

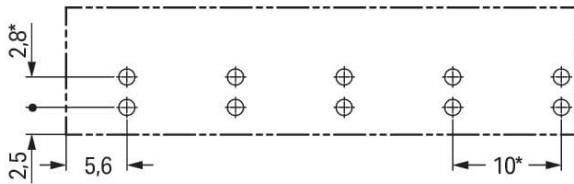
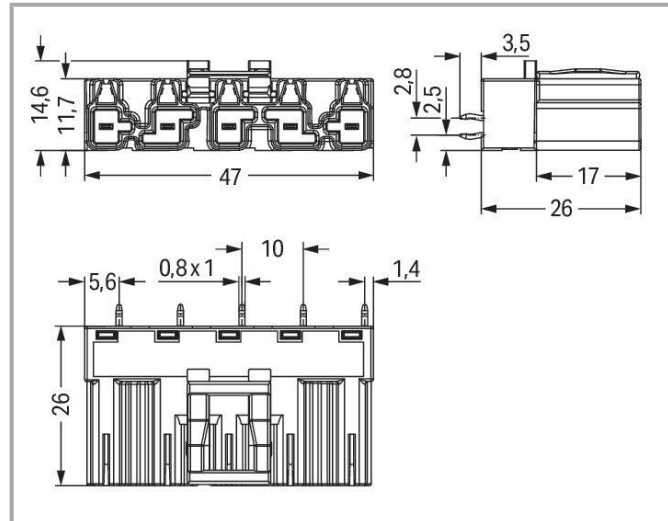
## Data sheet | Item number: 770-815

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

[www.wago.com/770-815](http://www.wago.com/770-815)



Color: ■



\*  $\pm 0.05$  mm  
Drilled hole diameter:  $1.5^{+0.1}$  mm

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

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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 5-pole

Secure installations with special connection technology: The *WINSTA*® MIDI male connector/plug. Our pluggable PCB connectors provide a versatile pluggable connection system for your devices that meets all the conditions for a stable device connection that is easy to put into operation. 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 realised with *WINSTA*® MIDI pcb connectors with A coding. Important parameters in the selection of a pcb connectors 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 also suitable for robust 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 and maximally flexible installation.

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

The *WINSTA*® Pluggable Connection System is perfectly tailored to the very strict requirements of building installation. It makes electrical installation pluggable, and thus more efficient, even more reliable, and error-free. Using this pre-assembled system reduces time spent on assembly 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 with marking from WAGO.

- 
- pcb connectors with protection against mismatching
- pre-assembled versions
- with A coding for a great number of applications
- rapid, structured electrical installation

## 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

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## 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

## Connection data

Total number of potentials	5
Number of levels	1
PE function	Preceding PE contact

## Connection 1

Pole number	5
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## 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 $\perp$ N

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Potential marking	L3 L2 L1 $\perp$ N
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 WINSTA <sup>®</sup> 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
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)

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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
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
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## Approvals / Certificates


### General approvals

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




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	<b>cURus</b> Underwriters Laboratories Inc.	UL 1059	E 45172
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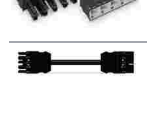
## Declarations of conformity and manufacturer's declarations

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

## Approvals for marine applications

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

## Counterpart

	<b>Item no.770-105</b> Socket; with strain relief housing; 5-pole; Cod. A; 4,00 mm <sup>2</sup> ; black	<a href="http://www.wago.com/770-105">www.wago.com/770-105</a>
	<b>Item no.770-205</b> Socket; 5-pole; Cod. A; 4,00 mm <sup>2</sup> ; black	<a href="http://www.wago.com/770-205">www.wago.com/770-205</a>
	<b>Item no.770-305</b> Socket; with strain relief housing; 5-pole; Cod. A; 4,00 mm <sup>2</sup> ; black	<a href="http://www.wago.com/770-305">www.wago.com/770-305</a>
	<b>Item no.770-405</b> Socket; 5-pole; Cod. A; 4,00 mm <sup>2</sup> ; black	<a href="http://www.wago.com/770-405">www.wago.com/770-405</a>
	<b>Item no.771-9995/006-101</b> pre-assembled interconnecting cable; Eca; Socket/plug; 5-pole; Cod. A; H05VV-F 5G 1.5 mm <sup>2</sup> ; 1 m; 1,50 mm <sup>2</sup> ; black	<a href="http://www.wago.com/771-9995/006-101">www.wago.com/771-9995/006-101</a>

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

**Item no. 771-9995/106-101**

pre-assembled connecting cable; Eca; Socket/open-ended; 5-pole; Cod. A; H05VV-F 5G 1.5 mm<sup>2</sup>; 1 m; 1,50 mm<sup>2</sup>; black

[www.wago.com/771-9995/106-101](http://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](http://www.wago.com/770-360)

**Optional accessories****Coding**

Coding

**Item no.: 770-401**

Coding pin; for plugs; Plastic; gray

[www.wago.com/770-401](http://www.wago.com/770-401)

**Downloads****CAD/CAE-Data****CAD data**

2D/3D Models 770-815	URL	Download
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**PCB Design**

Symbol and Footprint 770-815	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

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- 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

Asset Administration Shell

Asset Administration Shell 770-815	URL	Download
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Environmental Product Compliance

Compliance Search

Environmental Product Compliance 770-815	URL	Download
Plug for PCBs; straight; 5-pole; Cod. A; black		

Installation Notes

Product family

WINSTA® MIDI  
[Show all products from the family](#)

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