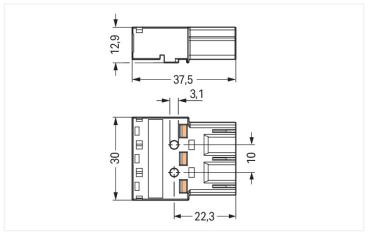






Color: ■ black





Dimensions in mm

Male connector/plug WINSTA® MIDI 3-pole

The WINSTA® MIDI male connector/plug A coding supports fast, reliable installation. Our pluggable installation connectors with spring pressure connection technology function without screw connections. They allow flexible, error-free installation in a large number of possible uses. The mechanical coding and color coding of the pluggable installation connector ensure error-free installation of the individual components – including protection against mismating. 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!)). This means that users' fingers will never come into contact with electrified elements. General mains applications for almost any domain of use can be implemented with WINSTA® MIDI pluggable installation connectors with A coding. This pluggable installation connector can be used for electrical currents up to 25 A. Thus the product is especially suitable for high power loads. The WINSTA® MIDI product line guarantees maximum flexibility for the installation. Through its Push-in CAGE CLAMP® spring pressure connection technology, it guarantees error-free, time-saving installation and offers customization and flexibility for meeting an enormous variety of installation requirements.

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 offers error-free installation of cables and components, quickly and reliably. Now you can also cut installation expenses without compromising quality and safety: with protection type IP20 eliminates the need for servicing and prevents unnecessary downtime.

- pluggable installation connectors with protection against mismating
- · pre-assembled versions
- · with A coding for use in many general mains applications
- ready to install and use immediately
- rapid, structured electrical installation



Electrical data			
Ratings per	IEC	/EN 60664	-1
Overvoltage category	III	III	II
Pollution degree	3	2	2
Nominal voltage	250 V	-	-
Rated surge voltage	4 kV	-	-
Rated current	25 A	-	-

Approvals per	UL 1977
Rated voltage	600 V
Rated current	23 A

General information

Total number of potentials

Note on contact resistance approx. 1 m Ω of contact resistance approx. 0.25 m Ω contact transition plug/socket

3

Connection data		
Clamping units	6	

PE function Preceding PE contact

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rection

Connection technology Push-in CAGE CLAMP® Actuation type Operating tool Push-in Nominal cross-section 4 mm² / 12 AWG Solid conductor 0.5 ... 4 mm² / 20 ... 12 AWG 1.5 ... 4 mm² / 16 ... 12 AWG Solid conductor; push-in termination 0.5 ... 2.5 mm² / 20 ... 14 AWG Stranded conductor Fine-stranded conductor 0.5 ... 4 mm² / 20 ... 12 AWG Fine-stranded conductor; with insulated 0.25 ... 1.5 mm² / 20 ... 16 AWG ferrule Fine-stranded conductor; with uninsula-0.25 ... 2.5 mm² / 20 ... 14 AWG ted ferrule Fine-stranded conductor; with ferrule; 1.5 mm² / 16 AWG push-in termination Strip length 9 mm / 0.35 inches Pole number 3 Conductor entry direction to mating di-0°

connectors are not designed for use in open, easily accessible areas!)

Physical data

 Pin spacing
 10 mm / 0.394 inches

 Width
 30 mm / 1.181 inches

 Height
 12.9 mm / 0.508 inches

 Depth
 37.5 mm / 1.476 inches

Mechanical data

Use General mains applications Coding Α Variable coding Yes Marking $\mathsf{N} \oplus \mathsf{L}$ Potential marking $N \oplus L$ 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

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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).

Material data	
Note (material data)	
	<u>Information on material specifications can be found here</u>
Color	black
Cover color	gray
Material group	1
Insulation material (main housing)	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	0.2 MJ
Weight	10.1 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)
PU (SPU)	100 pcs
Packaging type	Вох
Country of origin	PL
GTIN	4044918254137
Customs tariff number	85366990990

Product classification	
UNSPSC	39121402
eCl@ss 10.0	27-44-06-05
eCl@ss 9.0	27-44-06-05
ETIM 9.0	EC002560
ETIM 8.0	EC002560
ECCN	NO US CLASSIFICATION



Environmental Product Compliance

RoHS Compliance Status Compliant, No Exemption

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

Declarations of conformity and manufacturer's declarations

Approval Standard **Certificate Name** EU-Declaration of Confor-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 770-213

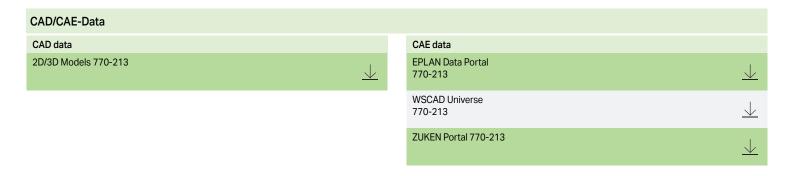


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Documentation

Bid Text			
770-213	19.02.2019	xml 3.01 KB	$\underline{\downarrow}$
770-213	08.06.2015	doc 23.50 KB	$\underline{\downarrow}$



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





Distribution box; 230 V + SMI; 2 inputs; 6 outputs; Cod. A, B; MINI, MIDI; black

Item No.: 899-631/405-000

Item No.: 899-631/180-000

Item No.: 899-631/334-000

black



Distribution box; Cable and device pro-

tection; 1 input; 4 outputs; Cod. A; MIDI;

Distribution box; Relay switching; 2 in-

puts; 1 output; Cod. A, B; MINI, MIDI; black

Item No.: 899-631/315-000

Item No.: 899-632/102-000

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



Distribution box; Motion/presence detector; 1 input; 5 outputs; Cod. A; MIDI; black



Item No.: 899-631/386-000

Distribution box; Series switching; 1 input; 7 outputs; Cod. A, S; MIDI; black



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



Item No.: 899-631/476-000

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; MI-DI; black



Distribution box; Single-phase current

(230 V); 1 input; 13 outputs; Cod. A; MIDI;

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;



Item No.: 899-631/478-000

Distribution box; Single-pole switch circuit; 1 input; 7 outputs; Cod. A, S; MIDI; black

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1.1.2 Distribution box









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



<u>Item No.: 899-632/103-000</u>

Distribution box; Surge switch circuit; 2 inputs; 2 outputs; Cod. A; MIDI; black



Item No.: 899-631/346-000

Distribution box; Three-phase to singlephase current (400 V/230 V); 1 input; 4 outputs; Cod. A; MIDI; black



Item No.: 899-631/149-000

Distribution box; Three-phase to singlephase 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 singlephase current (400 V/230 V); 1 input; 6 outputs; Cod. A; MIDI; black



Item No.: 899-631/100-000

Distribution box; Three-phase to singlephase current (400 V/230 V); 1 input; 7 outputs; Cod. A; MIDI; black



Item No.: 899-631/302-000

Distribution box; Three-phase to singlephase 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 singlephase 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; 3pole; 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



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-po-le/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-po-le/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

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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 Installation

1.3.3.1 Mounting accessories





Item No.: 770-318

Snap-in frame; 3-pole; 1.0 ... 3.0 mm; black

Item No.: 770-338

Snap-in frame; 3-pole; 1.0 ... 3.0 mm; whi-

1.3.4 Marking

1.3.4.1 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



1.3.5 Shield termination

1.3.5.1 Shield termination



Item No.: 770-523

Shield connecting plate; 3-pole; for sockets and plugs; silver-colored

1.3.6 Strain relief

1.3.6.1 Strain relief housing



Item No.: 770-503/021-000

Strain relief housing; 3-pole; for 1 cable; 9.0 ... 13.0 mm; 71 mm; black



Item No.: 770-503

Strain relief housing; 3-pole; for 2 cables; 8.0 ... 11.5 mm; 55 mm; black



Item No.: 770-503/038-000

Strain relief housing; 3-pole; with locking clip; for 1 cable; 7.0 ... 11.5 mm; 48 mm;



Item No.: 770-513/021-000

Strain relief housing; 3-pole; for 1 cable; 9.0 ... 13.0 mm; 71 mm; white



Item No.: 770-513

Strain relief housing; 3-pole; for 2 cables; 8.0 ... 11.5 mm; 55 mm; white



Item No.: 770-513/035-000

Strain relief housing; 3-pole; with locking clip; for 1 cable; 7.0 ... 11.5 mm; 48 mm;



Item No.: 770-503/023-000

Strain relief housing; 3-pole; for 2 cables; 4.5 ... 8.0 mm: 55 mm: black



Item No.: 770-513/032-000

Strain relief housing; 3-pole; for 2 cables; 8.0 ... 11.5 mm; 55 mm; white



Item No.: 770-513/038-000

Strain relief housing; 3-pole; with locking clip; for 1 cable; 7.0 ... 11.5 mm; 48 mm;



Item No.: 770-513/023-000

Strain relief housing; 3-pole; for 2 cables; 4.5 ... 8.0 mm; 55 mm; white



Item No.: 770-503/035-000

Strain relief housing; 3-pole; with locking clip; for 1 cable; 7.0 ... 11.5 mm; 48 mm; black



Item No.: 770-503/032-000

Strain relief housing; 3-pole; with locking clip; for 2 cables; 8.0 ... 11.5 mm; 55 mm;

1.3.7 Tool

1.3.7.1 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.

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Conductor removal



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

Installation



We recommend pulling the pre-latched strain relief housing over the cable prior to termination. However, the strain relief can be mounted at a later time as well.



Latch the strain relief housing onto the plug/socket. Note the "TOP" inscription.



Prepare strain relief housing by snapping together upper and bottom part.



Tighten strain relief screw with screwdriver (2.5 mm blade width).

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