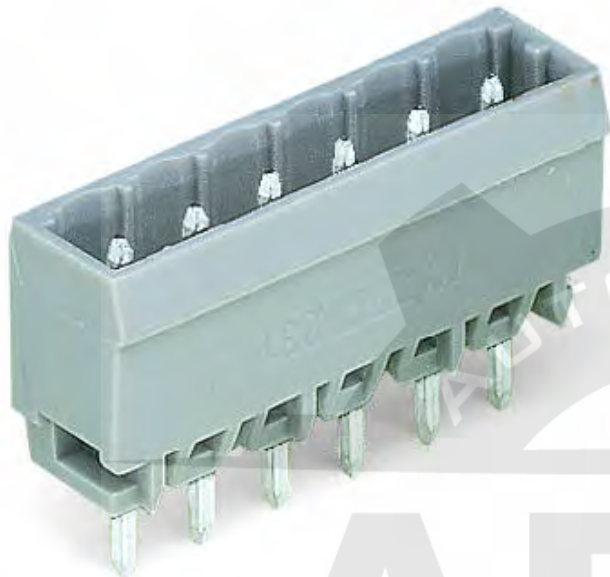


Data sheet | Item number: 231-148/001-000

THT male header; 1.0 x 1.0 mm solder pin; straight; Pin spacing 5 mm; 18-pole; gray



231-148_001-000



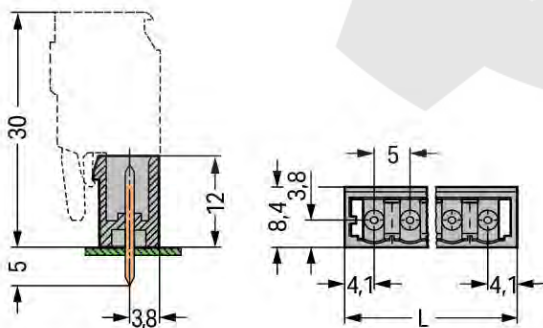
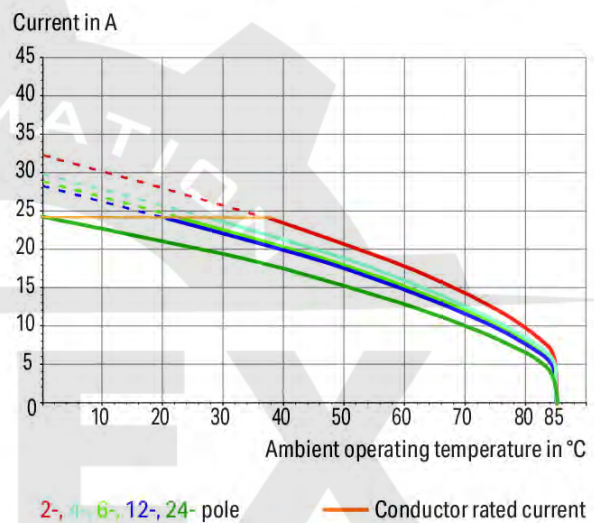
RoHS
Compliant

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



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

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
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

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

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

Total number of potentials	18
Number of connection types	1



Number of levels	1
No. of poles	18

Geometrical Data

Pin spacing	5 mm / 0.197 inch
Width	93.2 mm / 3.669 inch
Height	17 mm / 0.669 inch
Height from the surface	12 mm / 0.472 inch
Depth	8.4 mm / 0.331 inch
Solder pin length	5 mm
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
Mismatching protection	No
Mating direction to the PCB	90°

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	gray
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	0.101 MJ
Weight	5.654 g

Environmental Requirements

Limit temperature range	-60 +100 °C
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Commercial data

Product Group	3 (Multi Conn. System)
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Country of origin	PL
GTIN	4044918864015
Customs Tariff No.	85366990990

Approvals / Certificates

Radio-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

Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate name
	ABS American Bureau of Shipping	-	14- HG1241537- PDA
	CB DEKRA Certification B.V.	IEC 61984	NL-39756
	CSA DEKRA Certification B.V.	C22.2	1466354
	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE000016Z

Ship Approvals

Logo	Approval	Additional Approval Text	Certificate name
	ABS American Bureau of Shipping	-	14- HG1241537- PDA
	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE000016Z

Other Approvals

Certificate

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

UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	UL Underwriters Laboratories Inc.	UL 1059	E45172-19911118
	UR UL International Germany GmbH	UL 1977	E45171

Compatible products

Coding

	Item no.: 231-129 Coding key; snap-on type; light gray	231-129
	Item no.: 231-500 Spacer; for formation of groups; light gray	231-500

Marking accessories

	Item no.: 210-833 Marking strips; on reel; 6 mm wide; plain; Self-adhesive; white	210-833
	Item no.: 210-834 Marking strips; on reel; 5 mm wide; plain; Self-adhesive; white	210-834

Downloads

Documentation

Additional Information

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



CAD data

3D Download 231-148/001-000	URL	Download
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EPLAN

EPLAN Data Portal	Download
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Subject to changes.