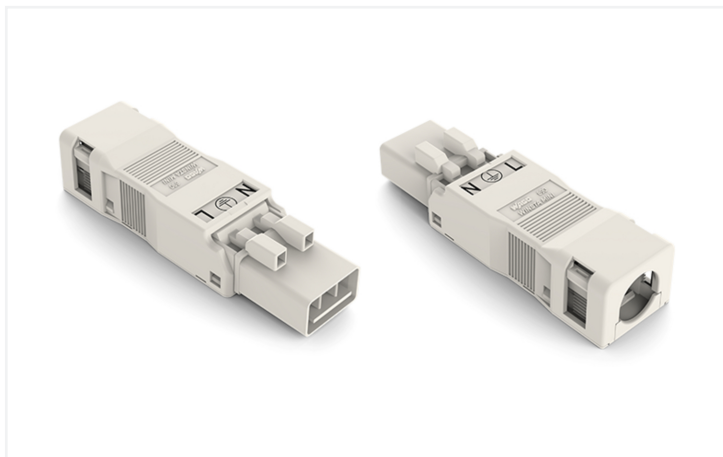


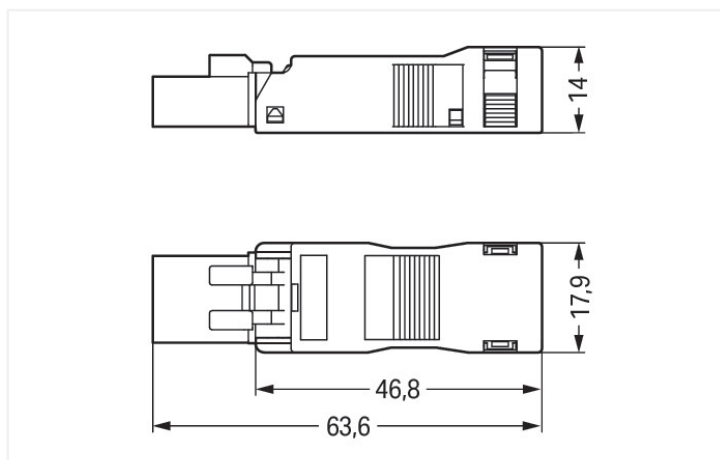
Data Sheet | Item Number: 890-133

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

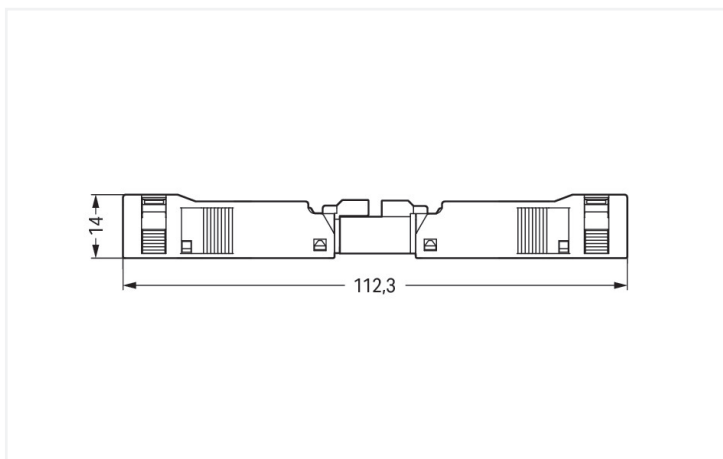
<https://www.wago.com/890-133>



Color: ■ white



Dimensions in mm



Dimensions in mm
Overall length when mated

Male connector/plug WINSTA® MINI with protection against mismatching



Use effective pluggable connections instead of laborious screw connections: With the WINSTA® MINI male connector/plug A coding. The pluggable installation connectors with spring pressure connection technology function without screw connections. They allow fast, efficient, error-free installation in numerous possible uses. The coding options reduce installation errors, allowing fast, maintenance-free wiring of all components. The pluggable installation connector offers protection against contact with wires or tools if they are smaller than 1 mm in accordance with protection type IP40. The WINSTA® MINI pluggable installation connector with A coding in white or black is normally used for general mains applications in power distribution. Especially where space is tight, our smallest pluggable connection system, WINSTA® MINI, consistently displays its advantageous properties. It saves space, and, thanks to Push-in CAGE CLAMP® spring pressure connection technology, it also can be installed quickly, since the connection is low-maintenance and requires no screw connections. A range up to 40 mm can be used for the strip length.

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

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

- protection against mismatching eliminates errors
- easy tool-free operation, a wide range of coding options
- with A coding for a large number of uses
- ready to install and use immediately
- convenient installation and commissioning

This item includes:

			
Item No.: 890-233	1	Item No.: 890-513	1
Plug; 3-pole; Cod. A; 1,50 mm²; white		Strain relief housing; 3-pole; with locking clip; for 1 cable; 4.5 ... 10.0 mm; 37 mm; white	

Electrical data

Ratings per		IEC/EN 60664-1		Approvals per		UL 1977	
Overvoltage category	III	III	II	Rated voltage	600 V		
Pollution degree	3	2	2	Rated current	14 A		
Nominal voltage	250 V	-	-				
Rated surge voltage	4 kV	-	-				
Rated current	16 A	-	-				

General information

Note on contact resistance	approx. 1 mΩ of contact resistance approx. 0.25 mΩ contact transition plug/ socket
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Connection data

Clamping units	3	Connection 1	
Total number of potentials	3	Connection technology	Push-in CAGE CLAMP®
PE function	Preceding PE contact	Actuation type	Operating tool Push-in
		Nominal cross-section	1.5 mm² / 16 AWG
		Solid conductor	0.25 ... 1.5 mm² / 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 mm² / 22 ... 16 AWG
		Fine-stranded conductor; with insulated ferrule	0.25 ... 0.75 mm² / 22 ... 20 AWG

Connection 1

Fine-stranded conductor; with uninsulated ferrule	0.25 ... 0.75 mm ² / 22 ... 20 AWG
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Fine-stranded conductor; with ferrule; push-in termination	0.75 mm ² / 20 AWG
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Strip length	9 mm / 0.35 inches
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Pole number	3
-------------	---

Connectable sheathed cable diameter	4.5 ... 10 mm
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Conductor entry direction to mating direction	0 °
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Strip length (outer insulation)	40 mm
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Physical data

Pin spacing	4.4 mm / 0.173 inches
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Width	17.9 mm / 0.705 inches
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Height	14 mm / 0.551 inches
--------	----------------------

Depth	63.6 mm / 2.504 inches
-------	------------------------

Mechanical data

Use	General mains applications
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Coding	A
--------	---

Variable coding	No
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Marking	N ⊕ L
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Potential marking	N ⊕ L
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Mating force of a plug-in connection	approx. 20 ... 70 N (depending on pole number)
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Retention force of a plug-in connection	Locked: > 80 N
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Unmating force of a plug-in connection	Unlocked: approx. 20 ... 70 N (depending on pole number)
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Number of mating cycles	200, without resistive load
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Protection type	IP40
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Plug-in connection

Contact type (pluggable connector)	Male connector/plug
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Connector (connection type)	for conductor
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Mismating protection	Yes
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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
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Locking lever	Can be retrofitted
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Locking of plug-in connection	Locking lever
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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).
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Strain relief	Strain relief housing
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Material data		
Note (material data)		Information on material specifications can be found here
Color		white
Cover color		gray
Material group		I
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		0.284 MJ
Connector color		white
Strain relief color		white
Weight		6.6 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)
PU (SPU)		50 pcs
Packaging type		Box
Country of origin		DE
GTIN		4045454233013
Customs tariff number		85366990990

Product classification		
UNSPSC		39121402
eCl@ss 10.0		27-44-06-05
eCl@ss 9.0		27-44-06-05
ETIM 9.0		EC002560
ETIM 8.0		EC002560
ECCN		NO US CLASSIFICATION

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 DEKRA Certification B.V.	EN 61535	71-123231
CCA DEKRA Certification B.V.	IEC 61535	NL-85020
cURus Underwriters Laboratories Inc.	UL 1977	E45171
EU-Declaration of Confor- mity WAGO GmbH & Co. KG		-
UK-Declaration of Confor- mity WAGO GmbH & Co. KG		-



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 890-133



Documentation

Bid Text			
890-133	19.02.2019	xml 3.03 KB	
890-133	08.06.2015	doc 23.00 KB	

CAD/CAE-Data

CAD data
2D/3D Models 890-133



CAE data
EPLAN Data Portal 890-133
WSCAD Universe 890-133
ZUKEN Portal 890-133



1 Compatible Products

1.1 System counterpart

1.1.1 Cable assembly



Item No.: 891-8993/105-102 pre-assembled connecting cable; Eca; Socket/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
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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



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



Item No.: 890-656
T-distribution connector; 3-pole; Cod. A; 1 input; 2 outputs; 2 locking levers; white



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 Female connector/socket



Item No.: 890-723
Snap-in socket; 3-pole; Cod. A; 1,50 mm²; white



Item No.: 890-823/011-000
Socket for PCBs; angled; 3-pole; Cod. A; white



Item No.: 890-823
Socket for PCBs; straight; 3-pole; Cod. A; white



Item No.: 890-223
Socket; 3-pole; Cod. A; 1,50 mm²; white



Item No.: 890-123
Socket; with strain relief housing; 3-pole; Cod. A; 1,50 mm²; white

1.2 Required Accessories

1.2.1 Locking system

1.2.1.1 Locking system



Item No.: 890-111
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

1.3 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



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



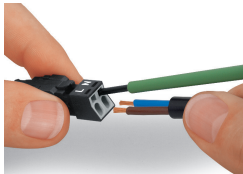
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

Installation Notes

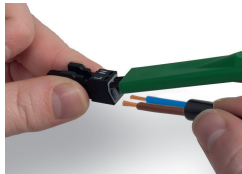
Conductor termination



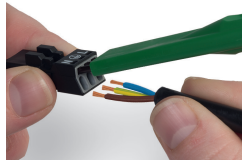
- 1. Strip length, outer insulation = 30 mm (2-pole), 37 mm (3-pole), 45 mm (4- and 5-pole)
- 2. Strip length = 9 mm
- 3. Extended ground conductor = 8 mm



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



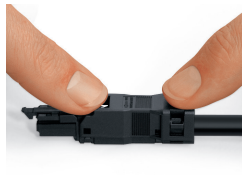
Latch the wired connector into the base of the strain relief housing.



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.



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.