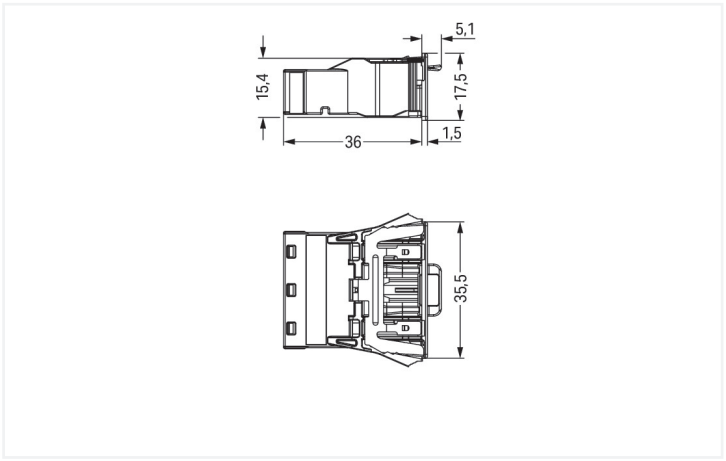
Data Sheet | Item Number: 770-713/007-000

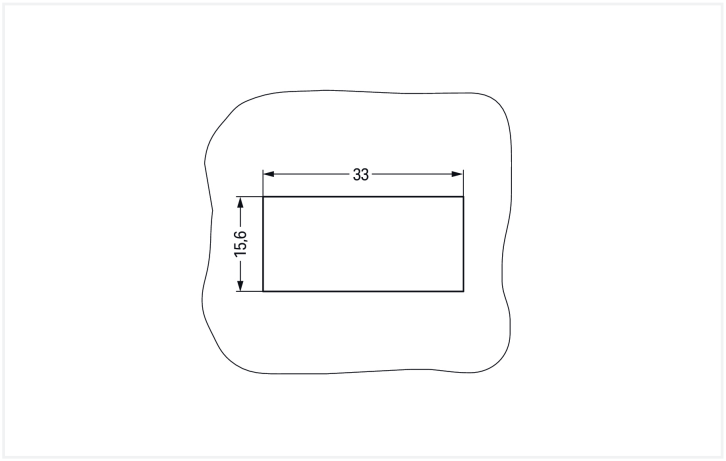
Snap-in plug; with direct ground contact; 3-pole; Cod. A; black

https://www.wago.com/770-713/007-000



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 against mismating

The *WINSTA*® MIDI male connector/plug with protection type IP20 supports fast, reliable installation. Whether on PCBs, in control cabinets or for connecting lights – pluggable installation connectors from WAGO allow you to make connections according to various requirements in next to no time. For greater protection in electrical installations, the pluggable installation connector is provided with mechanical protection against mismating. The pluggable installation connector offers touch-proof protection with live components in accordance with protection type IP20 (When mated: IP2xC (These compact connectors are not designed for use in open, easily accessible areas!)). Thanks to the color coding and mechanical A coding of *WINSTA*® MIDI pluggable installation connectors, you can clearly distinguish different circuits. The rated current and voltage are important criteria for selecting a pluggable installation connector: They tell us about the product's domains of use. This product has a current rating of 25 A – so it is also suitable for robust loads. Our *WINSTA*® MIDI product line guarantees maximum flexibility for the installation of applications. With its Push-in CAGE CLAMP® spring pressure connection technology, it achieves time-saving, error-free installation and offers flexibility and customization for meeting all installation requirements.

Push-in CAGE CLAMP® spring pressure connection technology – pluggable installation instead of laborious screw connections!

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

- protection against mismating eliminates errors
- simple circuits
- suitable for any application

- 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!**
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 °

 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
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
Direct ground contact to DIN-rail/drilled hole/housing	Yes
Design	with direct ground contact
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	0.267 MJ
Weight	13.8 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

PU (SPU)	100 pcs
Packaging type	Box
Country of origin	PL
GTIN	4045454422400
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
cURus Underwriters Laboratories Inc.	UL 1977	E45171
cURus Underwriters Laboratories Inc.	UL 1059	E 45172

Approvals for marine applications

Approval	Standard	Certificate Name
DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE00001Z6
LR Lloyds Register	IEC 61984	LR22429487TA

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance
770-713/007-000

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Documentation

Bid Text

770-713/007-000	19.02.2019	xml 2.96 KB	
770-713/007-000	08.06.2015	doc 23.50 KB	

CAD/CAE-Data

CAD data

2D/3D Models
770-713/007-000

CAE data

EPLAN Data Portal
770-713/007-000

WSCAD Universe
770-713/007-000

ZUKEN Portal
770-713/007-000

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

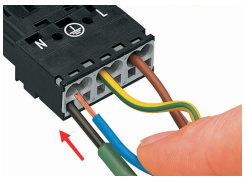
Item No.: 770-383
Operating tool; 3-way; green

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

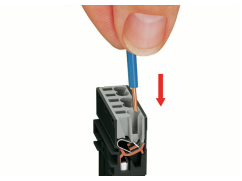
Installation Notes

Conductor termination

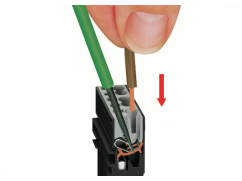
1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm



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.

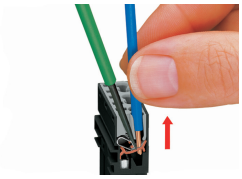


Insert the stripped solid conductor until it hits the backstop.

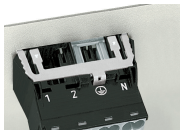


To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.

Conductor removal



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



Varnish-piercing direct ground contact