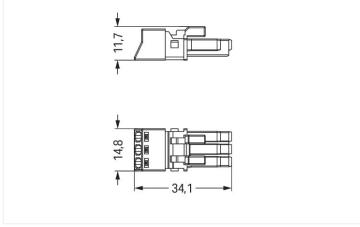
Data Sheet | Item Number: 890-223 Socket; 3-pole; Cod. A; 1,50 mm²; white

https://www.wago.com/890-223







Dimensions in mm

Female connector/socket WINSTA® MINI A coding

For signal and power transmission: The *WINSTA*® MINI female connector/socket A coding. Our pluggable installation connectors with spring pressure connection technology work completely without screw connections. They allow flexible, 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 mismating. The *WINSTA*® MINI pluggable installation connector with A coding in black or white is normally used for general mains applications in power distribution. *WINSTA*® MINI follows the trend towards miniaturisation. Our smallest pluggable connection system is especially suitable for lights, for instance, since as a result of LED technology; due to complex systems, these offer significantly less space for the connection technology.

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. Choose quality and durability – with protection against mismating from WAGO makes the electrical installation of electrical components visibly easier.

- pluggable installation connectors with protection against mismating
- consistent IP40 protection
- with A coding for use in a large number of general mains applications
- custom-engineered solutions
- quick replacement of defective units during ongoing operation

IEC	C/EN 60664	-1
III	III	II
3	2	2
250 V	-	-
4 kV	-	-
16 A	-	-
	III 3 250 V 4 kV	3 2 250 V - 4 kV -

Approvals per	UL 1977
Rated voltage	600 V
Rated current	14 A

General information	
Note on contact resistance	approx. 1 m Ω of contact resistance approx. 0.25 m Ω contact transition plug/ socket



nection data			
mping units	3	Connection 1	
Total number of potentials 3	Connection technology	Push-in CAGE CLAMP®	
	Actuation type	Operating tool Push-in	
	Nominal cross-section	1.5 mm² / 16 AWG	
	Solid conductor	0.25 1.5 mm ² / 22 16 AWG	
	Solid conductor; push-in termination	0.75 1.5 mm² / 20 16 AWG	
	Stranded conductor	0.25 1 mm² / 22 18 AWG	
	Fine-stranded conductor	0.25 1.5 mm ² / 22 16 AWG	
	Fine-stranded conductor; with insulated ferrule	0.25 0.75 mm² / 22 20 AWG	
		Fine-stranded conductor; with uninsulated ferrule	0.25 0.75 mm² / 22 20 AWG
	Fine-stranded conductor; with ferrule; push-in termination	0.75 mm² / 20 AWG	
		Strip length	9 mm / 0.35 inches
		Pole number	3
	Conductor entry direction to mating direction	0°	

Physical data	
Pin spacing	4.4 mm / 0.173 inches
Width	15 mm / 0.591 inches
Height	11.7 mm / 0.461 inches
Depth	34.1 mm / 1.343 inches

Mechanical data	
Use	General mains applications
Coding	A
Variable coding	No
Marking	$L \oplus N$
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; IP40 with strain relief housing

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).

https://www.wago.com/890-223



Material data	
Note (material data)	
	<u>Information on material specifications can be found here</u>
Color	white
Cover color	gray
Material group	
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	0.104 MJ
Weight	3.8 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	27-44-06-05
eCl@ss 9.0	27-44-06-05
ETIM 9.0	EC002560
ETIM 8.0	EC002560
PU (SPU)	50 pcs
Packaging type	Box
Country of origin	PL
GTIN	4055143548526
Customs tariff number	85366990990

Environmental Product Compliance	
RoHS Compliance Status	Compliant,No Exemption

KEMA c Sus		
Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 61535	71-123231
CCA DEKRA Certification B.V.	IEC 61535	NL-85020

Approvals / Certificates

General approvals

Approvai	Stanuaru	Certificate Name
CCA DEKRA Certification B.V.	EN 61535	71-123231
CCA DEKRA Certification B.V.	IEC 61535	NL-85020
cURus Underwriters Laboratories	UL 1977	E45171

Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

https://www.wago.com/890-223



Approvals for marine applications







Approval	Standard	Certificate Name
ABS American Bureau of Ship- ping	Steel Vessel Rules	19-HG1869855-PDA
DNV GL Det Norske Veritas, Ger- manischer Lloyd	-	TAE00001Z6
LR Lloyds Register	EN 61535	08/20047 (E2)

Downloads

Environmental Product Compliance

Compliance Search **Environmental Product**

Compliance 890-223

Documentation

Bid Text			
890-223	19.02.2019	xml 2.95 KB	$\underline{\downarrow}$
890-223	08.06.2015	doc 22.50 KB	$\underline{\downarrow}$

CAD/CAE-Data

CAD data

2D/3D Models 890-223

CAE data

EPLAN Data Portal 890-223

WSCAD Universe 890-223

ZUKEN Portal 890-223

1 Compatible Products

1.1 System counterpart

1.1.1 Cable assembly



<u>Item No.: 891-8993/205-102</u>

pre-assembled connecting cable; Eca; Plug/open-ended; 3-pole; Cod. A; 1 m; 1,00 mm²; white

Item No.: 891-8993/005-102

pre-assembled interconnecting cable; Eca; Socket/plug; 3-pole; Cod. A; 1 m; 1,00 mm²; white

https://www.wago.com/890-223



1.1.2 Distribution connector

Item No.: 890-684

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

10 40

Item No.: 890-686

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

600

Item No.: 890-656

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

in in

Item No.: 890-665

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

1.1.3 Male connector/plug

Item No.: 890-833/011-000

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

Item No.: 890-833

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

Item No.: 890-233

Plug; 3-pole; Cod. A; 1,50 mm²; white

Item No.: 890-133

Plug; with strain relief housing; 3-pole; 1,50 mm²; white

Car Car

Item No.: 890-733

Snap-in plug; 3-pole; Cod. A; 1,50 mm²; white

1.2 Required Accessories

1.2.1 Locking system

1.2.1.1 Locking system



Locking lever; for flying leads; for tool operation; black

Item No.: 890-131

Locking lever; for flying leads; for tool operation; white

Item No.: 890-101

Locking lever; for manual operation; black

Item No.: 890-121

Locking lever; for manual operation; white

1.2.2 Strain relief

1.2.2.1 Strain relief housing



Item No.: 890-503

Strain relief housing; 3-pole; with locking clip; for 1 cable; 4.5 ... 10.0 mm; 37 mm; black

Item No.: 890-513

Strain relief housing; 3-pole; with locking clip; for 1 cable; 4.5 ... 10.0 mm; 37 mm; white

War Car

1.3 Optional Accessories

1.3.1 Cover

1.3.1.1 Cover



Item No.: 897-2001

Protective cap; Type1; for sockets and plugs; PVC; red



1.3.2 Installation

1.3.2.1 Mounting accessories



Item No.: 890-310

Mounting carrier; 2- to 5-pole; for flying leads; black

6.00

Item No.: 890-311

Mounting carrier; 2- to 5-pole; for flying leads; white

1.3.3 Shield termination

1.3.3.1 Shield termination



Item No.: 890-523

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

1.3.4 Tool

1.3.4.1 Operating tool



Item No.: 890-383

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 = 30 mm (2-pole), 37 mm (3-pole), 45 mm (4- and 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. Terminate solid conductors by simply pushing them in.



To terminate fine-stranded conductors, open clamping units via operating tool (890-382) and insert stripped conductors until they hit backstop.

Terminate solid conductors by simply pushing them in.



To terminate fine-stranded conductors, open clamping units via operating tool (890-383) and insert stripped conductors until they hit backstop.

Terminate solid conductors by simply pushing them in.

Installation



Latch the wired connector into the base of the strain relief housing.



Push down strain relief clamp by hand.



Push down strain relief clamp with 2.5 mm screwdriver alternately on both sides.



Latch the top of the strain relief housing.

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Installation



The printed marking of the connector is clearly visible in the openings of the strain relief housing.

Shield termination



Connector with shield termination



Apply the shield to the sheathed cable.

Strip length, outer insulation = 30 mm Shield length = 8 mm



Push the shield connecting plate into the connector until fully inserted.



First insert the wired connector into strain relief housing, then snap clamp and cover.

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