

Item description

- Protected against mismatching and maintenance-free
- Push-in CAGE CLAMP® spring pressure connection technology allows solid conductors to be simply pushed into a unit
- Compact design with 4.4 mm pole spacing
- When assembled, the installation connectors complies with IP40 and are suitable for easily accessible areas

Note:

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).

Note on mismatching protection:

All WINSTA® components are 100% protected against mismatching when:

- a.) plugging different numbers of poles
- b.) plugging while rotated 180
- c.) plugging while laterally staggered
- d.) plugging one pole

Safety information 1:

Application note for the U.S. market (USR): 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.

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



Data

Electrical data

Note on Contact Resistance

approx. 1 mΩ of contact resistance approx. 0.25 mΩ contact transition plug/socket

Ratings per IEC/EN 60664-1

Ratings per	IEC/EN 60664-1
Rated voltage (III / 3)	250 V
Rated impulse voltage (III / 3)	4 kV
Rated current	16 A
Legend (ratings)	(III / 3) ≙ Overvoltage category III / Pollution degree 3

Approvals per UL 1977

Rated voltage per UL 1977 (factory wiring only)	600 V
Rated current per UL 1977 (factory wiring only)	14 A

Connection data

Connection technology	Push-in CAGE CLAMP®
Actuation type	Operating tool Push-in
Nominal cross section	1,5 mm²
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 ferrule with plastic collar	0,25 ... 0,75 mm² / 22 ... 20 AWG
Fine-stranded conductor with ferrule without plastic collar	0,25 ... 0,75 mm² / 22 ... 20 AWG
Fine-stranded conductor with ferrule, push-in termination, from	0,75 mm² / 20 AWG
Strip length	9 mm / 0.35 inch
Note (strip length)	see also packaging or instructions
No. of poles	3
Total number of connection points	3
Total number of potentials	3
Ground function	with preceding ground contact
Conductor entry direction to mating direction	0°

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Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.



Geometrical Data

Pin spacing	4,4 mm / 0.173 inch
Width	15 mm / 0.591 inch
Height	11,7 mm / 0.461 inch
Depth	34,1 mm / 1.343 inch

Mechanical data

Coding	A
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 100, with resistive load $I_N = 16$ A, tested (1.5 mm ² /AWG 16)
Marking	L N
Protection class	IP20
Note on protection class	IP40 when mated with strain relief housing
Potential marking	L N
Application	General mains applications

Plug connection

Contact type (pluggable connector)	Male connector/plug
Connector connection type	for conductor
Mismating protection	Yes
Locking of plug-in connection	locking lever
Locking lever	retrofittable

Material Data

Color	white
Insulating material	Polyamide 66 (PA 66)
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Copper or copper alloy (surface-treated)
Fire load	0.077 MJ
Weight	4.9 g

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Environmental Requirements


Processing temperature	-5 ... +40 °C
Continuous operating temperature	-35 ... +85 °C
Note on Continuous Service Temperature	Insulating parts for temperatures ≤ 105 °C

Commercial data




Product Group	20 (WINSTA)
Packaging type	BOX
Country of origin	PL
GTIN	4055143548540
Customs Tariff No.	85366990990

Approvals / Certificates

Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate name
	CCA DEKRA Certification B.V.	EN 61535	71- 102984

Ship Approvals

Logo	Approval	Additional Approval Text	Certificate name
	ABS American Bureau of Shipping	Steel Vessel Rules	19- HG1869855- PDA
	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE00001Z6
	LR Lloyds Register	EN 61535	08/20047 (E2)

UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	cURus	UL 1977	E45171

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Underwriters Laboratories Inc.



Counterpart



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

www.wago.com/890-123

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

www.wago.com/890-223

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

www.wago.com/890-656

Item no.890-665
T-distribution connector; 3-pole; Cod. A; 1 input; 2 outputs; 3 locking levers; for flying leads; white

www.wago.com/890-665

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

www.wago.com/890-686

Item no.890-684
h-distribution connector; 3-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 2 locking levers; white

www.wago.com/890-684

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

www.wago.com/890-723

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

www.wago.com/890-823

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

www.wago.com/890-823/011-000

Item no.891-8993/005-102
pre-assembled interconnecting cable; Eca; Socket/plug; 3-pole; Cod. A; 1 m; 1,00 mm²; white

www.wago.com/891-8993/005-102





Item no.891-8993/105-102
pre-assembled connecting cable; Eca; Socket/open-ended; 3-pole; Cod. A; 1 m; 1,00 mm²; white

www.wago.com/891-8993/105-102



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

Compatible products



Locking lever

	Item no.: 890-101 Locking lever; for manual operation; black	www.wago.com/890-101
	Item no.: 890-111 Locking lever; for flying leads; for tool operation; black	www.wago.com/890-111
	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



Strain relief plate

	Item no.: 890-503 Strain relief housing; 3-pole; with locking clip; for 1 cable; 4.5 ... 10.0 mm; 37 mm; black	www.wago.com/890-503
	Item no.: 890-513 Strain relief housing; 3-pole; with locking clip; for 1 cable; 4.5 ... 10.0 mm; 37 mm; white	www.wago.com/890-513

assembling

	Item no.: 890-310 Mounting carrier; 2- to 5-pole; for flying leads; black	www.wago.com/890-310
	Item no.: 890-311 Mounting carrier; 2- to 5-pole; for flying leads; white	www.wago.com/890-311

tools

	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.: 890-383 Operating tool; 3-way; green	www.wago.com/890-383

shield connection

	Item no.: 890-523 Shield connecting plate; 3-pole; for sockets and plugs	www.wago.com/890-523
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Downloads

Documentation

Bid Text

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890-233 GAEB X81 - Datei	Feb 19, 2019	xml 3.0 kB	Download
890-233 doc - Datei	Jun 8, 2015	doc 24.1 kB	Download

CAD/CAE-Data

CAD data

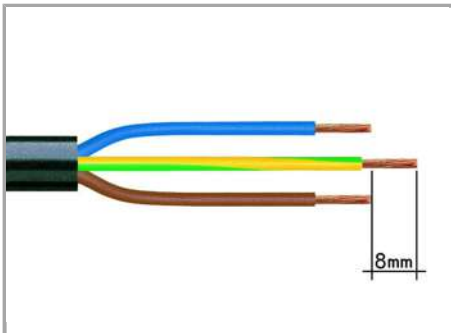
2D/3D Models 890-233	URL	Download
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CAE data

EPLAN Data Portal 890-233	URL	Download
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WSCAD Universe 890-233	URL	Download
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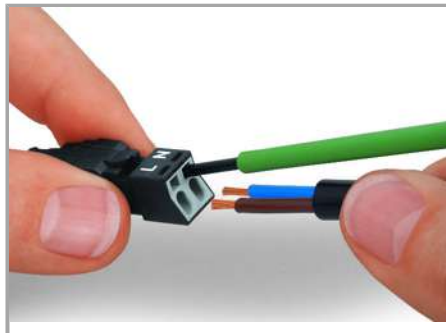
Installation Notes



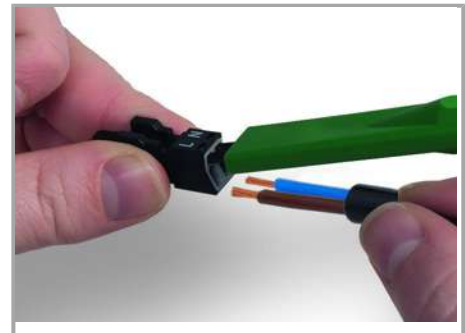
1. Strip length, outer insulation = 30 mm (2-pole), 37 mm (3-pole), 45 mm (4- and 5-pole)

2. Strip length = 9 mm

3. Extended ground conductor = 8 mm



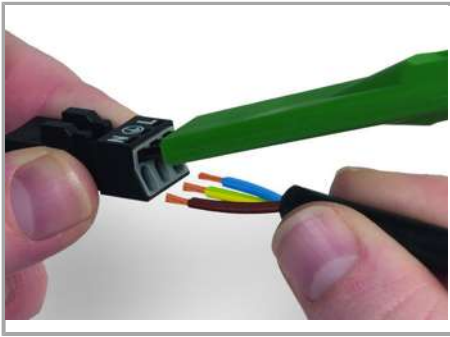
To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits backstop. Terminate solid conductors by simply pushing them in.



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.

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



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 wired connector onto the base of the strain relief housing.



Push down strain relief clamp by hand.



Push down strain relief clamp via 2.5 mm screwdriver alternately on both sides.

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



Latch the top of the strain relief housing.

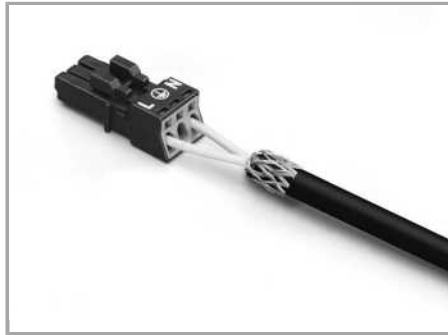


The printed marking of the connector is clearly visible in the openings of the strain relief housing.

Shield Connection



Connector with shield termination



Apply the shield to the rubber cable.



Push the shield connecting plate into the connector until fully inserted.

Strip length, outer insulation = 30 mm

Shield length = 8 mm

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



First insert wired connector into strain relief housing, then snap the clamp and cover.

Product family

<i>WINSTA</i>® MINI

[Show all products from the family](#)

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