

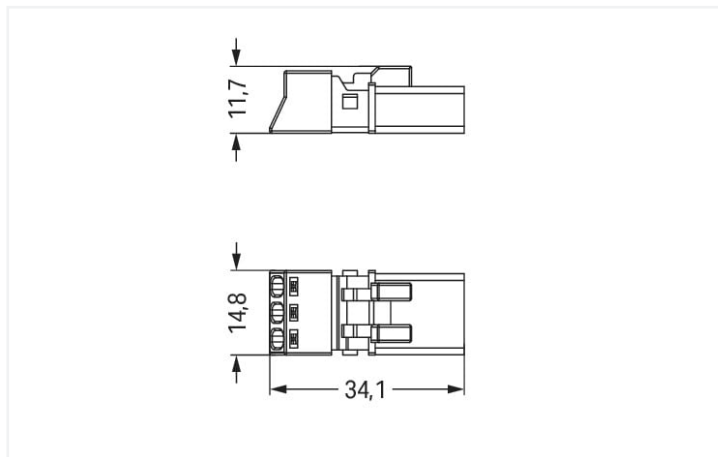
# Data Sheet | Item Number: 890-213

Plug; 3-pole; Cod. A; 1,50 mm<sup>2</sup>; black

<https://www.wago.com/890-213>



Color: ■ black



Dimensions in mm

## Male connector/plug WINSTA® MINI A coding

The WINSTA® MINI male connector/plug A coding is the pluggable solution for your application in control cabinets, on PCBs or for lighting connections. The pluggable installation connectors with spring pressure connection technology work completely without screw connections. They allow flexible, error-free installation in numerous applications. The color coding and mechanical coding of the pluggable installation connector ensure error-free installation of the individual components – including protection against mismating. Thanks to the color coding and mechanical A coding of WINSTA® MINI pluggable installation connectors, you can clearly distinguish different circuits. Particularly if only limited space is available, our smallest pluggable connection system, WINSTA® MINI, consistently displays its advantages. It is very compact, and, thanks to Push-in CAGE CLAMP® spring pressure connection technology, it also saves time, since the connection is low-maintenance and can be performed without screw connections.

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. Now you can also cut installation costs without compromising quality and safety: with protection type IP20 eliminates the need for servicing and prevents unnecessary downtime.

- protection against mismating eliminates errors
- compact design for conductors with a cross-section up to 1.5 mm<sup>2</sup>
- with A coding for use in a large number of general mains applications
- flexible installation to save space
- rapid, structured electrical installation

## Electrical data

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

Approvals per	UL 1977
Rated voltage	600 V
Rated current	14 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
Total number of potentials	3
PE function	Preceding PE contact

## Connection 1

Connection technology	Push-in CAGE CLAMP®
Actuation type	Operating tool Push-in
Nominal cross-section	1.5 mm <sup>2</sup> / 16 AWG
Solid conductor	0.25 ... 1.5 mm <sup>2</sup> / 22 ... 16 AWG
Solid conductor; push-in termination	0.75 ... 1.5 mm <sup>2</sup> / 20 ... 16 AWG
Stranded conductor	0.25 ... 1 mm <sup>2</sup> / 22 ... 18 AWG
Fine-stranded conductor	0.25 ... 1.5 mm <sup>2</sup> / 22 ... 16 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 0.75 mm <sup>2</sup> / 22 ... 20 AWG
Fine-stranded conductor; with uninsulated ferrule	0.25 ... 0.75 mm <sup>2</sup> / 22 ... 20 AWG
Fine-stranded conductor; with ferrule; push-in termination	0.75 mm <sup>2</sup> / 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	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 <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
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	black
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	0.095 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 9.0	EC002560
ETIM 8.0	EC002560
PU (SPU)	50 pcs
Packaging type	Box
Country of origin	PL
GTIN	4055143548533
Customs tariff number	85366990990

## Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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## Approvals / Certificates

### General approvals



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

### Declarations of conformity and manufacturer's declarations

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 890-213

Documentation

Bid Text			
890-213	19.02.2019	xml 2.96 KB	
890-213	08.06.2015	doc 23.00 KB	

CAD/CAE-Data

CAD data
2D/3D Models 890-213

CAE data
EPLAN Data Portal 890-213
WSCAD Universe 890-213
ZUKEN Portal 890-213

1 Compatible Products

1.1 System counterpart

1.1.1 Cable assembly



**Item No.: 891-8993/105-101**  
pre-assembled connecting cable; Eca;  
Socket/open-ended; 3-pole; Cod. A; 1 m;  
1,00 mm<sup>2</sup>; black

**Item No.: 891-8993/005-101**  
pre-assembled interconnecting cable;  
Eca; Socket/plug; 3-pole; Cod. A; 1 m; 1,00  
mm<sup>2</sup>; black

### 1.1.2 Distribution connector



**Item No.: 890-634**

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



**Item No.: 890-636**

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



**Item No.: 890-606**

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



**Item No.: 890-615**

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

### 1.1.3 Female connector/socket



**Item No.: 890-703**

Snap-in socket; 3-pole; Cod. A; 1,50 mm<sup>2</sup>; black



**Item No.: 890-803/011-000**

Socket for PCBs; angled; 3-pole; Cod. A; black



**Item No.: 890-803**

Socket for PCBs; straight; 3-pole; Cod. A; black



**Item No.: 890-203**

Socket; 3-pole; Cod. A; 1,50 mm<sup>2</sup>; black



**Item No.: 890-103**

Socket; with strain relief housing; 3-pole; Cod. A; 1,50 mm<sup>2</sup>; black

## 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**

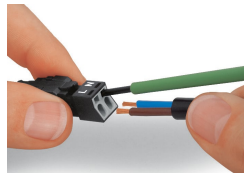
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

## Installation Notes

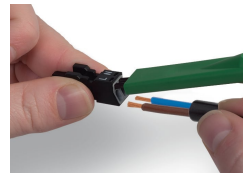
### Conductor termination



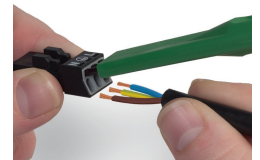
1. Strip length, outer insulation = 30 mm (2-pole), 37 mm (3-pole), 45 mm (4- and 5-pole)
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm



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.

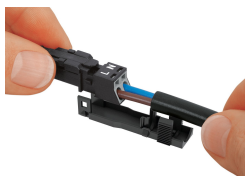


To terminate fine-stranded conductors, open clamping units via operating tool (890-382) and insert stripped conductors until they hit backstop. Terminate solid conductors by simply pushing them in.



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



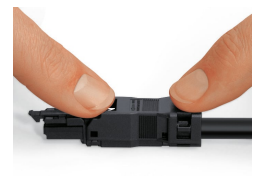
Latch the wired connector into the base of the strain relief housing.



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.