

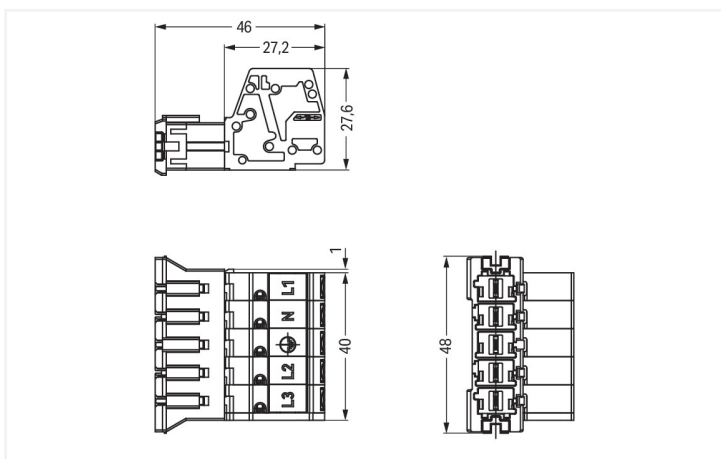
Data Sheet | Item Number: 831-3205/1020-050

Plug; with strain relief housing; 5-pole; Cod. A; 6,00 mm²; white

<https://www.wago.com/831-3205/1020-050>



Color: ■ white



Dimensions in mm

Male connector/plug *WINSTA*® MAXI rated current 35 A

The *WINSTA*® MAXI male connector/plug with protection type IP20 supports rapid, correct installation. Our pluggable installation connectors with spring pressure connection technology function entirely without screw connections. They allow flexible, error-free installation in a large number of applications. The coding options reduce installation errors, allowing fast, maintenance-free wiring of all components. The pluggable installation connector is protected against ingress by solid objects in accordance with protection type IP20 (When mated and secured with a strain relief housing: IP2xC (These compact connectors are not designed for use in open, easily accessible areas!)). Standard mains applications for almost any domain of use can be implemented with *WINSTA*® MAXI pluggable installation connectors with A coding. Important parameters in the selection of a pluggable installation connector are the rated current and voltage: They tell us about the product's domains of use. This product has a current rating of 35 A – therefore it is suitable for powerful loads. *WINSTA*® MAXI is synonymous with higher power. The 831 Series Pluggable Connectors are especially suitable for power feed-in applications and help reduce voltage drop for long distances.

Lower costs through fast commissioning and elimination of service expenses – solutions from *WINSTA*® MAXI

WINSTA® is the pluggable connection system that is ideally tailored to the strict requirements of electrical installation. It ensures fast, secure and, above all, error-free installation of components and cables. Choose quality and durability – with protection against mismatching from WAGO makes the electrical installation of electrical components noticeably easier.

- effective protection against mismatching
- saves time, since no wiring is required at the construction site
- with A coding for a large number of uses
- ready to install and use immediately
- quick replacement of defective units during ongoing operation

Notes

General safety information

1. Only to be used by a qualified electrician or by a person electrically instructed for the task (EIP per DIN VDE 0105-100).
2. Do not install while energized or under load.
3. Use only for its intended purpose.
4. Observe applicable national regulations, standards and directives.
5. Observe the technical specifications of the products.
6. Ensure correct polarity assignment.
7. Do not use damaged or contaminated components.
8. Observe conductor types, conductor cross-sections, strip lengths and cable diameters.
9. Insert conductors up to the stop.
10. Use only with locking lever and strain relief.
11. Use original accessories only.

To be sold only with installation instructions!

Electrical data

Ratings per	IEC/EN 60664-1		
	III	III	II
Overtoltage category	III	III	II
Pollution degree	3	2	2
Nominal voltage	400 V	-	-
Rated impulse withstand voltage	6 kV	-	-
Rated current	35 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	5
Total number of potentials	5

Connection 1

Connection technology	Push-in CAGE CLAMP®
Actuation type	Operating tool Push-in
Nominal cross-section	6 mm ² / 8 AWG
Solid conductor	0.5 ... 6 mm ² / 20 ... 8 AWG
Stranded conductor	0.5 ... 4 mm ² / 20 ... 12 AWG
Fine-stranded conductor	0.5 ... 6 mm ² / 20 ... 8 AWG
Fine-stranded conductor; with insulated ferrule	0.5 ... 6 mm ²
Fine-stranded conductor; with uninsulated ferrule	0.5 ... 6 mm ²
Strip length	13 mm / 0.51 inches
Pole number	5
Connectable sheathed cable diameter	13 ... 18 mm
Conductor entry direction to mating direction	0°

Physical data

Pin spacing	7.62 mm / 0.3 inches
Width	48 mm / 1.89 inches
Height	29 mm / 1.142 inches
Depth	46 mm / 1.811 inches

Mechanical data

Use	General mains applications
Coding	A
Variable coding	No
Marking	L1 N ⊕ L2 L3
Potential marking	L1 N ⊕ L2 L3
Mating force of a plug-in connection	approx. 30 ... 70 N (depending on number of poles)
Retention force of a plug-in connection	Locked: > 80 N
Unmating force of a plug-in connection	Unlocked: approx. 30 ... 70 N (depending on pole number)
Number of mating cycles	100, without resistive load
Protection type	IP20; When mated and secured with a strain relief housing: IP2xC (These compact connectors are not designed for use in open, easily accessible areas!)

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
Strain relief	Strain relief housing

Material data

Note (material data)	Information on material specifications can be found here
Color	white
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	1.306 MJ
Connector color	white
Strain relief color	white
Printing color of strain relief	black
Weight	66.6 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

PU (SPU)	5 pcs
Packaging type	Box
Country of origin	PL
GTIN	4055143500722
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	Approval	Standard	Certificate Name
KEMA/KEUR DEKRA Certification B.V.	EN 61535	71-123230	EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
UR Underwriters Laboratories Inc.	UL 1059	UL-US-2426356-0	UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Downloads

Environmental Product Compliance

Compliance Search	
Environmental Product Compliance 831-3205/1020-050	↓

Documentation

Bid Text			
831-3205/1020-050	19.02.2019	xml 3.01 KB	↓
831-3205/1020-050	06.12.2016	doc 24.00 KB	↓

CAD/CAE-Data

CAD data
 2D/3D Models
 831-3205/1020-050

CAE data
 ZUKEN Portal
 831-3205/1020-050

1 Compatible Products

1.1 System counterpart

1.1.1 Female connector/socket



Item No.: 831-3105/1019-050
 Socket; with strain relief housing; 5-pole;
 Cod. A; 6,00 mm²; white

1.2 Optional Accessories

1.2.1 Coding

1.2.1.1 Coding



Item No.: 831-500
 Coding pin carrier with six coding pins; or-
 ange

1.2.2 Marking

1.2.2.1 Marker

Item No.: 2009-145/000-006
 Mini-WSB Inline; for Smart Printer; 1700
 pieces on roll; stretchable 5 - 5.2 mm; plain;
 snap-on type; blue

Item No.: 2009-145/000-007
 Mini-WSB Inline; for Smart Printer; 1700
 pieces on roll; stretchable 5 - 5.2 mm; plain;
 snap-on type; gray

Item No.: 2009-145/000-023
 Mini-WSB Inline; for Smart Printer; 1700
 pieces on roll; stretchable 5 - 5.2 mm; plain;
 snap-on type; green

Item No.: 2009-145/000-012
 Mini-WSB Inline; for Smart Printer; 1700
 pieces on roll; stretchable 5 - 5.2 mm; plain;
 snap-on type; orange

Item No.: 2009-145/000-005
 Mini-WSB Inline; for Smart Printer; 1700
 pieces on roll; stretchable 5 - 5.2 mm; plain;
 snap-on type; red

Item No.: 2009-145/000-024
 Mini-WSB Inline; for Smart Printer; 1700
 pieces on roll; stretchable 5 - 5.2 mm; plain;
 snap-on type; violet

Item No.: 2009-145
 Mini-WSB Inline; for Smart Printer; 1700
 pieces on roll; stretchable 5 - 5.2 mm; plain;
 snap-on type; white

Item No.: 2009-145/000-002
 Mini-WSB Inline; for Smart Printer; 1700
 pieces on roll; stretchable 5 - 5.2 mm; plain;
 snap-on type; yellow

Item No.: 248-501/000-006
 Mini-WSB marking card; as card; not stretch-
 able; plain; snap-on type; blue

Item No.: 248-501/000-007
 Mini-WSB marking card; as card; not
 stretchable; plain; snap-on type; gray

Item No.: 248-501/000-023
 Mini-WSB marking card; as card; not
 stretchable; plain; snap-on type; green

Item No.: 248-501/000-017
 Mini-WSB marking card; as card; not stretch-
 able; plain; snap-on type; light green

Item No.: 248-501/000-012
 Mini-WSB marking card; as card; not stretch-
 able; plain; snap-on type; orange

Item No.: 248-501/000-005
 Mini-WSB marking card; as card; not
 stretchable; plain; snap-on type; red

Item No.: 248-501
 Mini-WSB marking card; as card; not
 stretchable; plain; snap-on type; white

Item No.: 248-501/000-002
 Mini-WSB marking card; as card; not stretch-
 able; plain; snap-on type; yellow

Item No.: 793-5501/000-006
 WMB marking card; as card; for terminal
 block width 5 - 17.5 mm; stretchable 5 - 5.2
 mm; plain; snap-on type; blue

Item No.: 793-5501/000-007
 WMB marking card; as card; for terminal
 block width 5 - 17.5 mm; stretchable 5 - 5.2
 mm; plain; snap-on type; gray

Item No.: 793-5501/000-023
 WMB marking card; as card; for terminal
 block width 5 - 17.5 mm; stretchable 5 - 5.2
 mm; plain; snap-on type; green

Item No.: 793-5501/000-017
 WMB marking card; as card; for terminal
 block width 5 - 17.5 mm; stretchable 5 - 5.2
 mm; plain; snap-on type; light green

1.2.2.1 Marker



Item No.: 793-5501/000-012

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; orange

Item No.: 793-5501/000-005

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; red

Item No.: 793-5501/000-024

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; violet

Item No.: 793-5501

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; white



Item No.: 793-5501/000-002

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; yellow

Item No.: 793-501/000-006

WMB marking card; as card; not stretchable; plain; snap-on type; blue

Item No.: 793-501/000-007

WMB marking card; as card; not stretchable; plain; snap-on type; gray

Item No.: 793-501/000-023

WMB marking card; as card; not stretchable; plain; snap-on type; green



Item No.: 793-501/000-017

WMB marking card; as card; not stretchable; plain; snap-on type; light green

Item No.: 793-501/000-012

WMB marking card; as card; not stretchable; plain; snap-on type; orange

Item No.: 793-501/000-005

WMB marking card; as card; not stretchable; plain; snap-on type; red

Item No.: 793-501/000-024

WMB marking card; as card; not stretchable; plain; snap-on type; violet



Item No.: 793-501

WMB marking card; as card; not stretchable; plain; snap-on type; white

Item No.: 793-501/000-002

WMB marking card; as card; not stretchable; plain; snap-on type; yellow

Item No.: 2009-115/000-006

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue

Item No.: 2009-115/000-007

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray



Item No.: 2009-115/000-023

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green

Item No.: 2009-115/000-017

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; light green

Item No.: 2009-115/000-012

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange

Item No.: 2009-115/000-024

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet



Item No.: 2009-115

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

Item No.: 2009-115/000-002

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow

1.2.2.2 Marking strip



Item No.: 2009-110

Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white

1.2.3 Mounting adapter

1.2.3.1 Mounting accessories



Item No.: 831-137

Mounting adapter; for DIN-35 rail/panel mounting; 3 parts; Pin spacing 7.62 mm; light gray

1.2.4 Strain relief

1.2.4.1 Strain relief plate



Item No.: 831-505

Strain relief plate; for female and male connectors; 30 mm wide; 1 part; Pin spacing 7.62 mm; light gray

1.2.5 Test and measurement

1.2.5.1 Testing accessories



Item No.: 210-136

Test plug; 2 mm Ø; with 500 mm cable; red

1.2.6 Tool

1.2.6.1 Operating tool

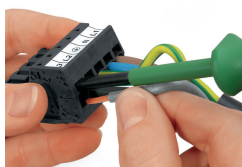


Item No.: 210-721

Operating tool; Blade: 5.5 x 0.8 mm; with a partially insulated shaft; multicoloured

Installation Notes

Conductor termination



The following lengths are recommended:

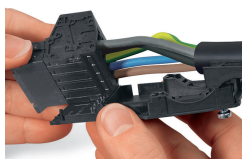
1. Strip length, outer insulation = 80 mm
2. Strip length = 13 mm
3. Extended ground conductor = 10 mm

To terminate fine-stranded conductors, open the clamping unit via screwdriver (5.5 mm blade width) and insert a stripped conductor until it hits the backstop.

Installation



Unscrew base of strain relief housing.



Snap wired connector onto the base.



Tighten strain relief using a screwdriver.



Wired connector fitted in base of strain relief housing

Installation



Latch the top of the strain relief housing.

Marking



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