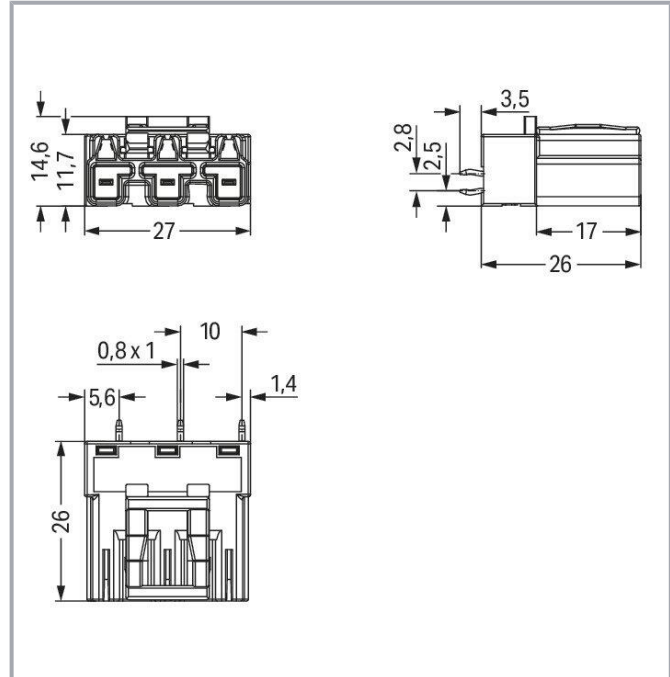


Data sheet | Item number: 770-813

Plug for PCBs; straight; 3-pole; Cod. A; black

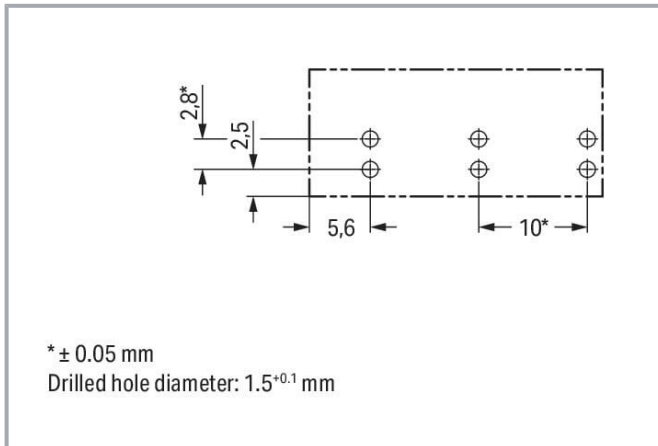
www.wago.com/770-813



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

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Item description

Male connector/plug WINSTA® MIDI A coding

The WINSTA® MIDI male connector/plug with protection against mismatching offers easy, secure handling to support drive and control technology tasks. The pluggable PCB connectors with spring pressure connection technology and Push-in CAGE CLAMP® technology from WAGO permit maintenance free terminal connections. The coding options reduce installation errors, allowing fast, secure wiring of all components. Thanks to the color coding and mechanical A coding of WINSTA® MIDI pcb connectors, you can clearly distinguish different circuits. Important parameters in the selection of a pcb connectors are the rated current and voltage: They provide information about possible domains of use and applications. This product has a current rating of 25 A – so it is suitable for high power loads. Our WINSTA® MIDI product line offers maximum flexibility for the installation of applications. With its Push-in CAGE CLAMP® spring pressure connection technology, it ensures time-saving, error-free installation and offers customization and flexibility for meeting various installation requirements.

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

The WINSTA® Pluggable Connection System allows pluggable electrical installation. This saves time, lowers costs, and reduces the need for servicing. Now you can also lower installation expenses without compromising quality and safety: with marking reduces the need for servicing and prevents unnecessary downtime.

- effective protection against mismatching
- for automation controllers
- with A coding for a large number of uses
- convenient installation and commissioning

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



Data

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) ≙ 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 mΩ of contact resistance approx. 0.25 mΩ contact transition plug/socket |
|----------------------------|--|

Connection data

| | |
|----------------------------|----------------------|
| Total number of potentials | 3 |
| Number of levels | 1 |
| PE function | Preceding PE contact |

Connection 1

| | |
|-------------|---|
| Pole number | 3 |
|-------------|---|

Physical data

| | |
|-------------------------|------------------------|
| Pin spacing | 10 mm / 0.394 inches |
| Width | 27 mm / 1.063 inches |
| Height | 29.5 mm / 1.161 inches |
| Height from the surface | 26 mm / 1.024 inches |
| Depth | 14.6 mm / 0.575 inches |

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| | |
|--------------------------------------|-----------------------------------|
| Solder pin length | 3.5 mm |
| Solder pin dimensions | 1 x 0.8 mm |
| Drilled hole diameter with tolerance | 1.5 ^(-0.1 ... +0.1) mm |

Mechanical Data

| | |
|---|--|
| Application | General mains applications |
| Coding | A |
| Variable coding | Yes |
| Marking | N $\frac{1}{2}$ L |
| Potential marking | N $\frac{1}{2}$ L |
| 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 |
| Design | straight |

Plug-in connection

| | |
|------------------------------------|--|
| Contact type (pluggable connector) | Male connector/plug |
| Connector (connection type) | for PCB |
| Mismating protection | Yes |
| Note on mismating protection | All <i>WINSTA</i> [®] 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 |
| Mating direction to the PCB | 90 ° |
| 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). |

PCB contact

| | |
|------------------------|----------------------------|
| PCB contact | THT |
| Solder pin arrangement | 2 in-line solder pins/pole |

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



| | |
|-------------------------------------|---|
| Number of solder pins per potential | 2 |
|-------------------------------------|---|

Material data

Note (material data)

Information on material specifications can be found here

| | |
|-----------------------------|---|
| Color | black |
| 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 | 0.18 MJ |
| Weight | 6.7 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

| | |
|-----------------------|---------------|
| eCl@ss 10.0 | 27-44-06-05 |
| eCl@ss 9.0 | 27-44-06-05 |
| ETIM 8.0 | EC002560 |
| ETIM 7.0 | EC002560 |
| ECCN | NO DATA |
| PU (SPU) | 100 pcs |
| Packaging type | box |
| Country of origin | PL |
| GTIN | 4044918511445 |
| Customs tariff number | 85366990990 |

Environmental Product Compliance

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




Approvals / Certificates

General approvals


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| Logo | Approval | Additional Approval Text | 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 |

Declarations of conformity and manufacturer's declarations






| Logo | Approval | Additional Approval Text | Certificate name |
|---|--|--------------------------|------------------|
|  | EU-Declaration of Conformity WAGO GmbH & Co. KG | - | - |

Approvals for marine applications

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

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

Counterpart

| | | |
|--|---|--|
|  | Item no.770-103 Socket; with strain relief housing; 3-pole; Cod. A; 4,00 mm ² ; black | www.wago.com/770-103 |
|  | Item no.770-203 Socket; 3-pole; Cod. A; 4,00 mm ² ; black | www.wago.com/770-203 |
|  | Item no.770-203/035-000 Socket; with strain relief housing; 3-pole; Cod. A; 4,00 mm ² ; black | www.wago.com/770-203/035-000 |
|  | Item no.771-9993/006-101 pre-assembled interconnecting cable; Eca; Socket/plug; 3-pole; Cod. A; H05VV-F 3G 1.5 mm ² ; 1 m; 1,50 mm ² ; black | www.wago.com/771-9993/006-101 |
|  | Item no.771-9993/106-101 pre-assembled connecting cable; Eca; Socket/open-ended; 3-pole; Cod. A; H05VV-F 3G 1.5 mm ² ; 1 m; 1,50 mm ² ; black | www.wago.com/771-9993/106-101 |

Required accessories

Cover

Cover

| | | |
|---|---|--|
|  | Item no.: 770-360 Lockout cap; for plugs; 5-pole; separable; yellow | www.wago.com/770-360 |
|---|---|--|

Optional accessories

Coding

Coding

| | | |
|--|--|--|
|  | Item no.: 770-401 Coding pin; for plugs; Plastic; gray | www.wago.com/770-401 |
|--|--|--|

Downloads

CAD/CAE-Data

CAD data

| | | |
|----------------------|---------------------|--------------------------|
| 2D/3D Models 770-813 | URL | Download |
|----------------------|---------------------|--------------------------|

CAE data

| | | |
|---------------------------|---------------------|--------------------------|
| EPLAN Data Portal 770-813 | URL | Download |
|---------------------------|---------------------|--------------------------|

| | | |
|----------------------|---------------------|--------------------------|
| ZUKEN Portal 770-813 | URL | Download |
|----------------------|---------------------|--------------------------|

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PCB Design

Symbol and Footprint 770-813

[URL](#)

[Download](#)

CAx data for your PCB design, consisting of "schematic symbols and PCB footprints", allow easy integration of the WAGO component into your development environment.

Supported formats:

- Accel EDA 14 & 15
- Altium 6 to current version
- Cadence Allegro
- DesignSpark
- Eagle Libraries
- KiCad
- Mentor Graphics BoardStation
- Mentor Graphics Design Architect
- Mentor Graphics Design Expedition 99 and 2000
- OrCAD 9.X PCB and Capture
- PADS PowerPCB 3, 3.5, 4.X, and 5.X
- PADS PowerPCB and PowerLogic 3.0
- PCAD 2000, 2001, 2002, 2004, and 2006
- Pulsonix 8.5 or newer
- STL
- 3D STEP
- TARGET 3001!
- View Logic ViewDraw
- Quadcept
- Zuken CadStar 3 and 4
- Zuken CR-5000 and CR-8000

PCB Component Libraries (EDA), PCB CAD Library Ultra Librarian

Asset Administration Shell

Asset Administration Shell 770-813

[URL](#)

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Environmental Product Compliance

Compliance Search

Environmental Product Compliance 770-813

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Data sheet | Item number: 770-813

www.wago.com/770-813



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Plug for PCBs; straight; 3-pole; Cod. A; black

Installation Notes

Product family

WINSTA® MIDI

[Show all products from the family](#)

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