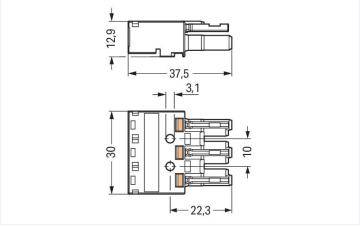
Data Sheet | Item Number: 770-223 Socket; 3-pole; Cod. A; 4,00 mm²; white

https://www.wago.com/770-223







Dimensions in mm

Female connector/socket WINSTA® MIDI with protection against mismating

For signal and power transmission: The *WINSTA*® MIDI female connector/socket rated current 25 A. Our pluggable installation connectors with spring pressure connection technology work entirely without screw connections. They allow resource-efficient, error-free installation in numerous possible uses. The mechanical coding and color coding of the pluggable installation connector ensure error-free installation of the individual components – including protection against mismating. 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!)). Thanks to the color coding and mechanical A coding of *WINSTA*® MIDI pluggable installation connectors, you can clearly distinguish different circuits. This pluggable installation connector can be used for a current load of up to 25 A. Therefore, it can also be used for high power loads. The *WIN-STA*® MIDI Pluggable Connection System with Push-in CAGE CLAMP® spring pressure connection technology facilitates precise electrification. Thanks to the integrated test slot, connections can be checked even when they are plugged in. This saves time, labor, and money.

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

WINSTA® is the pluggable connection system that is ideally tailored to the strict requirements of electrical installation. It allows fast, secure and, above all, error-free installation of components and cables. Now you can also lower installation costs without compromising safety and quality: The WINSTA® MIDI pluggable installation connector with marking eliminates the need for servicing and prevents unnecessary downtime.

- · protection against mismating eliminates errors
- · pre-assembled versions
- · suitable for any application
- ready to install and use immediately
- · convenient installation and commissioning

Electrical data			
Ratings per IEC/EN		Ratings per UL 1977	
Ratings per	IEC/EN 60664-1	Note for the US market	Some versions may also be used for cur-
Nominal voltage (III/3)	250 V	rent interruption in accordan UL certificate in select applic	
Rated impulse voltage (III/3)	4 kV		currents below 16 A and voltages up to
Rated current	25 A		600 V. For further information, please contact your local sales office.
Legend (ratings)	(III / 3) ≙ Overvoltage category III / Polluti-	Rated voltage (UL 1977)	600 V
	on degree 3	Rated current UL 1977	23 A
		TIGLOG CATTOTIC DE 1011	2071

https://www.wago.com/770-223





 $\begin{tabular}{lll} \textbf{General} \\ \textbf{Note on contact resistance} & approx. 1 m \Omega \ of \ contact \ resistance \\ approx. 0.25 m \Omega \ contact \ transition \ plug/socket \\ \end{tabular}$

Connection data				
Connection points	6		Connection 1	
Total number of potentials 3	3		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; wi ted ferrule	Fine-stranded conductor; with uninsulated ferrule	0.25 2.5 mm² / 20 14 AWG	
	Fine-stranded conductor; with ferrule; push-in termination	1.5 mm ² / 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	L ⊕ N
Potential marking	L⊕ N
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!)

Data Sheet | Item Number: 770-223 https://www.wago.com/770-223



Plug-in connection	
Contact type (pluggable connector)	Female connector/socket
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)	
	<u>Information on material specifications can be found here</u>
Color	white
Cover color	gray
Material group	1
Insulation material	Polyamide (PA66)
Flammability class per UL94	VO
Clamping spring material	Chrome-nickel spring steel (CrNi)
Contact material	Copper or copper alloy; surface-treated
Contact plating	Tin
Fire load	0.177 MJ
Weight	9.6 g

Environmental requirements	
Processing temperature	-5+40°C
Continuous operating temperature	-35 +85 ℃
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	4044918252362
Customs tariff number	85366990990

Approvals / Certificates

https://www.wago.com/770-223



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
VDE VDE Prüf- und Zertifizie- rungsinstitut	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
Approvai	Standard	Oei tilloate 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 770-223



Documentation

Bid Text			
770-223	19.02.2019	xml 3.01 KB	$\underline{\downarrow}$
770-223	08.06.2015	doc 23.50 KB	\downarrow

CAD/CAE-Data

https://www.wago.com/770-223



CAD data 2D/3D Models 770-223



1 Compatible Products

1.1 System counterpart

1.1.1 Cable assembly





Item No.: 771-9993/206-102

pre-assembled connecting cable; Eca; Plug/open-ended; 3-pole; Cod. A; H05VV-F 3G 1.5 mm²; 1 m; 1,50 mm²; white

Item No.: 771-9993/006-102

pre-assembled interconnecting cable; Eca; Socket/plug; 3-pole; Cod. A; H05VV-F 3G 1.5 mm²; 1 m; 1,50 mm²; white

1.1.2 Distribution box







Item No.: 899-631/395-000

Distribution box; Single-phase current (230 V); 1 input; 6 outputs; Cod. A; MIDI; black

Item No.: 899-681/104-000

Distribution box; Single-phase current (230 V); 1 input; 7 outputs; Cod. A; MIDI; white

Item No.: 899-631/327-000

Distribution box; Single-phase current (230 V); 2 inputs; 6 outputs; Cod. A; MIDI; black

1.1.3 Distribution connector







Item No.: 770-657

Item No.: 770-683

3-way distribution connector; 3-pole; Cod. A; 1 input; 3 outputs; white

Item No.: 770-658

5-way distribution connector; 3-pole; Cod. A; 1 input; 5 outputs; white

Item No.: 770-688

Distribution connector for switches; Single-pole and throttle two-way circuit; 3pole; Cod. A/S; 1 input; 5 outputs; white

Item No.: 770-687

Distribution connector for switches; Single-pole switch and series circuit; 3-pole; Cod. A/S; 1 input; 5 outputs; white



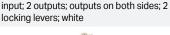
h-distribution connector; 3-pole; Cod. A; 1



h-distribution connector; 3-pole; Cod. A;

Item No.: 770-684 h-distribution connector; 3-pole; Cod. A;

610



Item No.: 770-6223

Linect® T-connector; 3-pole; Cod. A; 1 input; 2 outputs; white

Item No.: 770-685

1 input; 2 outputs; outputs on both sides; 3 locking levers; for flying leads; white

(816

1 input; 2 outputs; outputs on one side; 2 locking levers; white

Item No.: 770-686

h-distribution connector; 3-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 3 locking levers; for flying leads; white



Item No.: 770-656

T-distribution connector; 3-pole; Cod. A; 1 input; 2 outputs; 2 locking levers; white

Item No.: 770-665

T-distribution connector; 3-pole; Cod. A; 1 input; 2 outputs; 3 locking levers; for flying leads; white

1.1.4 Male connector/plug





Plug for PCBs; straight; 3-pole; Cod. A;

600

Co Co

Item No.: 770-833/011-000

Plug for PCBs; angled; 3-pole; Cod. A; white

Item No.: 770-833

white

Item No.: 770-233

Plug; 3-pole; Cod. A; 4,00 mm²; white

Item No.: 770-233/002-000

Plug; with direct ground contact; 3-pole; Cod. A; 4,00 mm²; white



Item No.: 770-133

Plug; with strain relief housing; 3-pole; Cod. A; 4,00 mm²; white

Item No.: 770-233/035-050

Plug; with strain relief housing; 3-pole; Cod. A; 4,00 mm²; white

Item No.: 770-733

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



Item No.: 770-733/007-000

Snap-in plug; with direct ground contact; 3-pole; Cod. A; 4,00 mm²; white

https://www.wago.com/770-223



1.2 Required Accessories

1.2.1 Locking system

1.2.1.1 Locking system



Locking lever; for flying leads; for manual

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

1.2.2 Strain relief

Item No.: 770-101

operation; black

1.2.2.1 Strain relief housing



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

1.3 Optional Accessories

1.3.1 Cover

1.3.1.1 Cover



Item No.: 770-201

Lockout cap; 12-pole, separable; for sockets; Plastic; black

Item No.: 770-221

Lockout cap; 12-pole, separable; for sockets; Plastic; white

1.3.2 Installation

1.3.2.1 Snap-in frame



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; whi-

1.3.3 Marking

1.3.3.1 Marker

Item No.: 770-450









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.: 770-450/000-002 Marker card; Plastic; yellow

1.3.4 Shield termination

Marker card; Plastic; white

https://www.wago.com/770-223



1.3.4.1 Shield termination



Item No.: 770-523

Shield connecting plate; 3-pole; for sockets and plugs; silver-colored

1.3.5 Strain relief

1.3.5.1 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.: 770-513/032-000

Strain relief housing; 3-pole; for 2 cables; 8.0 ... 11.5 mm; 55 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.: 770-513/021-000

Strain relief housing; 3-pole; for 1 cable; 9.0 ... 13.0 mm; 71 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.: 770-503/032-000

Strain relief housing; 3-pole; with locking clip; for 2 cables; 8.0 ... 11.5 mm; 55 mm; black



Item No.: 770-503/023-000

Strain relief housing; 3-pole; for 2 cables; 4.5 ... 8.0 mm; 55 mm; black



Item No.: 770-503/038-000

Strain relief housing; 3-pole; with locking clip; for 1 cable; 7.0 ... 11.5 mm; 48 mm; black

Item No.: 770-513/023-000

Strain relief housing; 3-pole; for 2 cables; 4.5 ... 8.0 mm; 55 mm; white



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

1.3.6 Tool

1.3.6.1 Operating tool



/

Item No.: 770-383Item No.: 210-719Operating tool; 3-way; greenOperating tool; Bla

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.

https://www.wago.com/770-223



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).

Subject to changes. Please also observe the further product documentation!