

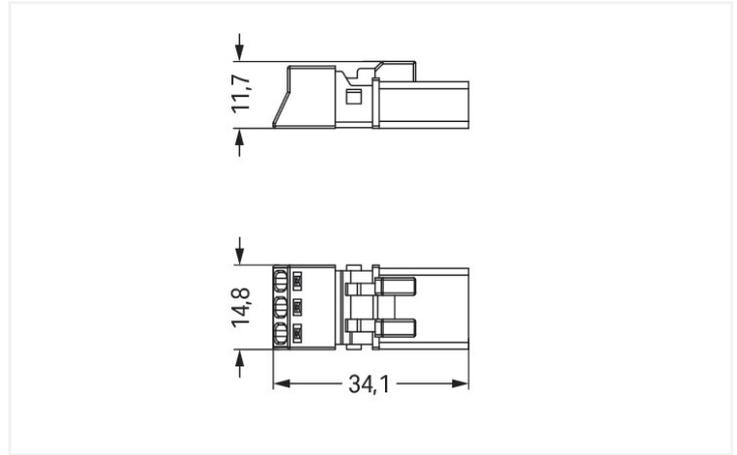
Data Sheet | Item Number: 890-213

Plug; 3-pole; Cod. A; 1,50 mm²; black

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



Color: ■ black



Dimensions in mm

Male connector/plug *WINSTA*® MINI rated current 16 A

For signal and power transmission: The *WINSTA*® MINI male connector/plug with protection type IP20. On PCBs, in control cabinets or for connecting lights – pluggable installation connectors from WAGO allow you to make connections according to a huge variety of requirements in seconds. For greater protection in electrical installations, the pluggable installation connector is provided with mechanical protection against mismatching. Thanks to the color coding and mechanical A coding of *WINSTA*® MINI pluggable installation connectors, you can clearly distinguish different circuits. Especially if only limited space is available, our smallest pluggable connection system, *WINSTA*® MINI, conveniently displays its strengths. It saves space, and, with Push-in CAGE CLAMP® spring pressure connection technology, it additionally 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!

WINSTA® is the pluggable connection system that is optimally tailored to the strict requirements of electrical installation. It allows error-free installation of cables and components, quickly and reliably. Choose durability and quality – with marking from WAGO makes the installation of electrical components noticeably easier.

- effective protection against mismatching
- compact design for conductors with a cross-section up to 1.5 mm²
- with A coding for a great number of uses
- custom-engineered solutions
- fast, secure installation

Notes

General safety information

NOTICE: Observe installation and safety instructions!

- Nur von Elektrofachkraft oder einer für die Tätigkeit elektrisch unterwiesenen Person (EUP nach DIN VDE 0105-100) anzuwenden!
- Nicht unter Spannung/Last installieren!
- Nur für bestimmungsgemäßen Gebrauch einsetzen!
- Nationale Vorschriften/Normen/Richtlinien beachten!
- Technische Daten der Produkte beachten!
- Auf die richtige Polbelegung achten!
- Keine beschädigten/verschmutzten Komponenten verwenden!
- Leiterarten, -querschnitte, Abisolierlängen und Leitungsdurchmesser beachten!
- Leiter bis zum Anschlag einführen!
- Nur mit Verriegelungsklinke und Zugentlastung verwenden!
- Originalzubehör verwenden!

To be sold only with installation instructions!

Electrical data

Ratings per	IEC/EN 60664-1		
Overvoltage category	III	III	II
Pollution degree	3	2	2
Nominal voltage	250 V	-	-
Rated impulse withstand 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 ² / 16 AWG
Solid conductor	0.25 ... 1.5 mm ² / 22 ... 16 AWG
Solid conductor; push-in termination	0.75 ... 1.5 mm ² / 20 ... 16 AWG
Stranded conductor	0.25 ... 1 mm ² / 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 mm ² / 22 ... 20 AWG
Fine-stranded conductor; with uninsulated ferrule	0.25 ... 0.75 mm ² / 22 ... 20 AWG
Fine-stranded conductor; with ferrule; push-in termination	0.75 mm ² / 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 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	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	0.08 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)
PU (SPU)	50 pcs
Packaging type	Box
Country of origin	PL
GTIN	4055143548533
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 10.0	EC002560
ECCN	NO US CLASSIFICATION

Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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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 Conformity WAGO GmbH & Co. KG	-	-
UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Approvals for marine applications



Approval	Standard	Certificate Name
ABS American Bureau of Shipping	Steel Vessel Rules	24-0095973-PDA
DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE00001Z6
LR Lloyds Register	EN 61535	LR23317167TA
PRS Polski Rejestr Statków	-	TE/1096/880590/23

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	CAE data
2D/3D Models 890-213 	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 mm²; black

Item No.: 891-8993/005-101

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



Item No.: 890-103

Socket; with strain relief housing; 3-pole; Cod. A; 1,50 mm²; 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

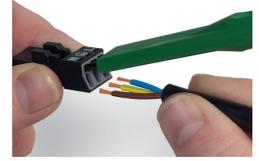
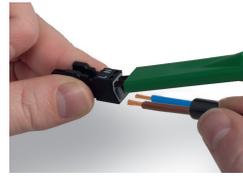
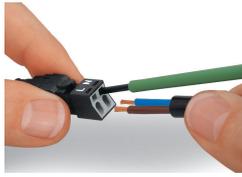


Item No.: 210-719

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.



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.