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ABB Welcome[®] M2305 Switch actuator

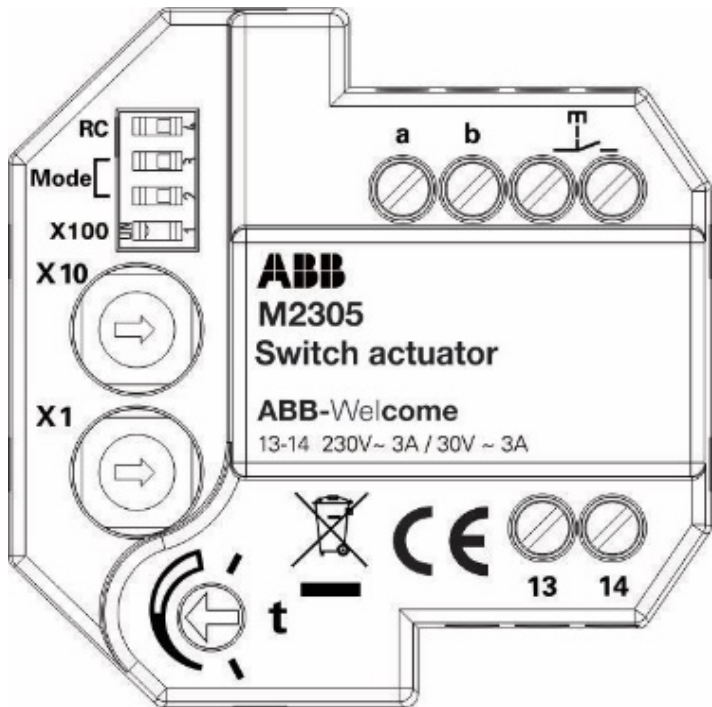


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1 Safety



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

This device is an integral part of the ABB Welcome door communication system and operates exclusively with components from this system. This device can be mounted easily inside flush-mounted box.

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

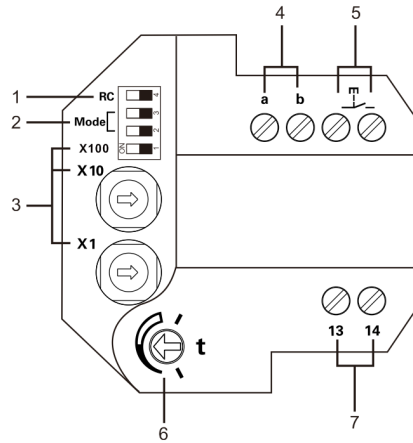


Fig. 1: Overview of control buttons

No.	Functions
1	Terminal resistor ON or OFF In video installations or audio- and video-combined installations, the switch must be set as "RC on" on the last device of the line.
2	For operating the mode switchover button, see chapter "Operating modes."
3	Rotary switches for addressing (001-199)
4	Bus in or out
5	Connection with pushbutton (e.g., exit button, doorbell)
6	Adjust relay switching time
7	Floating output for door opener or light

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4.2 Operating modes

4.2.1 Call repetition

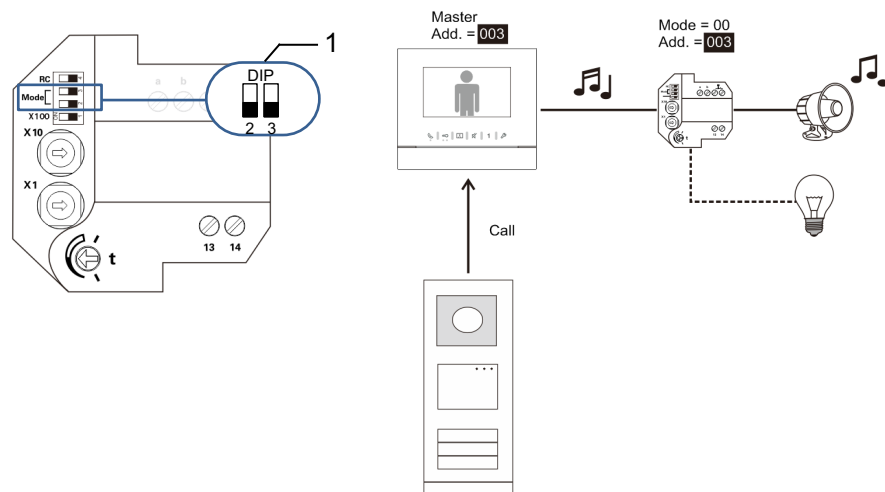


Fig. 2: Call repetition

No.	Functions
1	2->OFF, 3->OFF

The device is enabled for an incoming call to control an external bell or light.

The device is disabled after the call is answered or after a user-specified time-out (ranging from 1 to 30 seconds).

The address of the switch actuator is equal to that of an indoor station in the same apartment.

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4.2.2 Door opener

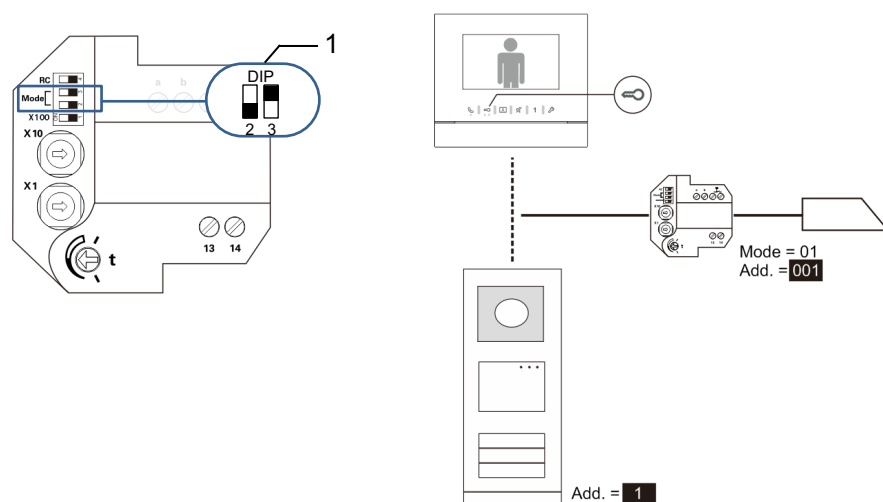


Fig. 3: Door opener

No.	Functions
1	2->OFF, 3->ON

The device is enabled by pressing the unlock button on an indoor station or guard unit, which releases a connected lock.

The device is disabled after a user-specified time-out (ranging from 1 to 10 seconds).

The address of the switch actuator is equal to that of an outdoor station in the same subsystem.

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4.2.3 Time relay

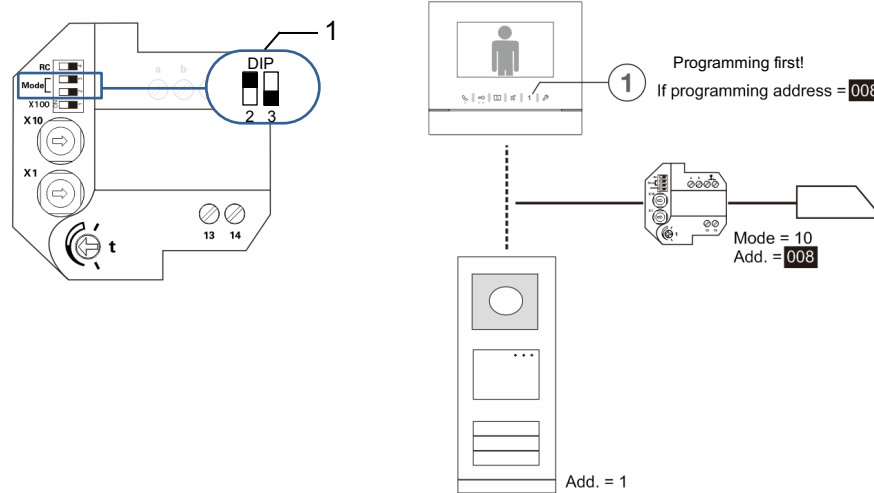


Fig. 4: Release a lock

No.	Functions
1	2->ON, 3->OFF

The device is enabled by pressing the program button on an indoor station or guard unit, or a light button on an outdoor station in the same subsystem, which releases a connected lock or switches on a light.

The device is disabled after a user-specified time-out (ranging from 1 second to 5 minutes).

If an indoor station or guard unit in the same subsystem is used to control the switch actuator, the address of the program button is equal to that of the switch actuator, which can be set from 001 to 199.

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If an outdoor station is used to control the switch actuator, the address of the switch actuator is equal to that of the outdoor station.

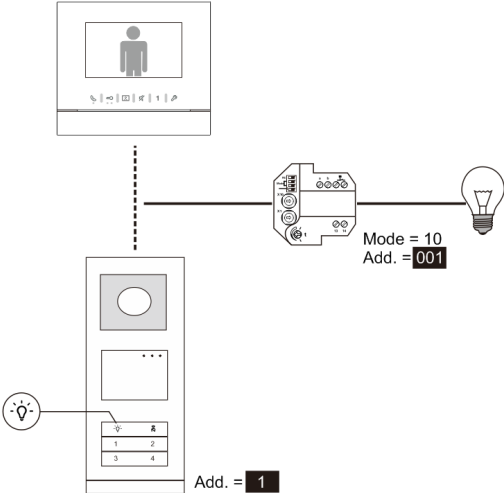


Fig. 5: Switch on a light

5 Technical data

Designation	Value
Operating temperature	-13 °F to +131 °F
Protection (with flush-mounted box)	IP 30
Single-wire clamps	2 x 22 AWG - 2 x 18 AWG
Fine-wire clamps	2 x 22 AWG - 2 x 18 AWG
Floating output for light	100 V - 240 V AC, 3 A
Bus voltage	30 V AC/DC, 3 A

6 Mounting and installation



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.

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:

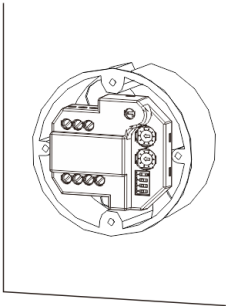
- Apply the "five safety rules" (DIN VDE 0105, EN 50110):
 1. Disconnect from power.
 2. Secure against being re-connected.
 3. Ensure there is no voltage.
 4. Connect to earth.
 5. Cover or barricade adjacent live parts.
- Wear suitable personal protective clothing.
- Use only suitable tools and measuring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

6.3 Mounting

Mounted with a flush-mounted box





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