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

www.wago.com/770-815



0-1	

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

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# Data sheet | Item number: 770-815 www.wago.com/770-815



### Item description

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

The WINSTA® MIDI male connector/plug A coding are compact but outstanding PCB terminal blocks. They offer easy operation and the greatest flexibility for installation. Our enormous number 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® MIDI pcb connectors, you can clearly distinguish different circuits. This pcb connector is used for electrical currents up to 25 A. Thus the product is ideally suitable for high power loads. The WINSTA® MIDI Pluggable Connection System with Push-in CAGE CLAMP® spring pressure connection technology facilitates exemplary electrification. Due to the integrated test slot, connections can be checked even when they are plugged in. This saves time, labor, and money.

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

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# Lower costs through fast commissioning and elimination of service expenses – solutions from WINSTA® MIDI

The WINSTA® Pluggable Connection System is ideally tailored to the strict requirements of building installation. It makes electrical installation pluggable, and thus more efficient, more reliable, and error-free. Use of this pre-assembled system decreases assembly times and installation errors at the construction site. Choose quality and durability – the WINSTA® MIDI pcb connector with marking from WAGO makes the electrical installation of electrical components significantly easier.

- protection against mismating eliminates errors
- for automation controllers
- with A coding for a large number of uses
- 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 m $\Omega$ contact transition plug/socket

### Connection data

Total number of potentials 5

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Number of levels	1	
PE function	Preceding PE contact	
Connection 1		
Pole number	5	

# Physical data

Pin spacing	10 mm / 0.394 inches
Width	47 mm / 1.85 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 +0.1)</sup> mm

### **Mechanical Data**

Application	General mains applications
Coding	A
Variable coding	Yes
Marking	L3 L2 L1
Potential marking	L3 L2 L1
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	0.265 MJ
Weight	10.8 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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Cartificata

ETIM 8.0	EC002560
ETIM 7.0	EC002560
PU (SPU)	50 pcs
Packaging type	box
Country of origin	PL
GTIN	4044918511544
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	IEC 61535	NL -84761
	DEKRA Certification B.V.		
	CCA	EN 61535	71-
	DEKRA Certification B.V.		123228
	cURus	UL 1977	E45171
	Underwriters Laboratories Inc.		
	cURus	UL 1059	E 45172
	Underwriters Laboratories Inc.		

### Declarations of conformity and manufacturer's declarations

			Certificate
Logo	Approval	Additional Approval Text	name
	<b>EU-Declaration of Conformity</b>	-	-
	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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Cou	ınter	part	l
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Item no.770-105 Socket; with strain relief housing; 5-pole; Cod. A; 4,00 mm²; black	www.wago.com/770-105
Item no.770-205 Socket; 5-pole; Cod. A; 4,00 mm²; black	www.wago.com/770-205
Item no.770-305 Socket; with strain relief housing; 5-pole; Cod. A; 4,00 mm²; black	www.wago.com/770-305
Item no.770-405 Socket; 5-pole; Cod. A; 4,00 mm²; black	www.wago.com/770-405
Item no.771-9995/006-101  pre-assembled interconnecting cable; Eca; Socket/plug; 5-pole; Cod. A; H05VV-F 5G 1.5 mm²; 1 m; 1,50 mm²; black	www.wago.com/771-9995 /006-101
Item no.771-9995/106-101  pre-assembled connecting cable; Eca; Socket/open-ended; 5-pole; Cod. A; H05VV-F 5G 1.5 mm²; 1 m; 1,50 mm²; black	www.wago.com/771-9995 /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 770-815	URL	Download

### **PCB** Design

Symbol and Footprint 770-815 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:

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

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- 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

### CAE data

ZUKEN Portal 770-815	URL	Download
EPLAN Data Portal 770-815	URL	Download

### **Environmental Product Compliance**

### Compliance Search

Environmental Product Compliance 770-815

URL

Download

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### **Installation Notes**

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**Product family** 

WINSTA® MIDI

Show all products from the family

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