Plug for PCBs; straight; 4-pole; Cod. A; black

www.wago.com/890-814



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ı		
	2.	
	Color:	

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

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# Data sheet | Item number: 890-814 www.wago.com/890-814



Item description

# Male connector/plug WINSTA® MINI A coding

The *WINSTA*® MINI male connector/plug 4-pole saves money and space thanks to its compact dimensions. Our enormous selection of pluggable PCB connectors with different insertion directions and operating variants offers you the perfect solution for your application at any time. For greater protection in electrical installations, the pcb connector is provided with mechanical protection against mismating. Thanks to the color coding and mechanical A coding of *WINSTA*® MINI pcb connectors, you can clearly distinguish different circuits. *WINSTA*® MINI satisfies the demand for miniaturisation. Our smallest pluggable connection system is primarily suited for lights, for example, since as a result of LED technology; due to complex systems, these offer less and less space for the connection technology.

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

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

The WINSTA® Pluggable Connection System is perfectly tailored to the very strict requirements of building installation. It makes electrical installation pluggable, and therefore more efficient, more reliable, and error-free. Using this pre-assembled system reduces assembly times and errors during installation 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.

- effective protection against mismating
- compact design for conductors with a cross-section up to 1.5 mm²
- suitable for any application
- convenient installation and commissioning

#### 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	16 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 m $\Omega$ of contact resistance
	approx. 0.25 m $\Omega$ contact transition plug/socket

#### Connection data

Total number of potentials

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Number of levels	1	
PE function	Preceding PE contact	
Connection 1		
Pole number	4	

# Physical data

Pin spacing	4.4 mm / 0.173 inches
Width	19.2 mm / 0.756 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	1/L' 2/L
Potential marking	1/L' 2/L
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 <i>WINSTA</i> ® components are 100% protected against mismating when:  a.) plugging different numbers of poles  b.) plugging while rotated 180

 $\label{thm:condition} \textbf{Subject to changes. Please also observe the further product documentation!}$ 

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	<ul><li>c.) plugging while laterally staggered</li><li>d.) plugging one pole</li></ul>
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	ТНТ
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	VO
Clamping spring material	Chrome-nickel spring steel (CrNi)
Contact material	Copper or copper alloy; surface-treated
Contact plating	Tin
Fire load	0.083 MJ
Weight	4 g

# **Environmental requirements**

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

#### Commercial data

Product Group 20 (Winsta)	Product Group	20 (Winsta)
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eCl@ss 9.0 27-44-06-05 ETIM 8.0 EC002560	
ETIM 8.0 EC002560	
ETIM 7.0 EC002560	
PU (SPU) 50 pcs	
Packaging type box	
Country of origin PL	
GTIN 4050821695516	
Customs tariff number 85366990990	

# **Environmental Product Compliance**

RoHS Compliance Status Compliant, No Exemption

# Approvals / Certificates

# General approvals

Logo	Approval	Additional Approval Text	Certificate name
	CCA DEKRA Certification B.V.	EN 61535	71- 123231
	CCA	IEC 61535	NL-85020
	DEKRA Certification B.V.		
	<b>cURus</b> Underwriters Laboratories Inc.	UL 1977	E45171

# Declarations of conformity and manufacturer's declarations

Logo	Approval	Additional Approval Text	name
	EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
	UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

# Approvals for marine applications

Logo	Approval	Additional Approval Text	name
	ABS	Steel Vessel Rules	19-
	American Bureau of Shipping		HG1869855- PDA
	DNV GL	-	TAE00001Z6
	Det Norske Veritas, Germanischer Lloyd		
	LR	EN 61535	08/20047

 $\label{thm:condition} \textbf{Subject to changes. Please also observe the further product documentation!}$ 

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Cortificato



Lloyds Register (E2)

#### Counterpart

Item no.890-104 Socket; with strain relief housing; 4-pole; Cod. A; 1,50 mm²; black	www.wago.com/890-104
Item no.890-204 Socket; 4-pole; Cod. A; 1,50 mm²; black	www.wago.com/890-204
Item no.891-8994/106-101 pre-assembled connecting cable; Eca; Socket/open-ended; 4-pole; Cod. A; H05VV-F 4G 1.5 mm²; 1,50 mm²; black	www.wago.com/891-8994 /106-101
Item no.891-8994/006-101  pre-assembled interconnecting cable; Eca; Socket/plug; 4-pole; Cod. A; H05VV-F 4G 1.5 mm²; 1 m; 1,50 mm²; black	www.wago.com/891-8994 /006-101

# Downloads CAD/CAE-Data

### CAD data

2D/3D Models 890-814 URL Download

#### **PCB** Design

Symbol and Footprint 890-814

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

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- 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

#### CAE data

ZUKEN Portal 890-814 URL Download

#### **Environmental Product Compliance**

Compliance Search

Environmental Product Compliance 890-814 URL Download Plug for PCBs; straight; 4-pole; Cod. A; black

Installation Notes

# **Product family**

WINSTA® MINI

Show all products from the family

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