

Color: white

Similar to illustration

Dimensions in mm

Male connector/plug WINSTA® MINI with protection type IP20

For power and signal transmission: The WINSTA® MINI male connector/plug 3-pole. WAGO pluggable installation connectors are used when criteria repeat or are distributed on a specified grid, for example for installing grid lighting or flush-mount lighting. The coding options reduce installation errors, allowing fast, maintenance-free wiring of all components. Standard mains applications for almost any domain of use can be implemented with WINSTA® MINI pluggable installation connectors with A coding. WINSTA® MINI satisfies the demand for miniaturisation. Our smallest pluggable connection system is very good for lights, for example, since as a result of LED technology; due to complex systems, these offer less and less space for the connection technology.

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. Now you can also lower installation costs without compromising safety and quality: with protection against mismatching eliminates the need for servicing and prevents unnecessary downtime.

- protection against mismatching eliminates errors
- easy tool-free operation, a wide range of coding options
- with A coding for use in many general mains applications
- flexible installation to save space
- fast, secure installation

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



Connection data																												
Connection points	3	<div>Connection 1</div> <table><tr><td>Connection technology</td><td>Push-in CAGE CLAMP®</td></tr><tr><td>Actuation type</td><td>Operating tool Push-in</td></tr><tr><td>Nominal cross-section</td><td>1.5 mm² / 16 AWG</td></tr><tr><td>Solid conductor</td><td>0.25 ... 1.5 mm² / 22 ... 16 AWG</td></tr><tr><td>Solid conductor; push-in termination</td><td>0.75 ... 1.5 mm² / 20 ... 16 AWG</td></tr><tr><td>Stranded conductor</td><td>0.25 ... 1 mm² / 22 ... 18 AWG</td></tr><tr><td>Fine-stranded conductor</td><td>0.25 ... 1.5 mm² / 22 ... 16 AWG</td></tr><tr><td>Fine-stranded conductor; with insulated ferrule</td><td>0.25 ... 0.75 mm² / 22 ... 20 AWG</td></tr><tr><td>Fine-stranded conductor; with uninsulated ferrule</td><td>0.25 ... 0.75 mm² / 22 ... 20 AWG</td></tr><tr><td>Fine-stranded conductor; with ferrule; push-in termination</td><td>0.75 mm² / 20 AWG</td></tr><tr><td>Strip length</td><td>9 mm / 0.35 inches</td></tr><tr><td>Pole number</td><td>3</td></tr><tr><td>Conductor entry direction to mating direction</td><td>0°</td></tr></table>	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 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	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°
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Total number of potentials	3																											
PE function	Preceding PE contact																											

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	
Application	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
Protection type	IP20; IP40 when mated with strain relief housing

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	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)		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		0.093 MJ
Weight		3.6 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)
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)		50 pcs
Packaging type		Box
Country of origin		PL
GTIN		4055143548540
Customs tariff number		85366990990

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
Approval	Standard	Certificate Name
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 890-233



Documentation

Bid Text			
890-233	19.02.2019	xml 2.95 KB	
890-233	08.06.2015	doc 23.50 KB	

CAD/CAE-Data

CAD data
2D/3D Models 890-233



CAE data	
EPLAN Data Portal 890-233	
WSCAD Universe 890-233	
ZUKEN Portal 890-233	

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

1.2.2 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

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



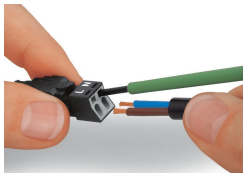
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

Installation Notes

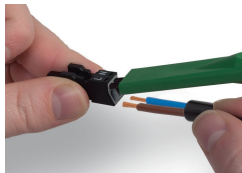
Conductor termination



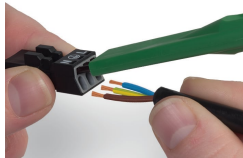
- 1. Strip length, outer insulation = 30 mm (2-pole), 37 mm (3-pole), 45 mm (4- and 5-pole)
- 2. Strip length = 9 mm
- 3. Extended ground conductor = 8 mm



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.

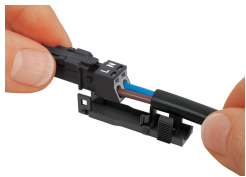


To terminate fine-stranded conductors, open clamping units via operating tool (890-382) and insert stripped conductors until they hit backstop. Terminate solid conductors by simply pushing them in.



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



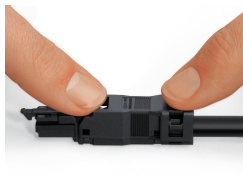
Latch the wired connector into the base of the strain relief housing.



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.

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.