

## Data Sheet | Item Number: 771-9993/216-301

pre-assembled connecting cable; Eca; Plug/open-ended; 3-pole; Cod. A; H05Z1Z1-F 3G 1.5 mm<sup>2</sup>; 3 m; 1,50 mm<sup>2</sup>; black

<https://www.wago.com/771-9993/216-301>



Color: ■ black



Dimensions in mm

### Cable assembly WINSTA® MIDI with protection type IP20

Use effective pluggable connections instead of laborious screw connections: With the WINSTA® MIDI cable assembly with protection type IP20. Whether on PCBs, in control cabinets or for connecting lights – pluggable installation connectors from WAGO allow you to establish connections according to a huge variety of requirements in next to no time. The mechanical coding and color coding of the pluggable installation connector ensure error-free installation of the individual components – including protection against mismatching. The pluggable installation connector is protected in accordance with protection type IP20 (When mated: IP2xC (These compact connectors are not designed for use in open, easily accessible areas!)). This means that users' fingers will never come into contact with live elements. The WINSTA® MIDI pluggable installation connector with A coding in black or white is normally used for general mains applications in power distribution. The WINSTA® MIDI Pluggable Connection System with Push-in CAGE CLAMP® spring pressure connection technology facilitates safe electrification. Thanks to the built-in test slot, connections can be checked even when they are plugged in. This saves time, labor, and money. This product meets all the mandatory safety requirements of fire class E; therefore it can be used in domains where fire safety is relevant. Eliminating halogens as an additive in the manufacture of this cable assembly significantly improves fire safety and minimises environmental contamination.

### Pluggable connections instead of screw connections – cable assemblies from WAGO

The cable assembly is equipped with a plug and a free end. WINSTA® is the pluggable connection system that is perfectly tailored to the strict requirements of electrical installation. It ensures error-free installation of cables and components, quickly and reliably. Now you can also lower installation expenses without compromising quality and safety: with fire class E eliminates the need for servicing and prevents unnecessary downtime.

- pluggable installation connectors with protection against mismatching
- simple circuits
- with A coding for use in many general mains applications
- ready for immediate use
- quick replacement of defective units during ongoing operation

## Notes

Note Cables with a different fire class can be found in the eShop.

## Electrical data

Ratings per	IEC/EN 60664-1			General information	
Overvoltage category	III	III	II	Note on contact resistance	approx. 1 mΩ of contact resistance approx. 0.25 mΩ contact transition plug/ socket
Pollution degree	3	2	2		
Nominal voltage	250 V	-	-		
Rated impulse withstand voltage	4 kV	-	-		
Rated current	16 A	-	-		

## Connection Data

Total number of potentials	3	<b>Connection 1</b>	
PE function	Preceding PE contact	Strip length	9 mm / 0.35 inches
Conductor preparation	ultrasonically tip-bonded	Pole number	3
		Wire cross-section	1.5 mm <sup>2</sup>
		Strip length (outer insulation)	55 mm
		Connection type	Plug - free end

## Physical data

Pin spacing	10 mm / 0.394 inches
Width	27 mm / 1.063 inches
Height	12.9 mm / 0.508 inches
Total length	3 m

## Mechanical data

Use	General mains applications
Coding	A
Variable coding	Yes
Marking	L ⊕ N
Potential marking	L ⊕ N
Mating force of a plug-in connection	approx. 20 ... 70 N (depending on pole number)
Retention force of a plug-in connection	when locked: > 80N
Unmating force of a plug-in connection	when unlocked: approx. 20 ... 70 N (depending on pole number)
Number of mating cycles	200, without resistive load
Connection type	Plug - free end
Type of pre-assembled cable	Connecting cable
Cable type	H05Z1Z1-F 3G1.5
Protection type	IP20; When mated: IP2xC (These compact connectors are not designed for use in open, easily accessible areas!)

### Plug-in connection

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)	<a href="#">Information on material specifications can be found here</a>
Color	black
Insulation material (main housing)	Polyamide (PA66)
Fire class per EN 50575	E <sub>ca</sub>
Contact material	Copper or copper alloy; surface-treated
Contact Plating	Tin
Fire load	89.757 MJ
Connector color	black
Strain relief color	black
Printing color of strain relief	white
Sheathed cable color	black
Printing color of sheathed cable	white
Halogen-free	Yes
Silicon-free	Yes
Sheath material	Halogen-free
Rubber cable	No
Weight	302.8 g
Copper weight of the raw cable	0.043 kg/m

### Environmental requirements

Processing temperature	-5 ... +40 °C
Continuous operating temperature	-35 ... +85 °C
Note on continuous operating temperature	Cable for temperatures ≤ 70 °C (including halogen-free) Insulating parts for temperatures ≤ 105 °C

### Commercial data

Product Group	20 (Winsta)
PU (SPU)	1 pcs
Packaging type	unpacked
Country of origin	DE
GTIN	4044918272049
Customs tariff number	85444290900

**Product Classification**

UNSPSC	26121629
eCl@ss 10.0	27-44-06-04
eCl@ss 9.0	27-44-06-04
ETIM 9.0	EC002587
ETIM 10.0	EC002587
ECCN	NO US CLASSIFICATION

**Environmental Product Compliance**

RoHS Compliance Status	Compliant, No Exemption
------------------------	-------------------------

**Approvals / Certificates**

General approvals			Declarations of conformity and manufacturer's declarations		
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 61535	NTR NL-7355	EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
KEMA/KEUR DEKRA Certification B.V.	EN 61535	71-123834	UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

**Downloads**

**Environmental Product Compliance**

Compliance Search	
Environmental Product Compliance 771-9993/216-301	<a href="#">↓</a>

**Documentation**

Bid Text			
771-9993/216-301	19.02.2019	xml 3.00 KB	<a href="#">↓</a>
771-9993/216-301	04.12.2014	doc 25.50 KB	<a href="#">↓</a>

**CAD/CAE-Data**

CAD data	CAE data
2D/3D Models 771-9993/216-301	EPLAN Data Portal 771-9993/216-301
	WSCAD Universe 771-9993/216-301
	ZUKEN Portal 771-9993/216-301

## 1 Compatible Products

### 1.1 Required Accessories

#### 1.1.1 Locking system

##### 1.1.1.1 Locking system



**Item No.: 770-101**

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

**Item No.: 770-121**

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

**Item No.: 770-111**

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

**Item No.: 770-131**

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

### 1.2 Optional Accessories

#### 1.2.1 Cover

##### 1.2.1.1 Cover



**Item No.: 770-360**

Lockout cap; for plugs; 5-pole; separable; yellow

**Item No.: 897-2003**

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

#### 1.2.2 Installation

##### 1.2.2.1 Mounting accessories



**Item No.: 770-310**

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

#### 1.2.3 Marking

##### 1.2.3.1 Marker



**Item No.: 770-450/000-006**

Marker card; Plastic; blue

**Item No.: 770-450/000-001**

Marker card; Plastic; green

**Item No.: 770-450/000-012**

Marker card; Plastic; orange

**Item No.: 770-450/000-005**

Marker card; Plastic; red



**Item No.: 770-450**

Marker card; Plastic; white

**Item No.: 770-450/000-002**

Marker card; Plastic; yellow

##### 1.2.3.2 Marking strip



**Item No.: 210-334**

Marking strips; as a DIN A4 sheet; Strip width 5 mm; Strip length 182 mm; plain; Self-adhesive; white