ABB-Welcome

M2305
Switch actuator
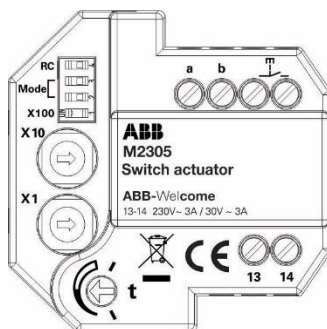
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1   Safety

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!

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 domestic waste.
– The device contains valuable raw materials which can be recycled. Therefore, dispose of the device at the appropriate recycling facility.

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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 and electric devices and their components via an authorized recycling facilities or disposal companies.
ABB products meet the legal requirements, in particular the laws governing electronic and electrical devices and the REACH ordinance.
(EU-Directive 2002/96/EG WEEE and 2002/95/EG RoHS)
(EU-REACH ordinance and law for the implementation of the ordinance (EG) No.1907/2006)
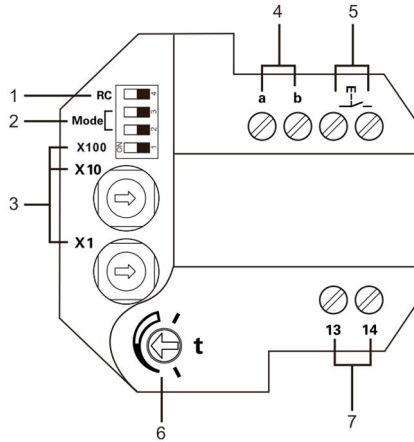
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4 Operation

4.1 Control elements

Fig. 1: Overview of control buttons

No.	Functions
1	Terminal resistor ON/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/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
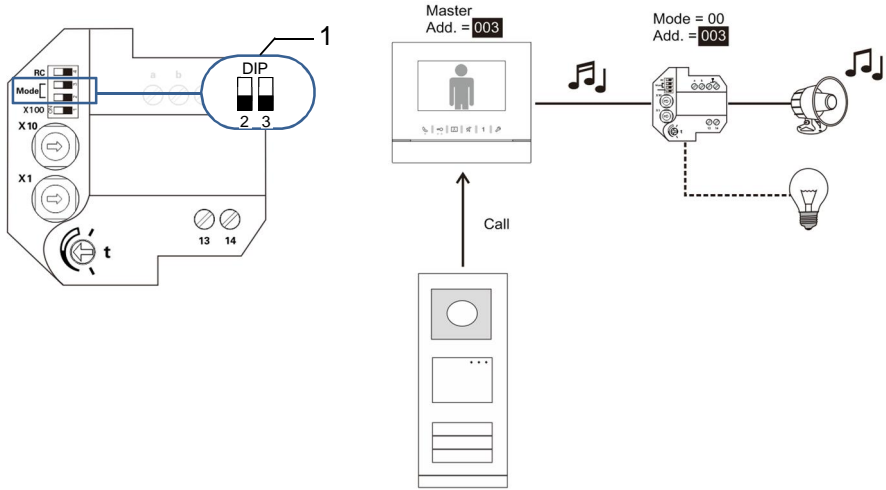
4.2.1 Call repetition

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 customized 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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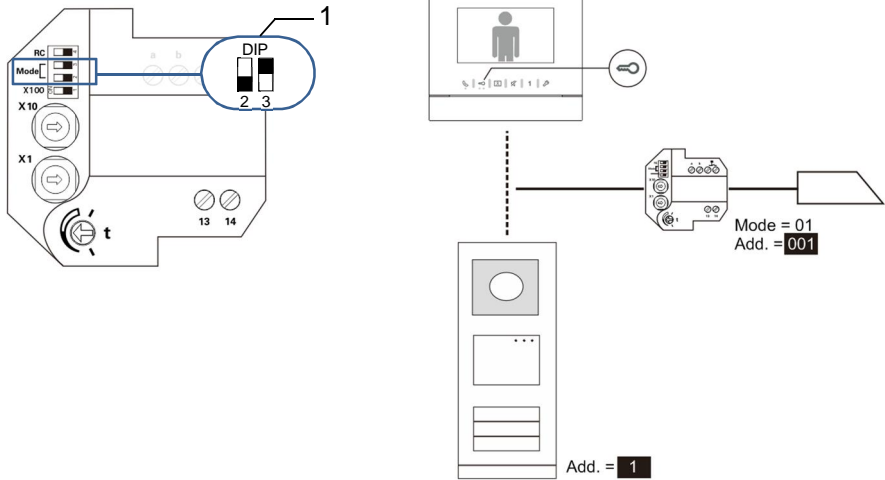## 4.2.2   Door opener

Fig. 3:   Door opener

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

The device is enabled by pressing the unlock button on indoor stations/guard units, which releases a connected lock.
The device is disabled after a customized 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 sub-system.

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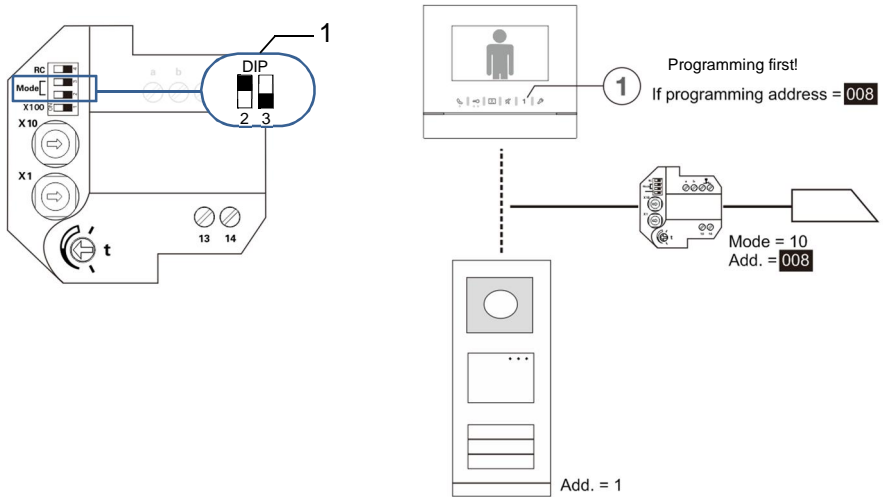## 4.2.3   Time relay

Fig. 4:   Release a lock

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

The device is enabled by pressing the program button on indoor stations/guard units or a light button on outdoor stations in the same sub-system which releases a connected lock or switches on the light.

The device is disabled after a customized time-out (ranging from 1 second to 5 minutes). If an indoor station/a guard unit 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 in the same sub-system.

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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.
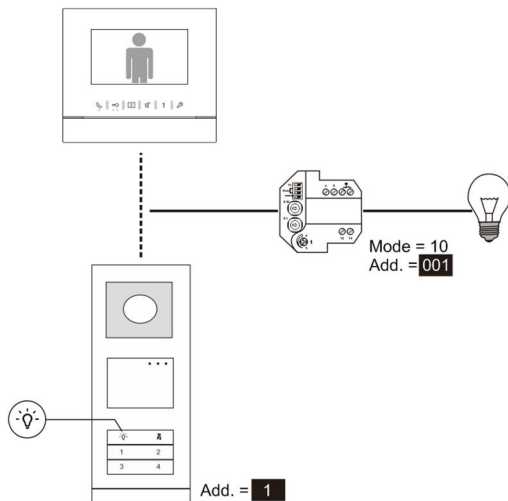

Fig. 5:   Switch on a light

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5 Technical data

Designation	Value
Operating temperature	-25 ℃ - +55 ℃
Protection (with flush-mounted box)	IP 30
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
Floating output for light	100-240 V AC, 3 AX
Bus voltage	30 V AC/DC; 3 A
Size	20-30 V

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6 Mounting/Installation

Warning

Electric voltage!

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■ 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!

6.1 Requirements 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 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.

• Use suitable personal protective clothing.

• Use only suitable tools and measuring devices.

• Check the type 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 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.

6.3   Mounting

Mounted with a flush-mounted box
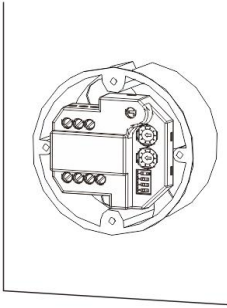
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Notice

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