

Color: ■

#### Derating Curve

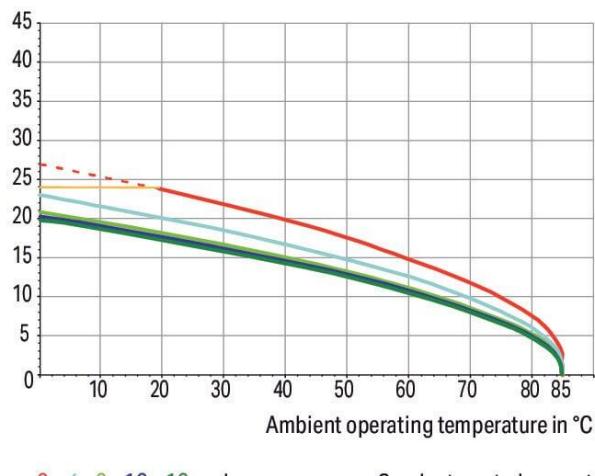
1-conductor female connector (231-102/026-000) with

THT male header (232-332)

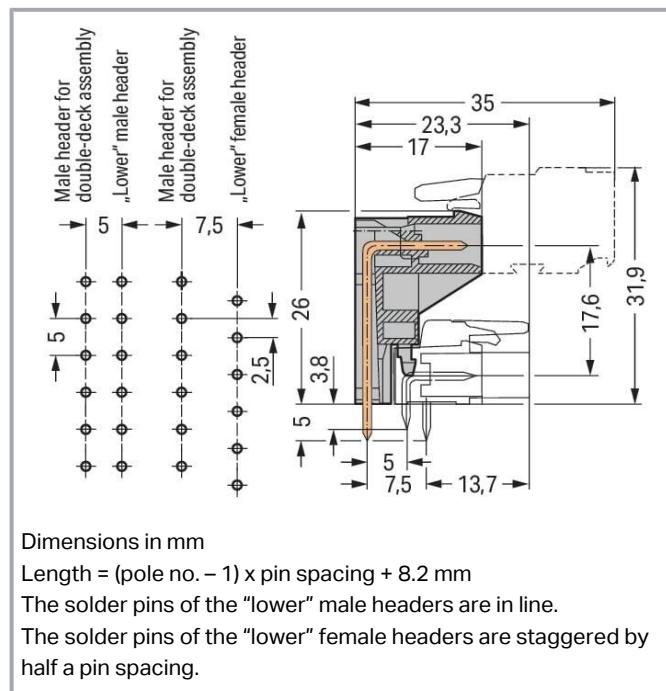
Pin spacing: 5 mm / Conductor cross-section: 2.5 mm "f-st"

Based on: EN 60512-5-2 / Reduction factor: 0.8

Current in A



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



## Item description

- Male headers for double-deck assembly provide high-density wiring for wire-to-board connections
- Horizontal PCB mounting
- Double-deck design allows male or female headers with angled solder pins to be placed on the lower deck
- Coding option available

## Data

### Notes

Safety information

The *MCS – MULTI CONNECTION SYSTEM* includes connectors without breaking capacity in accordance with DIN EN 61984. When used as intended, these connectors must not be connected /disconnected when live or under load. When used as intended, these connectors must 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.

Variants:

Other pole numbers

Gold-plated or partially gold-plated contact surfaces

Other versions (or variants) can be requested from WAGO Sales or configured at <https://configurator.wago.com/>.

## Electrical data

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

WAGO GmbH & Co. KG

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Phone: +49 571 887-0 | Fax: +49 571 887-169

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

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## Ratings per IEC/EN

Ratings per	IEC/EN 60664-1
Nominal 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
Nominal voltage (II/2)	630 V
Rated surge voltage (II/2)	4 kV
Rated current	12 A
Legend (ratings)	(III / 2) $\triangleq$ Overvoltage category III / Pollution degree 2

## Ratings per UL

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

## Ratings per UL 1977

Rated voltage (UL 1977)	600 V
Rated current UL 1977	10 A

## Ratings per CSA

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	10
Number of connection types	1
Number of levels	1

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

## Connection 1

Pole number	10
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## Physical data

Pin spacing	5 mm / 0.197 inches
Width	53.2 mm / 2.094 inches
Height	31 mm / 1.22 inches
Height from the surface	26 mm / 1.024 inches
Depth	17 mm / 0.669 inches
Solder pin length	5 mm
Solder pin dimensions	1 x 1 mm
Drilled hole diameter with tolerance	1.4 <sup>(±0.1)</sup> mm

## Mechanical Data

Variable coding	No
Anti-rotation protection	Yes

## Plug-in connection

Contact type (pluggable connector)	Male connector/plug
Connector (connection type)	for PCB
Mismating protection	No
Plugging without loss of pin spacing	No
Mating direction to the PCB	0 °
Locking of plug-in connection	none

## PCB contact

PCB contact	THT
Solder pin arrangement	over the entire male connector (in-line)
Number of solder pins per potential	1

## Material data

Note (material data)	Information on material specifications can be found here
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Color	gray
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Material group	I
Insulation material	Polyamide (PA66)
Flammability class per UL94	V0
Contact material	Electrolytic copper ( $E_{Cu}$ )
Contact plating	Tin
Fire load	0.225 MJ
Weight	8.6 g

### Environmental requirements

Limit temperature range	-60 ... +100 °C
Processing temperature	-35 ... +60 °C

### Commercial data

Product Group	3 (Multi Conn. System)
eCl@ss 10.0	27-44-04-02
eCl@ss 9.0	27-44-04-02
ETIM 8.0	EC002637
ETIM 7.0	EC002637
ECCN	NO DATA
PU (SPU)	50 pcs
Packaging type	box
Country of origin	PL
GTIN	4044918685504
Customs tariff number	85366930000

### Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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### Approvals / Certificates

#### General approvals

Logo	Approval	Additional Approval Text	Certificate name
	CB DEKRA Certification B.V.	IEC 61984	NL-39756/A1
	CCC CQC	GB/T 13140.1	CQC03003003013

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	CSA DEKRA Certification B.V.	C22.2	1466354
	KEMA/KEUR DEKRA Certification B.V.	EN 61984	71-121453
	UL Underwriters Laboratories Inc.	UL 1059	E45172
	UR Underwriters Laboratories Inc.	UL 1977	E45171

**Approvals for marine applications**

Logo	Approval	Additional Approval Text	Certificate name
	ABS American Bureau of Shipping	-	19- HG15869876- PDA
	DNV DNV GL SE	-	TAE000016Z
	LR Lloyds Register	IEC 61984	96/20035 (E5)

**Counterpart****Item no.231-110/026-000**1-conductor female connector; CAGE CLAMP®; 2.5 mm<sup>2</sup>; Pin spacing 5 mm; 10-pole; 2,50 mm<sup>2</sup>; gray[www.wago.com/231-110/026-000](http://www.wago.com/231-110/026-000)**Optional accessories****Coding**

Coding

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



Item no.: 231-160

Coding pin; for coding lower male headers; push-in type; light gray

[www.wago.com/231-160](http://www.wago.com/231-160)



Item no.: 231-129

Coding key; snap-on type; light gray

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

## Downloads

### Documentation

#### Additional Information

Technical Section

2019 Apr 3

pdf

Download

Technical explanations

2.1 MB

### CAD/CAE-Data

#### CAD data

2D/3D Models 232-340

URL

Download

#### CAE data

EPLAN Data Portal 232-340

URL

Download

ZUKEN Portal 232-340

URL

Download

### PCB Design

Symbol and Footprint via Ultra Librarian 232-340

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
- Altair
- Altium 6 to current version
- Autodesk Fusion 360
- Cadence Allegro
- DesignSpark
- Eagle Libraries
- KiCad
- Mentor Graphics

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- 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
- Zuken eCADSTAR 2020 and 2021Zuken CR-5000 and CR-8000

#### PCB Component Libraries (EDA), PCB CAD Library Ultra Librarian

Symbol and Footprint via SamacSys 232-340

[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:

- 3D (stp)
- Altium
- CADSTAR
- Capture
- CircuitStudio
- CR-5000
- CR-8000
- DEHDL
- DesignSpark PCB
- DesignSpark PCB PRO
- DipTrace
- EAGLE
- Easy-PC

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

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- EasyEDA
- eCADSTAR
- KiCad
- OrCAD\_Allegro16
- PADS
- Proteus
- Pulsonix
- Quadcept
- SOLIDWORKS PCB
- TARGET 3001!
- xDX Designer
- Xpedition

PCB Component Libraries (EDA), PCB CAD Library SamacSys Electronic Component Search Engine

#### Asset Administration Shell

Asset Administration Shell 232-340

URL

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#### Environmental Product Compliance

##### Compliance Search

Environmental Product Compliance 232-340

URL

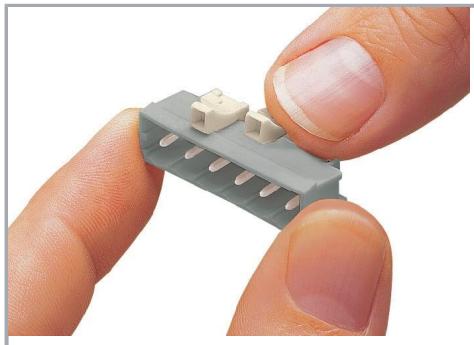
Download

THT male header for double-deck assembly; 1.0 x 1.0 mm solder pin; angled; Pin spacing 5 mm; 10-pole; gray

#### Installation Notes

##### Coding

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



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

## Product family

**MCS MIDI Classic**

[Show all products from the family](#)

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

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