

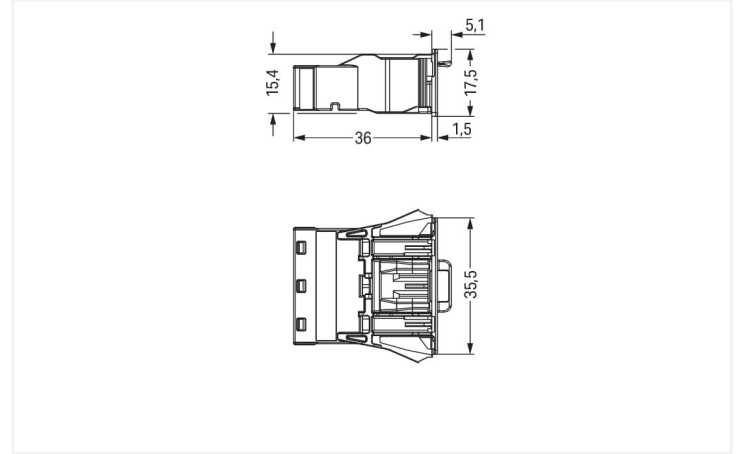
Data Sheet | Item Number: 770-713

Snap-in plug; 3-pole; Cod. A; 4,00 mm²; black

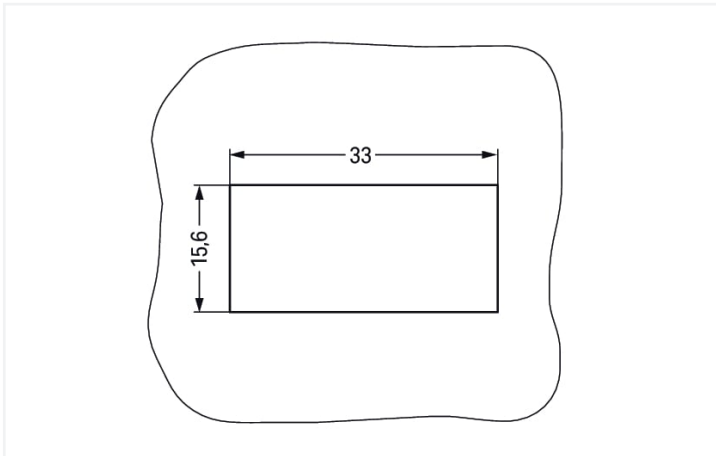
<https://www.wago.com/770-713>



Color: ■ black



Dimensions in mm



Dimensions in mm

Plate thickness: 0.5 ... 2 mm

Cutout tolerance: + 0.1 mm

Please note!

Male connector/plug **WINSTA® MIDI** with protection against mismatching

Use effective pluggable connections instead of laborious screw connections: With the **WINSTA® MIDI** male connector/plug with protection type IP20. The pluggable installation connectors with spring pressure connection technology work completely without screw connections. They allow resource-efficient, error-free installation in a large number of possible uses. For greater protection in electrical installations, the pluggable installation connector is provided with mechanical protection against mismatching. The pluggable installation connector is protected in accordance with protection type IP20 (When mated: IP2xXC (These compact connectors are not designed for use in open, easily accessible areas!)). This means that users' fingers will never come into contact with energised contact elements. Standard 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 a current load of up to 25 A. As a result, it can also be used 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, flexible, and secure installation.

Lower costs through fast commissioning and elimination of service expenses – solutions from **WINSTA® MIDI**

WINSTA® is the pluggable connection system that is perfectly tailored to the strict requirements of electrical installation. It offers fast, secure and, above all, error-free installation of components and cables. Now you can also reduce installation costs without compromising quality and safety: with protection type IP20 reduces the need for servicing and prevents unnecessary downtime.

- pluggable installation connectors with protection against mismatching
- for automation controllers
- with A coding for use in a large number of general mains applications
- custom-engineered solutions
- rapid, structured electrical installation



Notes	
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 surge 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		
Connection points	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	35.5 mm / 1.398 inches
Height	17.5 mm / 0.689 inches
Depth	41.1 mm / 1.618 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
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!)

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	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	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	0.261 MJ
Weight	12.2 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	27-44-06-02	
eCl@ss 9.0	27-44-06-02	
ETIM 8.0	EC002566	
ETIM 7.0	EC002566	
PU (SPU)	100 pcs	
Packaging type	Box	
Country of origin	DE	
GTIN	4044918254199	
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
CCA	EN 61535	71-123228	EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
DEKRA Certification B.V.					
CCA	IEC 61535	NL -84761			
DEKRA Certification B.V.					
cURus	UL 1977	E45171			
Underwriters Laboratories Inc.					
cURus	UL 1059	E 45172			
Underwriters Laboratories Inc.					

Approvals for marine applications

  		
Approval	Standard	Certificate Name
ABS	-	19-HG1868589-PDA
American Bureau of Ship- ping		
DNV GL	-	TAE00001Z6
Det Norske Veritas, Ger- manischer Lloyd		
LR	IEC 61984	LR22429487TA
Lloyds Register		



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; 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

1.2 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



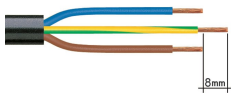
Item No.: 770-383
Operating tool; 3-way; green



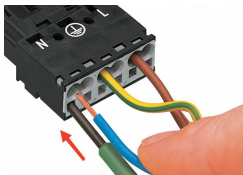
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

Installation Notes

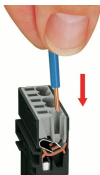
Conductor termination



- 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.

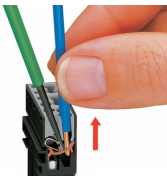


Insert the stripped solid conductor until it hits the backstop.



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.



Seal unused cutout with lockout cap.