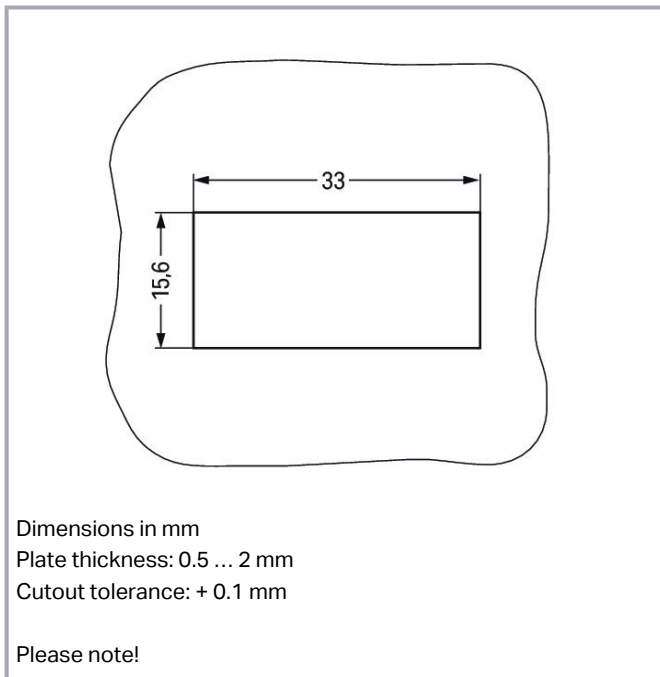
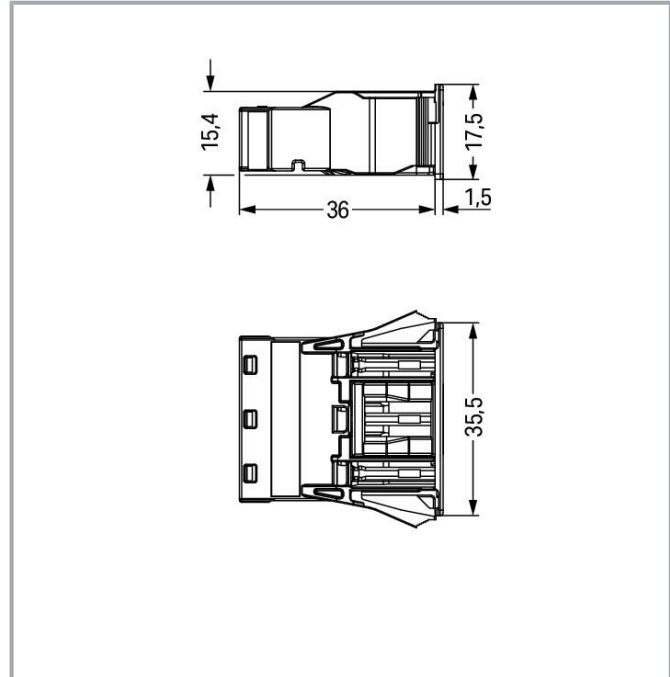
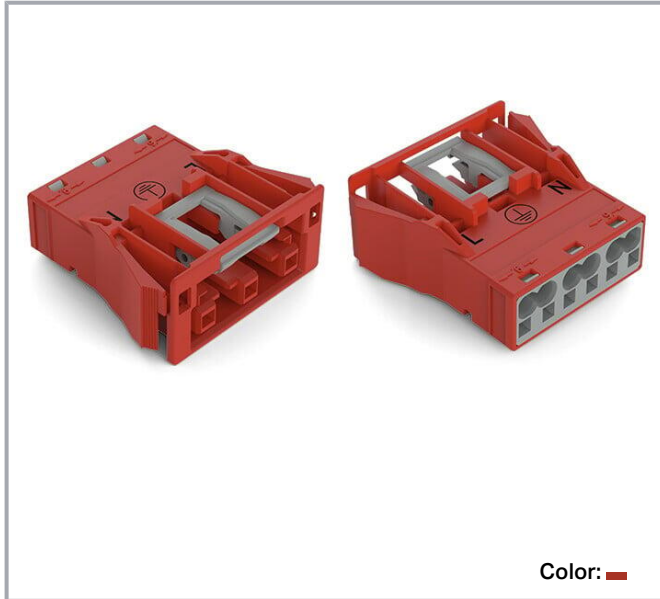


**Data sheet | Item number: 770-2303**

Snap-in socket; 3-pole; Cod. P; 4,00 mm<sup>2</sup>; red

[www.wago.com/770-2303](http://www.wago.com/770-2303)



Subject to changes. Please also observe the further product documentation!

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## Item description

### Female connector/socket WINSTA® MIDI with protection against mismating

The WINSTA® MIDI female connector/socket with protection against mismating is the pluggable solution for your use in control cabinets, on PCBs or for lighting connections. 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 seconds. 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: IP2xC (These compact connectors are not designed for use in open, easily accessible areas!)). WINSTA® MIDI pluggable installation connectors with P coding allow proper realization of an fault-free power supply (UPS). This pluggable installation connector can be employed for a voltage load of up to 25 A. As a result, 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 exemplary electrification. Thanks to the integrated 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

The WINSTA® Pluggable Connection System is ideally tailored to the strict requirements of building installation. It makes electrical installation pluggable, and thus more efficient, even more reliable, and error-free. Using this pre-assembled system decreases assembly times and installation errors at the construction site. Now you can also lower installation expenses without compromising quality and safety: with protection against mismating reduces the need for servicing and prevents unnecessary downtime.

- effective protection against mismating
- for automation controllers
- with P coding for use in implementing an uninterruptible power supply
- ready for immediate use
- quick replacement of defective units during ongoing operation

## Data

### Notes

|      |   |
|------|---|
| Note | <p>The snap-in connectors must be relieved of tensile and transverse forces.</p> <p>A surface finish can influence the edge radius of the cutouts. This may affect the snap-in socket fit, so ensure an adequate fit before use. In addition, the punched edge should be on the inside for punched cutouts.</p> <p>The wings of the snap-in connectors must not be mechanically</p> |
|------|---|

Subject to changes. Please also observe the further product documentation!



stressed for a long period before use (e.g., due to a pre-locking position).

## Electrical data

### Ratings per IEC/EN

| Ratings per                   | IEC/EN 60664-1   |
|-------------------------------|--|
| Nominal voltage (III/3)       | 250 V  |
| Rated impulse voltage (III/3) | 4 kV   |
| Rated current                 | 25 A   |
| Legend (ratings)              | (III / 3) $\triangleq$ Overvoltage category III / Pollution degree 3 |

### Ratings per UL 1977

|                         |  |
|-------------------------|--|
| Note for the US market  | Some versions may also be used for current interruption in accordance with the UL certificate in select applications with currents below 16 A and voltages up to 600 V. For further information, please contact your local sales office. |
| Rated voltage (UL 1977) | 600 V  |
| Rated current UL 1977   | 23 A   |

## General information

|                            |  |
|----------------------------|--|
| Note on contact resistance | approx. 1 m $\Omega$ of contact resistance<br>approx. 0.25 m $\Omega$ contact transition plug/socket |
|----------------------------|--|

## Connection data

|                            |   |
|----------------------------|---|
| Connection points          | 6 |
| Total number of potentials | 3 |

### Connection 1

|                                      |   |
|--------------------------------------|---|
| Connection technology                | Push-in CAGE CLAMP®                         |
| Actuation type                       | Operating tool<br>Push-in                   |
| Nominal cross-section                | 4 mm <sup>2</sup> / 12 AWG                  |
| Solid conductor                      | 0.5 ... 4 mm <sup>2</sup> / 20 ... 12 AWG   |
| Solid conductor; push-in termination | 1.5 ... 4 mm <sup>2</sup> / 16 ... 12 AWG   |
| Stranded conductor                   | 0.5 ... 2.5 mm <sup>2</sup> / 20 ... 14 AWG |
| Fine-stranded conductor              | 0.5 ... 4 mm <sup>2</sup> / 20 ... 12 AWG   |

Subject to changes. Please also observe the further product documentation!



|  |  |
|--|--|
| Fine-stranded conductor; with insulated ferrule            | 0.25 ... 1.5 mm <sup>2</sup> / 20 ... 16 AWG |
| Fine-stranded conductor; with uninsulated ferrule          | 0.25 ... 2.5 mm <sup>2</sup> / 20 ... 14 AWG |
| Fine-stranded conductor; with ferrule; push-in termination | 1.5 mm <sup>2</sup> / 16 AWG                 |
| Strip length   | 9 mm / 0.35 inches                           |
| Pole number  | 3  |
| Conductor entry direction to mating direction              | 0 °  |

## Physical data

|             |                        |
|-------------|------------------------|
| Pin spacing | 10 mm / 0.394 inches   |
| Width       | 35.5 mm / 1.398 inches |
| Height      | 17.5 mm / 0.689 inches |
| Depth       | 37.5 mm / 1.476 inches |

## Mechanical Data

|   |   |
|---|---|
| Application                             | EDV (UPS)   |
| Coding                                  | P   |
| Variable coding                         | No  |
| 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 | 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   |
| Housing sheet thickness                 | 0.5 ... 2 mm / 0.02 ... 0.079 inches  |
| Mounting type                           | Snap-in flange  |
| Protection type                         | IP20; When mated: 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 <sup>®</sup> components are 100% protected against mismating when:<br>a.) plugging different numbers of poles<br>b.) plugging while rotated 180<br>c.) plugging while laterally staggered<br>d.) plugging one pole |

Subject to changes. Please also observe the further product documentation!



|                               |  |
|-------------------------------|--|
| Locking lever                 | yes  |
| 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                       | red  |
| 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                   | 0.252 MJ   |
| Weight                      | 11.9 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           | 27-44-06-02   |
| eCl@ss 9.0            | 27-44-06-02   |
| ETIM 8.0              | EC002566      |
| ETIM 7.0              | EC002566      |
| ECCN                  | NO DATA       |
| PU (SPU)              | 100 pcs       |
| Packaging type        | box           |
| Country of origin     | DE            |
| GTIN                  | 4045454435059 |
| Customs tariff number | 85366990990   |

Subject to changes. Please also observe the further product documentation!




## Environmental Product Compliance

RoHS Compliance Status


Compliant, No Exemption

## Approvals / Certificates



### General approvals

| Logo  | Approval                                       | Additional Approval Text | Certificate name |
|---|--|--------------------------|------------------|
|   | <b>CCA</b><br>DEKRA Certification B.V.         | EN 61535                 | 71-123228        |
|   | <b>CCA</b><br>DEKRA Certification B.V.         | IEC 61535                | NL -84761        |
|   | <b>cURus</b><br>Underwriters Laboratories Inc. | UL 1977                  | E45171           |
|  | <b>cURus</b><br>Underwriters Laboratories Inc. | UL 1059                  | E 45172          |

### Declarations of conformity and manufacturer's declarations

| Logo   | Approval  | Additional Approval Text | Certificate name |
|--|---|--------------------------|------------------|
|  | <b>EU-Declaration of Conformity</b><br>WAGO GmbH & Co. KG | -                        | -                |

### Approvals for marine applications

| Logo   | Approval  | Additional Approval Text | Certificate name |
|--|---|--------------------------|------------------|
|  | <b>ABS</b><br>American Bureau of Shipping               | -                        | 19-HG1868589-PDA |
|  | <b>DNV GL</b><br>Det Norske Veritas, Germanischer Lloyd | -                        | TAE00001Z6       |
|  | <b>LR</b>   | IEC 61984                | LR22429487TA     |

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Lloyds Register

## Counterpart



Item no. 770-1313

Plug; 3-pole; Cod. P; 4,00 mm<sup>2</sup>; red[www.wago.com/770-1313](http://www.wago.com/770-1313)

Item no. 771-9973/006-101

pre-assembled interconnecting cable; Eca; Socket/plug; 3-pole; Cod. P; H05VV-F 3G 1.5 mm<sup>2</sup>; 1 m; 1,50 mm<sup>2</sup>; red[www.wago.com/771-9973/006-101](http://www.wago.com/771-9973/006-101)

Item no. 771-9973/206-101

pre-assembled connecting cable; Eca; Plug/open-ended; 3-pole; Cod. P; H05VV-F 3G 1.5 mm<sup>2</sup>; 1 m; 1,50 mm<sup>2</sup>; red[www.wago.com/771-9973/206-101](http://www.wago.com/771-9973/206-101)

## Optional accessories

### Tool

Operating tool



Item no.: 210-719

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

[www.wago.com/210-719](http://www.wago.com/210-719)

Item no.: 770-383

Operating tool; 3-way; green

[www.wago.com/770-383](http://www.wago.com/770-383)

### Cover

Cover



Item no.: 770-693

Lockout cap; 3-pole; for cutouts; Plastic; white

[www.wago.com/770-693](http://www.wago.com/770-693)

Item no.: 770-643

Lockout cap; 3-pole; for cutouts; Plastic; black

[www.wago.com/770-643](http://www.wago.com/770-643)

Item no.: 770-201

Lockout cap; 12-pole, separable; for sockets; Plastic; black

[www.wago.com/770-201](http://www.wago.com/770-201)

Item no.: 770-221

Lockout cap; 12-pole, separable; for sockets; Plastic; white

[www.wago.com/770-221](http://www.wago.com/770-221)

Subject to changes. Please also observe the further product documentation!

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## Downloads

### Documentation

#### Bid Text

|                         |             |                |          |
|-------------------------|-------------|----------------|----------|
| 770-2303<br>X81 - Datei | 2019 Feb 19 | xml<br>3.0 kB  | Download |
| 770-2303<br>doc - Datei | 2015 Jun 8  | doc<br>23.6 kB | Download |

## CAD/CAE-Data

### CAE data

|                            |     |          |
|----------------------------|-----|----------|
| EPLAN Data Portal 770-2303 | URL | Download |
| ZUKEN Portal 770-2303      | URL | Download |
| WSCAD Universe 770-2303    | URL | Download |

### CAD data

|                       |     |          |
|-----------------------|-----|----------|
| 2D/3D Models 770-2303 | URL | Download |
|-----------------------|-----|----------|

### Asset Administration Shell

|                                     |     |          |
|-------------------------------------|-----|----------|
| Asset Administration Shell 770-2303 | URL | Download |
|-------------------------------------|-----|----------|

## Environmental Product Compliance

### Compliance Search

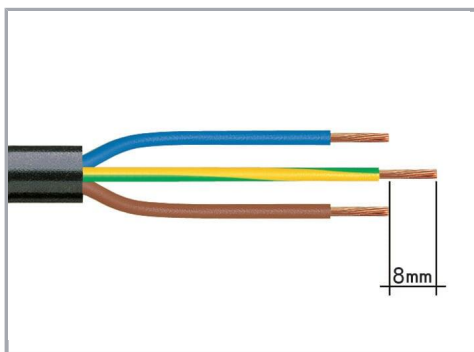
|   |     |          |
|---|-----|----------|
| Environmental Product Compliance 770-2303<br>Snap-in socket; 3-pole; Cod. P; 4,00 mm <sup>2</sup> ; red | URL | Download |
|---|-----|----------|

## Installation Notes

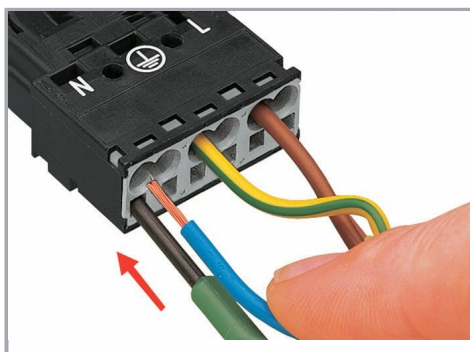
### Conductor termination

Subject to changes. Please also observe the further product documentation!

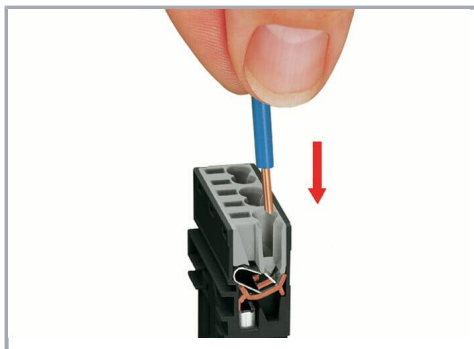




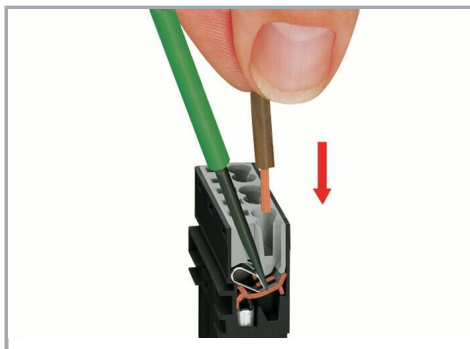
1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm



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.

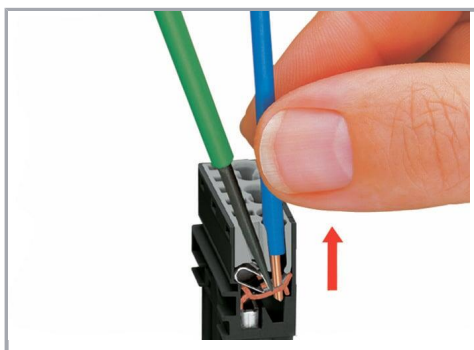


Insert the stripped solid conductor until it hits the backstop.



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.

Subject to changes. Please also observe the further product documentation!



Seal unused cutout with lockout cap.

## Product family

### WINSTA® MIDI

[Show all products from the family](#)

Subject to changes. Please also observe the further product documentation!

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