

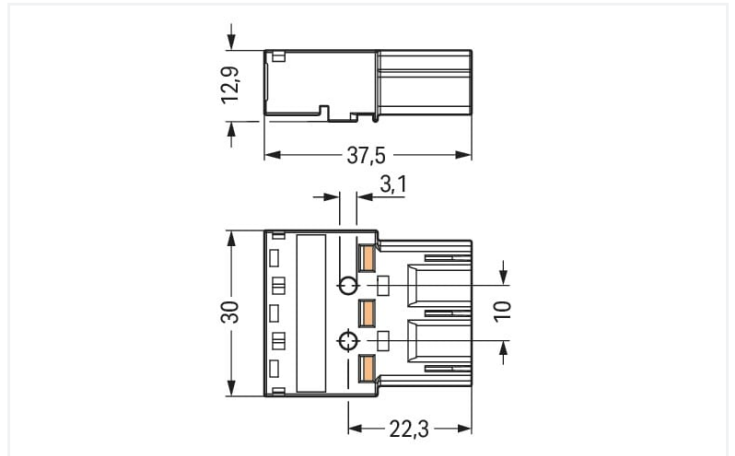
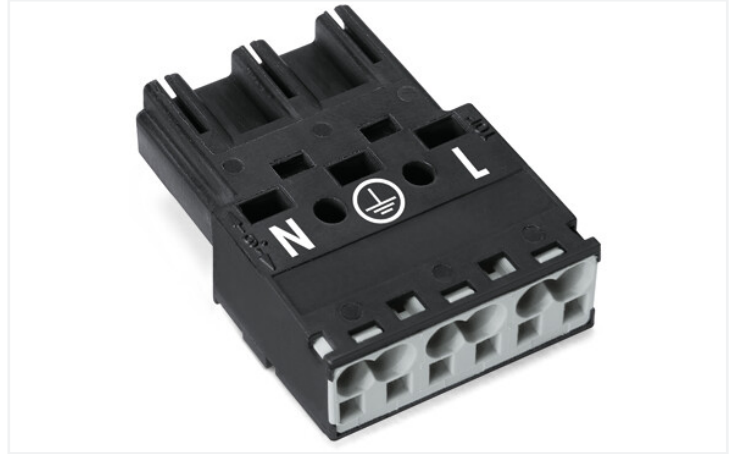
Data Sheet | Item Number: 770-213

Plug; 3-pole; Cod. A; 4,00 mm²; black

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



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 mismatching. 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 mismatching
- 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 | | | | Approvals per UL 1977 | |
|----------------------------|-------|-----|----|-----------------------|-------|
| Overvoltage 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 |

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 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

| | |
|---|--|
| 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). |

| 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 | 0.195 MJ |
| Weight | 10 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) | 100 pcs |
| Packaging type | Box |
| Country of origin | DE |
| GTIN | 4044918254137 |
| Customs tariff number | 85366990990 |






| Environmental Product Compliance | |
|----------------------------------|-------------------------|
| RoHS Compliance Status | Compliant, No Exemption |


Approvals / Certificates

| General approvals | | | Declarations of conformity and manufacturer's declarations | | |
|--|-----------|------------------|--|----------|------------------|
|     | | | | | |
| Approval | Standard | Certificate Name | Approval | Standard | Certificate Name |
| CCA DEKRA Certification B.V. | EN 61535 | 71-123228 | EU-Declaration of Confor- mity WAGO GmbH & Co. KG | - | - |
| 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 | | | |

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 |  |



| | | | |
|--|---|---|---|
| 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 | | CAE data | |
| 2D/3D Models 770-213 | | 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; MI-DI; 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 |



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



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 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



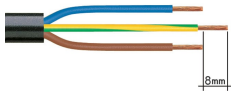
Item No.: 770-383
Operating tool; 3-way; green



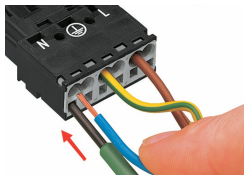
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

Installation Notes

Conductor termination



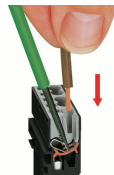
1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm



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.

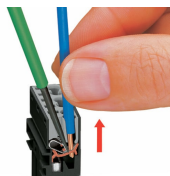


Insert the stripped solid conductor until it hits the backstop.



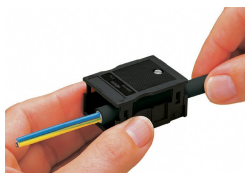
To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.

Conductor removal

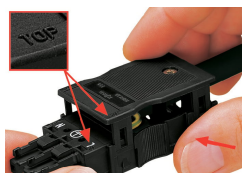


To remove the conductor, actuate the clamp via screwdriver (2.5 mm blade width) and pull out the conductor.

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).