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## Operating Instructions

### **ABB-Welcome IP**

Mini video outdoor station

H8131Px-A

H8136Px-A



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## 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

Mini outdoor station with camera and transponder serves as an end device for Door Entry System. It supports call other indoor stations, call guard units, unlock by ID cards and other functions. It is suitable for flush-mounted installation or surface-mounted installation.

## 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 2002/96/EG WEEE and 2002/95/EG RoHS)

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

## 5 Product description

### 5.1 Control elements

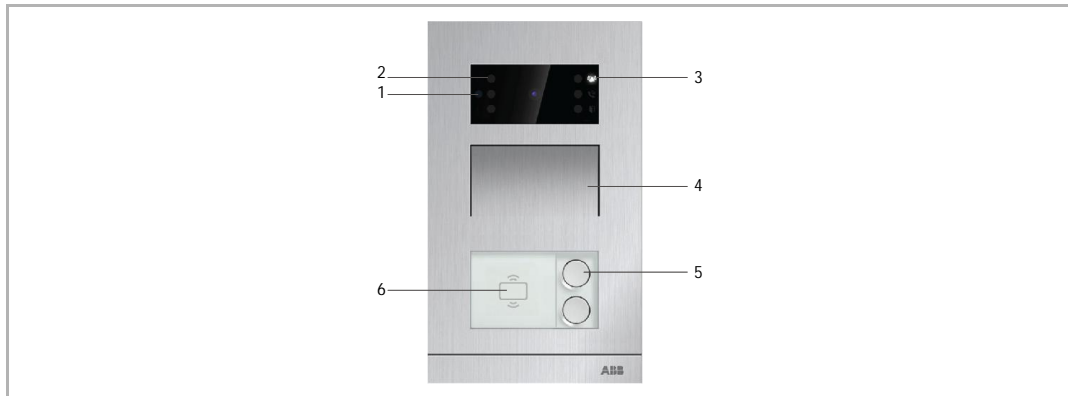


Fig. 1: Control elements

No	Function
1	Light sensor
2	Infrared LED
3	Indicator LED (ring, call and door open)
4	Speaker and microphone integration
5	Pushbutton
6	Nameplate

Tab.1: Description

## 5.2 Feature

- Aluminum alloy frame
- 3 intuitive LED indicators (ring, call and door open)
- Available with one and two pushbuttons
- Available with optional ID (125 KHz ) card reader
- The 2nd button (if available) can be programmed to call guard unit, PC guard or another residence
- Supports 2 locks connection
- Supports door status detection
- Supports exit button to release the lock
- 0.3M pixel camera with large detection angle (H 86°,V 67°, D 104°)
- Anti-fog design camera with in-built heater
- In-built lighting and automatic backlight ensure clear view at night
- Support 802.3af PoE and directly standalone power supply
- Compact size, can be flush or surface mounted.

### 5.3 Terminal description

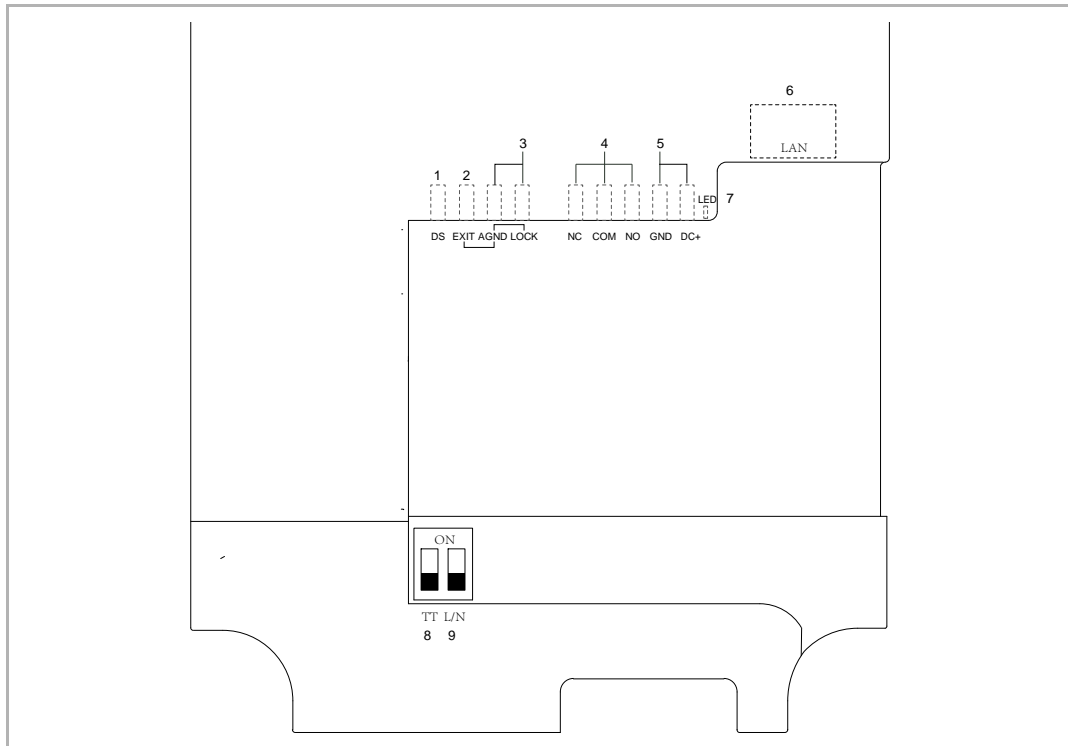


Fig. 2: Terminal description

No	Function
1	Connector for sensor used for door status detection
2	Connector for exit pushbutton
3	Plug-in clamps (LOCK-AGND) for door opener (15V 4A impulsive, 250 mA holding)
4	Plug-in clamps (COM-NC-NO) for floating output, door opener (30 VAC/DC 1A)
5	Plug-in clamps (DC+-GND) for standalone power supply
6	Connector for TCP/IP RJ45 port
7	LED indicator of LAN port
8	Set feedback tones for pushbuttons when pressing and outdoor station during a call
9	Assigns default lock ie 12VDC power supply (LOCK-GND) or Dry contact (Com-NC-NO)

Tab.2: Description

5.4 Lock type and connection

Lock type	Operation type	Voltage	Wiring type
Electrical strike lock, 12 V	Power on to open	12 VDC/AC	Type A Type B
Electrical strike lock, 24 V	Power on to open	24 VDC/AC	Type B
Electrical rim lock, 12 V	Power on to open	12 VDC	Type A Type B
Electrical mortise lock	Power off to open	12 VDC	Type C
Magnetic lock	Power off to open	12/24 V DC	Type C

Tab.3: Lock type

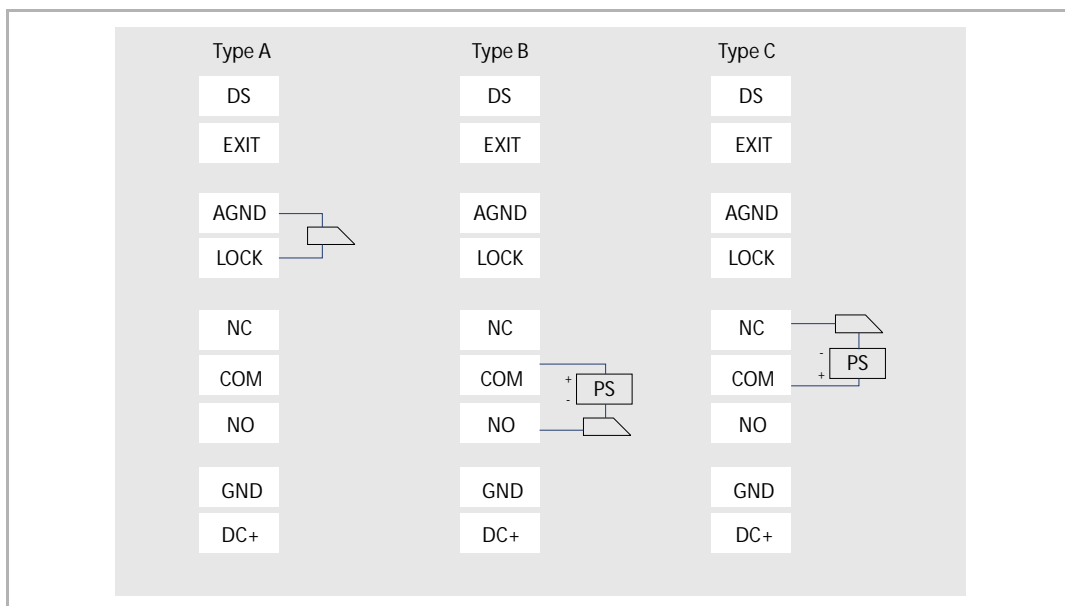


Fig. 3: Lock connection



## 6 Technical data

<b>Designation</b>	<b>Value</b>
Operating temperature	-40 °C - +70 °C
Protection	dustproof and waterproof as IP 54, vandal proof as IK 07
Power supply, door opener (Lock-GND)	15 V 4 A impulsive, 250 mA holding
Floating supply, door opener (COM-NC-NO)	30 VDC/AC 1A
Operating voltage	27 VDC
Dimension	Surface-mounted: 168 mm x 99 mm x 26 mm Flush-mounted: 180 mm x 105 mm x 43 mm

Tab.4: 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 Mounting

Use gloves to protect yourself from being cut.

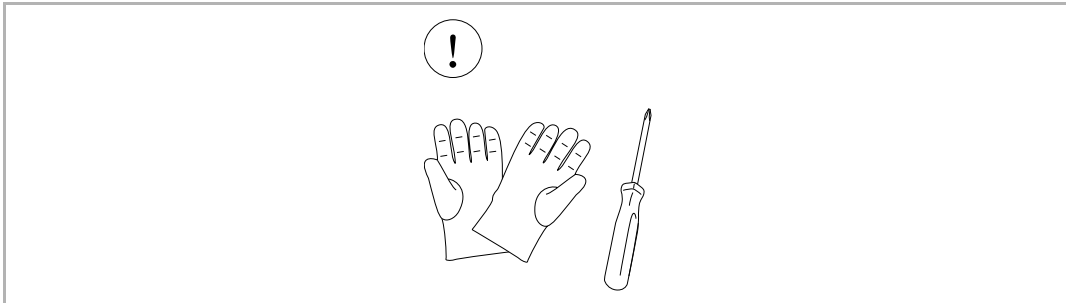


Fig. 4: Preparation

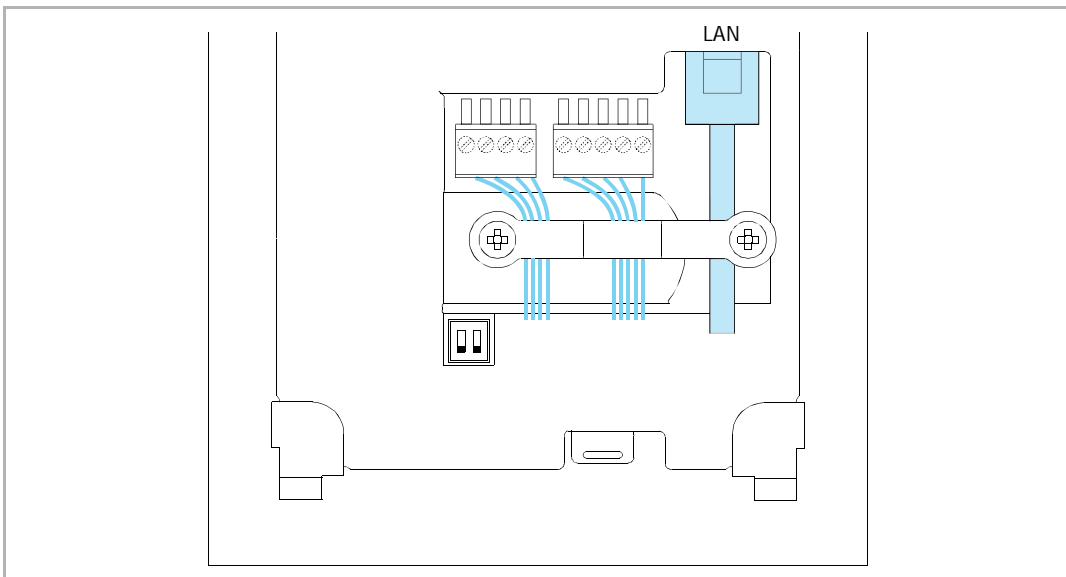


Fig. 5: Wiring

7.2.1 Surface-mounted installation

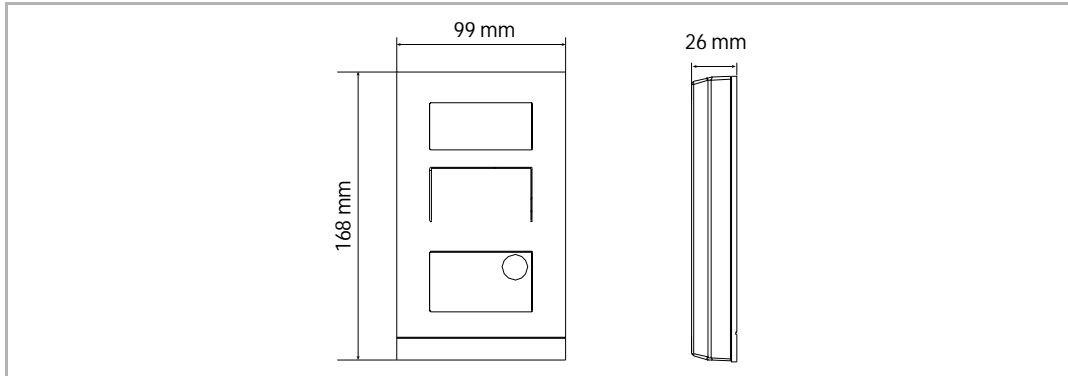


Fig. 6: Product dimension

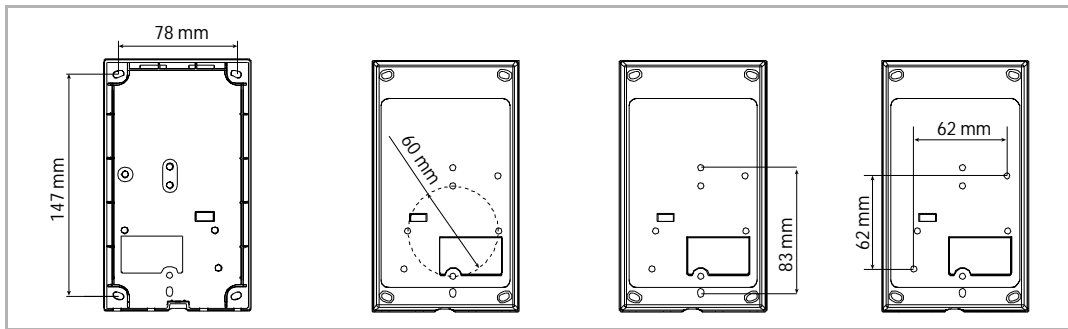


Fig. 7: Installation dimension

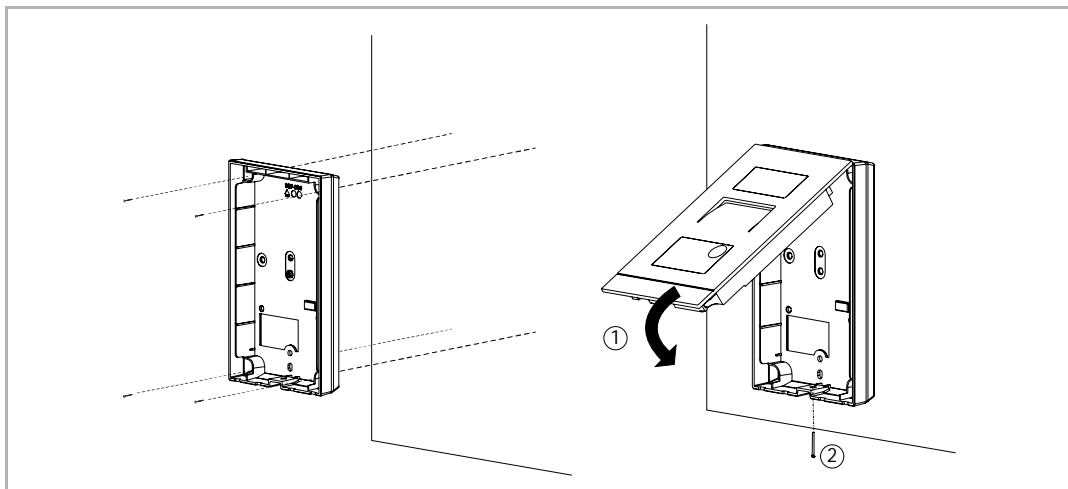


Fig. 8: Surface mounting on the wall

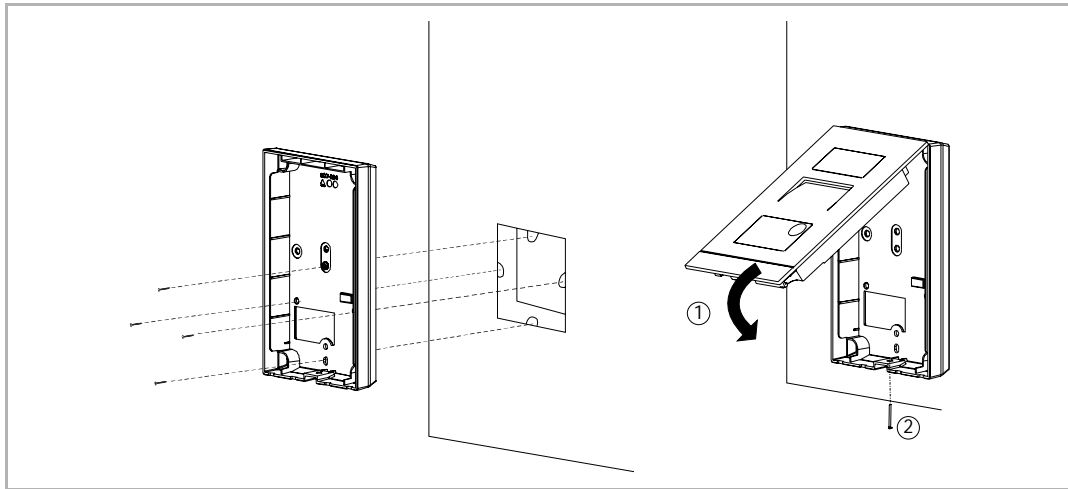


Fig. 9: Surface mounting with standard flush-mounted box

7.2.2 Flush-mounted installation

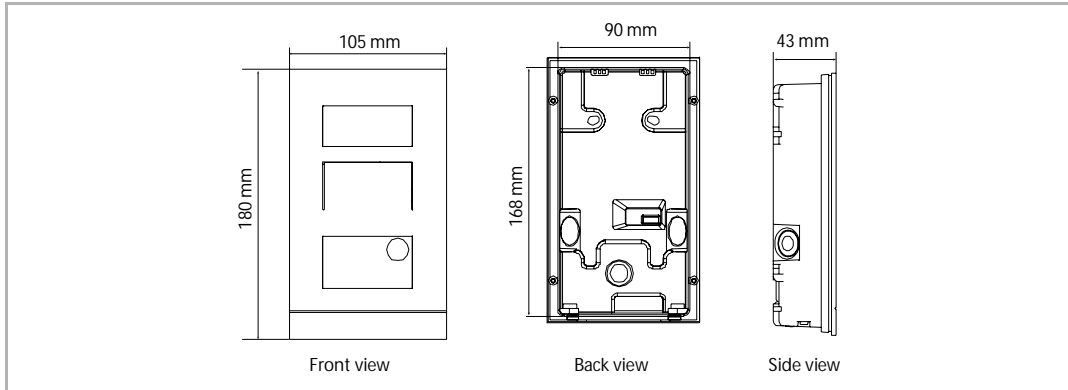


Fig. 10: Product dimension

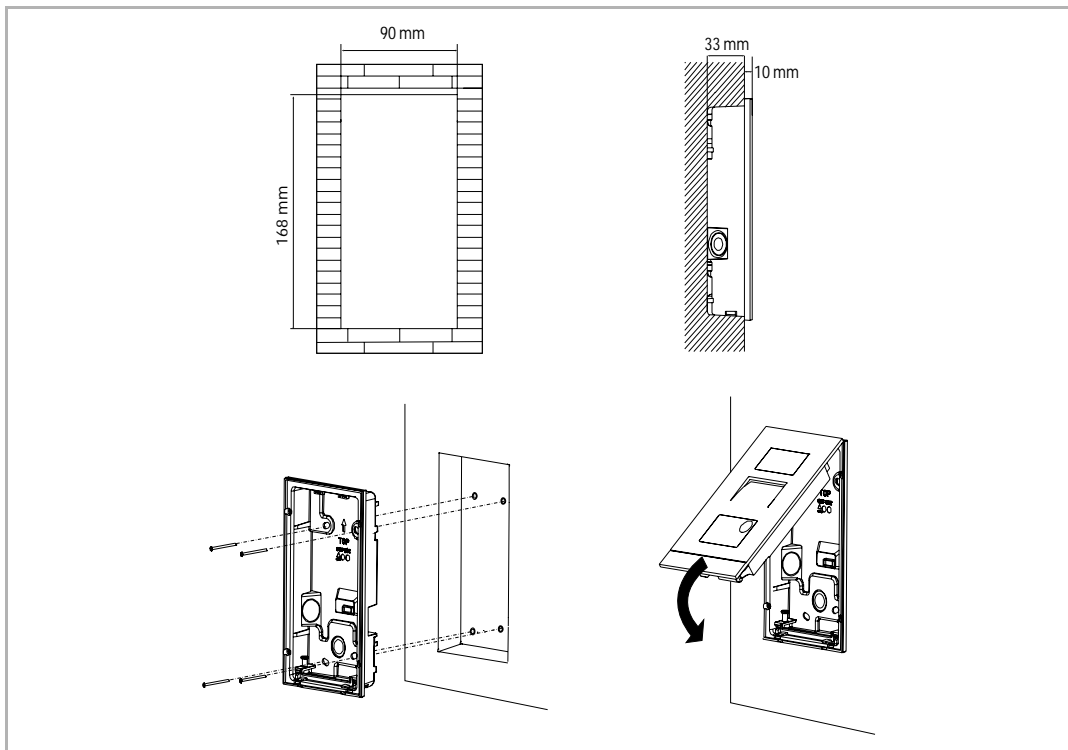


Fig. 11: Mounting without pre-installation box

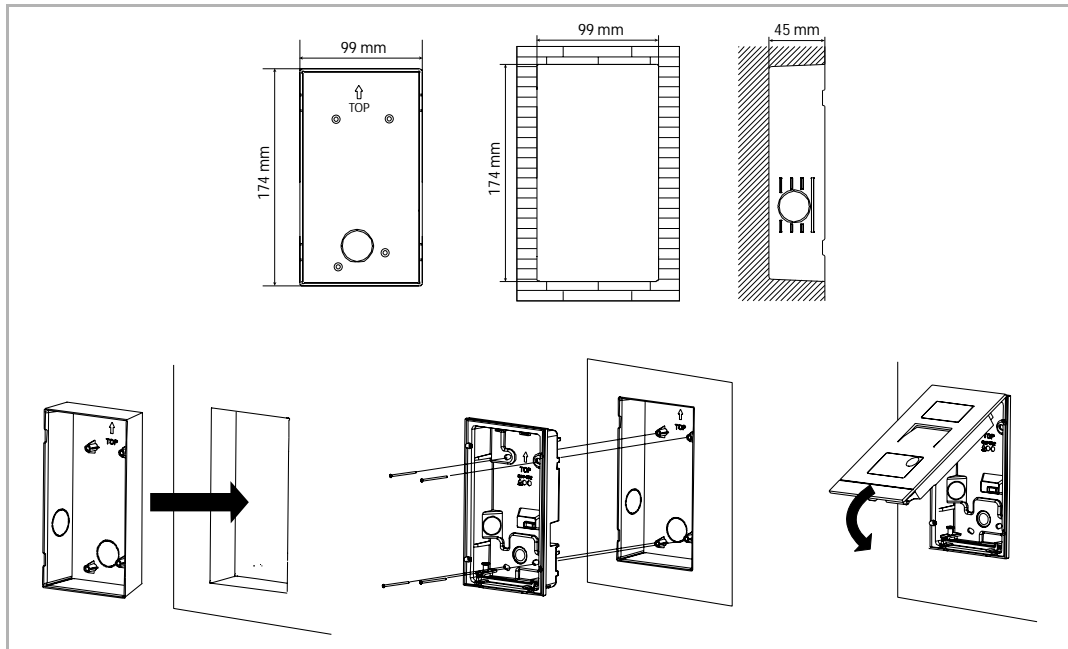


Fig. 12: Mounting with pre-installation box

For the flush-mounted installation, a pre-installation box is highly recommended to ensure the efficient and sleek installation. Without the pre-installation box, in case the hole is deeper or tilt, the installation will look ugly or hard to install. For flush-mounting in a cavity wall, the pre-installation box is not needed.

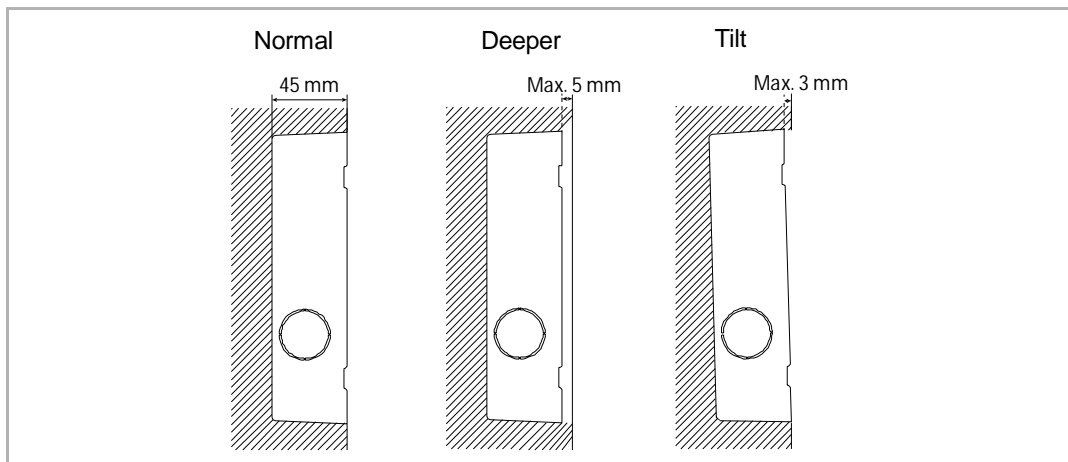


Fig. 13: Installation flexibility

7.2.3 Cavity wall installation

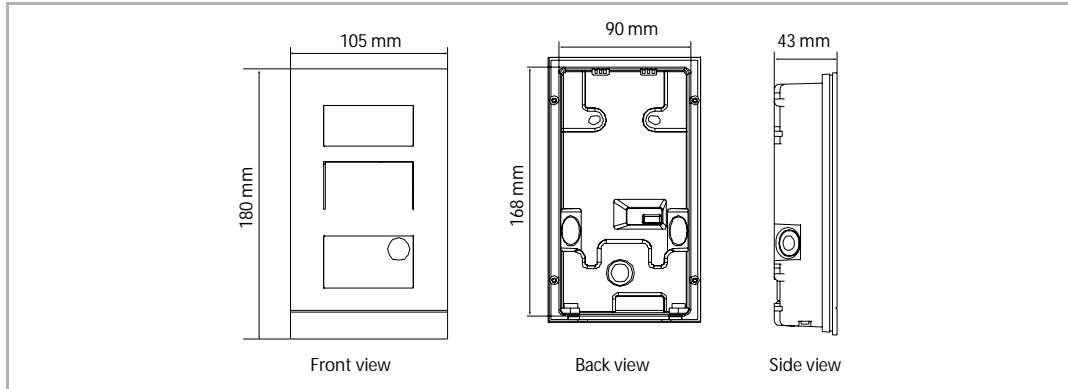


Fig. 14: Product dimension

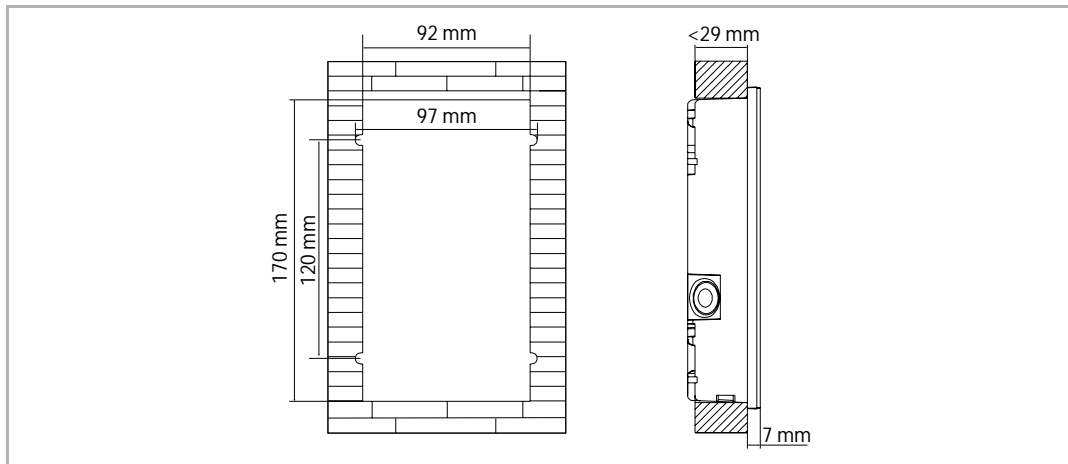


Fig. 15: Installation dimension



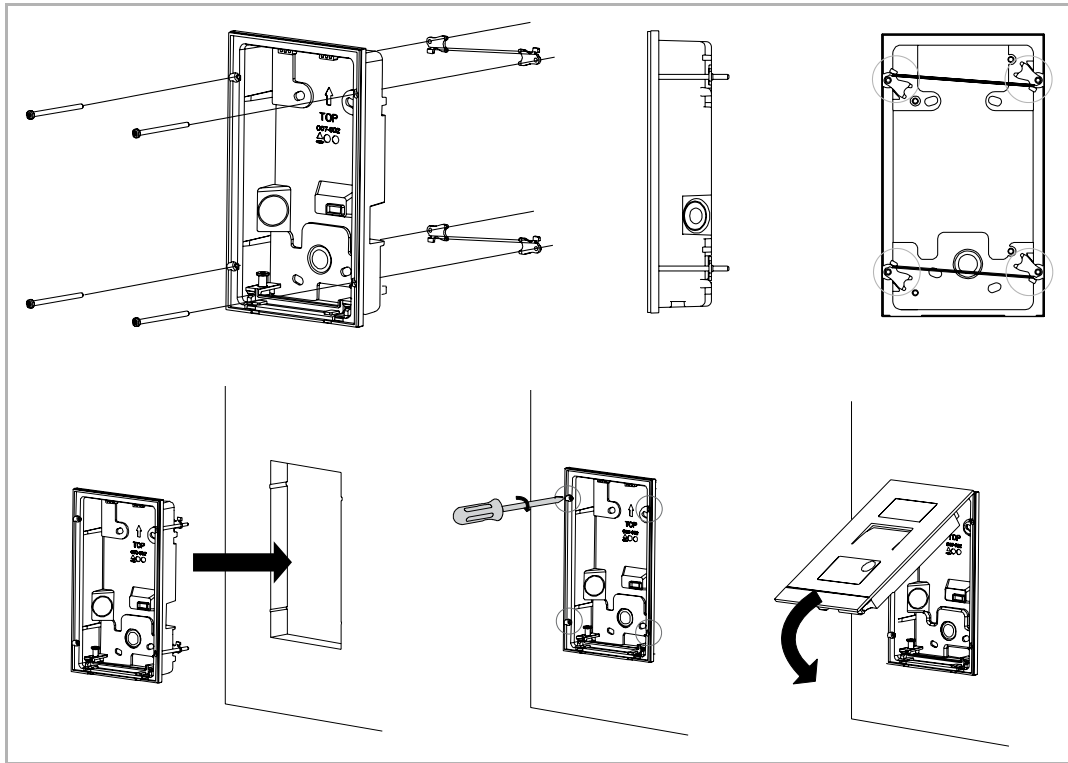


Fig. 16: Cavity wall installation

- Fix 4 claws onto the back of outdoor station with 4 screws. (The direction of the claws please refer to the picture above)
- Tie up 4 claws with 2 rubbers.
- Put the back cover into the cavity wall.
- Tighten 4 screws.
- Latch the upper part onto the bottom part.

### 7.2.4 Dismantling and replacing the nameplate

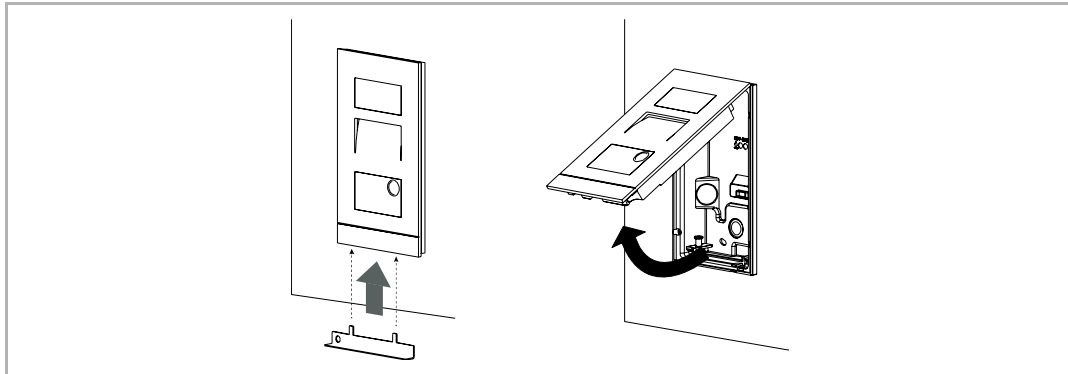


Fig. 17: Dismantling

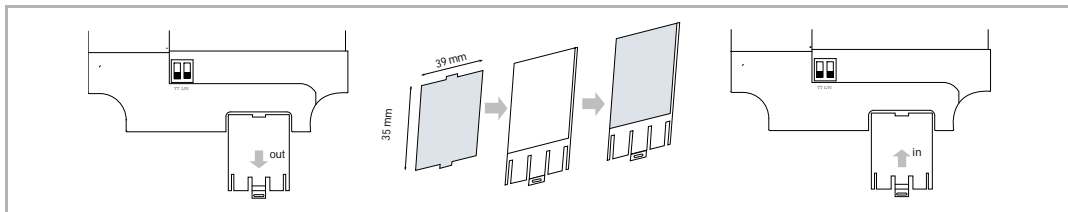


Fig. 18: Replace the nameplate

## 7.2.5 Installation situations



### **Note**

The following installation situations must be avoided without fail to ensure picture quality.

- Direct light
- Direct sunlight
- Extremely bright picture background
- Highly reflective walls on the opposite side of the door station
- Lamps or direct light sources

## 8 Commissioning

Please find details in the system manual.

## 9 Operation

### 9.1 Manage ID cards by mini outdoor station



**Note**

Please assign mini outdoor station to a specific apartment first before configuring ID card. And "Local card" is set ON.

#### Programming

Function	Command	Indicated color of door open
Create admin card	Swipe card 1x	Green
Enter settings	Swipe admin card 1x	Orange

Tab.5: Create admin card and enter settings

The system will take the first card swiped after powering up the system within 60s to be the admin card.

After entering settings, following functionalities can be implemented:

Function	Command	Indicated color of door open
Enroll user	Swipe admin card 1x	Orange flash 1x
	Swipe user card 1x	Green
Delete user	Swipe admin card 2x	Orange flash 2x
	Swipe user card 1x	Green
Enroll new admin	Swipe admin card 3x	Orange flash 3x
	Swipe new admin card 1x	Green
Delete admin	Swipe admin card 4x	Orange flash 4x
	Swipe other admin card 1x	Green
Delete all users	Swipe admin card 5x	Orange flash quickly
	Swipe admin card 1x	Green

Tab.6: Enroll and delete admin and user cards

During setting, please swipe the same admin card.

Function	Command	Indicated color of door open
Exit settings	Swipe admin card 1x or no cards swiped within 15 seconds	--

Tab.7: Exit setting

Function	Command	Indicated color of door open
Open a door	Swipe the enrolled keycard	Green

Tab.8: Open a door

Function	Command	Indicated color of door open
Reset to factory default	Press and hold the 1st button for 3 s to enter configuration mode.	3 LED: green cycle flash
	Press and hold the 1st button for 10 s to reset to factory default.	3 LED: OFF
	Reboot the device	Door open LED: red, green, orange cycle flash

Tab.9: Reset to factory default

#### Technical data of ID card

Work frequency	Standard	Support ID card protocol
125KHz	ISO18000-2	EM4100, EM4205, EM4305, EM4450, TK4100, T5567/T5577

Tab.10: Technical data of ID card

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