

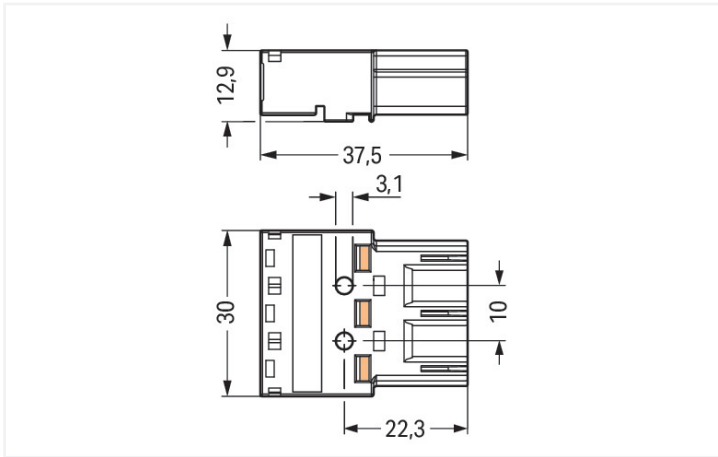
Data Sheet | Item Number: 770-213

Plug; 3-pole; Cod. A; black

<https://www.wago.com/770-213>



Color: ■ black



Dimensions in mm

Male connector/plug WINSTA® MIDI A coding

For signal and power transmission: The WINSTA® MIDI male connector/plug with protection type IP20. WAGO pluggable installation connectors can be used when requirements repeat or are planned on a specific grid, for example for installing grid lighting or flush-mount lighting. The mechanical coding and color coding of the pluggable installation connector ensure error-free installation of the individual components – including protection against mismatching. The pluggable installation connector is protected against ingress by solid objects 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!)). The WINSTA® MIDI pluggable installation connector with A coding in white or black is usually 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 ideally suitable for high power loads. WINSTA® MIDI with Push-in CAGE CLAMP® spring pressure connection technology is found in can be found in a variety of projects you can use for quick, easy and maximally flexible electrical installation.

WINSTA® MIDI solutions for your electrical installation – protected against mismatching and maintenance-free

The WINSTA® Pluggable Connection System allows pluggable electrical installation. This significantly reduces the need for servicing and lowers costs. Choose durability and quality – with protection against mismatching from WAGO makes the electrical installation of electrical components significantly easier.

- protection against mismatching eliminates errors
- for automation controllers
- with A coding for use in many general mains applications
- custom-engineered solutions



- quick replacement of defective units during ongoing operation

Notes	
General safety information	NOTICE: Observe installation and safety instructions! • Nur von Elektrofachkraft oder einer für die Tätigkeit elektrisch unterwiesenen Person (EUP nach DIN VDE 0105-100) anzuwenden! • Nicht unter Spannung/Last installieren! • Nur für bestimmungsgemäßen Gebrauch einsetzen! • Nationale Vorschriften/Normen/Richtlinien beachten! • Technische Daten der Produkte beachten! • Auf die richtige Polbelegung achten! • Keine beschädigten/verschmutzten Komponenten verwenden! • Leiterarten, -querschnitte, Abisolierlängen und Leitungsdurchmesser beachten! • Leiter bis zum Anschlag einführen! • Nur mit Verriegelungsklinke und Zugentlastung verwenden! • Originalzubehör verwenden! To be sold only with installation instructions!

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

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

General information	
Note on contact resistance	approx. 1 mΩ of contact resistance approx. 0.25 mΩ contact transition plug/ socket

Connection Data	
Clamping units	6
Total number of potentials	3
PE function	Preceding PE contact

Connection 1	
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
Solid conductor; push-in termination	1.5 ... 4 mm² / 16 ... 12 AWG
Stranded conductor	0.5 ... 2.5 mm² / 20 ... 14 AWG
Fine-stranded conductor	0.5 ... 4 mm² / 20 ... 12 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 1.5 mm² / 20 ... 16 AWG
Fine-stranded conductor; with uninsulated ferrule	0.25 ... 2.5 mm² / 20 ... 14 AWG
Fine-stranded conductor; with ferrule; push-in termination	1.5 mm² / 16 AWG
Strip length	9 mm / 0.35 inches
Pole number	3
Conductor entry direction to mating direction	0 °

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	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 <i>WINSTA</i> ® 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)	Information on material specifications can be found here
Color	black
Cover color	gray
Material group	I
Insulation material (main housing)	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	0.2 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	Box
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 10.0	EC002560
ECCN	NO US CLASSIFICATION

Environmental Product Compliance	
RoHS Compliance Status	Compliant, No Exemption

Approvals / Certificates	
General approvals	Declarations of conformity and manufacturer's declarations



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 Zertifizierungsinstitut	EN 61984	40002889

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



Approvals for marine applications



Approval	Standard	Certificate Name
ABS American Bureau of Ship- ping	-	24-0095977-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



Documentation

Bid Text			
770-213	19.02.2019	xml 3.01 KB	
770-213	08.06.2015	doc 23.50 KB	

CAD/CAE-Data

CAD data
2D/3D Models 770-213



CAE data
EPLAN Data Portal 770-213
WSCAD Universe 770-213
ZUKEN Portal 770-213



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

**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.: 770-612**

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



1.1.3 Distribution connector



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; black



Item No.: 770-703/009-000
Snap-in socket; with protruding mating face; 3-pole; Cod. A; 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; 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 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; white

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.: 770-513/021-000
Strain relief housing; 3-pole; for 1 cable; 9.0 ... 13.0 mm; 71 mm; white



Item No.: 770-503/023-000
Strain relief housing; 3-pole; for 2 cables; 4.5 ... 8.0 mm; 55 mm; black



Item No.: 770-513/023-000
Strain relief housing; 3-pole; for 2 cables; 4.5 ... 8.0 mm; 55 mm; white



Item No.: 770-503
Strain relief housing; 3-pole; for 2 cables; 8.0 ... 11.5 mm; 55 mm; black



Item No.: 770-513
Strain relief housing; 3-pole; for 2 cables; 8.0 ... 11.5 mm; 55 mm; white



Item No.: 770-513/032-000
Strain relief housing; 3-pole; for 2 cables; 8.0 ... 11.5 mm; 55 mm; white



Item No.: 770-503/035-000
Strain relief housing; 3-pole; with locking clip; for 1 cable; 7.0 ... 11.5 mm; 48 mm; black

1.3.6.1 Strain relief housing



Item No.: 770-503/038-000
Strain relief housing; 3-pole; with locking clip; for 1 cable; 7.0 ... 11.5 mm; 48 mm; black



Item No.: 770-513/035-000
Strain relief housing; 3-pole; with locking clip; for 1 cable; 7.0 ... 11.5 mm; 48 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; white



Item No.: 770-503/032-000
Strain relief housing; 3-pole; with locking clip; for 2 cables; 8.0 ... 11.5 mm; 55 mm; black

1.3.7 Tool

1.3.7.1 Operating tool



Item No.: 770-383
Operating tool; 3-way; green



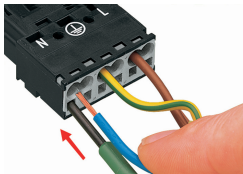
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

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.

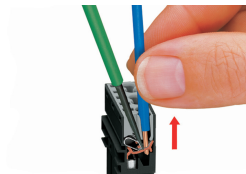


Insert the stripped solid conductor until it hits the backstop.



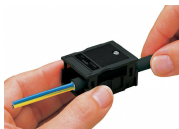
To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.

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).