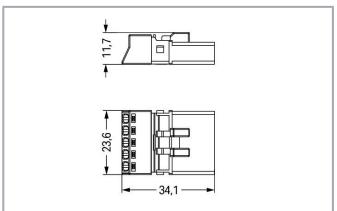
Plug; 5-pole; Cod. A; 1,50 mm<sup>2</sup>; white

www.wago.com/890-235







# Item description

# Male connector/plug WINSTA® MINI rated current 13 A

Use effective pluggable connections instead of laborious screw connections: With the WINSTA® MINI male connector/plug rated current 13 A. Whether on PCBs, in control cabinets or for connecting lights – pluggable installation connectors from WAGO allow you to establish connections according to various requirements in seconds. For greater security in electrical installations, the pluggable installation connector is provided with mechanical protection against mismating. Thanks to the color coding and mechanical A coding of WINSTA® MINI pluggable installation connectors, you can clearly distinguish different circuits. Thanks to its particularly compact dimensions, our WINSTA® MINI Pluggable Connection System with Push-in CAGE CLAMP® spring pressure connection technology is especially suitable in very restricted spaces, i.e., for connections when very little room is available.

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

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# 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 durability and quality – the *WINSTA®* MINI pluggable installation connector with marking from WAGO makes the installation of electrical components noticeably easier.

- pluggable installation connectors with protection against mismating
- compact design for conductors with a cross-section up to 1.5 mm²
- with A coding for a great number of uses
- flexible installation to save space
- rapid, structured electrical installation

# Data Electrical data

# Ratings per IEC/EN

Ratings per	IEC/EN 60664-1
Nominal voltage (III/3)	400 V
Rated impulse voltage (III/3)	6 kV
Rated current	13 A
Legend (ratings)	(III / 3) ≙ Overvoltage category III / Pollution degree 3

# Ratings per UL 1977

Note for the US market	Some versions may also be used for current interruption in accordance with the UL certificate in select applications with currents below 5 A and voltages up to 600 V. For further information, please contact your local sales office.
Rated voltage (UL 1977)	600 V
Rated current UL 1977	12 A

### General

Note on contact resistance	approx. 1 m $\Omega$ of contact resistance
	approx. 0.25 m $\Omega$ contact transition plug/socket

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### Connection data

Connection points	5
Total number of potentials	5

# 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 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	5
Conductor entry direction to mating direction	0°

# Physical data

Pin spacing	4.4 mm / 0.173 inches
Width	23.6 mm / 0.929 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	3 2 1
Potential marking	3 2 1 ∮ 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 of mating cycles	200, without resistive load

 $\label{thm:condition} \textbf{Subject to changes. Please also observe the further product documentation!}$ 

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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	1
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	0.16 MJ
Weight	5.7 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

 $\label{lem:condition} \textbf{Subject to changes. Please also observe the further product documentation!}$ 

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### 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	DE
GTIN	4045454233242
Customs tariff number	85366990990

# **Environmental Product Compliance**

RoHS Compliance Status Compliant, No Exemption

# Approvals / Certificates

### General approvals

Logo	Approval	Additional Approval Text	Certificate name
	CCA DEKRA Certification B.V.	IEC 61535	NL-85020
KEMA	CCA DEKRA Certification B.V.	EN 61535	71- 123231
c <b>FL</b> *u	cURus Underwriters Laboratories Inc.	UL 1977	E45171



Declarations of conformity and manufacturer's declarations

Logo	Approval	Additional Approval Text	Certificate name
CE	EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
	UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

 $\label{thm:condition} \textbf{Subject to changes. Please also observe the further product documentation!}$ 

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Approvals for	Certificate		
Logo	Approval	Additional Approval Text	name
ABS.	ABS American Bureau of Shipping	Steel Vessel Rules	19- HG1869855- PDA
DNV DNV.COM/AF	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE00001Z6
THE PROPERTY AND ALL PARTY AND	LR Lloyds Register	EN 61535	08/20047 (E2)

# Counterpart

	Item no.890-125 Socket; with strain relief housing; 5-pole; Cod. A; 1,50 mm²; white	www.wago.com/890-125	
¥	Item no.890-671 T-distribution connector; 5-pole; Cod. A; 1 input; 2 outputs; 2 locking levers; white	www.wago.com/890-671	
	Item no.890-225 Socket; 5-pole; Cod. A; 1,50 mm²; white	www.wago.com/890-225	
P	Item no.890-672 T-distribution connector; 5-pole; Cod. A; 1 input; 2 outputs; 3 locking levers; for flying leads; white	www.wago.com/890-672	
	Item no.890-725 Snap-in socket; 5-pole; Cod. A; 1,50 mm²; white	www.wago.com/890-725	
	Item no.890-725/006-000 Snap-in socket; without locking lever; 5-pole; Cod. A; 1,50 mm²; white	www.wago.com/890-725/006- 000	
B	Item no.890-825 Socket for PCBs; straight; 5-pole; Cod. A; white	www.wago.com/890-825	

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www.wago.com/890-235





#### Item no.890-979

h-distribution connector; 5-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 2 locking levers;

www.wago.com/890-979



### Item no.890-825/011-000

Socket for PCBs; angled; 5-pole; Cod. A; white

www.wago.com/890-825/011-

000



#### Item no.890-980

h-distribution connector; 5-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 3 locking levers; for www.wago.com/890-980

flying leads; white

pre-assembled interconnecting cable; Eca; Socket/plug; 5-pole; Cod. A; H05VV-F 5G 1.5 mm<sup>2</sup>; 1 m; 1,50 mm<sup>2</sup>; white

www.wago.com/891-8995

/006-102



### Item no.891-8995/106-102

Item no.891-8995/006-102

pre-assembled connecting cable; Eca; Socket/open-ended; 5-pole; Cod. A; H05VV-F 5G 1.5 mm²; 1 m; 1,50 mm<sup>2</sup>; white

www.wago.com/891-8995

/106-102

### Required accessories

#### Strain relief

Strain relief housing



Strain relief housing; 5-pole; with locking clip; for 1 cable; 6.5 ... 10.5 mm; 45 mm; black

www.wago.com/890-505



### Item no.: 890-515

Strain relief housing; 5-pole; with locking clip; for 1 cable; 6.5 ... 10.5 mm; 45 mm; white

www.wago.com/890-515

### Locking levers

Locking system



Item no.: 890-111

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

www.wago.com/890-111



Item no.: 890-101

Locking lever; for manual operation; black

www.wago.com/890-101



Item no.: 890-121

Locking lever; for manual operation; white

www.wago.com/890-121



Item no.: 890-131

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

www.wago.com/890-131

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### Optional accessories

Cover
-------

Cover



Item no.: 897-2003

Protective cap; Type2; for sockets and plugs; PVC; red

www.wago.com/897-2003

Mounting

Mounting accessories



Item no.: 890-310

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

www.wago.com/890-310

So Cal

Item no.: 890-311

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

www.wago.com/890-311

**Shield termination** 

Shield termination



Item no.: 890-527

Shield connecting plate; 5-pole; for plugs

www.wago.com/890-527

Tool

Operating tool



Item no.: 210-719

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

www.wago.com/210-719



Item no.: 890-385

Operating tool; 5-way; green

www.wago.com/890-385

Downloads Documentation

**Bid Text** 

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### CAD/CAE-Data

### **CAD** data

2D/3D Models 890-235	URL	Download
CAE data		
WSCAD Universe 890-235	URL	Download
ZUKEN Portal 890-235	URL	Download

# **Environmental Product Compliance**

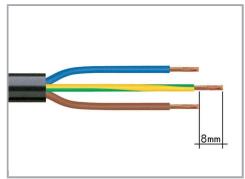
### Compliance Search

Environmental Product Compliance 890-235

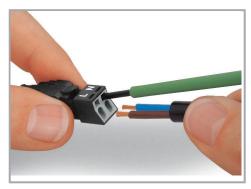
Plug; 5-pole; Cod. A; 1,50 mm²; white

# **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.

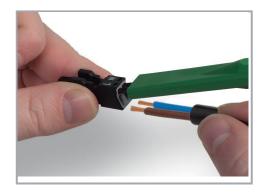
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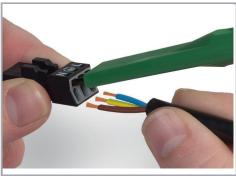
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To terminate fine-stranded conductors, open clamping units via operating tool (890-382) and insert stripped conductors until they hit backstop.

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.

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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

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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.

# **Product family**

WINSTA® MINI
Show all products from the family

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