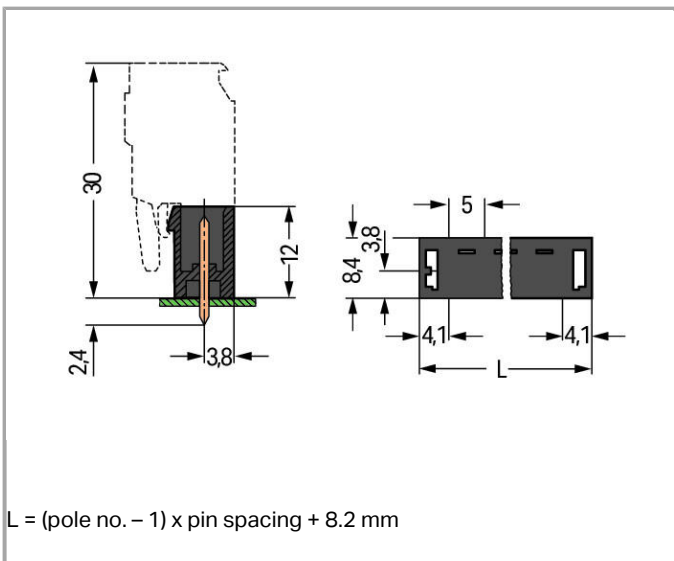
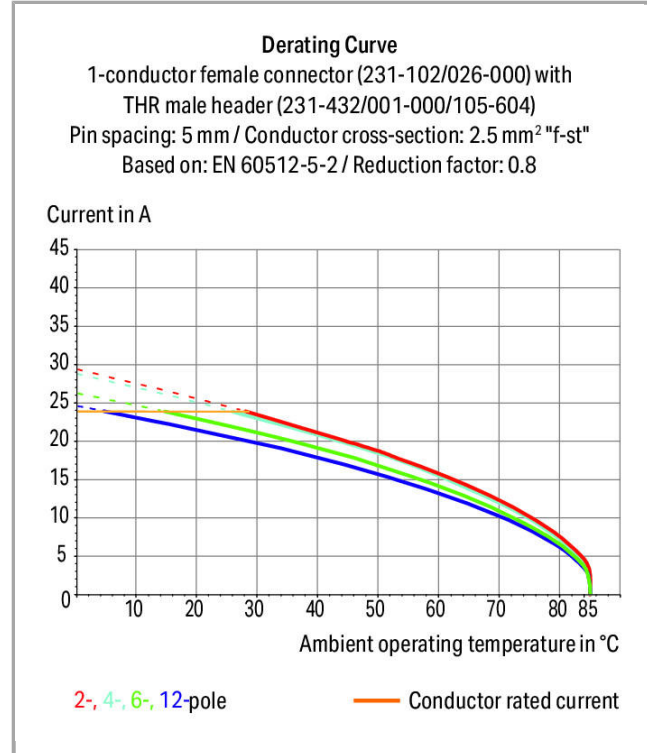


231-135/001-000/105-604



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****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
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	5
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Total number of potentials	5
Number of connection types	1
Number of levels	1

Geometrical Data

Pin spacing	5 mm / 0.197 inch
Width	28.2 mm / 1.11 inch
Height	14.4 mm / 0.567 inch
Height from the surface	12 mm / 0.472 inch
Depth	8.4 mm / 0.331 inch
Solder pin length	2.4 mm
Solder pin dimensions	1 x 1 mm

Plug connection

Contact type (pluggable connector)	Male connector/plug
Connector connection type	for PCBs
Mismating protection	No
Mating direction to the PCB	90°

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 _{Cu})
Contact plating	tin-plated
Fire load	0.039 MJ
Weight	1.855 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	DE
GTIN	4044918847346
Customs Tariff No.	85366990990

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
	CSA DEKRA Certification B.V.	C22.2	1466354

Ship Approvals

Logo	Approval	Additional Approval Text	Certificate name
	ABS American Bureau of Shipping	-	14- HG1241537- PDA

UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	UR UL International Germany GmbH	UL 1977	E45171
	UR UL International Germany GmbH	UL 1977	E45171

Compatible products

Coding

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

231-500

Marking accessories



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

210-833



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

210-834

Downloads

CAD/CAE - Smart Data

PCB libraries

DesignSpark Library for WAGO Pluggable PCB Connectors (MULTI CONNECTION SYSTEM) Compatible with DesignSpark PCB Version 4.x or higher	2.1 Oct 6, 2014	zip 6.1 MB	Download
TARGET Library for WAGO Pluggable PCB Connectors (Multi-Connection System) Compatible with TARGET PCB Design Software Version 17.x	1.1.0 Oct 6, 2014	zip 7.4 MB	Download
EAGLE Library for WAGO Pluggable PCB Connectors (MULTI CONNECTION SYSTEM) Compatible with EAGLE PCB Design Software Version 6.x or higher	2.1 Oct 6, 2014	zip 6.2 MB	Download

CAD data

3D Download 231-135/001-000/105-604	URL	Download
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Subject to changes.