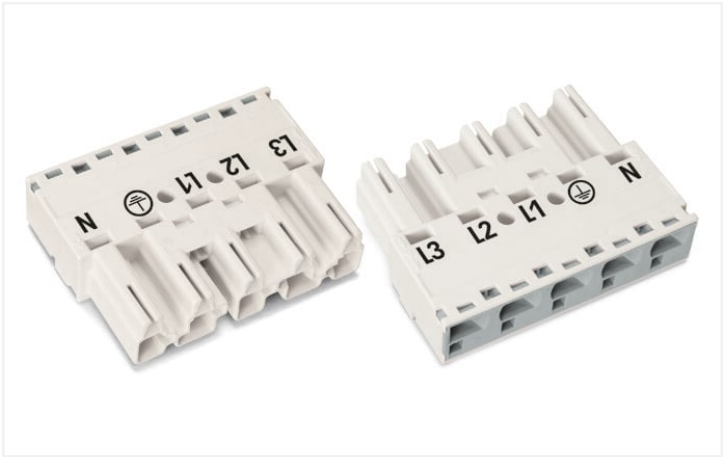
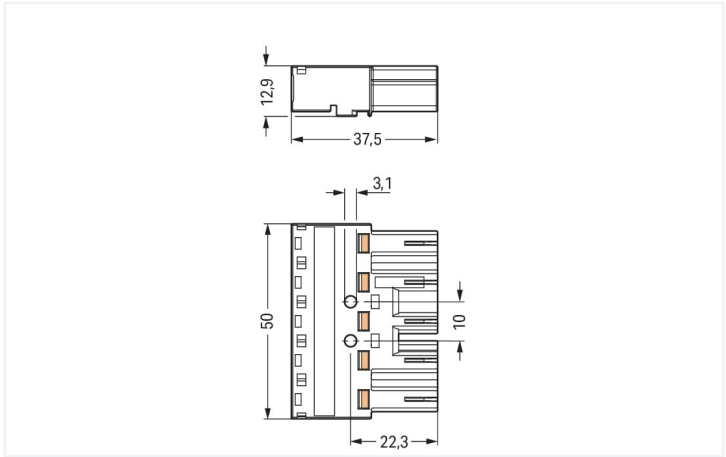




Color: ■ white



Dimensions in mm

Male connector/plug WINSTA® MIDI 5-pole

The WINSTA® MIDI male connector/plug with protection against mismating allows installation of solid and fine-stranded conductors. The pluggable installation connectors with spring pressure connection technology work completely without screw connections. They allow flexible, error-free installation in numerous possible uses. The mechanical coding and color coding of the pluggable installation connector ensure error-free installation of the individual components – including protection against mismating. The pluggable installation connector offers touch-proof protection with live components in accordance with protection type IP20 (When mated and secured with a strain relief housing: IP2x(C (These compact connectors are not designed for use in open, easily accessible areas!)). General mains applications for almost any domain of use can be implemented with WINSTA® MIDI pluggable installation connectors with A coding. This pluggable installation connector can be employed for a voltage load of up to 25 A. Therefore, it can also be used for high power loads. The WINSTA® MIDI Pluggable Connection System with Push-in CAGE CLAMP® spring pressure connection technology facilitates safe electrification. Due to the included test slot, it is possible to check connections even when they are plugged in. That saves time and reduces installation labor and costs.

WINSTA® MIDI solutions for your electrical installation – protected against mismating and maintenance-free

WINSTA® is the pluggable connection system that is optimally tailored to the strict requirements of electrical installation. It offers fast, secure and, above all, error-free installation of components and cables. Enjoy the benefits of the pluggable version of our maintenance-free spring pressure connection technology too! Plan your installation with with marking from WAGO.

- protection against mismating eliminates errors
- pre-assembled versions
- with A coding for a large number of applications
- custom-engineered solutions
- quick replacement of defective units during ongoing operation

Electrical data				
Ratings per		IEC/EN 60664-1		
Overvoltage category	III	III	II	
Pollution degree	3	2	2	
Nominal voltage	400 V	-	-	
Rated surge voltage	6 kV	-	-	
Rated current	25 A	-	-	
Approvals per				
Rated voltage		600 V		
Rated current		23 A		
General information				
Note on contact resistance	approx. 1 mΩ of contact resistance approx. 0.25 mΩ contact transition plug/ socket			

Connection data

Connection points	5
Total number of potentials	5
PE function	Preceding PE contact

Connection 1

Connection technology	Push-in CAGE CLAMP®
Actuation type	Operating tool Push-in
Nominal cross-section	4 mm² / 12 AWG
Solid conductor	0.5 ... 4 mm² / 20 ... 12 AWG
Solid conductor; push-in termination	1.5 ... 4 mm² / 16 ... 12 AWG
Stranded conductor	0.5 ... 2.5 mm² / 20 ... 14 AWG
Fine-stranded conductor	0.5 ... 4 mm² / 20 ... 12 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 1.5 mm² / 20 ... 16 AWG
Fine-stranded conductor; with uninsulated ferrule	0.25 ... 2.5 mm² / 20 ... 14 AWG
Fine-stranded conductor; with ferrule; push-in termination	1.5 mm² / 16 AWG
Strip length	9 mm / 0.35 inches
Pole number	5
Conductor entry direction to mating direction	0°

Physical data

Pin spacing	10 mm / 0.394 inches
Width	50 mm / 1.969 inches
Height	12.9 mm / 0.508 inches
Depth	37.5 mm / 1.476 inches

Mechanical data

Application	General mains applications
Coding	A
Variable coding	Yes
Marking	L3 L2 L1 N
Potential marking	L3 L2 L1 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)
Number of mating cycles	200, 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
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	I
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	0.321 MJ
Weight	16.4 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	
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	4044918254731
Customs tariff number	85366990990

Environmental Product Compliance	
RoHS Compliance Status	Compliant, No Exemption

Approvals / Certificates		
General approvals		Declarations of conformity and manufacturer's declarations
   		
Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 61535	71-123228
CCA DEKRA Certification B.V.	IEC 61535	NL -84761
cURus Underwriters Laboratories Inc.	UL 1977	E45171
cURus Underwriters Laboratories Inc.	UL 1059	E 45172
VDE VDE Prüf- und Zertifizierungsinstitut	EN 61984	40002889

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



Approvals for marine applications



Approval	Standard	Certificate Name
ABS American Bureau of Ship- ping	-	19-HG1868589-PDA
DNV GL Det Norske Veritas, Ger- manischer Lloyd	-	TAE00001Z6
LR Lloyds Register	IEC 61984	LR22429487TA

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 770-435



Documentation

Bid Text			
770-435	19.02.2019	xml 2.96 KB	
770-435	08.06.2015	doc 23.50 KB	

CAD/CAE-Data

CAD data
2D/3D Models 770-435



CAE data
EPLAN Data Portal 770-435
WSCAD Universe 770-435
ZUKEN Portal 770-435



1 Compatible Products

1.1 System counterpart

1.1.1 Cable assembly



Item No.: 771-9995/106-102
pre-assembled connecting cable; Eca;
Socket/open-ended; 5-pole; Cod. A;
H05VV-F 5G 1.5 mm²; 1 m; 1,50 mm²; white

Item No.: 771-9995/006-102
pre-assembled interconnecting cable;
Eca; Socket/plug; 5-pole; Cod. A; H05VV-
F 5G 1.5 mm²; 1 m; 1,50 mm²; white



1.1.2 Distribution box



Item No.: 899-681/100-000
Distribution box; Three-phase to single-phase current (400 V/230 V); 1 input; 7 outputs; Cod. A; MIDI; white

1.1.3 Distribution connector



Item No.: 770-6225
Linect® T-connector; 5-pole; Cod. A; 1 input; 2 outputs; white



Item No.: 770-671
T-distribution connector; 5-pole; Cod. A; 1 input; 2 outputs; 2 locking levers; white



Item No.: 770-672
T-distribution connector; 5-pole; Cod. A; 1 input; 2 outputs; 3 locking levers; for flying leads; white



Item No.: 770-661
Three-phase to single-phase distribution connector; with phase selection; 5-pole/3-pole; Cod. A; 1 input; 2 outputs; with cable connection on the input side; white



Item No.: 770-690
Three-phase to single-phase distribution connector; with phase selection; 5-pole/3-pole; Cod. A; 1 input; 5 outputs; white

1.1.4 Female connector/socket



Item No.: 770-725
Snap-in socket; 5-pole; Cod. A; 4,00 mm²; white



Item No.: 770-725/009-000
Snap-in socket; with protruding mating face; 5-pole; Cod. A; 4,00 mm²; white



Item No.: 770-825/011-000
Socket for PCBs; angled; 5-pole; Cod. A; white



Item No.: 770-825
Socket for PCBs; straight; 5-pole; Cod. A; white



Item No.: 770-225
Socket; 5-pole; Cod. A; 4,00 mm²; white



Item No.: 770-425
Socket; 5-pole; Cod. A; 4,00 mm²; white



Item No.: 770-125
Socket; with strain relief housing; 5-pole; Cod. A; 4,00 mm²; white



Item No.: 770-325
Socket; with strain relief housing; 5-pole; Cod. A; 4,00 mm²; white

1.2 Required Accessories

1.2.1 Locking system

1.2.1.1 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



1.3 Optional Accessories

1.3.1 Coding

1.3.1.1 Coding



[Item No.: 770-401](#)
Coding pin; for plugs; Plastic; gray

1.3.2 Cover

1.3.2.1 Cover



[Item No.: 770-360](#)
Lockout cap; for plugs; 5-pole; separable; yellow



[Item No.: 897-2005](#)
Protective cap; Type4; for sockets and plugs; PVC; red

1.3.3 Installation

1.3.3.1 Mounting accessories



[Item No.: 770-321](#)
Snap-in frame; 5-pole; 0.5 ... 2.0 mm; black



[Item No.: 770-341](#)
Snap-in frame; 5-pole; 0.5 ... 2.0 mm; white



[Item No.: 770-320](#)
Snap-in frame; 5-pole; 1.0 ... 3.0 mm; black



[Item No.: 770-340](#)
Snap-in frame; 5-pole; 1.0 ... 3.0 mm; white

1.3.4 Marking

1.3.4.1 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

1.3.5 Tool

1.3.5.1 Operating tool



[Item No.: 210-719](#)
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

1.3.5.2 Wiring aid



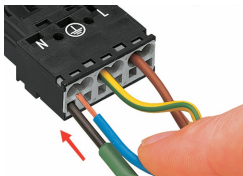
Item No.: 770-100
Wiring aid; 2- to 5-pole; Plastic; orange

Installation Notes

Conductor termination



- 1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 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.

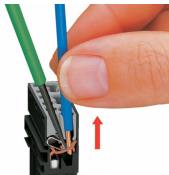


Insert the stripped solid conductor until it hits the backstop.



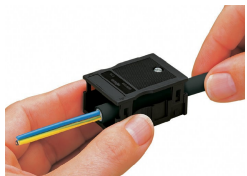
To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.

Conductor removal



To remove the conductor, actuate the clamp via screwdriver (2.5 mm blade width) and pull out the conductor.

Installation



We recommend pulling the pre-latched strain relief housing over the cable prior to termination. However, the strain relief can be mounted at a later time as well.



Latch the strain relief housing onto the plug/socket. Note the "TOP" inscription.



Prepare strain relief housing by snapping together upper and bottom part.



Tighten strain relief screw with screwdriver (2.5 mm blade width).