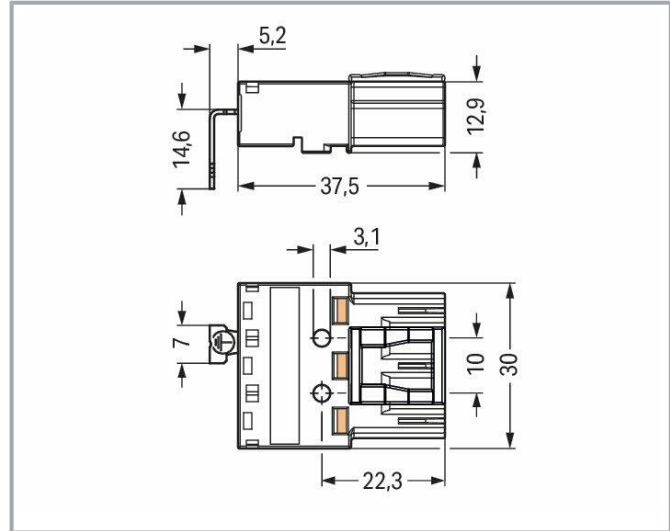


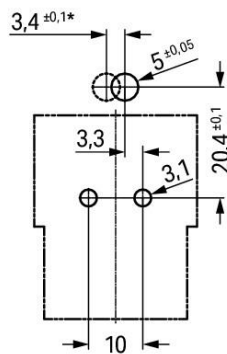
Data sheet | Item number: 770-233/002-000

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

www.wago.com/770-233/002-000



Color:



* Depending on the position of the ground contact

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

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Do you have any questions about our products?
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Item description

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

The *WINSTA*® MIDI male connector/plug rated current 25 A is the pluggable solution for your application in control cabinets, for lighting connections or on PCBs. On PCBs, in control cabinets or for connecting lights – pluggable installation connectors from WAGO allow you to establish connections according to an enormous variety of requirements in next to no time. The coding options reduce installation errors, allowing fast, secure wiring of all components. The pluggable installation connector is protected in accordance with protection type IP20. This means that users' fingers will never come into contact with energised contact elements. 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 electrical currents up to 25 A. Thus the product is also 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 electrical installation.

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

The *WINSTA*® Pluggable Connection System allows pluggable electrical installation. This saves time, lowers costs, and reduces the need for servicing. Choose durability and quality – the *WINSTA*® MIDI pluggable installation connector with protection type IP20 from WAGO makes the installation of electrical components visibly easier.

-
- effective protection against mismatching
- for automation controllers
- suitable for any application
- custom-engineered solutions
- quick replacement of defective units during ongoing operation

Data

Notes

Safety information

Application note for the U.S. market (USR): Some versions may also be used for current interruption in accordance with the UL certificate in select applications with currents below 16 A and voltages up to 600 V. For further information, please contact your local sales office.

Note

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



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).

Electrical data

Ratings per IEC/EN

Ratings per	IEC/EN 60664-1
Nominal voltage (III/3)	250 V
Rated impulse voltage (III/3)	4 kV
Rated current	25 A
Legend (ratings)	(III / 3) $\hat{=}$ Overvoltage category III / Pollution degree 3

Ratings per UL 1977

Note for the US market	Some versions may also be used for current interruption in accordance with the UL certificate in select applications with currents below 16 A and voltages up to 600 V. For further information, please contact your local sales office.
Rated voltage (UL 1977)	600 V
Rated current UL 1977	23 A

General

Note on contact resistance	approx. 1 m Ω of contact resistance approx. 0.25 m Ω 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
Nominal cross-section	4 mm ² / 12 AWG

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



Solid conductor	0.5 ... 4 mm ² / 20 ... 12 AWG
Solid conductor; push-in termination	1.5 ... 4 mm ² / 16 ... 12 AWG
Stranded conductor	0.5 ... 2.5 mm ² / 20 ... 14 AWG
Fine-stranded conductor	0.5 ... 4 mm ² / 20 ... 12 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 1.5 mm ² / 20 ... 16 AWG
Fine-stranded conductor; with uninsulated ferrule	0.25 ... 2.5 mm ² / 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
Drilled hole diameter with tolerance	5 ^{-0.05 ... +0.05} mm

Mechanical Data

Application	General mains applications
Coding	A
Variable coding	Yes
Marking	N \perp L
Potential marking	N \perp 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
Design	With direct ground contact
Protection type	IP20

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

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



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	white
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	0.223 MJ
Weight	11.4 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

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

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Packaging type	box
Country of origin	DE
GTIN	4045454829551
Customs tariff number	85366990990

Environmental Product Compliance


RoHS Compliance Status	Compliant, No Exemption
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Approvals / Certificates




General approvals

Logo	Approval	Additional Approval Text	Certificate name
	CCA DEKRA Certification B.V.	EN 61535	71-123228
	CCA DEKRA Certification B.V.	IEC 61535	NL -84761

Declarations of conformity and manufacturer's declarations

Logo	Approval	Additional Approval Text	Certificate name
	EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Approvals for marine applications





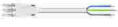
Logo	Approval	Additional Approval Text	Certificate name
	ABS American Bureau of Shipping	-	19-HG1868589-PDA
	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE00001Z6
	LR Lloyds Register	IEC 61984	LR22429487TA

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Counterpart

	Item no.770-123 Socket; with strain relief housing; 3-pole; Cod. A; 4,00 mm ² ; white	www.wago.com/770-123
	Item no.770-223/035-050 Socket; with strain relief housing; 3-pole; Cod. A; 4,00 mm ² ; white	www.wago.com/770-223/035-050
	Item no.771-9993/006-102 pre-assembled interconnecting cable; Eca; Socket/plug; 3-pole; Cod. A; H05VV-F 3G 1.5 mm ² ; 1 m; 1,50 mm ² ; white	www.wago.com/771-9993/006-102
	Item no.770-223 Socket; 3-pole; Cod. A; 4,00 mm ² ; white	www.wago.com/770-223
	Item no.771-9993/106-102 pre-assembled connecting cable; Eca; Socket/open-ended; 3-pole; Cod. A; H05VV-F 3G 1.5 mm ² ; 1 m; 1,50 mm ² ; white	www.wago.com/771-9993/106-102

Required accessories

Locking levers

Locking system

	Item no.: 770-121 Locking lever; for flying leads; for manual operation; white	www.wago.com/770-121
	Item no.: 770-131 Locking lever; for flying leads; for tool operation; white	www.wago.com/770-131
	Item no.: 770-101 Locking lever; for flying leads; for manual operation; black	www.wago.com/770-101
	Item no.: 770-111 Locking lever; for flying leads; for tool operation; black	www.wago.com/770-111

Cover

Cover

	Item no.: 770-360 Lockout cap; for plugs; 5-pole; separable; yellow	www.wago.com/770-360
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Subject to changes. Please also observe the further product documentation!

Optional accessories

Marking accessories

Marker



Item no.: 770-450/000-002
Marker card; Plastic; yellow

www.wago.com/770-450/000-002



Item no.: 770-450/000-001
Marker card; Plastic; green

www.wago.com/770-450/000-001



Item no.: 770-450/000-005
Marker card; Plastic; red

www.wago.com/770-450/000-005



Item no.: 770-450
Marker card; Plastic; white

www.wago.com/770-450



Item no.: 770-450/000-006
Marker card; Plastic; blue

www.wago.com/770-450/000-006



Item no.: 770-450/000-012
Marker card; Plastic; orange

www.wago.com/770-450/000-012

Tool

Operating tool



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

www.wago.com/210-719

Coding

Coding



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

www.wago.com/770-401

Downloads

Documentation

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



Bid Text

770-233/002-000 X81 - Datei	2019 Feb 19	xml 3.2 kB	Download
770-233/002-000 doc - Datei	2015 Jun 8	doc 24.1 kB	Download

CAD/CAE-Data

CAE data

WSCAD Universe 770-233/002-000	URL	Download
WSCAD Universe 770-233/002-000	URL	Download

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 770-233/002-000 Plug; with direct ground contact; 3-pole; Cod. A; 4,00 mm ² ; white	URL	Download
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Installation Notes

Product family

WINSTA® MIDI
[Show all products from the family](#)

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