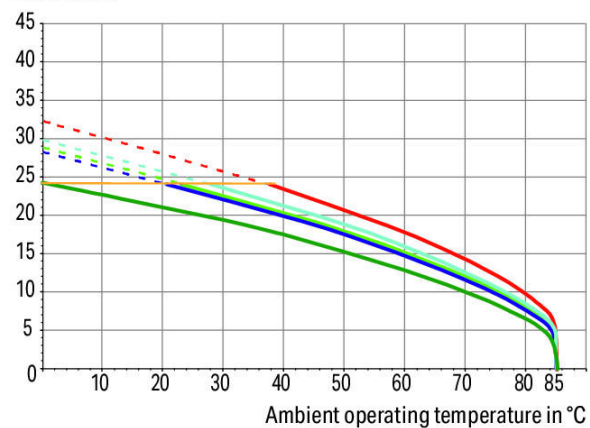
BOMcheck.net

Color: ■

Derating Curve

1-conductor female connector (231-102/026-000) with
THT male header (231-462/001-000)
Pin spacing: 5 mm / Conductor cross-section: 2.5 mm² "f-st"
Based on: EN 60512-5-2 / Reduction factor: 0.8

Current in A



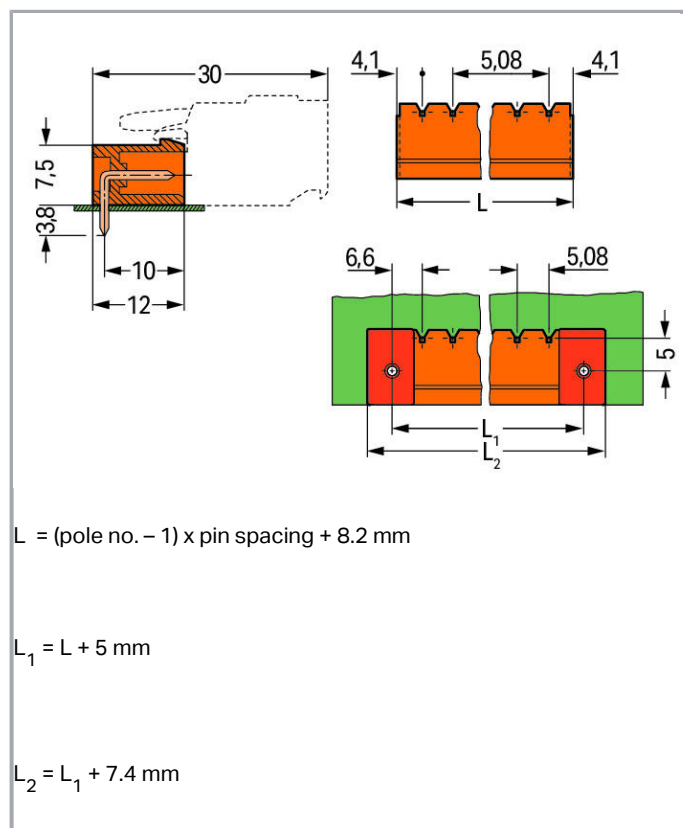
2-, 4-, 6-, 12-, 24- pole

— Conductor rated current

Subject to changes.

WAGO Kontakttechnik GmbH & Co. KG
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Item description

- Horizontal or vertical PCB mounting via straight or angled solder pins
- Pin cross-section: 1 x 1 mm
- 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

Rated voltage (III / 3)	320 V
Rated impulse voltage (III / 3)	4 kV

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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 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	15
Total number of potentials	15
Number of connection types	1
Number of levels	1

Geometrical Data

Pin spacing	5.08 mm / 0.2 inch
Width	79.32 mm / 3.123 inch
Height	12.2 mm / 0.48 inch
Height from the surface	8.4 mm / 0.331 inch
Depth	12 mm / 0.472 inch
Solder pin length	3.8 mm

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Solder pin dimensions	1 x 1 mm
Drilled hole diameter (tolerance)	1.4 ^(- ... +0.1) 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	THT
Solder pin arrangement	over the entire male connector, in line
Number of solder pins per potential	1

Material Data

Color	orange
Material group	I
Insulating material	Polyamide 66 (PA 66)
Flammability class per UL94	V0
Contact material	Electrolytic copper (E _{Cu})
Contact plating	tin-plated
Fire load	0.084 MJ
Weight	4.7 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	PL
GTIN	4044918867399
Customs Tariff No.	85366990990

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Approvals / Certificates

Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate name
	CB DEKRA Certification B.V.	IEC 61984	NL-39756
	CSA DEKRA Certification B.V.	C22.2	1466354
	KEMA/KEUR DEKRA Certification B.V.	EN 61984	2190761.01

Ship Approvals

Logo	Approval	Additional Approval Text	Certificate name
	ABS American Bureau of Shipping	-	19-HG1869876-PDA

UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	UL UL International Germany GmbH	UL 1977	E45171
	UR Underwriters Laboratories Inc.	UL 1059	E45172

Compatible products

Coding



Item no.: 231-129
 Coding key; snap-on type; light gray

www.wago.com/231-129

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**Item no.: 231-500**

Spacer; for formation of groups; light gray

www.wago.com/231-500**Marking accessories****Item no.: 210-833**

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

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**Downloads****Documentation****Additional Information**

Technical explanations

Apr 3, 2019

pdf
3.6 MB[Download](#)**CAD/CAE-Data****CAD data**

2D/3D Models 231-545/001-000

[URL](#)[Download](#)**CAE data**

EPLAN Data Portal 231-545/001-000

[Download](#)**PCB Design**

Symbol and Footprint 231-545/001-000

[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

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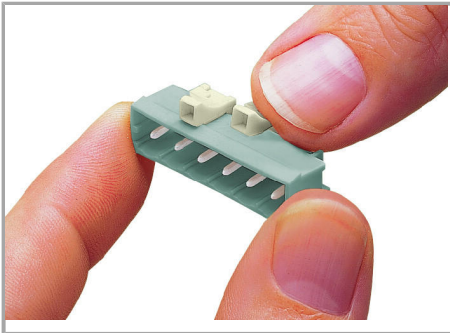
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- Mentor Graphics Design Expedition 99 and 2000
- OrCAD 9.X PCB and Capture
- PADS PowerPCB 3, 3.5, 4.X, and 5.X
- PADS PowerPCB and PowerLogic 3.0
- PCAD 2000, 2001, 2002, 2004, and 2006
- Pulsonix 8.5 or newer
- STL
- 3D STEP
- TARGET 3001!
- View 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

Coding



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

Product family

<i>MCS</i> MIDI Classic

[Show all products from the family](#)

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