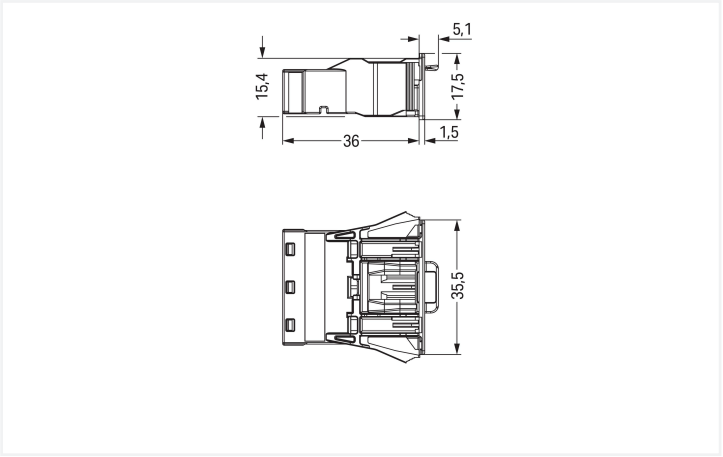
Data Sheet | Item Number: 770-713

Snap-in plug; 3-pole; Cod. A; black

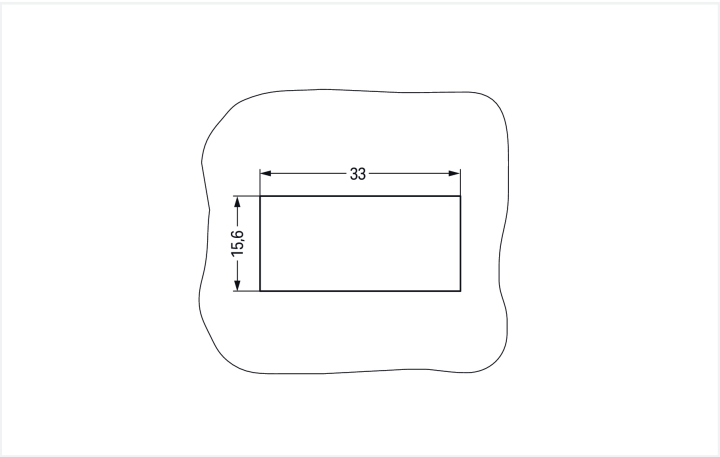
https://www.wago.com/770-713





Color: ■ black

Dimensions in mm



Dimensions in mm
Plate thickness: 0.5 … 2 mmCutout tolerance: + 0.1 mm Please note!

Male connector/plug *WINSTA*® MIDI with protection type IP20

The *WINSTA*® MIDI male connector/plug with locking latch is the pluggable solution for your use in control cabinets, on PCBs or for lighting connections. The pluggable installation connectors with spring pressure connection technology work without screw connections. They allow resource-efficient, error-free installation in numerous applications. For greater security in electrical installations, the pluggable installation connector is provided with mechanical protection against mismating. The pluggable installation connector is protected against ingress by solid objects in accordance with protection type IP20 (When mated: IP2xC (These compact connectors are not designed for use in open, easily accessible areas!)). The *WINSTA*® MIDI pluggable installation connector with A coding in black or white is normally used for general mains applications in power distribution. This pluggable installation connector is used for electrical currents up to 25 A. Thus the product is especially suitable for high power loads. *WINSTA*® MIDI with Push-in CAGE CLAMP® spring pressure connection technology is used in can be found in a variety of projects you can use for quick, easy, secure, tailored installation.

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

The WINSTA® Pluggable Connection System allows pluggable electrical installation. This saves time, lowers costs, and reduces the need for servicing. Enjoy the benefits of the pluggable version of our maintenance-free spring pressure connection technology too! Plan your installation with with locking lever from WAGO.

- effective protection against mismating
- for automation controllers
- with A coding for a large number of applications
- flexible installation to save space
- convenient installation and commissioning

Notes

General safety information	1. Only to be used by a qualified electrician or by a person electrically instructed for the task (EIP per DIN VDE 0105-100). 2. Do not install while energized or under load. 3. Use only for its intended purpose. 4. Observe applicable national regulations, standards and directives. 5. Observe the technical specifications of the products. 6. Ensure correct polarity assignment. 7. Do not use damaged or contaminated components. 8. Observe conductor types, conductor cross-sections, strip lengths and cable diameters. 9. Insert conductors up to the stop. 10. Use only with locking lever and strain relief. 11. Use original accessories only. **To be sold only with installation instructions!**
Note	The snap-in connectors must be relieved of tensile and transverse forces. A surface finish can influence the edge radius of the cutouts. This may affect the snap-in socket fit, so ensure an adequate fit before use. In addition, the punched edge should be on the inside for punched cutouts. The wings of the snap-in connectors must not be mechanically stressed for a long period before use (e.g., due to a pre-locking position).

Electrical data

Ratings per	IEC/EN 60664-1		
Overvoltage category	III	III	II
Pollution degree	3	2	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 °
Coding	A

Continued on next page

Physical data

Pin spacing	10 mm / 0.394 inches
Width	35.5 mm / 1.398 inches
Height	17.5 mm / 0.689 inches
Depth	41.1 mm / 1.618 inches

Mechanical data

Use	General mains applications
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
Housing sheet thickness	0.5 … 2 mm / 0.02 … 0.079 inches
Mounting type	Snap-in flange
Protection type	IP20; When mated: IP2xC (These compact connectors are not designed for use in open, easily accessible areas!)
Suitable for through-panel applications	Yes

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	Yes
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
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	0.238 MJ
Weight	12.2 g

Continued on next page

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	4044918254199
Customs tariff number	85366990990

Product Classification

UNSPSC	39121402
eCl@ss 10.0	27-44-06-02
eCl@ss 9.0	27-44-06-02
ETIM 9.0	EC002566
ETIM 10.0	EC002566
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

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

Continued on next page

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 770-713

Documentation

Bid Text

770-713	19.02.2019	xml 2.89 KB
770-713	08.06.2015	doc 23.00 KB

CAD/CAE-Data

CAD data

2D/3D Models 770-713

CAE data

EPLAN Data Portal 770-713

WSCAD Universe 770-713

ZUKEN Portal 770-713

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 Female connector/socket



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

1.2 Optional Accessories

1.2.1 Coding

1.2.1.1 Coding

Item No.: 770-401
Coding pin; for plugs; Plastic; gray

1.2.2 Cover

1.2.2.1 Cover



Item No.: 770-643
Lockout cap; 3-pole; for cutouts; Plastic; black



Item No.: 770-693
Lockout cap; 3-pole; for cutouts; Plastic; white



Item No.: 770-360
Lockout cap; for plugs; 5-pole; separable; yellow

1.2.3 Tool

1.2.3.1 Operating tool



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



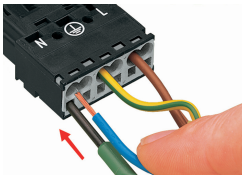
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

Installation Notes

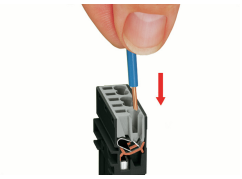
Conductor termination



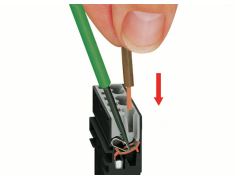
1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm



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.

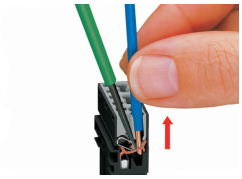


Insert the stripped solid conductor until it hits the backstop.



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.

Continued on next page



Seal unused cutout with lockout cap.