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

www.wago.com/770-803



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

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# Data sheet | Item number: 770-803 www.wago.com/770-803



# Item description

# Female connector/socket WINSTA® MIDI A coding

Consistently secure electrical installations thanks to special connection technology: The WINSTA® MIDI female connector/socket. Our pluggable PCB connectors provide a universal pluggable connection system for your devices that meets all the requirements for a robust device connection that is easy to put into operation. The color coding and mechanical coding of the pcb connector ensure error-free installation of the individual components – including protection against mismating. Thanks to the color coding and mechanical A coding of WINSTA® MIDI pcb connectors, you can clearly distinguish different circuits. Important parameters in the selection of a pcb connector are the rated current and voltage: They tell us about the product's domains of use. This product has a current rating of 25 A – as a result it is suitable for robust loads. WINSTA® MIDI with Push-in CAGE CLAMP® spring pressure connection technology is used in can be found in a variety of projects you can use for quick, easy, secure, tailored electrical installation.

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

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

- protection against mismating eliminates errors
- pre-assembled versions
- with A coding for a great number of uses
- fast, secure installation

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

## Connection data

Total number of potentials 3

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Number of levels 1

# Connection 1

Pole number 3

# 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 <sup>(-0.1</sup> <sup>+0.1)</sup> mm

#### Mechanical Data

Application	General mains applications
Coding	A
Variable coding	Yes
Marking	L    ↓ N
Potential marking	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)	Female connector/socket
Connector (connection type)	for PCB
Mismating protection	Yes
Note on mismating protection	All WINSTA® 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

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

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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
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	0.141 MJ
Weight	6.3 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

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

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

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Packaging type	box
Country of origin	PL
GTIN	4044918684637
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- 123228
	CCA DEKRA Certification B.V.	IEC 61535	NL -84761
	<b>cURus</b> Underwriters Laboratories Inc.	UL 1977	E45171

#### Declarations of conformity and manufacturer's declarations

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

# Approvals for marine applications

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

# Counterpart

Item no.770-113

Plug; with strain relief housing; 3-pole; Cod. A; 4,00 mm<sup>2</sup>; black

www.wago.com/770-113

Item no.770-213

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

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Plug; 3-pole; Cod. A; 4,00 mm²; black	www.wago.com/770-213
Item no.770-213/035-000	www.wago.com/770-213/035-
Plug; with strain relief housing; 3-pole; Cod. A; 4,00 mm²; black	000
Item no.771-9993/206-101  pre-assembled connecting cable; Eca; Plug/open-ended; 3-pole; Cod. A; H05VV-F 3G 1.5 mm²; 1 m; 1,50 mm²; black	www.wago.com/771-9993 /206-101
ltem no.771-9993/006-101 pre-assembled interconnecting cable; Eca; Socket/plug; 3-pole; Cod. A; H05VV-F 3G 1.5 mm²; 1 m; 1,50 mm²; black	www.wago.com/771-9993 /006-101

#### Required accessories

C	n	v	e	r

Cover		
	Item no.: 770-201 Lockout cap; 12-pole, separable; for sockets; Plastic; black	www.wago.com/770-201
	Item no.: 770-221 Lockout cap; 12-pole, separable; for sockets; Plastic; white	www.wago.com/770-221

# **Downloads** CAD/CAE-Data

#### CAD data

2D/3D Models 770-803	URL	Download
CAE data		
EPLAN Data Portal 770-803	URL	Download
ZUKEN Portal 770-803	URL	Download

# PCB Design

URL Download Symbol and Footprint 770-803 CAx data for your PCB design, consisting of "schematic symbols and PCB footprints",

# Supported formats:

- Accel EDA 14 & 15
- Altium 6 to current version
- Cadence Allegro
- DesignSpark

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allow easy integration of the WAGO component into your development environment.

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- 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 770-803 Socket for PCBs; straight; 3-pole; Cod. A; black URL

Download

# **Installation Notes**

#### **Product family**

WINSTA® MIDI

Show all products from the family

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