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ABB Welcome[®]

M2301

Mini-system controller

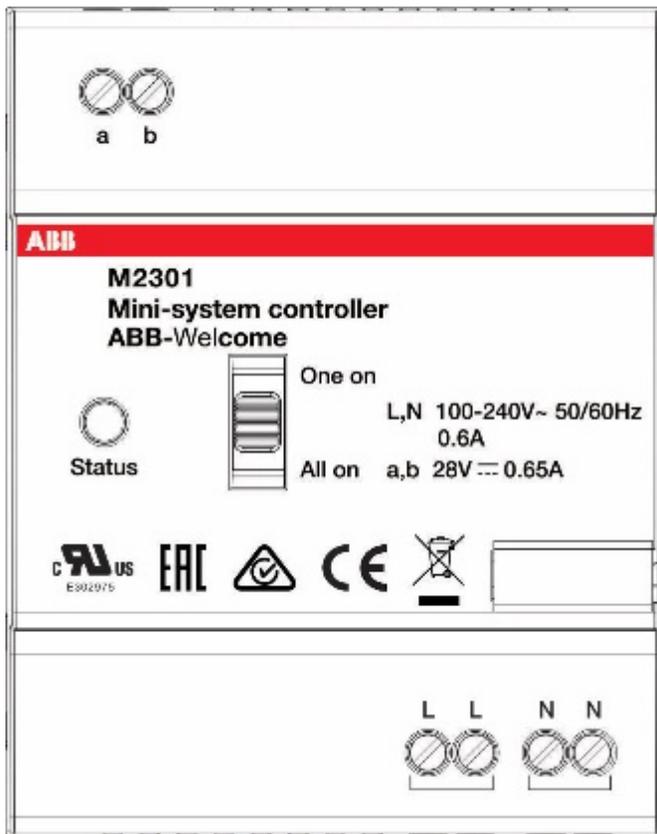


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1 Safety



Warning

Electric voltage!

Direct or indirect contact with live components can cause dangerous currents to flow through the body, which may result in electric shock, burns or even death.

- Always disconnect the main power supply prior to installation and/or disassembly.
- Work on the 110 V - 240 V supply system must be performed only by qualified personnel.

2 Intended use

The M2301 mini-system controller is an integral part of the ABB Welcome door communication system and operates exclusively with components from this system. The device must only be installed on mounting rails according to DIN EN 50022.

3 Environment



Consider the protection of the environment!

Used electric and electronic devices must not be disposed of with household waste.



- The device contains valuable raw materials that can be recycled and should be disposed of at an appropriate recycling facility.

3.1 ABB devices

All packaging materials and devices from ABB bear the markings and test seals for proper disposal. Always dispose of the packaging material, electronic devices and their components via authorized recycling facilities or disposal companies.

4 Operation

4.1 Control elements

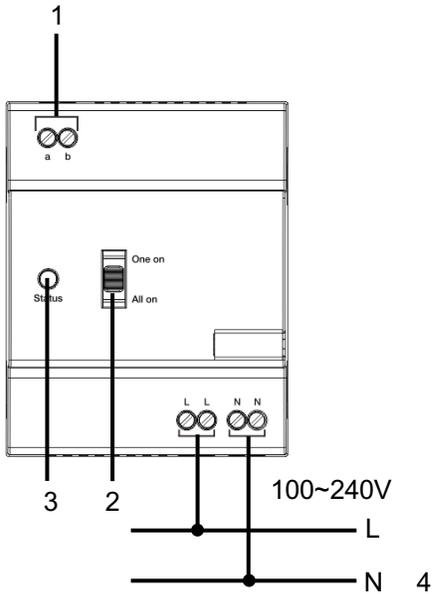


Fig. 1: Overview of control buttons

No.	Functions
1	Bus in and out
2	Operating mode setting See chapter "Operating modes" for more details.
3	Operating status indicating LED  - Ready for operation - Fault
4	Power supply

4.2 Operating modes

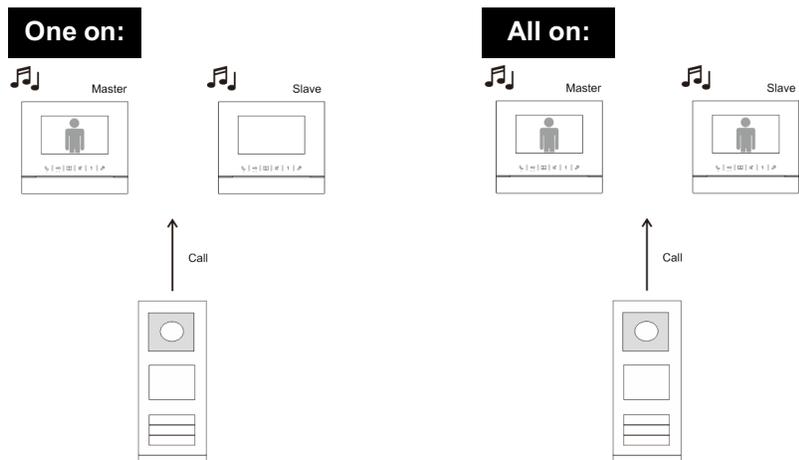


Fig. 2:

“One on” mode:

When there is an incoming call, all indoor stations in the same apartment ring together, but only the master indoor station switches on the screen.

“All on” mode:

When there is an incoming call, all indoor stations in the same apartment ring and switch on their screens at the same time.

5 Technical data

Designation	Value
Operating temperature	-13 °F to +131 °F
Storage temperature	-40 °F to +158 °F
Protection	IP 20
Single-wire clamps	2 x 22 AWG - 2 x 18 AWG
Fine-wire clamps	2 x 22 AWG - 2 x 18 AWG
Mains voltage	100 V - 240 V, 50/60 Hz, 1.0 A
Bus voltage	28 V ±2 V DC, 0.65 A
Size	4 U

6 Mounting and installation



Warning

Electric voltage!

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- Always disconnect the main power supply prior to installation and/or disassembly.
- Work on the 110 V - 240 V supply system must be performed only by qualified personnel.

6.1 Requirements for the electrician



Warning

Electric voltage!

Install the device only if you have the necessary qualifications.

- Incorrect installation endangers your life and that of the user of the electrical system.
- Incorrect installation can cause serious damage to property, e.g., due to fire.

The minimum necessary expert knowledge and requirements for the installation are as follows:

- Apply the "five safety rules" (DIN VDE 0105, EN 50110):
 1. Disconnect from power.
 2. Secure against being re-connected.
 3. Ensure there is no voltage.
 4. Connect to earth.
 5. Cover or barricade adjacent live parts.
- Wear suitable personal protective clothing.
- Use only suitable tools and measuring devices.
- Check the type of supply network (TN system, IT system, TT system) to secure the following power supply conditions (classic connection to ground, protective earthing, necessary additional measures, etc.).

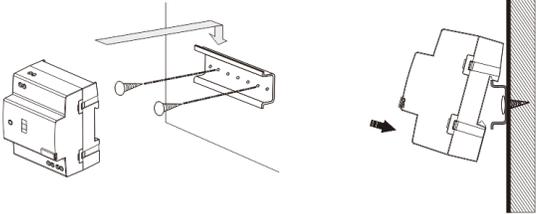
6.2 General installation instructions

- Terminate all branches of the wiring system via a connected bus device (e.g., indoor station, outdoor station, system device).
- Do not install the system controller directly next to the bell transformer or other power supplies (to avoid interference).
- Do not install the wires of the system bus together with 100 V - 240 V wires.
- Do not use common cables for the connecting wires of the door openers and wires of the system bus.
- Avoid bridges between different cable types.
- Use only two wires for the system bus in a four-core or multi-core cable.
- When looping, never install the incoming and outgoing bus inside the same cable.
- Never install the internal and external bus inside the same cable.

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6.3 Mounting

The device M2301 must only be installed on mounting rails according to DIN EN 500022.





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