

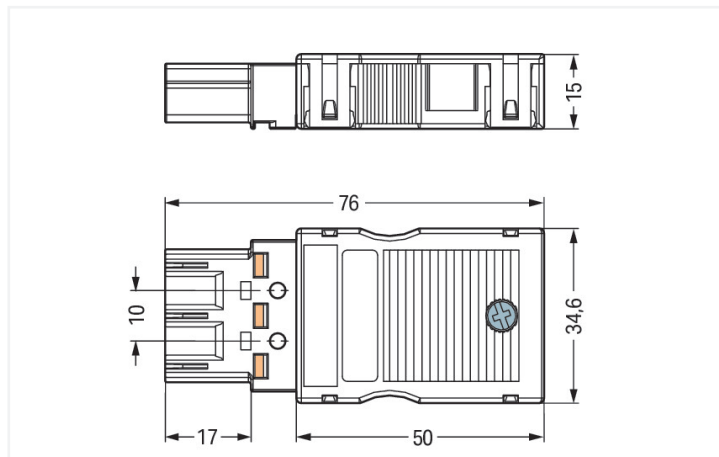
Data Sheet | Item Number: 770-113

Plug; with strain relief housing; 3-pole; Cod. A; 4,00 mm²; black

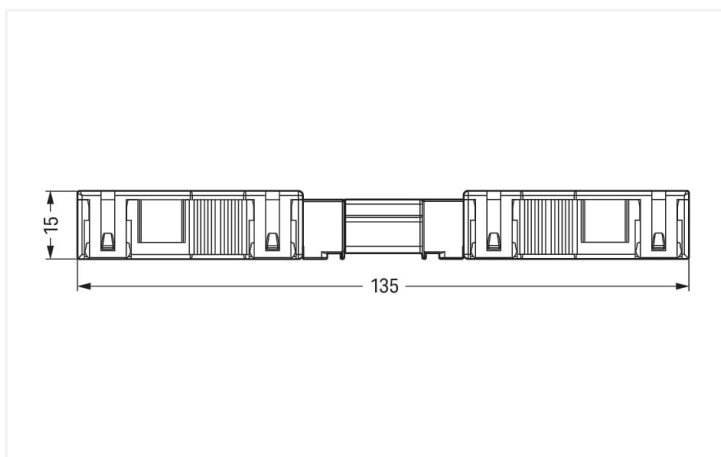
<https://www.wago.com/770-113>



Color: ■ black



Dimensions in mm



Dimensions in mm

Overall length when mated

Male connector/plug WINSTA® MIDI A coding

The WINSTA® MIDI male connector/plug A coding provides the foundation for assembly of solid and fine-stranded conductors. Whether on PCBs, in control cabinets or for connecting lights – pluggable installation connectors from WAGO allow you to make connections according to many different requirements in seconds. The coding options reduce installation errors, allowing fast, secure wiring of all components. The pluggable installation connector is protected in accordance with protection type IP20 (When mated and secured with a strain relief housing: IP2xC (These compact connectors are not designed for use in open, easily accessible areas!)). That results in the fact that users' fingers will never come into contact with electrified contact elements. The WINSTA® MIDI pluggable installation connector with A coding in white or black is normally used for general mains applications in power distribution. This pluggable installation connector can be used for electrical currents up to 25 A. Thus the product is also suitable for high power loads. The WINSTA® MIDI Pluggable Connection System with Push-in CAGE CLAMP® spring pressure connection technology facilitates safe electrification. Thanks to the built-in test slot, it is possible to check connections even when they are plugged in. This saves time, labor, and money. A range up to 55 mm can be used for the strip length.

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

WINSTA® is the pluggable connection system that is perfectly tailored to the strict requirements of electrical installation. It allows fast, secure and, above all, error-free installation of components and cables. Enjoy the benefits of the pluggable version of our maintenance-free spring pressure connection technology too! Plan your installation with with strain relief hosting from WAGO.

- protection against mismatching eliminates errors
- pre-assembled versions
- with A coding for use in many general mains applications
- flexible installation to save space
- convenient installation and commissioning

This item includes:



Item No.: 770-503

1

Item No.: 770-213

1

Strain relief housing; 3-pole; for 2 cables;
8.0 ... 11.5 mm; 55 mm; blackPlug; 3-pole; Cod. A; 4,00 mm²; black

Electrical data

Ratings per	IEC/EN 60664-1			Approvals per	UL 1977
Overtoltage category	III	III	II	Rated voltage	600 V
Pollution degree	3	2	2	Rated current	23 A
Nominal voltage	250 V	-	-		
Rated surge voltage	4 kV	-	-		
Rated current	25 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

Connection points	6	Connection 1	
Total number of potentials	3	Connection technology	Push-in CAGE CLAMP®
PE function	Preceding PE contact	Actuation type	Operating tool Push-in
		Nominal cross-section	4 mm ² / 12 AWG
		Solid conductor	0.5 ... 4 mm ² / 20 ... 12 AWG
		Solid conductor; push-in termination	1.5 ... 4 mm ² / 16 ... 12 AWG
		Stranded conductor	0.5 ... 2.5 mm ² / 20 ... 14 AWG
		Fine-stranded conductor	0.5 ... 4 mm ² / 20 ... 12 AWG
		Fine-stranded conductor; with insulated ferrule	0.25 ... 1.5 mm ² / 20 ... 16 AWG
		Fine-stranded conductor; with uninsulated ferrule	0.25 ... 2.5 mm ² / 20 ... 14 AWG
		Fine-stranded conductor; with ferrule; push-in termination	1.5 mm ² / 16 AWG
		Strip length	9 mm / 0.35 inches
		Pole number	3
		Connectable sheathed cable diameter	8 ... 11.5 mm
		Conductor entry direction to mating direction	0°
		Strip length (outer insulation)	55 mm

Physical data

Pin spacing	10 mm / 0.394 inches
Width	34.6 mm / 1.362 inches
Height	15 mm / 0.591 inches
Depth	76 mm / 2.992 inches

Mechanical data

Application	General mains applications
Coding	A
Variable coding	Yes
Marking	N L
Potential marking	N 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
Protection type	IP20; When mated and secured with a strain relief housing: IP2xC (These compact connectors are not designed for use in open, easily accessible areas!)

Plug-in connection

Contact type (pluggable connector)	Male connector/plug
Connector (connection type)	for conductor
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
Locking lever	Can be retrofitted
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).
Strain relief	Strain relief housing

Material data

Note (material data)	Information on material specifications can be found here
Color	black
Cover color	gray
Material group	I
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	0.473 MJ
Connector color	black
Strain relief color	black
Weight	19.7 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

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)	25 pcs
Packaging type	Box
Country of origin	DE
GTIN	4044918254083
Customs tariff number	85366990990

Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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Approvals / Certificates

General approvals



Approval	Standard	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
VDE VDE Prüf- und Zertifizie- rungsinstitut	EN 61984	40002889
VDE VDE Prüf- und Zertifizie- rungsinstitut	EN 61535	40029808

Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-

Approvals for marine applications



Approval	Standard	Certificate Name
ABS American Bureau of Ship- ping	-	19-HG1868589-PDA
DNV GL Det Norske Veritas, Ger- manischer Lloyd	-	TAE00001Z6
LR Lloyds Register	IEC 61984	LR22429487TA

Downloads

Environmental Product Compliance

Compliance Search	
Environmental Product Compliance 770-113	↓

Documentation

Bid Text			
770-113	19.02.2019	xml 3.01 KB	↓
770-113	08.06.2015	doc 23.50 KB	↓
ausschreiben.de 770-113			
			↓

CAD/CAE-Data

CAD data	
2D/3D Models 770-113	↓

CAE data	
EPLAN Data Portal 770-113	↓
WSCAD Universe 770-113	↓
ZUKEN Portal 770-113	↓

1 Compatible Products

1.1 System counterpart

1.1.1 Cable assembly



Item No.: 771-9993/106-101
pre-assembled connecting cable; Eca; Socket/open-ended; 3-pole; Cod. A; H05VV-F 3G 1.5 mm²; 1 m; 1,50 mm²; black

Item 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

1.1.2 Distribution box



Item No.: 899-631/181-000
Distribution box; 230 V + DALI; 2 inputs; 6 outputs; Cod. A, I; MINI, MIDI; black



Item No.: 899-631/405-000
Distribution box; 230 V + SMI; 2 inputs; 6 outputs; Cod. A, B; MINI, MIDI; black



Item No.: 899-631/315-000
Distribution box; Cable and device protection; 1 input; 4 outputs; Cod. A; MIDI; black



Item No.: 899-631/305-000
Distribution box; Crossover switching; 1 input; 5 outputs; Cod. A, B, S; MIDI; black



Item No.: 899-631/309-000
Distribution box; Motion/presence detector; 1 input; 3 outputs; Cod. A, S; MIDI; black



Item No.: 899-631/180-000
Distribution box; Motion/presence detector; 1 input; 5 outputs; Cod. A; MIDI; black



Item No.: 899-632/102-000
Distribution box; Relay switching; 2 inputs; 1 output; Cod. A, B; MINI, MIDI; black



Item No.: 899-631/386-000
Distribution box; Series switching; 1 input; 7 outputs; Cod. A, S; MIDI; black

1.1.2 Distribution box



Item No.: 899-631/477-000
Distribution box; Single-phase current (230 V); 1 input; 11 outputs; Cod. A; MIDI; black



Item No.: 899-631/334-000
Distribution box; Single-phase current (230 V); 1 input; 13 outputs; Cod. A; MIDI; black



Item No.: 899-631/476-000
Distribution box; Single-phase current (230 V); 1 input; 4 outputs; Cod. A; MIDI; black



Item No.: 899-631/104-000
Distribution box; Single-phase current (230 V); 1 input; 7 outputs; Cod. A; MIDI; black



Item No.: 899-631/311-000
Distribution box; Single-phase current (230 V); 2 inputs; 6 outputs; Cod. A, P; MIDI; black



Item No.: 899-631/327-000
Distribution box; Single-phase current (230 V); 2 inputs; 6 outputs; Cod. A; MIDI; black



Item No.: 899-631/363-000
Distribution box; Single-pole switch circuit; 1 input; 5 outputs; Cod. A, S; MIDI; black



Item No.: 899-631/478-000
Distribution box; Single-pole switch circuit; 1 input; 7 outputs; Cod. A, S; MIDI; black



Item No.: 899-631/450-000
Distribution box; supply cable entry; 6 outputs; Cod. A; MIDI; black



Item No.: 899-632/101-000
Distribution box; Surge switch circuit; 1 input; 4 outputs; Cod. A, S; MIDI; black



Item No.: 899-632/138-000
Distribution box; Surge switch circuit; 1 input; 4 outputs; Cod. A, S; MIDI; black



Item No.: 899-632/103-000
Distribution box; Surge switch circuit; 2 inputs; 2 outputs; Cod. A; MIDI; black



Item No.: 899-631/346-000
Distribution box; Three-phase to single-phase current (400 V/230 V); 1 input; 4 outputs; Cod. A; MIDI; black



Item No.: 899-631/149-000
Distribution box; Three-phase to single-phase current (400 V/230 V); 1 input; 6 outputs; Cod. A; MIDI, MAXI; black



Item No.: 899-631/105-000
Distribution box; Three-phase to single-phase current (400 V/230 V); 1 input; 6 outputs; Cod. A; MIDI; black



Item No.: 899-631/100-000
Distribution box; Three-phase to single-phase current (400 V/230 V); 1 input; 7 outputs; Cod. A; MIDI; black



Item No.: 899-631/302-000
Distribution box; Three-phase to single-phase current (400 V/230 V); 2 inputs; 6 outputs; Cod. A, P; MIDI; black



Item No.: 899-631/338-000
Distribution box; Three-phase to single-phase current (400 V/230 V); supply cable entry; 1 input; 6 outputs; Cod. A; MIDI; black



Item No.: 899-631/308-000
Distribution box; Two-way circuit; 1 input; 5 outputs; Cod. A, S; MIDI; black



Item No.: 899-631/189-000
Distribution box; Two-way circuit; 1 input; 7 outputs; Cod. A, S; MIDI; black

1.1.3 Distribution connector



Item No.: 770-607
3-way distribution connector; 3-pole; Cod. A; 1 input; 3 outputs; black



Item No.: 770-608
5-way distribution connector; 3-pole; Cod. A; 1 input; 5 outputs; outputs on both sides; black



Item No.: 770-638
Distribution connector for switches; Single-pole and throttle two-way circuit; 3-pole; Cod. A/S; 1 input; 5 outputs; black



Item No.: 770-637
Distribution connector for switches; Single-pole switch and series circuit; 3-pole; Cod. A/S; 1 input; 5 outputs; black



Item No.: 770-633
h-distribution connector; 3-pole; Cod. A; 1 input; 2 outputs; 2 locking levers; black



Item No.: 770-635
h-distribution connector; 3-pole; Cod. A; 1 input; 2 outputs; outputs on both sides; 3 locking levers; for flying leads; black



Item No.: 770-634
h-distribution connector; 3-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 2 locking levers; black



Item No.: 770-636
h-distribution connector; 3-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 3 locking levers; for flying leads; black



Item No.: 770-606
T-distribution connector; 3-pole; Cod. A; 1 input; 2 outputs; 2 locking levers; black



Item No.: 770-615
T-distribution connector; 3-pole; Cod. A; 1 input; 2 outputs; 3 locking levers; for flying leads; black



Item No.: 770-611
Three-phase to single-phase distribution connector; with phase selection; 5-pole/3-pole; Cod. A; 1 input; 2 outputs; with cable connection on the input side; black



Item No.: 770-640
Three-phase to single-phase distribution connector; with phase selection; 5-pole/3-pole; Cod. A; 1 input; 5 outputs; black

1.1.4 Female connector/socket



Item No.: 770-703
Snap-in socket; 3-pole; Cod. A; 4,00 mm²; black



Item No.: 770-703/009-000
Snap-in socket; with protruding mating face; 3-pole; Cod. A; 4,00 mm²; black



Item No.: 770-803/011-000
Socket for PCBs; angled; 3-pole; Cod. A; black



Item No.: 770-803
Socket for PCBs; straight; 3-pole; Cod. A; black



Item No.: 770-203
Socket; 3-pole; Cod. A; 4,00 mm²; black



Item No.: 770-103
Socket; with strain relief housing; 3-pole; Cod. A; 4,00 mm²; black



Item No.: 770-203/035-000
Socket; with strain relief housing; 3-pole; Cod. A; 4,00 mm²; black

1.1.5 Tap-off module



Item No.: 772-263

Tap-off module; for flat cable; 5 x 2.5 mm² + 2 x 1.5 mm²; 3-pole; Cod. A; with cable connection on the output side; black

1.2 Required Accessories

1.2.1 Locking system

1.2.1.1 Locking system



Item No.: 770-101

Locking lever; for flying leads; for manual operation; black



Item No.: 770-121

Locking lever; for flying leads; for manual operation; white



Item No.: 770-111

Locking lever; for flying leads; for tool operation; black



Item No.: 770-131

Locking lever; for flying leads; for tool operation; white

1.3 Optional Accessories

1.3.1 Coding

1.3.1.1 Coding



Item No.: 770-401

Coding pin; for plugs; Plastic; gray

1.3.2 Cover

1.3.2.1 Cover



Item No.: 770-360

Lockout cap; for plugs; 5-pole; separable; yellow

1.3.3 Marking

1.3.3.1 Marker



Item No.: 770-450/000-006

Marker card; Plastic; blue



Item No.: 770-450/000-001

Marker card; Plastic; green



Item No.: 770-450/000-012

Marker card; Plastic; orange



Item No.: 770-450/000-005

Marker card; Plastic; red



Item No.: 770-450

Marker card; Plastic; white



Item No.: 770-450/000-002

Marker card; Plastic; yellow

1.3.4 Tool

1.3.4.1 Operating tool



Item No.: 770-383

Operating tool; 3-way; green

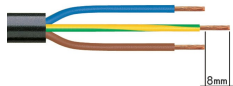


Item No.: 210-719

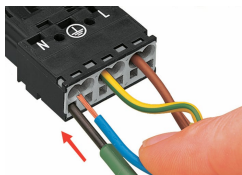
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

Installation Notes

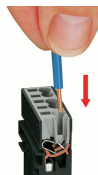
Conductor termination



1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm



To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.

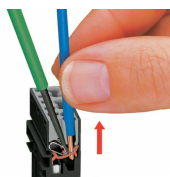


Insert the stripped solid conductor until it hits the backstop.



To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.

Conductor removal



To remove the conductor, actuate the clamp via screwdriver (2.5 mm blade width) and pull out the conductor.

Coding

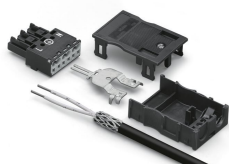


Simply cut off the coding pin from the socket.



Insert coding pin into plug (break first) until it engages.

Shield termination



Connector with shield termination



Apply the shield to the sheathed cable.
Strip length, outer insulation = 55 mm
Shield length = 10 mm



Push the shield connecting plate into the connector until fully inserted.



First insert the wired connector into a strain relief housing, then snap cover and tighten screw.

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

Current addresses can be found at: www.wago.com