

**Data sheet | Item number: 890-815**

Plug for PCBs; straight; 5-pole; Cod. A; black

[www.wago.com/890-815](http://www.wago.com/890-815)



**Color:**

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

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Do you have any questions about our products?  
We are always happy to take your call at +49 (571) 887-44222.



## Item description

### Male connector/plug *WINSTA*® MINI with protection against mismatching

The *WINSTA*® MINI male connector/plug A coding saves money and space thanks to its compact dimensions. Our pluggable PCB connectors provide a universal pluggable connection system for your devices that meets all the conditions for a stable device connection. The color coding and mechanical coding of the pcb connector ensure error-free installation of the individual components – including protection against mismatching. Thanks to the color coding and mechanical A coding of *WINSTA*® MINI pcb connectors, you can clearly distinguish different circuits. Especially where space is tight, our smallest pluggable connection system, *WINSTA*® MINI, consistently displays its strengths. It saves space, and, with Push-in CAGE CLAMP® spring pressure connection technology, it additionally can be installed quickly, since the connection is low-maintenance and requires no screw connections.

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## WINSTA® MINI solutions for your electrical installation – protected against mismatching and maintenance-free

The WINSTA® Pluggable Connection System is ideally tailored to the very strict requirements of building installation. It makes electrical installation pluggable, and consequently more efficient, even more reliable, and error-free. Use of this pre-assembled system decreases time spent on assembly and installation errors at the construction site. Take advantage of the pluggable version of our maintenance-free spring pressure connection technology too! Plan your installation with WINSTA® MINI pcb connectors with marking from WAGO.

- protection against mismatching eliminates errors
- compact design for conductors with a cross-section up to 1.5 mm<sup>2</sup>
- with A coding for a great number of applications
- quick replacement of defective units during ongoing operation

### Data

#### Electrical data

#### Ratings per IEC/EN

Ratings per	IEC/EN 60664-1
Nominal voltage (III/3)	250 V
Rated impulse voltage (III/3)	4 kV
Rated current	13 A
Legend (ratings)	(III / 3) ≙ Overvoltage category III / Pollution degree 3

#### Ratings per UL 1977

Note for the US market	Some versions may also be used for current interruption in accordance with the UL certificate in select applications with currents below 5 A and voltages up to 600 V. For further information, please contact your local sales office.
Rated voltage (UL 1977)	600 V
Rated current UL 1977	12 A

#### General information

Note on contact resistance	approx. 1 mΩ of contact resistance approx. 0.25 mΩ contact transition plug/socket
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#### Connection data

Total number of potentials	5
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Subject to changes. Please also observe the further product documentation!



Number of levels	1
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### Connection 1

Pole number	5
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### Physical data

Pin spacing	4.4 mm / 0.173 inches
Width	23.6 mm / 0.929 inches
Height	31.9 mm / 1.256 inches
Height from the surface	28.4 mm / 1.118 inches
Depth	12.2 mm / 0.48 inches
Solder pin length	3.5 mm
Solder pin dimensions	1 x 0.8 mm
Drilled hole diameter with tolerance	1.3 <sup>(+0.1)</sup> mm

### Mechanical Data

Application	General mains applications
Coding	A
Variable coding	No
Marking	3 2 1 $\frac{1}{2}$ N
Potential marking	3 2 1 $\frac{1}{2}$ N
Mating force of a plug-in connection	approx. 20 ... 70 N (depending on pole number)
Retention force of a plug-in connection	Locked: > 80 N
Unmating force of a plug-in connection	Unlocked: approx. 20 ... 70 N (depending on pole number)
Number of mating cycles	200, without resistive load
Design	straight

### Plug-in connection

Contact type (pluggable connector)	Male connector/plug
Connector (connection type)	for PCB
Mismating protection	Yes
Note on mismating protection	All WINSTA <sup>®</sup> components are 100% protected against mismating when: a.) plugging different numbers of poles b.) plugging while rotated 180 c.) plugging while laterally staggered d.) plugging one pole

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Mating direction to the PCB	90 °
Locking lever	yes
Locking of plug-in connection	locking lever
Note on locking system	All connectors for mounted installations (snap-in versions for lighting fixtures or devices, all types of PCB and distribution connectors) are factory-equipped with locking levers to ensure plugs and sockets are securely locked. Additional locking levers are only required for flying leads (plug/socket).

### PCB contact

PCB contact	THT
Solder pin arrangement	2 in-line solder pins/pole
Number of solder pins per potential	2

### Material Data

Note (material data)	Information on material specifications can be found here
Color	black
Cover color	gray
Material group	I
Insulation material	Polyamide (PA66)
Flammability class per UL94	V0
Clamping spring material	Chrome-nickel spring steel (CrNi)
Contact material	Copper or copper alloy; surface-treated
Contact plating	Tin
Fire load	0.09 MJ
Weight	4.8 g

### Environmental requirements

Processing temperature	-5 ... +40 °C
Continuous operating temperature	-35 ... +85 °C
Note on continuous operating temperature	Insulating parts for temperatures ≤ 105 °C

### Commercial data

Product Group	20 (Winsta)
eCl@ss 10.0	27-44-06-05
eCl@ss 9.0	27-44-06-05

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ETIM 8.0	EC002560
ETIM 7.0	EC002560
PU (SPU)	50 pcs
Packaging type	box
Country of origin	PL
GTIN	4050821695523
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
	<b>CCA</b> DEKRA Certification B.V.	EN 61535	71-123231
	<b>CCA</b> DEKRA Certification B.V.	IEC 61535	NL-85020
	<b>cURus</b> Underwriters Laboratories Inc.	UL 1977	E45171

### Declarations of conformity and manufacturer's declarations

Logo	Approval	Additional Approval Text	Certificate name
	<b>EU-Declaration of Conformity</b> WAGO GmbH & Co. KG	-	-
	<b>UK-Declaration of Conformity</b> WAGO GmbH & Co. KG	-	-

### Approvals for marine applications

Logo	Approval	Additional Approval Text	Certificate name
	<b>ABS</b> American Bureau of Shipping	Steel Vessel Rules	19-HG1869855-PDA
	<b>DNV GL</b> Det Norske Veritas, Germanischer Lloyd	-	TAE00001Z6
	<b>LR</b> Lloyds Register	EN 61535	08/20047 (E2)

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## Counterpart

<b>Item no.890-105</b> Socket; with strain relief housing; 5-pole; Cod. A; 1,50 mm <sup>2</sup> ; black	<a href="http://www.wago.com/890-105">www.wago.com/890-105</a>
<b>Item no.890-205</b> Socket; 5-pole; Cod. A; 1,50 mm <sup>2</sup> ; black	<a href="http://www.wago.com/890-205">www.wago.com/890-205</a>
<b>Item no.891-8995/006-101</b> pre-assembled interconnecting cable; Eca; Socket/plug; 5-pole; Cod. A; H05VV-F 5G 1.5 mm <sup>2</sup> ; 1 m; 1,50 mm <sup>2</sup> ; black	<a href="http://www.wago.com/891-8995/006-101">www.wago.com/891-8995/006-101</a>
<b>Item no.891-8995/106-101</b> pre-assembled connecting cable; Eca; Socket/open-ended; 5-pole; Cod. A; H05VV-F 5G 1.5 mm <sup>2</sup> ; 1 m; 1,50 mm <sup>2</sup> ; black	<a href="http://www.wago.com/891-8995/106-101">www.wago.com/891-8995/106-101</a>

## Downloads

### CAD/CAE-Data

#### CAD data

2D/3D Models 890-815	<a href="#">URL</a>	<a href="#">Download</a>
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#### PCB Design

Symbol and Footprint 890-815	<a href="#">URL</a>	<a href="#">Download</a>
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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

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- 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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#### CAE data

ZUKEN Portal 890-815	<a href="#">URL</a>	<a href="#">Download</a>
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#### Environmental Product Compliance

##### Compliance Search

Environmental Product Compliance 890-815 Plug for PCBs; straight; 5-pole; Cod. A; black	<a href="#">URL</a>	<a href="#">Download</a>
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#### Installation Notes

#### Product family

**WINSTA® MINI**

[Show all products from the family](#)

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