

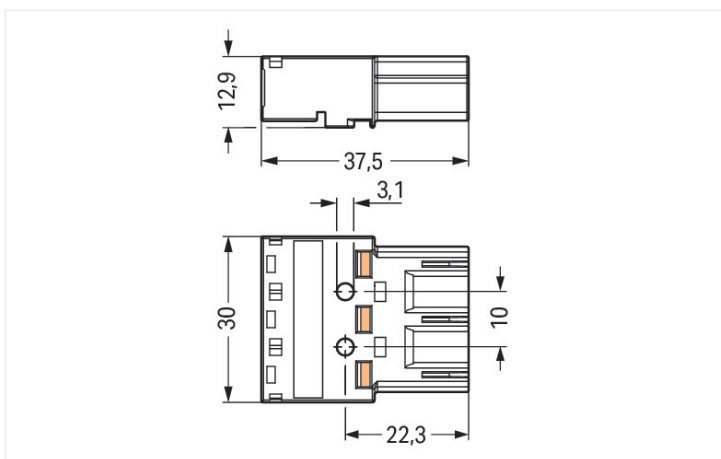
## Data Sheet | Item Number: 770-213

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	<ol style="list-style-type: none"> <li>1. Only to be used by a qualified electrician or by a person electrically instructed for the task (EIP per DIN VDE 0105-100).</li> <li>2. Do not install while energized or under load.</li> <li>3. Use only for its intended purpose.</li> <li>4. Observe applicable national regulations, standards and directives.</li> <li>5. Observe the technical specifications of the products.</li> <li>6. Ensure correct polarity assignment.</li> <li>7. Do not use damaged or contaminated components.</li> <li>8. Observe conductor types, conductor cross-sections, strip lengths and cable diameters.</li> <li>9. Insert conductors up to the stop.</li> <li>10. Use only with locking lever and strain relief.</li> <li>11. Use original accessories only.</li> </ol> <p><b>To be sold only with installation instructions!</b></p>
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**Electrical data**

Ratings per	IEC/EN 60664-1			Approvals per	UL 1977
	III	III	II		
Overvoltage category	III	III	II	Rated voltage	600 V
Pollution degree	3	2	2	Rated current	23 A
Nominal voltage	250 V	-	-		
Rated impulse withstand 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**

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 mm <sup>2</sup> / 12 AWG
Solid conductor	0.5 ... 4 mm <sup>2</sup> / 20 ... 12 AWG
Solid conductor; push-in termination	1.5 ... 4 mm <sup>2</sup> / 16 ... 12 AWG
Stranded conductor	0.5 ... 2.5 mm <sup>2</sup> / 20 ... 14 AWG
Fine-stranded conductor	0.5 ... 4 mm <sup>2</sup> / 20 ... 12 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 1.5 mm <sup>2</sup> / 20 ... 16 AWG
Fine-stranded conductor; with uninsulated ferrule	0.25 ... 2.5 mm <sup>2</sup> / 20 ... 14 AWG
Fine-stranded conductor; with ferrule; push-in termination	1.5 mm <sup>2</sup> / 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 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)	<a href="#">Information on material specifications can be found here</a>
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	0.181 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
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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 Zerti- fizierungsinstitut	EN 61984	40002889

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

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

**Approvals for marine applications**



Approval	Standard	Certificate Name
ABS American Bureau of Shipping	-	24-0095977-PDA
DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE00001Z6
LR Lloyds Register	IEC 61984	LR22429487TA

**Downloads**

**Environmental Product Compliance**

Compliance Search
Environmental Product Compliance 770-213 <a href="#">↓</a>

**Documentation**

Bid Text			
770-213	19.02.2019	xml 3.01 KB	<a href="#">↓</a>
770-213	08.06.2015	doc 23.50 KB	<a href="#">↓</a>

**CAD/CAE-Data**

CAD data
2D/3D Models 770-213 <a href="#">↓</a>

CAE data
EPLAN Data Portal 770-213 <a href="#">↓</a>
WSCAD Universe 770-213 <a href="#">↓</a>
ZUKEN Portal 770-213 <a href="#">↓</a>

**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 mm<sup>2</sup>; 1 m; 1,50 mm<sup>2</sup>; black

**Item No.: 771-9993/006-101**  
pre-assembled interconnecting cable; Eca; Socket/plug; 3-pole; Cod. A; H05VV-F 3G 1.5 mm<sup>2</sup>; 1 m; 1,50 mm<sup>2</sup>; 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.: 899-631/492-000**  
Distribution box; Three-phase current (400 V); 1 input; 7 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.: 899-631/349-000**  
Distribution box; Three-phase to single-phase current (400 V/230 V); 2 inputs; 6 outputs; Cod. A; 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



**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 mm<sup>2</sup>; black



**Item No.: 770-203/035-000**  
Socket; with strain relief housing; 3-pole; Cod. A; 4,00 mm<sup>2</sup>; black

**1.1.5 Tap-off module**



**Item No.: 772-263**  
Tap-off module; for flat cable; 5 x 2.5 mm<sup>2</sup> + 2 x 1.5 mm<sup>2</sup>; 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



**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**

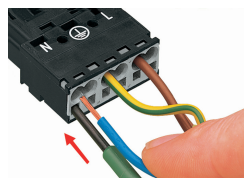
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

### Installation Notes

#### Conductor termination



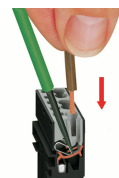
1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm



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.

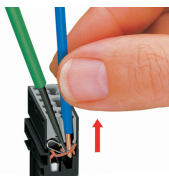


Insert the stripped solid conductor until it hits the backstop.



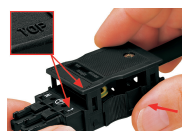
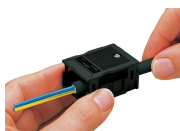
To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.

#### 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).