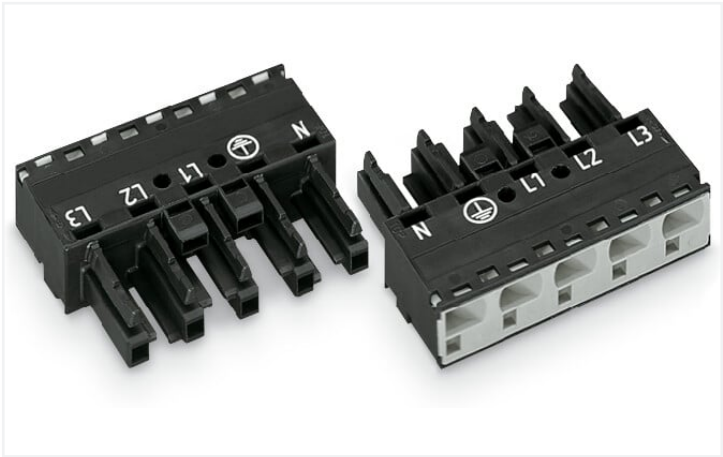
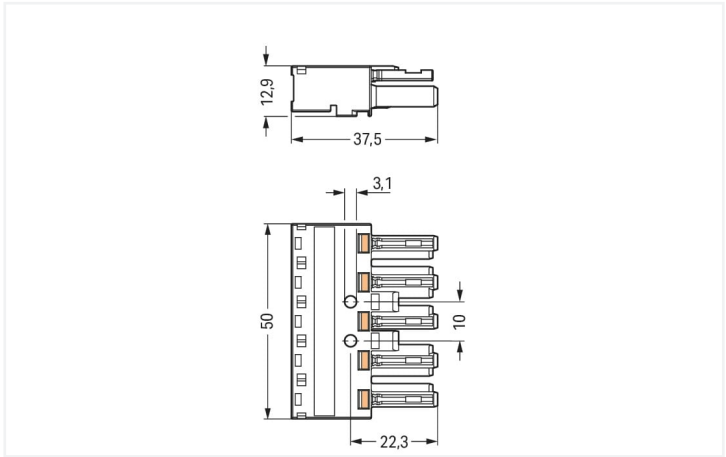




Color: ■ black



Dimensions in mm

Female connector/socket WINSTA® MIDI 5-pole

The WINSTA® MIDI female connector/socket with protection against mismating allows assembly of solid and fine-stranded conductors. The pluggable installation connectors with spring pressure connection technology work entirely without screw connections. They allow resource-efficient, error-free installation in numerous possible uses. For greater protection in electrical installations, the pluggable installation connector is equipped with mechanical protection against mismating. 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!)). General mains applications for almost any domain of use can be realised with WINSTA® MIDI pluggable installation connectors with A coding. This pluggable installation connector is designed for a voltage load of up to 25 A. As a result, it can also be used for high power loads. WINSTA® MIDI with Push-in CAGE CLAMP® spring pressure connection technology is found in a broad range of individual products you can use for quick, easy and maximally flexible electrical installation.

Push-in CAGE CLAMP® spring pressure connection technology – pluggable installation instead of laborious screw connections!

WINSTA® is the pluggable connection system that is optimally tailored to the strict requirements of electrical installation. It ensures fast, secure and, above all, error-free installation of components and cables. Now you can also lower installation expenses without compromising quality and safety: The WINSTA® MIDI pluggable installation connector with protection against mismating reduces the need for servicing and prevents unnecessary downtime.

- pluggable installation connectors with protection against mismating
- for automation controllers
- with A coding for a large number of applications
- custom-engineered solutions
- convenient installation and commissioning

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		UL 1977		
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	Connection 1	
Total number of potentials	5	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	N L1 L2 L3
Potential marking	N L1 L2 L3
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)	Female connector/socket
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	black
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	0.264 MJ
Weight	15.8 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	4044918252522
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 Confor- - - mity 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

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Environmental Product Compliance 770-405



Documentation

Bid Text
770-405
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770-405
08.06.2015
doc 23.50 KB



CAD/CAE-Data

CAD data
2D/3D Models 770-405



CAE data
EPLAN Data Portal 770-405
WSCAD Universe 770-405
ZUKEN Portal 770-405



1 Compatible Products

1.1 System counterpart

1.1.1 Cable assembly



Item No.: 771-9995/206-101 pre-assembled connecting cable; Eca; Plug/open-ended; 5-pole; Cod. A; H05VV- F 5G 1.5 mm²; 1 m; 1,50 mm²; black	Item No.: 771-9995/006-101 pre-assembled interconnecting cable; Eca; Socket/plug; 5-pole; Cod. A; H05VV- F 5G 1.5 mm²; 1 m; 1,50 mm²; black
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1.1.2 Distribution box



Item No.: 899-631/455-000
Distribution box; 400 V + DALI; 2 inputs; 5 outputs; Cod. A, I; MINI, MIDI; black



Item No.: 899-631/187-000
Distribution box; Three-phase current (400 V); 1 input; 5 outputs; Cod. A; MIDI; black



Item No.: 899-631/346-000
Distribution box; Three-phase to single-phase current (400 V/230 V); 1 input; 4 outputs; Cod. A; MIDI; black



Item No.: 899-631/105-000
Distribution box; Three-phase to single-phase current (400 V/230 V); 1 input; 6 outputs; Cod. A; MIDI; black



Item No.: 899-631/100-000
Distribution box; Three-phase to single-phase current (400 V/230 V); 1 input; 7 outputs; Cod. A; MIDI; black



Item No.: 899-631/302-000
Distribution box; Three-phase to single-phase current (400 V/230 V); 2 inputs; 6 outputs; Cod. A, P; MIDI; black

1.1.3 Distribution connector



Item No.: 770-609
3-way distribution connector; 5-pole; Cod. A; 1 input; 3 outputs; black



Item No.: 770-659
3-way distribution connector; 5-pole; Cod. A; 1 input; 3 outputs; white



Item No.: 770-621
T-distribution connector; 5-pole; Cod. A; 1 input; 2 outputs; 2 locking levers; black



Item No.: 770-622
T-distribution connector; 5-pole; Cod. A; 1 input; 2 outputs; 3 locking levers; for flying leads; black



Item No.: 770-640
Three-phase to single-phase distribution connector; with phase selection; 5-pole/3-pole; Cod. A; 1 input; 5 outputs; black

1.1.4 Male connector/plug



Item No.: 770-815/011-000
Plug for PCBs; angled; 5-pole; Cod. A; black



Item No.: 770-815
Plug for PCBs; straight; 5-pole; Cod. A; black



Item No.: 770-215
Plug; 5-pole; Cod. A; 4,00 mm²; black



Item No.: 770-415
Plug; 5-pole; Cod. A; 4,00 mm²; black



Item No.: 770-115
Plug; with strain relief housing; 5-pole; Cod. A; 4,00 mm²; black



Item No.: 770-315
Plug; with strain relief housing; 5-pole; Cod. A; 4,00 mm²; black



Item No.: 770-715
Snap-in plug; 5-pole; Cod. A; 4,00 mm²; black



Item No.: 770-715/007-000
Snap-in plug; with direct ground contact; 5-pole; Cod. A; 4,00 mm²; black

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 Cover

1.3.1.1 Cover



[Item No.: 770-201](#)
Lockout cap; 12-pole, separable; for sockets; Plastic; black



[Item No.: 770-221](#)
Lockout cap; 12-pole, separable; for sockets; Plastic; white



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

1.3.2 Installation

1.3.2.1 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

1.3.3 Marking

1.3.3.1 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

1.3.4 Tool

1.3.4.1 Operating tool



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

1.3.4.2 Wiring aid



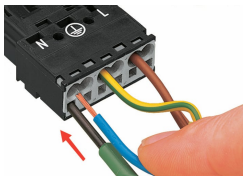
[Item No.: 770-100](#)
Wiring aid; 2- to 5-pole; Plastic; orange

Installation Notes

Conductor termination



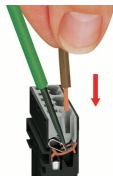
- 1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)
- 2. Strip length = 9 mm
- 3. Extended ground conductor = 8 mm



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.

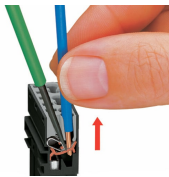


Insert the stripped solid conductor until it hits the backstop.



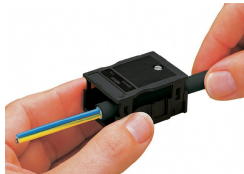
To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.

Conductor removal



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

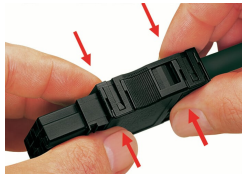
Installation



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).