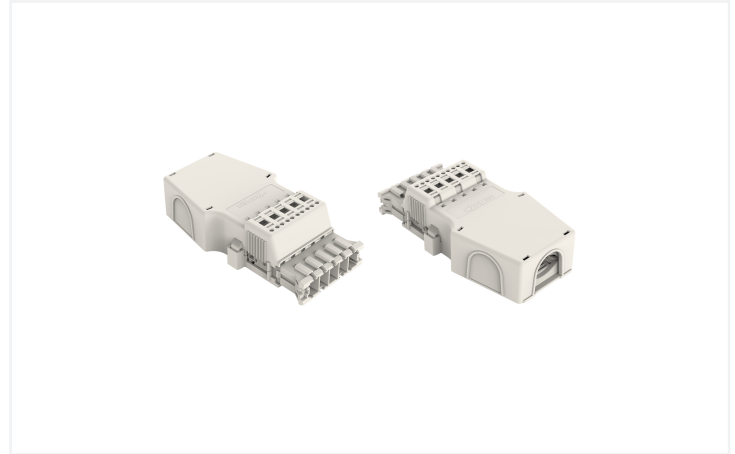


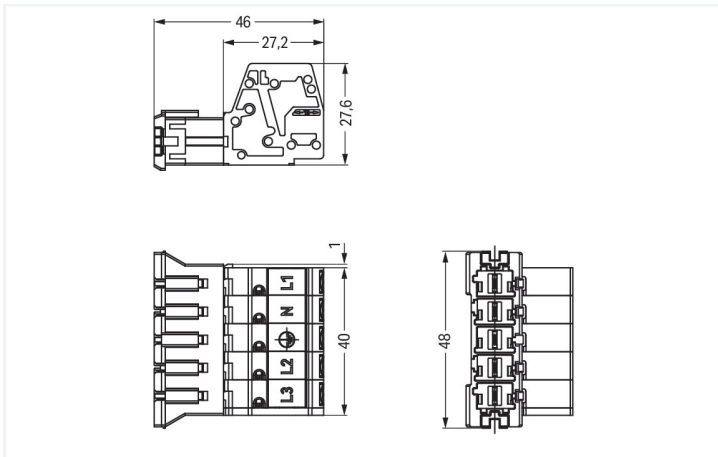
Data Sheet | Item Number: 831-3205/1020-050

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 mismating from WAGO makes the electrical installation of electrical components noticeably easier.

- effective protection against mismating
- 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					General information	
Ratings per		IEC/EN 60664-1			Note on contact resistance	
Overvoltage category	III	III	II		approx. 1 mΩ of contact resistance	
Pollution degree	3	2	2		approx. 0.25 mΩ contact transition plug/ socket	
Nominal voltage	400 V	-	-			
Rated impulse withstand voltage	6 kV	-	-			
Rated current	35 A	-	-			

Connection Data			Connection 1	
Clamping units	5		Connection technology	Push-in CAGE CLAMP®
Total number of potentials	5		Actuation type	Operating tool Push-in
			Nominal cross-section	6 mm² / 8 AWG
			Solid conductor	0.5 ... 6 mm² / 20 ... 8 AWG
			Stranded conductor	0.5 ... 4 mm² / 20 ... 12 AWG
			Fine-stranded conductor	0.5 ... 6 mm² / 20 ... 8 AWG
			Fine-stranded conductor; with insulated ferrule	0.5 ... 6 mm²
			Fine-stranded conductor; with uninsulated ferrule	0.5 ... 6 mm²
			Strip length	13 mm / 0.51 inches
			Pole number	5
			Connectable sheathed cable diameter	13 ... 18 mm
			Conductor entry direction to mating direction	0 °
			Coding	A

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
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

Approvals / Certificates

General approvals



Approval	Standard	Certificate Name
KEMA/KEUR DEKRA Certification B.V.	EN 61535	71-123230
UR Underwriters Laboratories Inc.	UL 1059	UL-US-2426356-0

Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
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

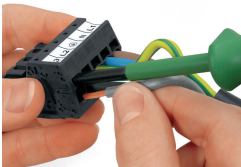
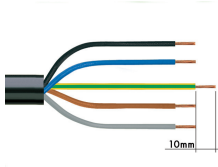
1.2.6.1 Operating tool



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:

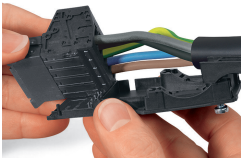
1. Strip length, outer insulation = 80 mm
2. Strip length = 13 mm
3. Extended ground conductor = 10 mm

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.