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

www.wago.com/770-814



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

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# Data sheet | Item number: 770-814 www.wago.com/770-814



### Item description

### Male connector/plug WINSTA® MIDI rated current 25 A

The WINSTA® MIDI male connector/plug with locking latch pays off and space thanks to its compact dimensions. Our large number of pluggable PCB connectors with various insertion directions and operating variants offers you the perfect solution for your application at all times. The coding options reduce installation errors, allowing fast, maintenance-free wiring of all components. General mains applications for almost any domain of use can be implemented with WINSTA® MIDI pcb connectors with A coding. This pcb connector can be used for electrical currents up to 25 A. Thus the product is also suitable for high power loads. WINSTA® MIDI with Push-in CAGE CLAMP® spring pressure connection technology is found in a broad range of individual products you can use for quick, easy, flexible, and secure installation.

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# Push-in CAGE CLAMP® spring pressure connection technology – pluggable installation instead of laborious screw connections!

The WINSTA® Pluggable Connection System allows pluggable electrical installation. This significantly reduces the need for servicing and lowers costs. Now you can also cut installation costs without compromising quality and safety: The WINSTA® MIDI pcb connector with protection against mismating eliminates the need for servicing and prevents unnecessary downtime.

- effective protection against mismating
- pre-assembled versions
- with A coding for use in a large number of general mains 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)	400 V
Rated impulse voltage (III/3)	6 kV
Rated current	25 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 16 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	23 A

### **General information**

Note on contact resistance	approx. 1 m $\Omega$ of contact resistance
	approx. $0.25~\text{m}\Omega$ contact transition plug/socket

### Connection data

Total number of potentials 4

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

# Physical data

Pin spacing	10 mm / 0.394 inches
Width	37 mm / 1.457 inches
Height	29.5 mm / 1.161 inches
Height from the surface	26 mm / 1.024 inches
Depth	14.6 mm / 0.575 inches
Solder pin length	3.5 mm
Solder pin dimensions	1 x 0.8 mm
Drilled hole diameter with tolerance	1.5 <sup>(-0.1</sup> <sup>+0.1)</sup> mm

### **Mechanical Data**

Application	General mains applications
Coding	A
Variable coding	Yes
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

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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
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	0.23 MJ
Weight	8.8 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

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

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Cortificato

ETIM 8.0	EC002560
ETIM 7.0	EC002560
PU (SPU)	50 pcs
Packaging type	box
Country of origin	PL
GTIN	4044918511520
Customs tariff number	85366990990

### **Environmental Product Compliance**

RoHS Compliance Status Compliant, No Exemption

### Approvals / Certificates

### General approvals

			Certificate
Logo	Approval	Additional Approval Text	name
	CCA	EN 61535	71-
	DEKRA Certification B.V.		123228
	CCA	IEC 61535	NL -84761
	DEKRA Certification B.V.		
	cURus	UL 1977	E45171
	Underwriters Laboratories Inc.		

### Declarations of conformity and manufacturer's declarations

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

### Approvals for marine applications

Logo	Approval	Additional Approval Text	Certificate name
	ABS American Bureau of Shipping	-	19- HG1868589- PDA
	<b>DNV GL</b> Det Norske Veritas, Germanischer Lloyd	-	TAE00001Z6
	LR Lloyds Register	IEC 61984	LR22429487TA

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Item no.770-104 Socket; with strain relief housing; 4-pole; Cod. A; 4,00 mm²; black	www.wago.com/770-104
Item no.770-204 Socket; 4-pole; Cod. A; 4,00 mm²; black	www.wago.com/770-204
Item no.771-9994/006-101  pre-assembled interconnecting cable; Eca; Socket/plug; 4-pole; Cod. A; H05VV-F 4G 1.5 mm²; 1 1,50 mm²; black	m; www.wago.com/771-9994 /006-101
Item no.771-9994/106-101  pre-assembled connecting cable; Eca; Socket/open-ended; 4-pole; Cod. A; H05VV-F 4G 1.5 mm m; 1,50 mm²; black	<sup>2</sup> ; 1 www.wago.com/771-9994 /106-101

### Required accessories

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Cover		
	<b>Item no.: 770-360</b> Lockout cap; for plugs; 5-pole; separable; yellow	www.wago.com/770-360

### Optional accessories

### Coding

Coding		
	Item no.: 770-401 Coding pin; for plugs; Plastic; gray	www.wago.com/770-401

# Downloads CAD/CAE-Data

2D/3D Models 770-814

### CAD data

CAE data		
EPLAN Data Portal 770-814	URL	Download
ZUKEN Portal 770-814	URL	Download
PCB Design		
Symbol and Footprint 770-814	URL	Download

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URL

Download

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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
- 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

### **Environmental Product Compliance**

### Compliance Search

Environmental Product Compliance 770-814 Plug for PCBs; straight; 4-pole; Cod. A; black URL

Download

### **Installation Notes**

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**Product family** 

WINSTA® MIDI

Show all products from the family

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