

**Data sheet | Item number: 2091-1177**

1-conductor THT female connector straight; push-button; Push-in CAGE CLAMP®; 1.5 mm<sup>2</sup>; Pin spacing 3.5 mm; 7-pole; 1.0 mm Ø solder pin; 1,50 mm<sup>2</sup>; light gray

[www.wago.com/2091-1177](http://www.wago.com/2091-1177)



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

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We are always happy to take your call at +49 (571) 887-44222.



Dimensions in mm

L = pole no. x pin spacing

A = 3.6 mm THT solder pin

A = 2.4 mm THR solder pin

### 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

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- Custom-installed solder pins

## Data Notes

### Safety information

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.

## Electrical data

### Ratings per IEC/EN

Ratings per	IEC/EN 60664-1
Nominal 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
Nominal voltage (II/2)	320 V
Rated surge voltage (II/2)	2.5 kV
Rated current	10 A
Legend (ratings)	(III / 2) ≙ 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

### Connection data

Connection points	7
Total number of potentials	7
Number of connection types	1
Number of levels	1

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## Connection 1

Connection technology	Push-in CAGE CLAMP®
Actuation type	Push-button
Actuation direction 1	Operation parallel to conductor entry
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 insulated ferrule	0.25 ... 0.75 mm <sup>2</sup>
Fine-stranded conductor; with uninsulated ferrule	0.25 ... 1.5 mm <sup>2</sup>
Strip length	8 ... 9 mm / 0.31 ... 0.35 inches
Pole number	7

## Physical data

Pin spacing	3.5 mm / 0.138 inches
Width	24.5 mm / 0.965 inches
Height	14 mm / 0.551 inches
Depth	11.4 mm / 0.449 inches
Solder pin length	3.6 mm
Solder pin diameter	1 mm
Drilled hole diameter with tolerance	1.2 <sup>(+0.1)</sup> mm

## Mechanical Data

Variable coding	No
Anti-rotation protection	Yes

## Plug-in connection

Contact type (pluggable connector)	Female connector/socket
Connector (connection type)	for PCB
Mismatching protection	No
Plugging without loss of pin spacing	Yes
Mating direction to the PCB	90 °
Locking of plug-in connection	none

## PCB contact

PCB contact	THT
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## Material Data

Note (material data)

Information on material specifications can be found here

Color	light gray
Material group	I
Insulation 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
Fire load	0.011 MJ
Weight	4.2 g

## Environmental requirements

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

## Commercial data

eCl@ss 10.0	27-44-04-02
eCl@ss 9.0	27-44-04-02
ETIM 8.0	EC002637
ETIM 7.0	EC002637
PU (SPU)	100 pcs
Packaging type	box
Country of origin	DE
GTIN	4055143428637
Customs tariff number	85366990990

## 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	IEC 61984	NL-49736

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DEKRA Certification B.V.		/A1
<b>CSA</b> DEKRA Certification B.V.	C22.2 No. 158	2362521
<b>CSA</b> DEKRA Certification B.V.	C22.2	2362521
<b>KEMA/KEUR</b> DEKRA Certification B.V.	EN 61984	71- 102260 REV.1
<b>UL</b> Underwriters Laboratories Inc.	UL 1977	E45171
<b>UR</b> Underwriters Laboratories Inc.	UL 1059	E45172

## Downloads

### Documentation

#### Additional Information

2019 年4月3日

pdf  
2.0 MB

Download

## CAD/CAE-Data

### PCB Design

Symbol and Footprint 2091-1177

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

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- 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

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#### CAD data

2D/3D Models 2091-1177	<a href="#">URL</a>	<a href="#">Download</a>
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#### CAE data

ZUKEN Portal 2091-1177	<a href="#">URL</a>	<a href="#">Download</a>
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### Environmental Product Compliance

#### Compliance Search

Environmental Product Compliance 2091-1177	<a href="#">URL</a>	<a href="#">Download</a>
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### Installation Notes

#### Conductor termination

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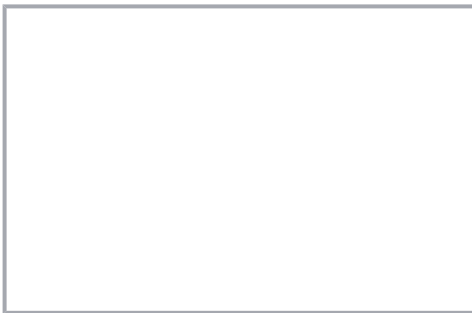


Terminating fine-stranded conductors and removing all conductor types via push-buttons.

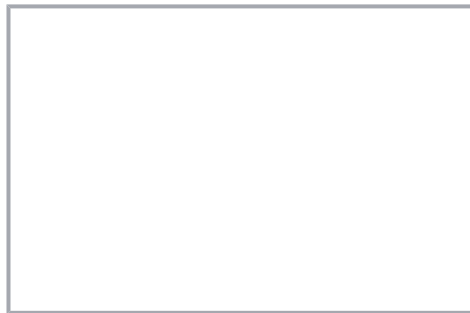


Solid and ferruled conductors are terminated by simply pushing them into unit.

### Marking



Pole marking via direct marking perpendicular to conductor entry.



Pole marking via factory direct marking.

### Testing



Testing via 1 mm Ø test pin – touch contact.

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