

Data sheet | Item number: 770-813

Plug for PCBs; straight; 3-pole; Cod. A; black

www.wago.com/770-813



Color:

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

WAGO GmbH & Co. KG
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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*® MIDI with protection against mismatching

The *WINSTA*® MIDI male connector/plug with protection against mismatching is economical and space thanks to its compact dimensions. Our immense number of pluggable PCB connectors with various insertion directions and operating variants offers you the perfect solution for your application at all times. The color coding and mechanical coding of the pcb connector ensure error-free installation of the individual components – including protection against mismatching. Standard mains applications for almost any domain of use can be implemented with *WINSTA*® MIDI pcb connectors with A coding. Important parameters in the selection of a pcb connector are the rated current and voltage: They provide information about possible domains of use and applications. This product has a current rating of 25 A – as a result it is also suitable for powerful loads. The *WINSTA*® MIDI Pluggable Connection System with Push-in CAGE CLAMP® spring pressure connection technology facilitates precise electrification. Due to the built-in test slot, connections can be checked even when they are plugged in. This saves time, labor, and money.

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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 saves time, lowers costs, and reduces the need for servicing. Choose quality and durability – the WINSTA® MIDI pcb connector with locking lever from WAGO makes the electrical installation of electrical components noticeably easier.

- effective protection against mismatching
- for automation controllers
- with A coding for use in many 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)	250 V
Rated impulse voltage (III/3)	4 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 mΩ of contact resistance approx. 0.25 mΩ contact transition plug/socket
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Connection data

Total number of potentials	3
Number of levels	1
PE function	Preceding PE contact

Connection 1

Pole number	3
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Physical data

Pin spacing	10 mm / 0.394 inches
Width	27 mm / 1.063 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 ^(-0.1 ... +0.1) mm

Mechanical Data

Application	General mains applications
Coding	A
Variable coding	Yes
Marking	N $\frac{1}{2}$ L
Potential marking	N $\frac{1}{2}$ 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

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Note on mismatching protection

All WINSTA® components are 100% protected against mismatching when:

- a.) plugging different numbers of poles
- b.) plugging while rotated 180
- c.) plugging while laterally staggered
- d.) plugging one pole

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
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	0.18 MJ
Weight	6.7 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

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Commercial data

eCl@ss 10.0	27-44-06-05
eCl@ss 9.0	27-44-06-05
ETIM 8.0	EC002560
ETIM 7.0	EC002560
PU (SPU)	100 pcs
Packaging type	box
Country of origin	PL
GTIN	4044918511445
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
	CCA DEKRA Certification B.V.	EN 61535	71-123228
	CCA DEKRA Certification B.V.	IEC 61535	NL -84761
	cURus Underwriters Laboratories Inc.	UL 1977	E45171
	cURus Underwriters Laboratories Inc.	UL 1059	E 45172

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

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DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE00001Z6
LR Lloyds Register	IEC 61984	LR22429487TA

Counterpart

Item no.770-103 Socket; with strain relief housing; 3-pole; Cod. A; 4,00 mm ² ; black	www.wago.com/770-103
Item no.770-203 Socket; 3-pole; Cod. A; 4,00 mm ² ; black	www.wago.com/770-203
Item no.770-203/035-000 Socket; with strain relief housing; 3-pole; Cod. A; 4,00 mm ² ; black	www.wago.com/770-203/035-000
Item no.771-9993/006-101 pre-assembled interconnecting cable; Eca; Socket/plug; 3-pole; Cod. A; H05VV-F 3G 1.5 mm ² ; 1 m; 1,50 mm ² ; black	www.wago.com/771-9993/006-101
Item no.771-9993/106-101 pre-assembled connecting cable; Eca; Socket/open-ended; 3-pole; Cod. A; H05VV-F 3G 1.5 mm ² ; 1 m; 1,50 mm ² ; black	www.wago.com/771-9993/106-101

Required accessories

Cover

Cover	
Item no.: 770-360 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

CAD data

2D/3D Models 770-813	URL	Download
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CAE data

EPLAN Data Portal 770-813	URL	Download
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ZUKEN Portal 770-813

URL

Download

PCB Design

Symbol and Footprint 770-813

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
- Zuken CR-5000 and CR-8000

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

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 770-813

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Installation Notes

Product family

WINSTA® MIDI

[Show all products from the family](#)

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