2TMD041600D0145 | 10.12.2018

Product manual

ABB-Welcome

M2300 System controller

Table of contents

1 Notes on the instruction manual

Please read through this manual carefully and observe the information it contains. This will assist you in preventing injuries and damage to property, and ensure both reliable operation and a long service life for the device.

Please keep this manual in a safe place.

If you pass the device on, also pass on this manual along with it.

ABB accepts no liability for any failure to observe the instructions in this manual.

2 Safety

Warning

Electric voltage!

Dangerous currents flow through the body when coming into direct or indirect contact with live components.

This can result in electric shock, burns or even death.

– Disconnect the mains power supply prior to installation and/or disassembly!
– Permit work on the 110-240 V supply system to be performed only by specialist staff!

3 Intended use

This device 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 500022.

4 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. Therefore, dispose of the device at the appropriate collecting facility.

4.1 ABB devices

All packaging materials and devices from ABB bear the markings and test seals for proper disposal. Always dispose of the packing materials and electric devices and their components via an authorized collection facility or disposal company.

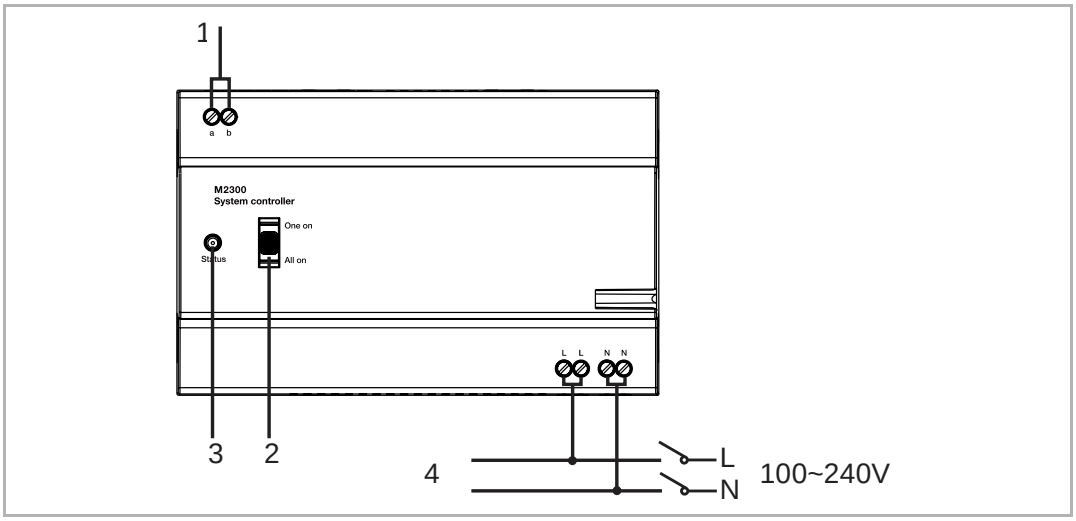
ABB products meet the legal requirements, in particular the laws governing electronic and electrical devices and the REACH ordinance.

(EU-Directive 2012/19/EU WEEE and 2011/65/EG RoHS)

(EU-REACH ordinance and law for the implementation of the ordinance (EG) No.1907/2006)

5 Product description

5.1 Control elements



No.	Functions
1	Bus in/out
2	**Operating mode settings** See chapter "Operating modes" for details.
3	**Operating status indicating LED** Ready for operation Fault
4	**Power supply**

6 Technical data

Designation	Value
Bus voltage	20-30 VDC
Operating temperature	-25 °C…+55 °C
Storage temperature	-40 °C…+70 °C
Single-wire clamps	2 x 0.28 mm² - 2 x 0.75 mm²
Fine-wire clamps	2 x 0.28 mm² - 2 x 0.75 mm²
Protection	IP 20
Size	8 U

Tab.1: Technical data

7 Mounting/Installation

Warning

Electric voltage!

Dangerous currents flow through the body when coming into direct or indirect contact with live components.

This can result in electric shock, burns or even death.

– Disconnect the mains power supply prior to installation and/or disassembly!
– Permit work on the 110-240 V supply system to be performed only by specialist staff!

7.1 Requirement for the electrician

Warning

Electric voltage!

Install the device only if you have the necessary electrical engineering knowledge and experience.

– 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:

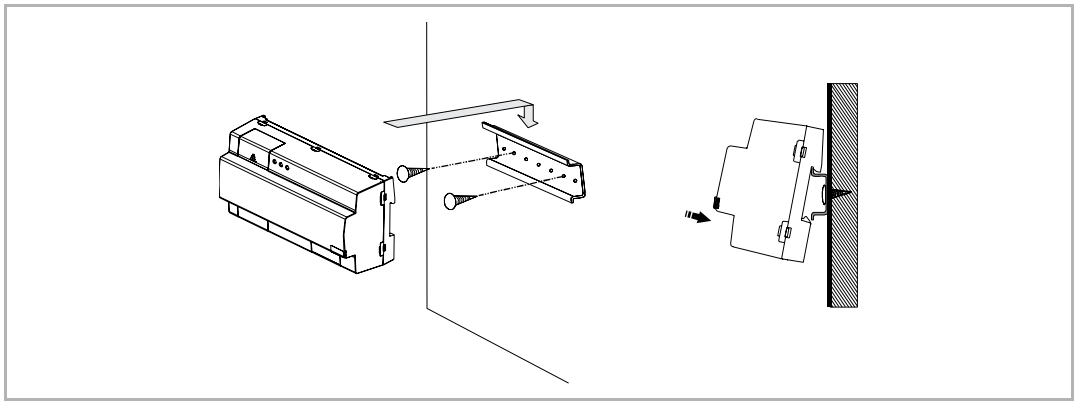
– Apply the "five safety rules" (DIN VDE 0105, EN 50110):
  1. Disconnect
  2. Secure against being re-connected
  3. Ensure there is no voltage
  4. Connect to earth and short-circuit
  5. Cover or barricade adjacent live parts.
– Use suitable personal protective clothing.
– Use only suitable tools 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 grounding, necessary additional measures, etc.).

7.2 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 and other power supplies (to avoid interference).
- Do not install the wires of the system bus together with 100-240 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.

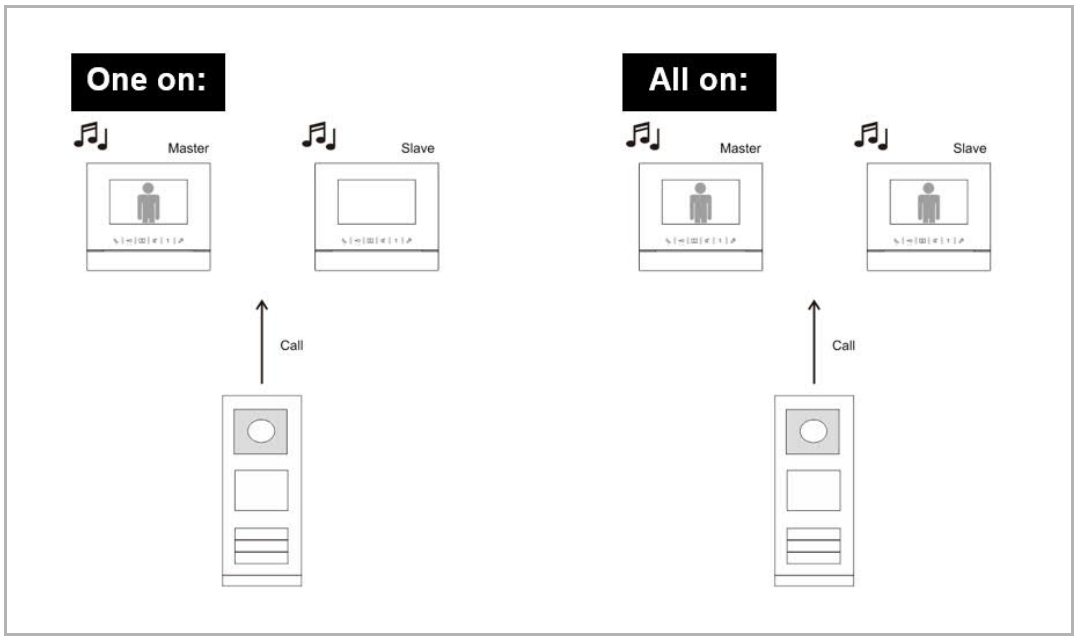
7.3 Mounting

The device must only be installed on mounting rails according to DIN EN 50022.



8 Operation

8.1 Operating modes



“One on” mode

If 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

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

9 FCC

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Only operate the device in accordance with the instructions supplied.

Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user’s authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

– Reorient or relocate the receiving antenna.
– Increase the separation between the equipment and receiver.
– Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
– Consult the dealer or an experienced radio/TV technician for help.

Notice

We reserve the right to at all times make technical changes as well as changes to the contents of this document without prior notice.

The detailed specifications agreed to at the time of ordering apply to all orders. ABB accepts no responsibility for possible errors or incompleteness in this document.

Contact us

ABB (United Arab Emirates)
Industries(L.L.C)
P.O.Box 11070 Dubai-UAE
T : +971 4 3147 586
F : +971 4 3401 541

ABB (Turkey) Eletrik San.AS
ABB Elektrik Sanayi AS. Organize Sanayi Bolgesi 2 Cadde
No: 16 Y. Dudullu-Istanbul
T : +90 216 528 2281
F : +90 216 528 2945

ABB (Thailand) Ltd.
161/1 SG Tower, 1st-4th Floor, Soi Mahadlekluang 3, Rajdamri Road, Lumpini, Pathumwan Bangkok 10330, Thailand
T : +66 2 6651 000
F : +66 2 6651 043

ABB (Korea) Ltd.
Oksan Bldg, 10th Fl. 157-33
Samsung-dong, Gangnam-gu,
135-090, Seoul, Korea
T : +82 2 5283 177
F : +82 2 5282 350

ABB Global Marketing - Lebanon
Down Town, Beirut, ebanon
T : +961 1983 724/5
F : +961 1983 723

ABB (India) Ltd.
Plot No.1, Sector-1B,
I.I.E.SIDCUL,
Haridwar-249403.India
T : +91 133 423 5447
F : +91 133 423 5449

ABB Australia Pty Ltd.
601 Blackburn Road
3168, Notting Hill, Victoria,
Australia
T : +61 3 8577 7139
F : +61 3 9545 0415

ABB (Vietnam) Ltd.
Km 9 National Highway 1A ,
Hoang Liet, Hoang Mai, Hanoi,
Vietnam
T : +84 4 3861 1010
F : +84 4 3861 1009

ABB (KSA) Electrical Industries Co. Ltd.
P.O.Box 325841, Riyadh 11371
T : +966 1 1484 5600
F : +966 1 1206 7609

ABB (Russia) Ltd.
3121 Wiring Accessories
30/1 bld.2, Obrucheva str. RU
T : +7 495 777 2220
F : +7 495 777 2220

ABB Malaysia Sdn Bhd
Block A, Level 2, Lot 608, Jalan SS13/IK 47500 Subang Jaya
Selangor
T : +60 3 5628 4888
F : +60 3 5635 8200

ABB (Hong Kong) Ltd.
3 Dai Hei Street, Tai Po Industrial Estate, Tai po, Hong Kong
T : +852 2 9293 912
F : +852 2 9293 505

ABB Pte. Ltd.
2 Ayer Rajah Crescent,
Singapore 139935
T: + 65 6 7765 711
F: + 65 6 7780 222

www.abb.com

Approvals and Compliances

Notice
We reserve the right to at all times make technical changes as well as changes to the contents of this document without prior notice.
The detailed specifications agreed upon apply for orders. ABB accepts no responsibility for possible errors or incompleteness in this document.