

**Data sheet | Item number: 2091-1160/000-5000**

1-conductor THT female header; 1.0 mm Ø solder pin; straight; Gripping plate; direct marking; 1.5 mm<sup>2</sup>; Pin spacing 3.5 mm; 10-pole; 1,50 mm<sup>2</sup>; light gray

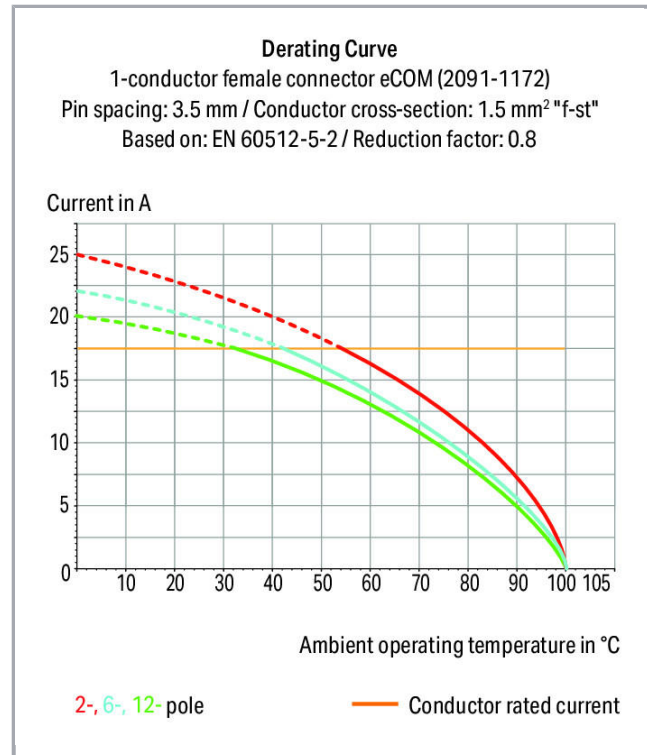


[www.wago.com/2091-1160/000-5000](http://www.wago.com/2091-1160/000-5000)



RoHS Compliant

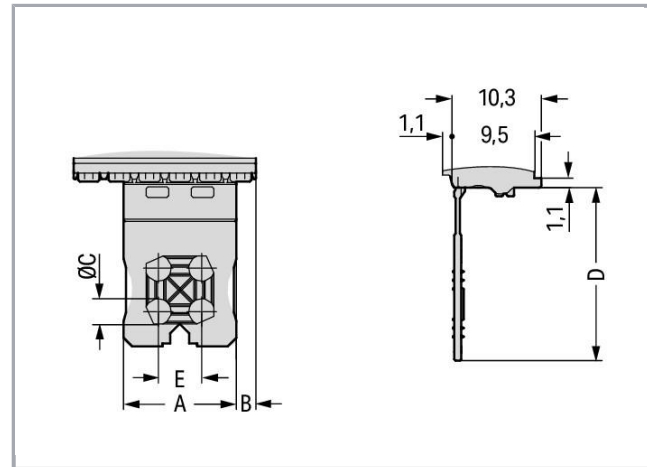
Color:



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

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## Item description

- Universal connection for all conductor types
- Simple, push-in termination of solid and ferruled conductors
- Easy-to-use design does not require special tools
- Ability to wire while mated or unmated
- Integrated test ports for testing parallel to conductor entry
- Custom-installed solder pins

## Safety information 1:

The **picoMAX® Pluggable 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. The circuit design should ensure header pins, which can be touched, are not live when unmated.

## Data

### Electrical data

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



### Ratings per IEC/EN 60664-1

Ratings per	IEC/EN 60664-1
Rated voltage (III / 3)	160 V
Rated impulse voltage (III / 3)	2.5 kV
Rated voltage (III / 2)	160 V
Rated impulse voltage (III / 2)	2.5 kV
Rated voltage (II / 2)	320 V
Rated impulse voltage (II / 2)	2.5 kV
Rated current	10 A
Legend (ratings)	(III / 2) $\triangleq$ 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

### Connection data

Connection technology	Push-in CAGE CLAMP <sup>®</sup>
Actuation type	Push-button
Solid conductor	0,2 ... 1,5 mm <sup>2</sup> / 24 ... 14 AWG
Fine-stranded conductor	0,2 ... 1,5 mm <sup>2</sup> / 24 ... 14 AWG
Fine-stranded conductor with ferrule with plastic collar	0,25 ... 0,75 mm <sup>2</sup>
Fine-stranded conductor with ferrule without plastic collar	0,25 ... 1,5 mm <sup>2</sup>
Strip length	8 ... 9 mm / 0.31 ... 0.35 inch
Conductor entry angle to the PCB	90°
No. of poles	10
Total number of connection points	10
Total number of potentials	10
Number of connection types	1
Number of levels	1

### Geometrical Data

Pin spacing	3,5 mm / 0.138 inch
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Width	35 mm / 1.378 inch
Height	38 mm / 1.496 inch
Depth	11,4 mm / 0.449 inch
Solder pin length	3.6 mm
Solder pin diameter	1 mm
Drilled hole diameter (tolerance)	1,2 <sup>(+0,1)</sup> mm

### Mechanical data

Design	With gripping plate
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### Plug connection

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

### PCB contact

PCB contact	THT
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### Material Data

Color	light gray
Material group	I
Insulating material	Polyphthalamide (PPA GF)
Flammability class per UL94	V0
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Electrolytic copper (E <sub>Cu</sub> )
Contact plating	tin-plated
Fire load	0.128 MJ
Weight	6.1 g

### Environmental Requirements

Limit temperature range	-60 ... +100 °C
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### Commercial data



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


Country of origin	DE
GTIN	4050821366553
Customs Tariff No.	85366990990

## Approvals / Certificates

### Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate name
	<b>CB</b> DEKRA Certification B.V.	IEC 61984	NL-49736 /A1
	<b>CSA</b> DEKRA Certification B.V.	C22.2	2362521
	<b>KEMA/KEUR</b> DEKRA Certification B.V.	EN 61984	71-102260 REV.1

### UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	<b>UL</b> Underwriters Laboratories Inc.	UL 1977	20190909-E45171

## Counterpart

## Compatible products

### Coding

**Item no.: 2091-1610**

Coding key carrier; suitable for 3.5 mm pin spacing; orange

[www.wago.com/2091-1610](http://www.wago.com/2091-1610)

### Test Accessories



**Item no.: 735-500**

Test pin; 1 mm Ø; with solder connection for test wire

[www.wago.com/735-500](http://www.wago.com/735-500)

### tools

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Item no.: 210-719

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

[www.wago.com/210-719](http://www.wago.com/210-719)

## Downloads

### Documentation

#### Additional Information

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

### PCB Design

Symbol and Footprint 2091-1160/000-5000

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
- 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

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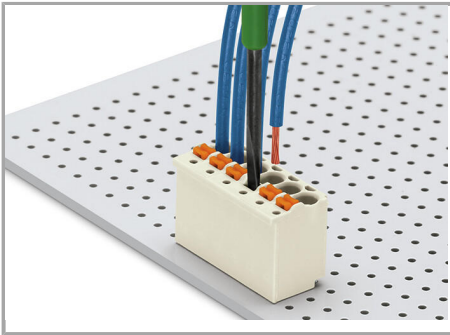
- Zuken CR-5000 and CR-8000

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

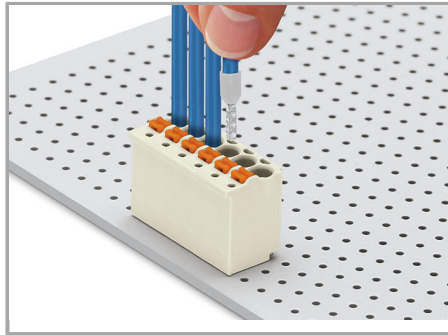
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## Installation Notes

### Conductor termination



Terminating fine-stranded conductors and removing all conductor types via push-buttons.



Terminating solid and ferruled conductors via push-in termination

### Marking



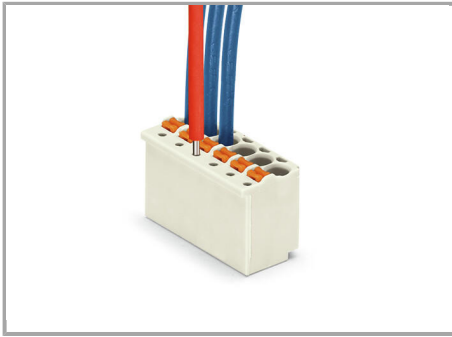
Pole marking via direct printing perpendicular to conductor entry.



Pole marking via factory direct printing.

### Testing

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



Testing with 1 mm Ø test pin, tip contact.

## Product family

**picoMAX eCOM**

[Show all products from the family](#)

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