



EN

THERMATEC

THERMATEC FAN COIL UNIT

MODEL:

TH-200-C-W / TH-200-C-G
TH-400-C-W / TH-400-C-G
TH-600-C-W / TH-600-C-G
TH-800-C-W / TH-800-C-G



THERMATEC FAN COIL UNIT

FOR HEATING, COOLING AND VENTILATING ROOMS

INSTALLATION AND USER MANUAL

Our primary goal is customer satisfaction, which is why we introduce devices made from components of renowned global manufacturers and materials that ensure long-lasting and trouble-free operation. From the beginning of our company's operation, we have placed great emphasis on the design of our products.

We believe that devices such as heat pumps, hydraulic cabinet assemblies, or even domestic hot water storage tanks should be a part of good design. To meet these expectations, our devices present themselves exceptionally well against the backdrop of our customers' dream homes and offices.

We attach great importance to the utility, quality of workmanship, and durability of our products, ensuring that we deliver devices prepared for years of trouble-free and efficient operation.

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1. INTRODUCTION

1.1. General Information

Thank you for choosing our product. Please read this manual carefully before starting to use the unit and follow the operating instructions to prevent damage to the device or personal injury. The specifications may be subject to change as the product is improved, without prior notice. Please refer to the specification label on the unit for the most up-to-date specifications.

1.2. Safety and Installation Comfort

The precautions listed here are divided into the following three categories. All of them cover very important topics, so please be sure to follow them carefully.















WARNING



CAUTION



PROHIBITED

Children should be supervised to ensure they do not play with the unit. 	Installation, disassembly, and maintenance of the unit must be carried out by qualified personnel. Any modifications to the construction of the unit are strictly prohibited. Otherwise, this may result in personal injury or damage to the unit. 	A dedicated power socket must be used for this unit; otherwise, it may malfunction. 
The unit's power supply must be grounded. 	Keep the unit away from flammable or corrosive environments.. 	Read this manual before use. 
Ensure that no water or other liquids enter the unit's electrical box; otherwise, the unit may be damaged. 	Do not insert any foreign objects into the air outlet grille when the fan motor is running. Otherwise, this may cause personal injury or damage to the unit. 	Do not block the air inlet or outlet with paper or other foreign objects to ensure proper ventilation of the unit. 
If the power cord becomes loose or damaged, always have it repaired by a qualified professional. 	Before carrying out any maintenance work, make sure the unit's power supply is disconnected. 	Always use an appropriate protective circuit breaker for the unit and ensure that the power supply complies with the technical specifications. Otherwise, the unit may be damaged. 

1. If the power cord is damaged, it must be replaced by the manufacturer, its service agent, or similarly qualified persons to avoid hazards.
2. This appliance is not intended for use by persons (including children) with reduced physical, sensory, or mental capabilities, or lacking experience and knowledge, unless they have been given supervision or instructions concerning the use of the appliance by a person responsible for their safety.
3. Children should be supervised to ensure they do not play with the appliance.
4. The appliance must be installed in accordance with national wiring regulations.
5. Fuse type and rating: 522 T3.15A L250V.
6. This symbol indicates that this product must not be disposed of with other household waste within the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, it should be recycled responsibly and in compliance with regulations.

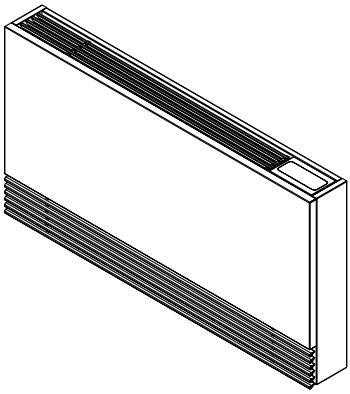


To return a used appliance, please use the return and collection system or contact the retailer from whom the product was purchased. The retailer can ensure that the product is recycled in an environmentally safe manner.



1.3. Features

- Unique design.
- Exceptionally quiet operation.
- Highly efficient DC fan motor.
- Balanced fan system for ultra-low noise levels.
- Heat exchanger with aluminum coil coated with a hydrophilic layer and internal grooved copper tube, effectively increasing the heat exchange surface of the unit.
- Housing made of galvanized and painted sheet metal, complete with insulation; grilles made of high-quality aluminum alloy.
- Condensate collection tray with natural drainage, complete with anti-condensation insulation.
- Polypropylene mesh filter.



1.4. Operating Temperature Range

OPERATING MODE	ROOM TEMPERATURE		WATER INLET TEMPERATURE	
	MIN.	MAX.	MIN.	MAX.
heating/cooling	5°C	32°C	4°C	80°C

2. INSTALLATION

2.1. Transport and Handling

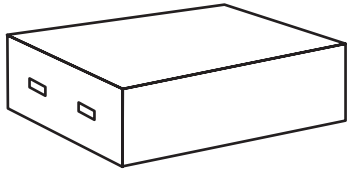


Do not open or tamper with the packaging before installation.
The units should be transported and lifted only by specialized personnel trained in these operations.

On the day of delivery, check whether the unit's carton has been damaged during transport and ensure it is complete with all parts.

To unpack the unit, follow the instructions below:

1. Check for any visible damage.
2. Open the packaging.
3. Verify that all accessories are packed inside the unit.
4. Dispose of the packaging material in accordance with applicable regulations, at an appropriate waste collection or recycling facility.



The unit should be moved with caution to avoid damage to the external structure as well as to the internal mechanical and electrical components.

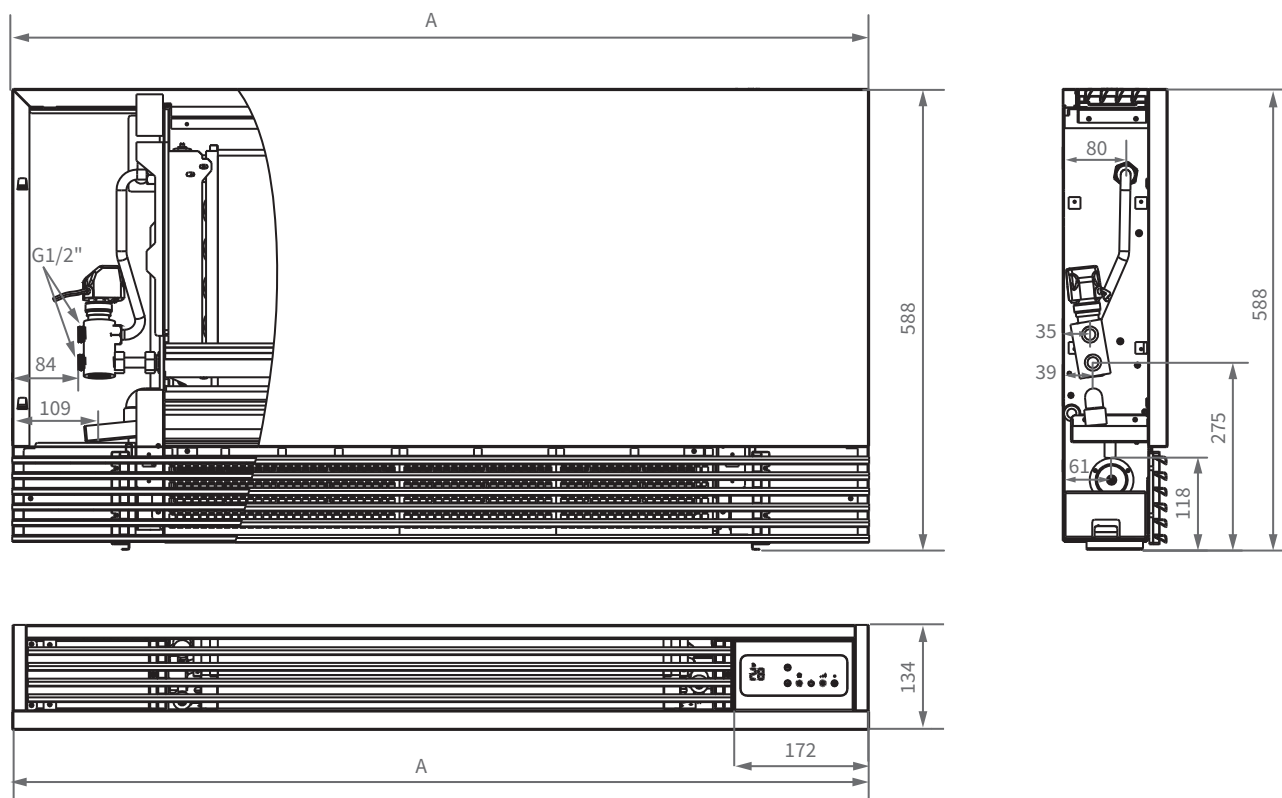
It must also be ensured that there are no obstacles or people along the route to avoid the risk of collision or crushing, and to prevent the lifting or transporting equipment from tipping over.

All of the above operations must be carried out in compliance with applicable health and safety regulations, both with regard to the equipment used and the procedures applied.

2.2. Dimensions

Model number	A [mm]	Connection size [cal]	Net weight [kg]
TH-200-C-W / TH-200-C-G	694	G1/2"	16
TH-400-C-W / TH-400-C-G	894	G1/2"	22
TH-600-C-W / TH-600-C-G	1094	G1/2"	28
TH-800-C-W / TH-800-C-G	1294	G1/2"	32

Fan coil unit with three-way valve

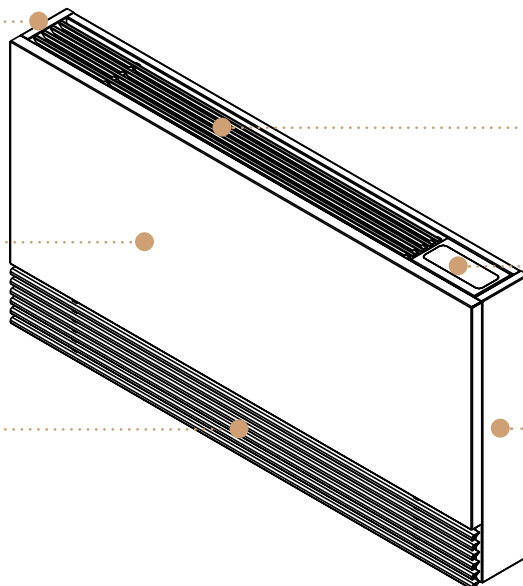


2.3. Unit Structure

LEFT PANEL

FRONT PANEL

AIR INLET GRILLE



AIR OUTLET GRILLE

TOUCH CONTROL PANEL WITH LED DISPLAY

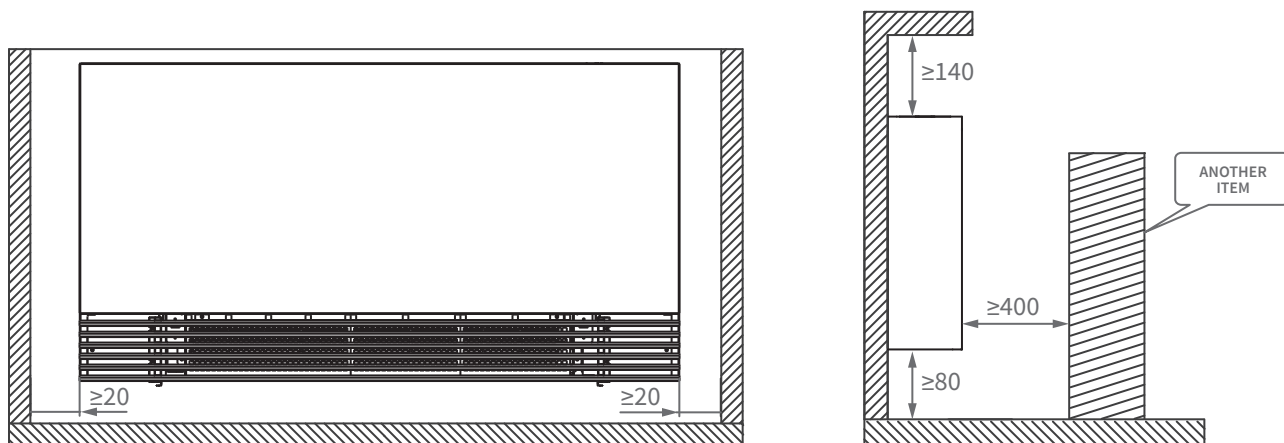
RIGHT PANEL

2.4. Unit Installation

To prevent malfunction or hazardous situations, the installation location must meet the following requirements:

- The minimum clearance must be 80 mm between the floor and the bottom of the unit, 20 mm from the side of the unit to the wall to allow easy removal of side panels, and 400 mm around the air inlets and outlets.
- The wall must be solid and capable of supporting the weight of the unit, and the air inlet of the unit must be at least 400 mm away from any other objects.

Unit position [mm]



2.4.1. Precautions

The unit must be installed by professional and qualified installers. Before starting any installation or maintenance work, disconnect the unit's power supply.

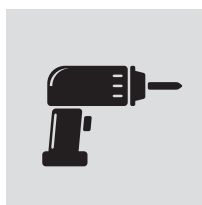
Tools required for installation



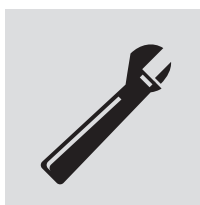
MEASURING TAPE



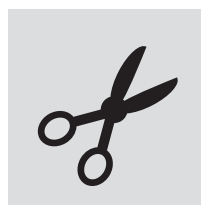
SCREWDRIVER



DRILL
with ϕ 6-8



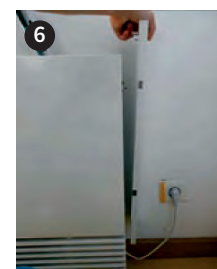
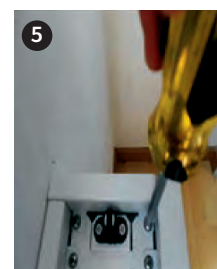
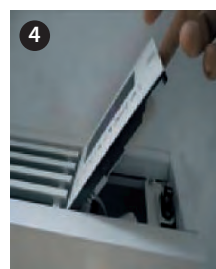
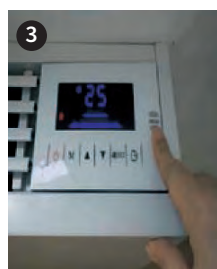
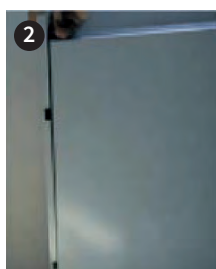
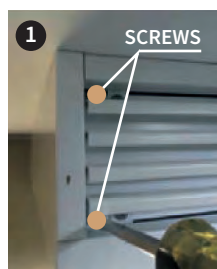
OPEN-END WRENCH



SCISSORS

2.4.2. Preparing the unit

Before installation, remove the left and right side panels. Use a screwdriver to unscrew the two screws located under the left side of the air outlet grille, then pull to remove the left side panel. Press the touch control panel located on the right side of the unit, unscrew the two screws beneath the control panel, and remove the right side panel.



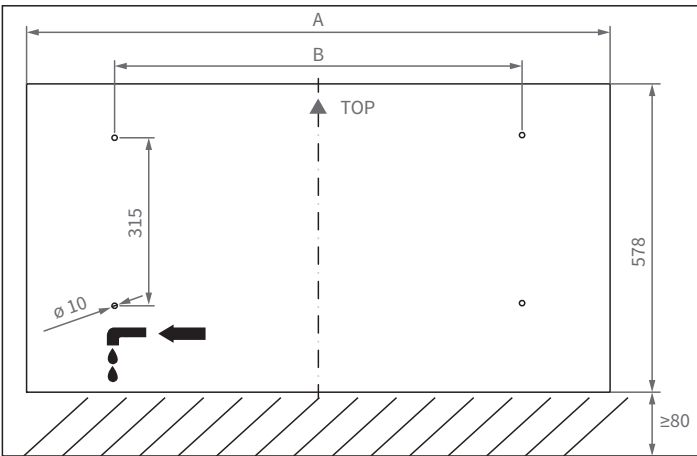
2.4.3. Remove the air outlet grille

Unscrew one screw on each side and take out the air outlet grille.



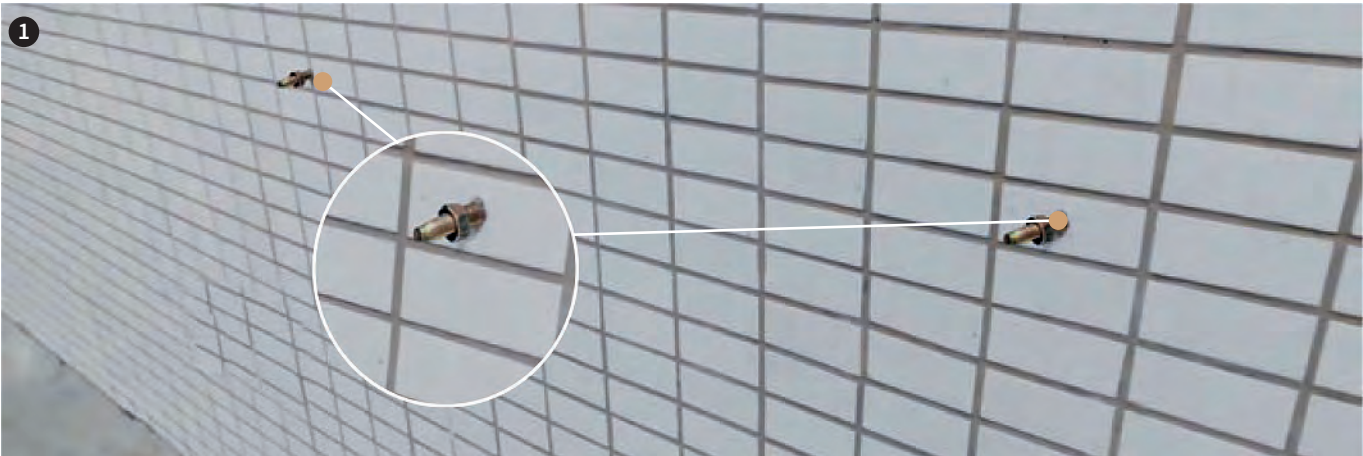
2.4.4. Wall mounting

Remove the positioning board from the accessories. Place the positioning board against the wall at the bottom.



Model number	A [mm]	B [mm]
TH-200-C-W / TH-200-C-G	594	364
TH-400-C-W / TH-400-C-G	794	564
TH-600-C-W / TH-600-C-G	1094	764
TH-800-C-W / TH-800-C-G	1294	964

1. After selecting the appropriate installation location, fix the unit to the wall using two expansion bolts on each side. For installation on a wooden wall, use appropriate screws.
2. Mark the positions on the wall where the mounting holes will be drilled. Drill the holes in the wall using an electric drill. Insert ø 8 expansion bolts into the holes and fit a gasket onto the expansion bolts to prevent the unit from touching the wall.
3. Secure the unit onto the expansion bolts (see Fig. 3) and align it correctly with a spirit level, ensuring it is slightly tilted towards the water outlet area for proper condensate drainage.



Secure the unit with metal expansion bolts.



Tighten the expansion screws on each side.

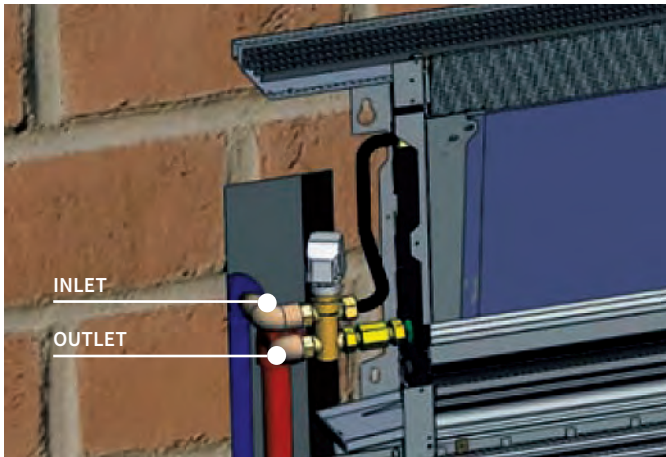


Secure the unit with screws.

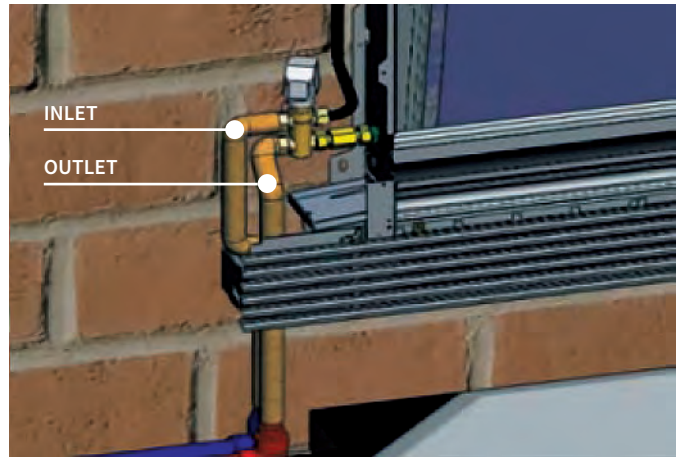
2.4.5. Connecting the water pipe

CAUTION! The water pipe must not protrude beyond the side panel area; otherwise, the side panel cannot be reinstalled.

After installing the unit, connect the water inlet and outlet pipes according to the labels on the unit. To ensure safety, refer to the safety requirements. After installation, check for leaks, clean the unit, etc., to meet the regulations before use.



Water pipes passing through walls.



Water pipes passing through the ground.

Installation steps::

1. Remove the sealing cover from the water inlet/outlet pipes.



Remove the sealing cover.



Remove the sealing cover.

2. Connect the unit to the water system; it is recommended to use a stainless steel corrugated pipe for the water inlet/outlet connection. Select a water pipe of appropriate length to connect the unit to the water system.

CAUTION! Place the gasket on the connection joint, then tighten the screws with a wrench to ensure there is no leakage at the connection.



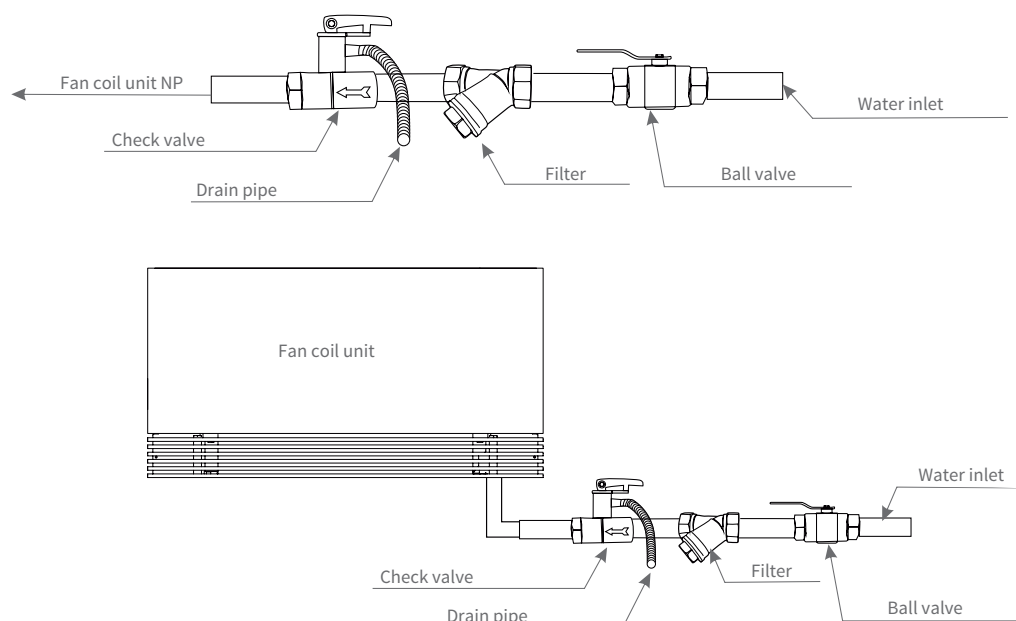
CAUTION! To connect the unit's water inlet/outlet to the water pipe, use one wrench to hold the water inlet/outlet fitting in place, and then use another wrench to tighten the water pipe connector to the inlet/outlet. Do not use only one wrench for this operation; otherwise, the unit's water pipe could be damaged due to twisting.



2.4.6. Filter



It is recommended to install an (80) mesh filter at the water inlet of the fan coil unit to maintain water quality and collect impurities contained in the water. Ensure that the mesh of the water filter is facing downward. The use of a check valve is recommended to facilitate cleaning or replacement of the filter.



2.4.7. Insulation

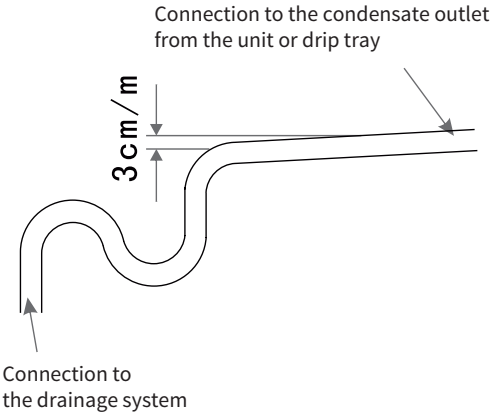
All water pipelines must be insulated with insulation of no less than 9 mm thickness. All movable parts of the valves (switches) must remain outside the insulation for future use. The insulation should be tight and secured with tape, leaving no gaps.



2.4.8. Condensate Drainage System Setup

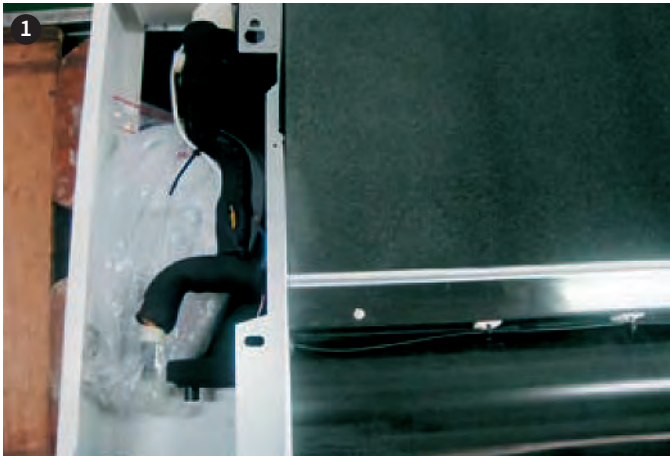
The condensate drainage system must be set at the proper slope to ensure correct water flow. Below are guidelines for the proper setup of the condensate drainage system.

NOTE! To check whether the water is flowing in the correct direction, it is recommended to pour a small amount of water very slowly into the drain pan. If the water does not drain smoothly, adjustments should be made.















2.5. Accessories

Remove the accessory bag from the location shown in the pictures below:



Accessories included in the bag:

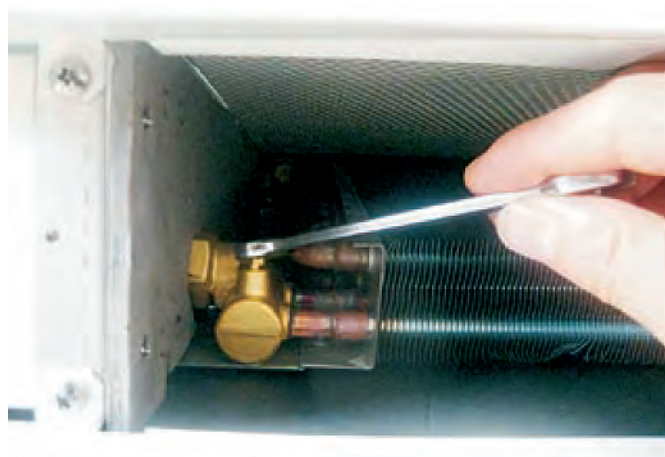
Name	Quantity	Appearance	Name	Quantity	Appearance
User Manual	1		Drain Pipe	1	
Ribbon	2		Plastic Hose Clamp	1	
Expansion Bolts	4		Gasket	2	
Machine Screws	2		Spring Washer	2	
Toothed Washer	1		Screws (ST4.1 X10)	4	
Sensor Mount	1		Positioning Plate	1	
Cross-Head Machine Screw + Flat Washer	2				

2.6. Test Run

2.6.1. Filling and Bleeding the Unit

After the installation is completed, perform the following steps to remove air from the unit:

1. Remove the air outlet grille.
2. Open all valves of the water system to allow water to flow into the unit.
3. Open the air vent valve and check the water in the transparent tube connected to the valve. If the transparent tube is filled with water without air bubbles, it means the air has been properly removed from the coil. Then close the air vent valve.



2.6.2. Before Start-Up

Before starting the unit, verify the correctness of the installation to ensure that the device will operate under the best possible conditions.

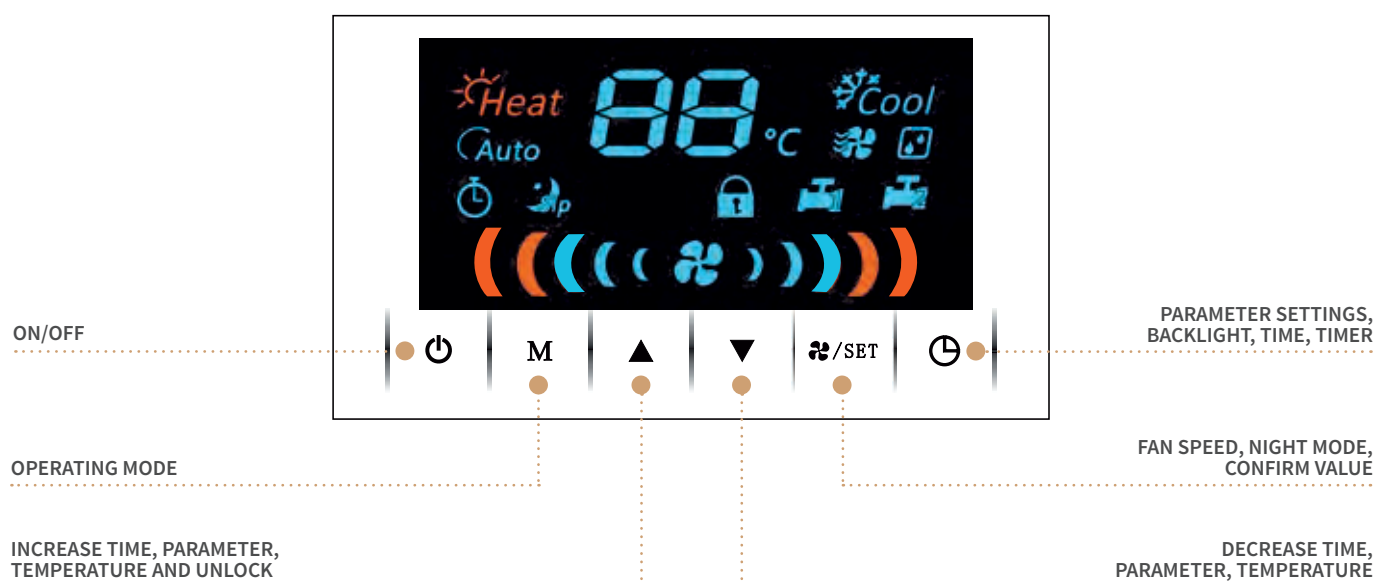
1. Make sure the fan rotates freely.
2. Check all water pipelines for flow direction.
3. Ensure that all piping connections in the system comply with the installation requirements.
4. Check the supply voltage of the unit and make sure it is within the permitted range.
5. Ensure the unit is properly grounded.
6. Check for the presence of protective and cut-off devices.
7. Verify the correctness of all electrical connections.
8. Check that all piping connections are leak-free and that the air is properly vented.












2.6.3. Unit Start-Up

After confirming that all electrical connections comply with regulations, follow the user manual instructions to start the unit. Once the unit is running, if any abnormal noise occurs, immediately cut off the power supply to ensure the safety of the unit.

3. CONTROL PANEL



3.1. Functionality of Buttons and Displayed Symbols



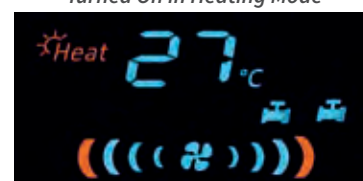
Symbol	Name	Symbol	Name
	Heating Mode		Timer
	Cooling Mode		Night Mode
	Automatic Mode		Screen Lock
	Dehumidification Mode		Fan Speed
	Fan Mode		Air Inlet Temperature and Temperature Settings
	Water Valve 1 and 2		

3.2. Operating the Unit

3.2.1. On/Off



When the unit is in standby mode, press the  button for 3 seconds to turn it on. When the unit is operating, press the  button again for 3 seconds to switch it back to standby mode. The unit will automatically restore its last operating settings.

Turned On in Heating Mode

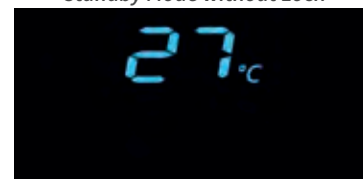


3.2.2. Standby Mode




The following two conditions are referred to as standby mode. In this mode, the unit is not operating, it only displays the room temperature:

1. Power is on → but the  button is not pressed to start the unit.
2. During operation → press the  button to turn the unit off.

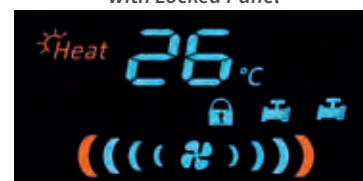
Standby Mode without Lock



3.2.3. Screen Lock






The touch panel will automatically lock if no operation is performed within 30 seconds after the unit is turned on. When the touch panel is locked, the  icon will appear on the screen, and the unit will not respond to any actions on the touch panel. Press and hold the  button for 3 seconds until the  icon disappears from the screen. This will unlock the touch panel.

Turned On in Heating Mode with Locked Panel

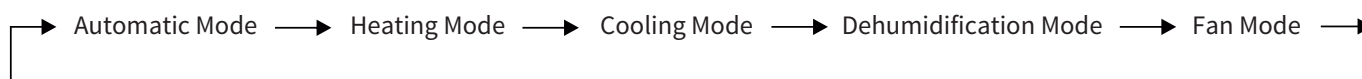


3.2.4. Mode Selection


When the unit is turned on, press  in the main menu to select the operating mode.

The operating mode cycles in the following sequence: Heating Mode , Cooling Mode , Drying Mode , Fan Mode , Automatic Mode .

Mode Selection



3.2.5. Night Mode

Press the  button for 3 seconds to enter or exit Sleep Mode. Once Sleep Mode is selected, the  icon will appear on the screen.





When Sleep Mode is active, the unit will decrease the set temperature by 2°C in Heating Mode, or increase it by 2°C in Cooling Mode, to ensure a comfortable sleep. This function will automatically turn off after 8 hours. This setting is valid only once.

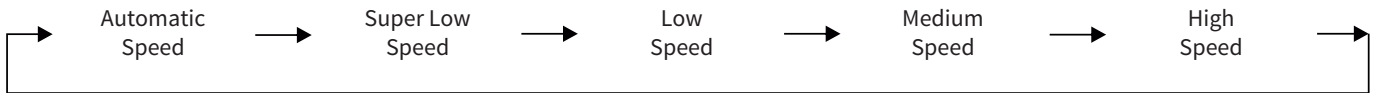
3.2.6. Temperature Setting

When the unit is turned on, press ▲ or ▼ to adjust the temperature settings.



3.2.7. Fan Speed Selection

Select the fan speed by pressing the **SET** button. Each press will cycle the fan speed between Super Low , Low , Medium , and High , or you can choose the Automatic speed setting.



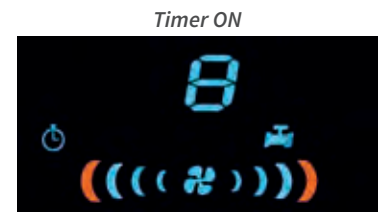
3.2.8. Timer Setting

Turning On the Timer





When the unit is in standby mode, press for 3 seconds and set the timer using ▲ and ▼.

The system will automatically save the settings after 3 seconds with highlighted. The value set here is expressed in hours. Once set, the unit will automatically turn on at the specified time.

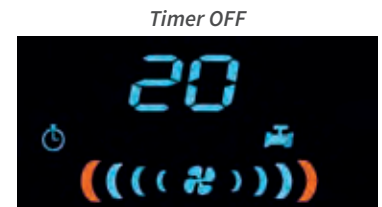
This setting is valid only once until the next restart.



Turning Off the Timer

When the unit is on, press  for 3 seconds and set the timer using  and . The system will automatically save the settings after 3 seconds with  highlighted. The value set here is expressed in hours. Once the set time is reached, the unit will automatically turn off.


This setting is valid only once until the next restart.



Resetting the Timer

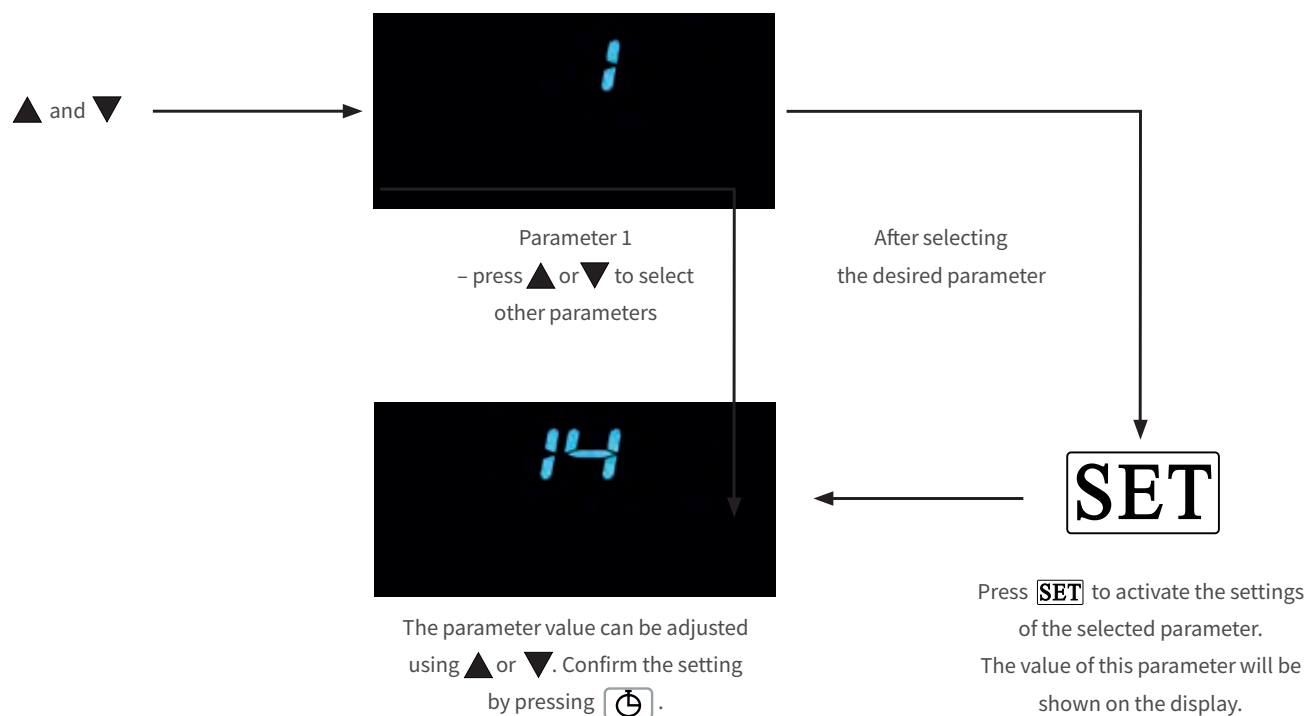
Press the button. Setting the timer to zero will cancel the timer.

3.2.9. Self-Diagnosis

Press  twice within 3 seconds after powering on the unit to enter self-diagnosis mode. The unit will sequentially power water valve 1 (EV1) and water valve 2 (EV2). The self-diagnosis function will automatically turn off after 10 seconds. The unit will return to normal operation mode only after being powered on again.

3.2.10. Advanced Settings

Press ▲ and ▼ simultaneously while the unit is in standby mode to enter the parameter settings. After entering, the number **88** will flash on the screen. Press ▲ and ▼ to select, then press **SET** to confirm the serial number of the parameter you want to change, and adjust the parameter value using the up/down buttons. The system will automatically return to default settings if no action is taken within 10 seconds after adjusting a parameter. To save the settings and exit the menu, press **ESC**.



3.2.11. Parameters

Parameter Name	Description	Range	Default Value
1	Maximum fan speed in cooling mode	12-15	14
2	Medium fan speed in cooling mode	10-13	12
3	Low fan speed in cooling mode	8-12	10
4	Maximum fan speed in heating mode	10-15	12
5	Medium fan speed in heating mode	8-12	10
6	Low fan speed in heating mode	5-10	7
7	Super low fan speed in heating mode	4-8	5
8	Valve function	0 (Off), 1 (On)	1
9	485 communication	0 (Off), 1 (On)	0
10	Display on/off	0 (Off after 5 minutes of no operation), 1 (Always on)	1

Ps: The actual fan speed = set fan speed * 100.

4. MAINTENANCE

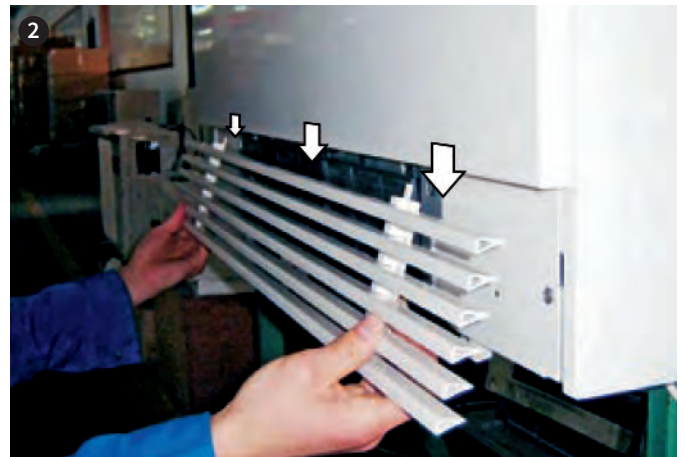
4.1. Safety Precautions

- It is forbidden to make changes to the internal structure and wiring of the unit. Otherwise, it may cause personal injury or damage to the unit.
- If the unit does not operate properly, disconnect the power immediately. Maintenance must be performed by qualified personnel.
- The “failure code” in this manual is helpful in locating and troubleshooting unit failures.
- On cold days, when the unit is not operated for a long period of time, water should be drained from the system.
- Check the surroundings, stability, and airflow of the unit from time to time.
- The filter must be cleaned periodically to ensure proper water flow in the water system.

4.2. Cleaning

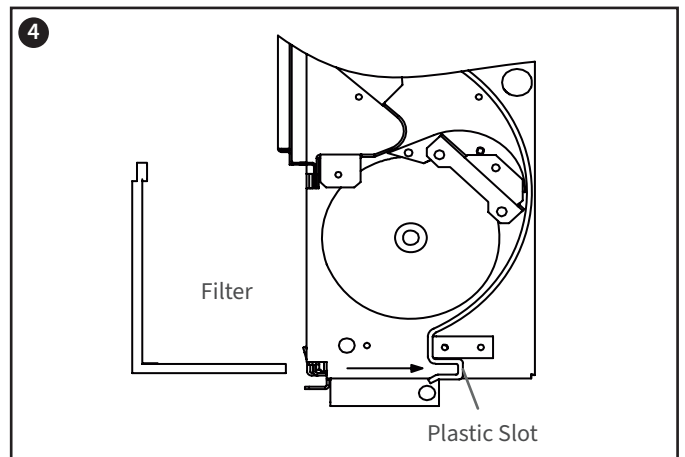
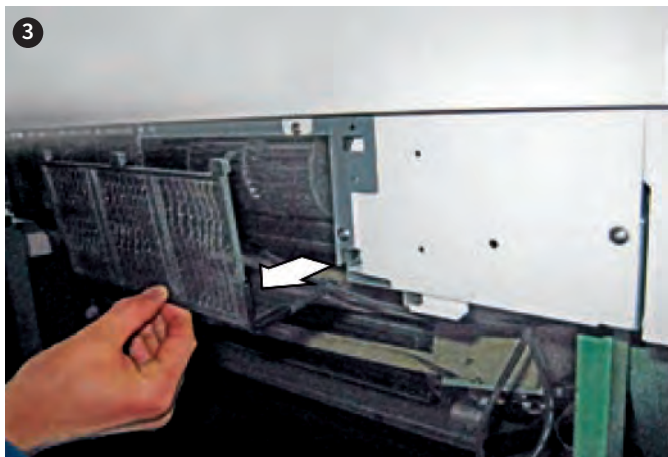
To ensure proper airflow, the air filter should be cleaned once a month.

If the unit is operated in a very dusty environment, the filter should be cleaned more frequently than once a month.



Press and pull to remove the air outlet grille.

To remove the filters, pull them towards you. Clean the filters by removing any dirt from their surface with a vacuum cleaner; then wash them with mild detergent and warm water. Rinse thoroughly and allow them to dry completely before reinstalling. Reinstall the filters by inserting the end of the shorter side into the plastic guide located under the fan (see Fig. 4).



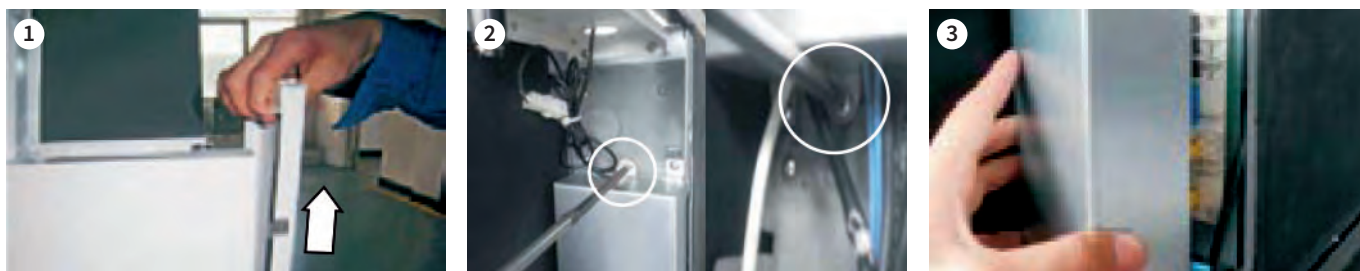
It is recommended to periodically inspect and clean the water system inside the unit to ensure its efficiency.

4.3. Draining

If the unit is not operated for an extended period of time, the water in the system must be drained. From time to time, check whether there is air in the water system. If so, it should be removed according to the instructions provided in Chapter 2.

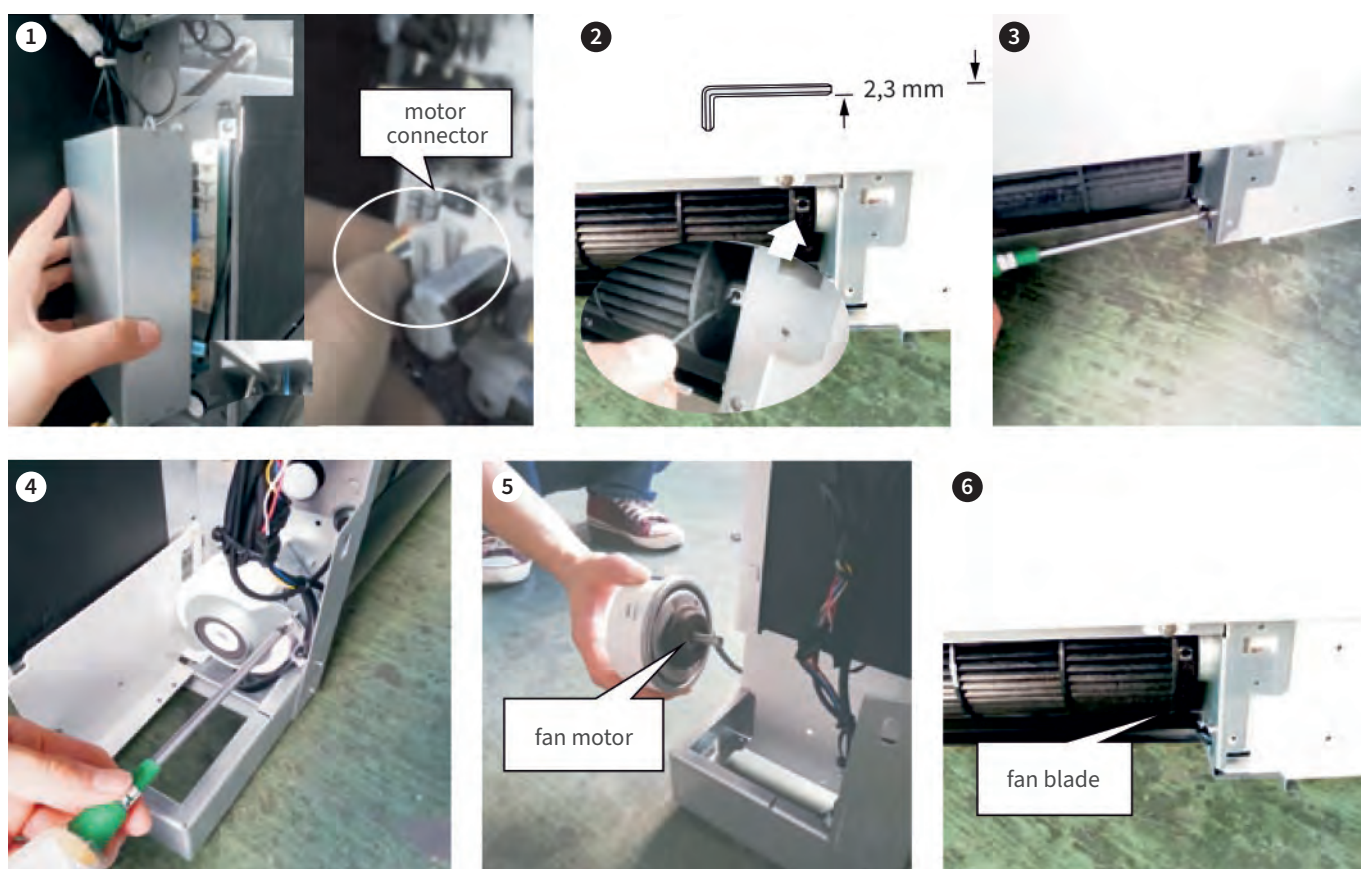
4.4. Servicing

If electrical component servicing is required, the right side panel must be removed to gain access to the electrical box.



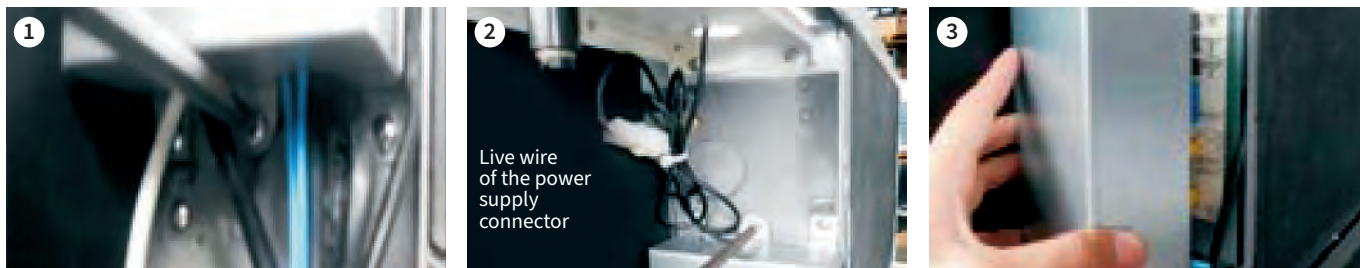
If the fan system does not operate properly, follow these steps:

1. Remove the right side panel, open the electrical box, and disconnect the motor connector.
2. Use a hex key to release the fan blade from the fan motor.
3. Remove the screw securing the fan motor.
4. Remove the fan blade or the fan motor.

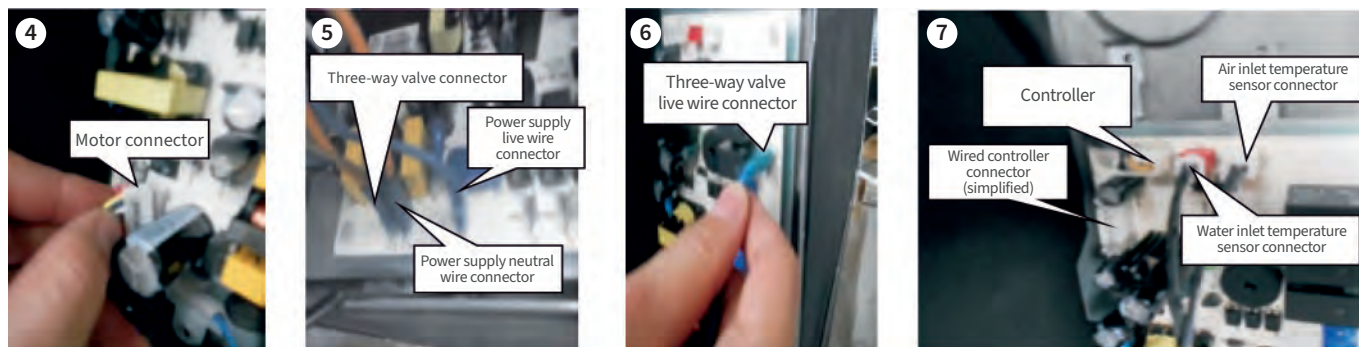


Removing the PCB Board

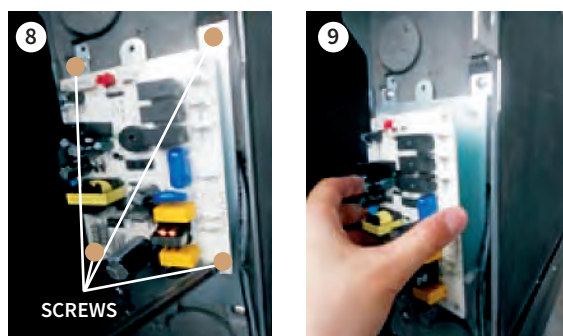
1. Disconnect the power supply of the fan coil unit and remove the right side panel of the device.
2. Unscrew the screws on the top and bottom of the electrical box using a screwdriver, then open the cover of the electrical box.



3. Disconnect the motor connector, power connector, electric three-way valve connector, wired controller connector, air intake temperature sensor connector and water intake temperature sensor connector on the PCB.

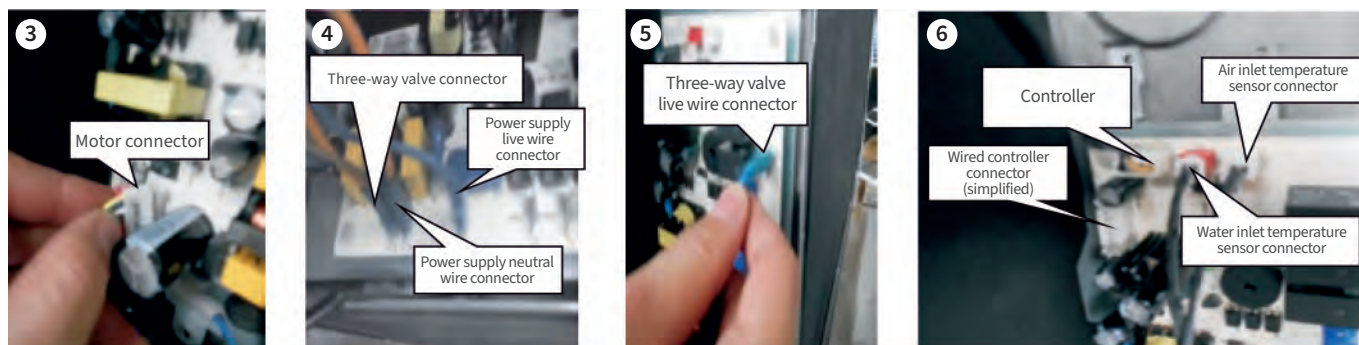
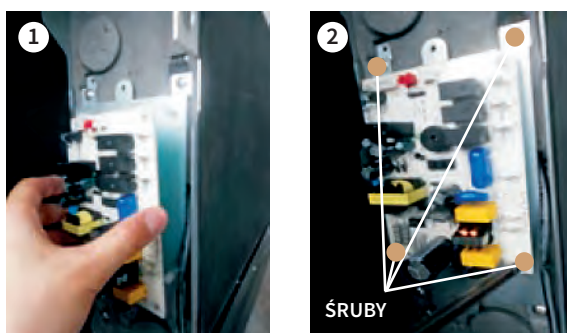


4. Unscrew the four plastic screws on the PCB using a screwdriver and remove the PCB.



Install the new PCB

1. Install the new PCB and secure it with four plastic screws.
2. Connect the motor connector, power supply connector, three-way valve connector, wired controller connector, air inlet temperature sensor connector, and water inlet temperature sensor connector to the PCB.
3. Install the cover of the electrical box.



5. WI-FI CONNECTION

5.1. Application installation, registration, login

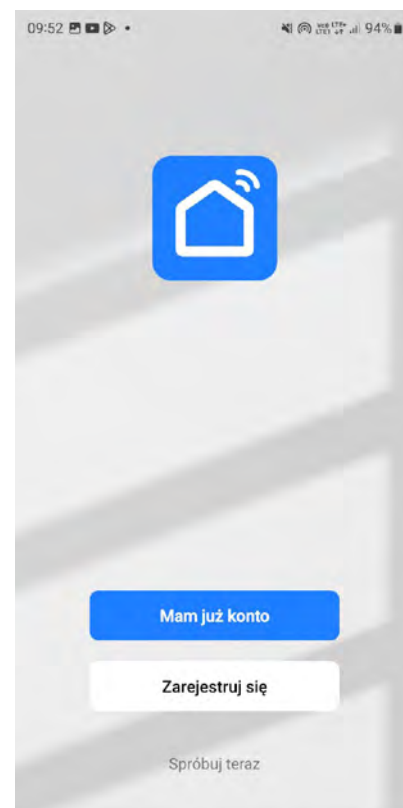
1. Download and install the Smart Life - Smart Living software.



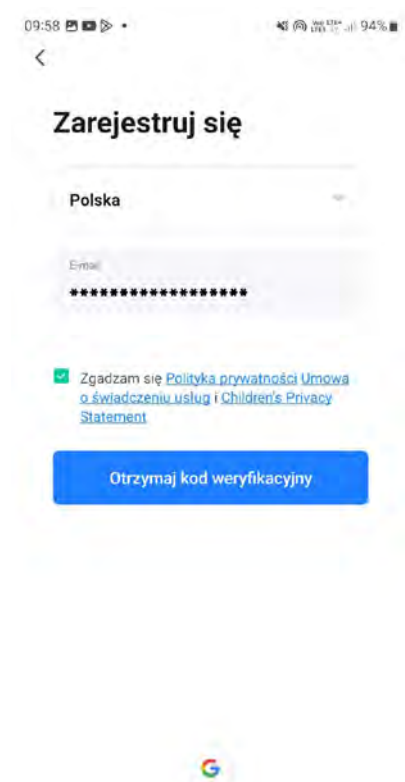
2. Accept the privacy policy.



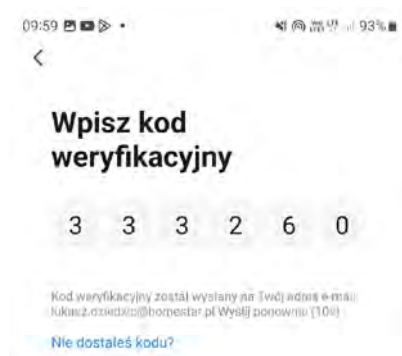
3. Register or log in if you already have an active account.



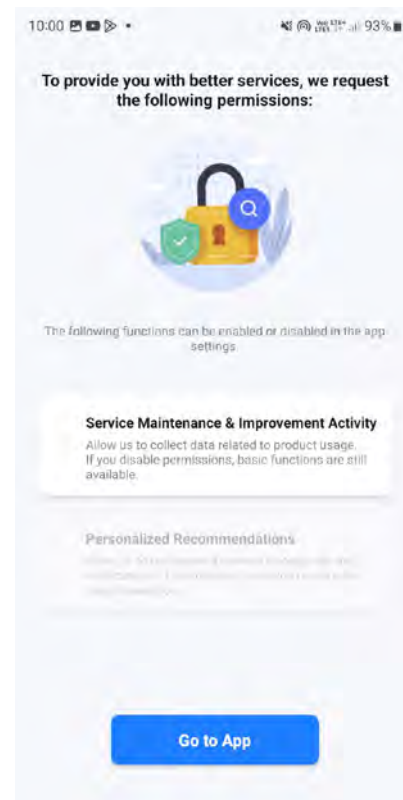
4. During registration, provide the necessary information and give the required consents.



5. Enter the verification code sent to you.

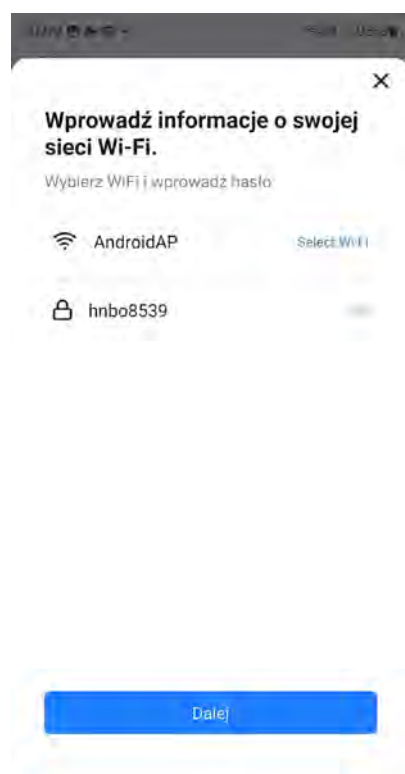


6. After completing the registration, open the application.

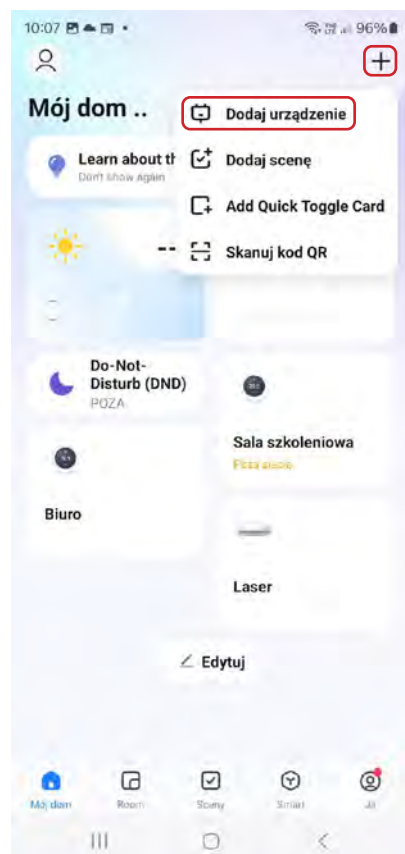




5.2. Connect the fan coil unit to the application via Wi-Fi


1. Connect your mobile phone to the available home Wi-Fi network.

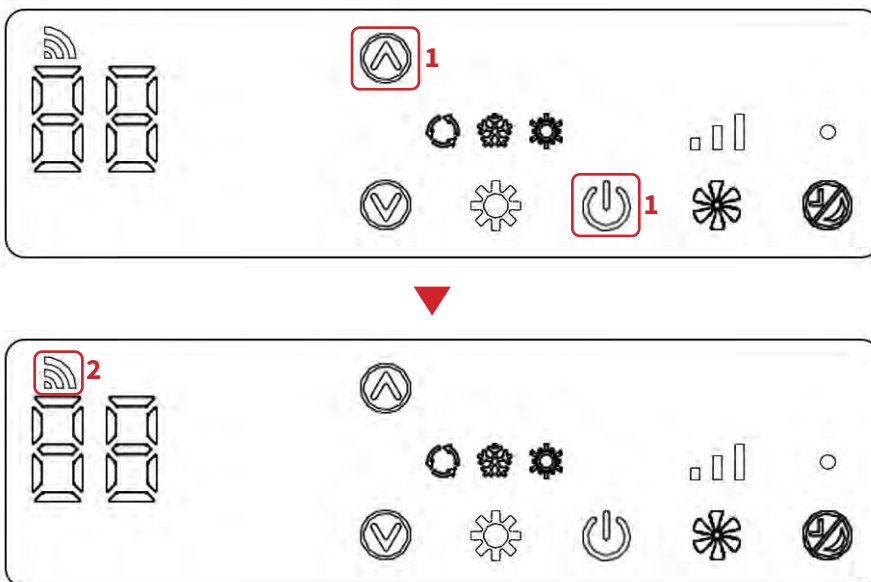


2. Open the “Smart Life” app and log in. Click “+” and then “Add Device.”

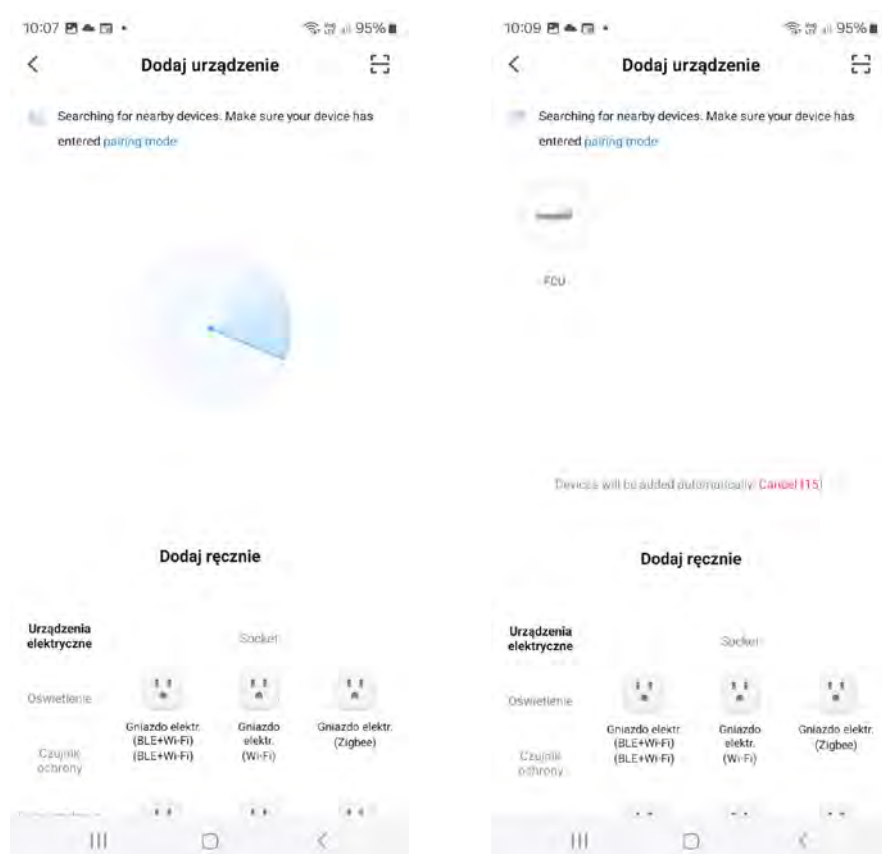


3. Connect the fan coil unit to the home Wi-Fi network. On the fan coil’s control panel, press the “” + “” buttons simultaneously for 3 seconds to enter “Default Wi-Fi Mode.”

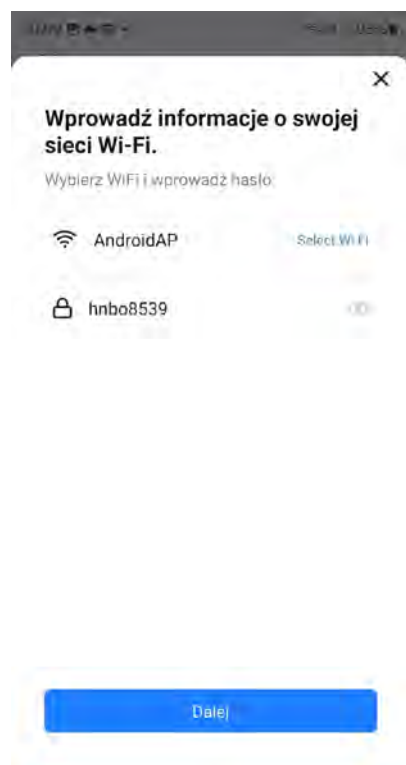
The “” icon will start flashing, and the fan coil will be ready for pairing.



4. After connecting the fan coil to Wi-Fi, go back to the app. The system will begin searching for the device. Once the fan coil appears in the app, tap its icon, and you will be prompted to select the Wi-Fi network.




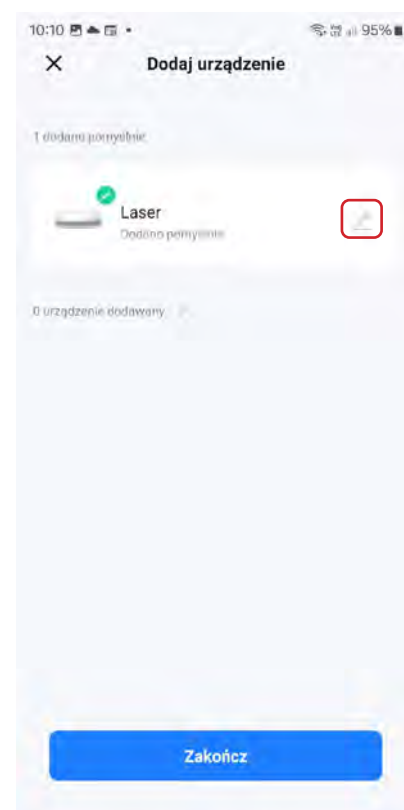
5. Select the same network to which the fan coil unit is connected, enter the password, and press “Next.” The options “Scan Device,” “Register in Cloud,” and “Initialize Device” will be performed automatically.



6. The system will begin pairing the app with the fan coil unit. A message confirming successful device addition will appear, then press “Finish”.




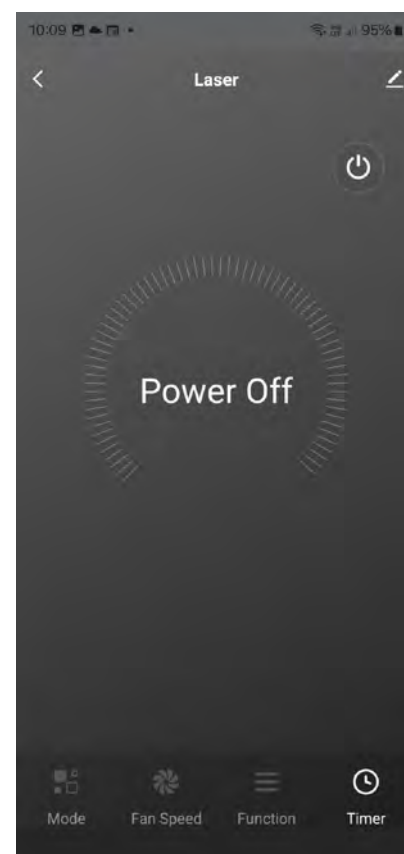
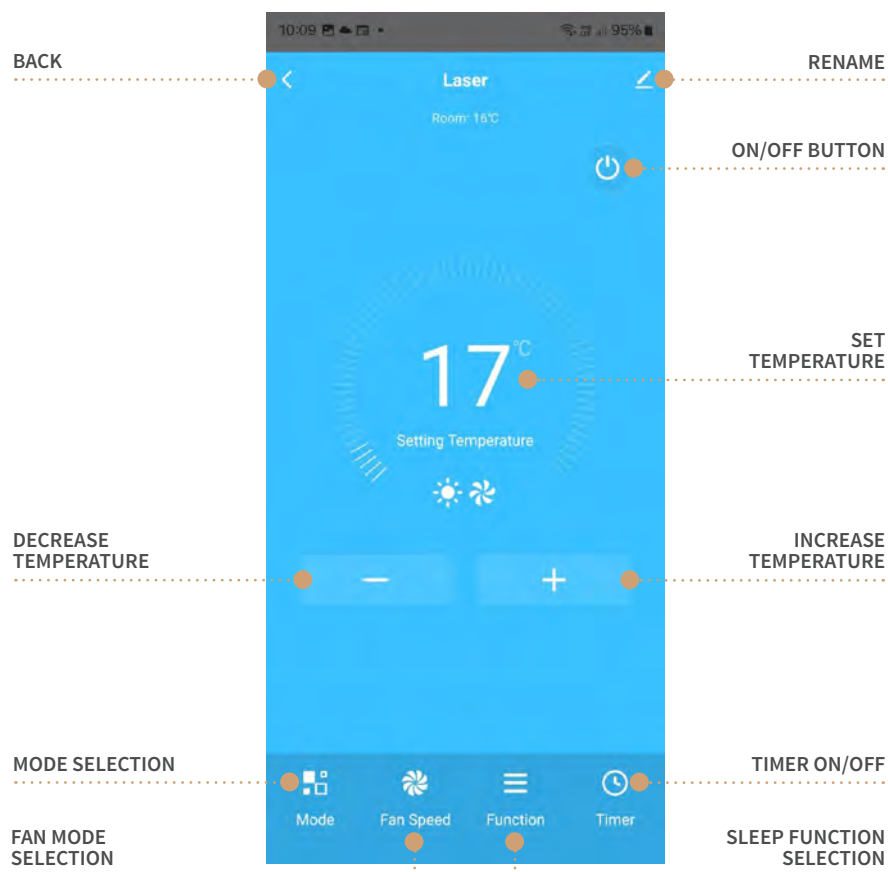
7. After adding the device, you can change its name. Tap “” to edit the name.



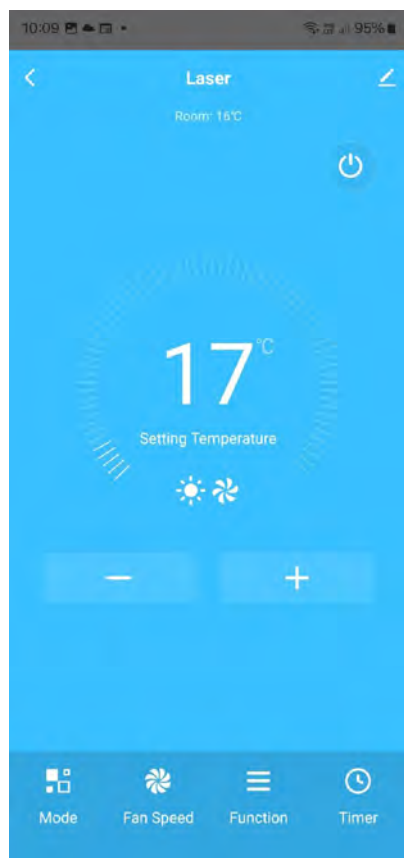
5.3. App Operation

After configuring the fan coil unit, click on the device name in the main interface to select and start it.

Press “” to turn the device on or off.



Press “+” or “-” to increase or decrease the set temperature.



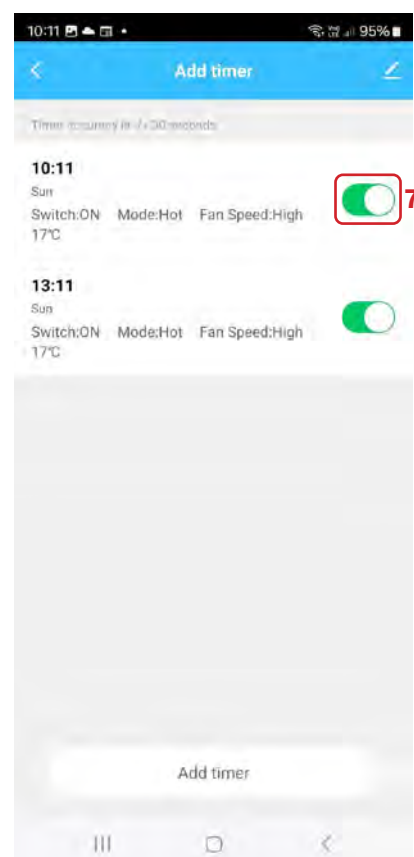
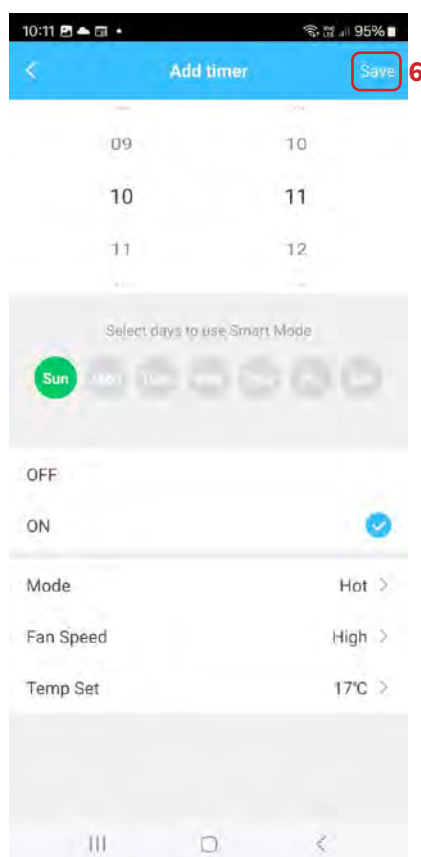
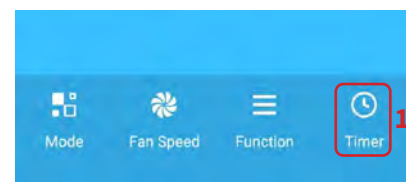
Press “Mode” to select a mode from “Heating,” “Cooling,” or “Auto.”



Similarly, you can select the fan operating mode “Fan Speed” from “High,” “Medium,” “Low,” or “Auto.”
By entering the “Function” mode, you can select the Night Mode “Sleep.”

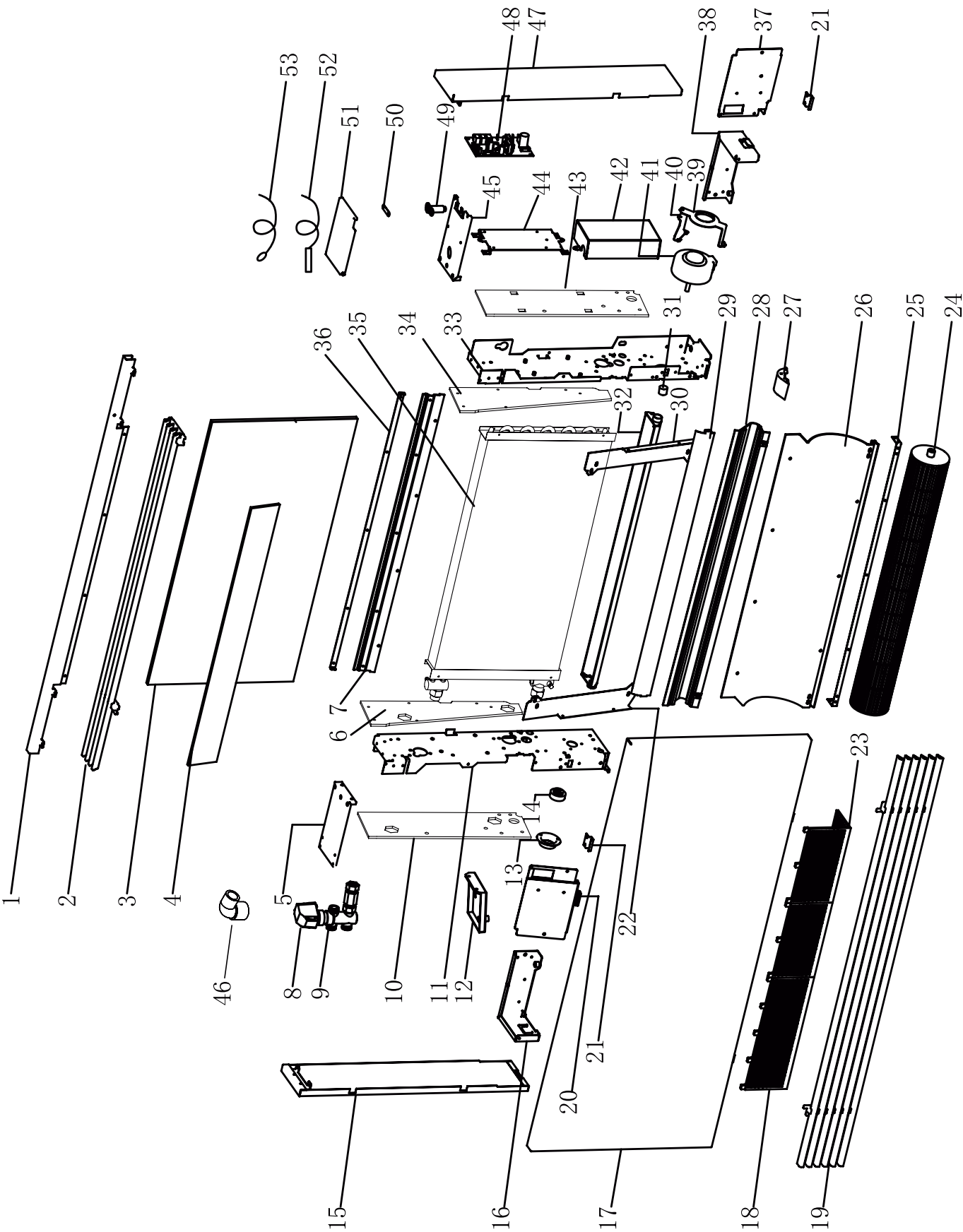
Timer ON/OFF

1. Select the “Timer” function.
- 2/3. Set the start time of the device and click “ON.”
4. Select the days on which you want the mode to be active.
5. Choose your parameters from the three operating modes of the fan coil unit.
6. Save the selected settings.
7. A slider marked in green indicates that the mode is enabled. The timer has been successfully set.
8. Similarly to the “ON” mode, set the device stop time and click “OFF.”
9. Adjust the remaining settings according to steps 4 through 7.



6. TECHNICAL DRAWING

6.1. Exploded View Drawing



No.	Name	No.	Name
1	Connecting Strip	28	Air Deflector 1
2	Air Outlet Grille	29	Air Deflector 2
3	Left Side Panel	30	Left Heat Exchanger Mount
4	Left Heat Exchanger Mount	31	Rubber Plug
5	Decorative Panel	32	Drain Bushing
6	Insulation	33	Right Inner Plate
7	Air Deflector 4	34	Insulation
8	Valve Controller	35	Heat Exchanger
9	Three-Way Valve	36	Air Guide Plate / Support Plate 4
10	Insulation	37	Right Support Plate 2
11	Left Inner Plate	38	Right Support Plate 1
12	Auxiliary Drain Tank	39	Motor Bracket 1
13	Bearing Bracket 1	40	Motor Bracket 2
14	Bearing Bracket 2	41	DC Fan Motor
15	Left Side Panel	42	Electrical Box Cover
16	Left Support Plate 1	43	Insulation
17	Front Panel	44	Electrical Installation Plate
18	Air Filter 1	45	Control Panel Bracket
19	Kratka wlotu powietrza	46	Rubber Elbow
20	Left Support Plate 2	47	Right Side Panel
21	Mocowanie kratki wlotu powietrza	48	Main PCB Board
22	Mocowanie wymiennika ciepła lewa strona	49	Magnet
23	Air Filter 2	50	Magnetic Bracket
24	Blower Wheel	51	Control Panel
25	Air Deflector Bracket	52	Air Inlet/Outlet Sensor
26	Air Deflector 3	53	Room Temperature Sensor
27	Air Deflector 5		

7. TECHNICAL DATA

Parameter	Unit	TH-200-C-W TH-200-C-G	TH-400-C-W TH-400-C-G	TH-600-C-W TH-600-C-G	TH-800-C-W TH-800-C-G
Total Cooling Capacity (a) (7°C Supply)	kW	0.75	1.5	2.2	3.1
Cooling Capacity	kW	0.61	1.25	1.9	2.6
Water Flow	l/h	142	302	453	573
Pressure Drop	kPa	7	9	22	28
Heating Capacity (b) (50°C Supply)	kW	0.99	2	2.8	4.2
Water Flow	l/h	142	302	453	573
Pressure Drop	kPa	6.5	7	18.5	24.5
Heating Capacity (c) (70°C Supply)	kW	1.55	3.1	4.6	6.3
Water Flow	l/h	162	343	471	600
Pressure Drop	kPa	7	7.5	19	25
Heat Exchanger Capacity	l	0.48	0.85	1.15	1.48
Maximum Pressure	bar	10	10	10	10
Water Connection	cal	G 1/2	G 1/2	G 1/2	G 1/2
Maximum Airflow (d)	m³/h	160	320	460	580
Minimum Airflow (d)	m³/h	50	150	200	300
Power Supply	V/ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50
Maximum Current	A	0.115	0.16	0.21	0.24
Maximum Power Input	W	14	23	27	33
Maximum Sound Pressure (e)	dB(A)	39	40	42	42.1
Minimum Sound Pressure (e)	dB(A)	19.8	18.3	19.1	21
Length	mm	694	894	1094	1294
Height	mm	580	580	580	580
Depth	mm	129	129	129	129
Net Weight	kg	16	22	28	34
Gross Weight	kg	18	24	30	36

Note:

- a) Cooling: water inlet/outlet temperature 7/12°C; room temperature DB/WB 27/19°C.
- b) Heating: water inlet temperature 50°C, water flow rate as in cooling mode, room temperature 20°C.
- c) Heating: water inlet/outlet temperature 70/60°C; room temperature 20°C.
- d) Airflow measured with a clean filter.
- e) Sound pressure level tested according to EN12102:2008 and ISO3745:2012.

Specifications are subject to change without prior notice. Actual technical data of the unit can be found on the labels attached to the unit.

8. UNIT PERFORMANCE

8.1. Ultra-low fan speed

Supply temperature (°C)	TH-200-C-W TH-200-C-G	TH-400-C-W TH-400-C-G	TH-600-C-W TH-600-C-G	TH-800-C-W TH-800-C-G
	Heating capacity [kW]			
35	0,36	0,73	1,06	1,53
38	0,40	0,81	1,23	1,76
40	0,49	0,98	1,47	2,04
43	0,55	1,11	1,56	2,20
45	0,57	1,14	1,68	2,63
48	0,66	1,32	1,86	2,80
50	0,69	1,38	2,03	2,82
53	0,72	1,45	2,33	3,23
55	0,75	1,50	2,46	3,48
58	0,84	1,68	2,64	3,81
60	0,85	1,71	2,90	3,91
63	0,93	1,86	2,98	3,96
65	0,96	1,93	3,02	4,08
68	1,01	2,03	3,09	4,38
70	1,08	2,17	3,36	4,55
Supply temperature (°C)	Cooling capacity [kW]			
7	not applicable	not applicable	not applicable	not applicable
12	not applicable	not applicable	not applicable	not applicable

8.2. Low fan speed

Supply temperature (°C)	TH-200-C-W TH-200-C-G	TH-400-C-W TH-400-C-G	TH-600-C-W TH-600-C-G	TH-800-C-W TH-800-C-G
	Heating capacity [kW]			
35	0,37	0,75	1,16	1,63
38	0,47	0,94	1,27	2,04
40	0,55	1,10	1,51	2,29
43	0,60	1,20	1,66	2,40
45	0,66	1,33	1,91	2,88
48	0,72	1,44	2,16	3,04
50	0,76	1,53	2,24	3,13
53	0,81	1,62	2,60	3,61
55	0,86	1,73	2,81	3,84
58	0,96	1,93	2,94	4,02
60	1,01	2,02	3,27	4,32
63	1,04	2,09	3,40	4,39
65	1,08	2,17	3,49	4,58
68	1,19	2,38	3,56	4,83
70	1,22	2,45	3,68	4,98
Supply temperature (°C)	Cooling capacity [kW]			
7	0,57	1,14	1,83	2,53
12	0,37	0,75	1,05	1,59

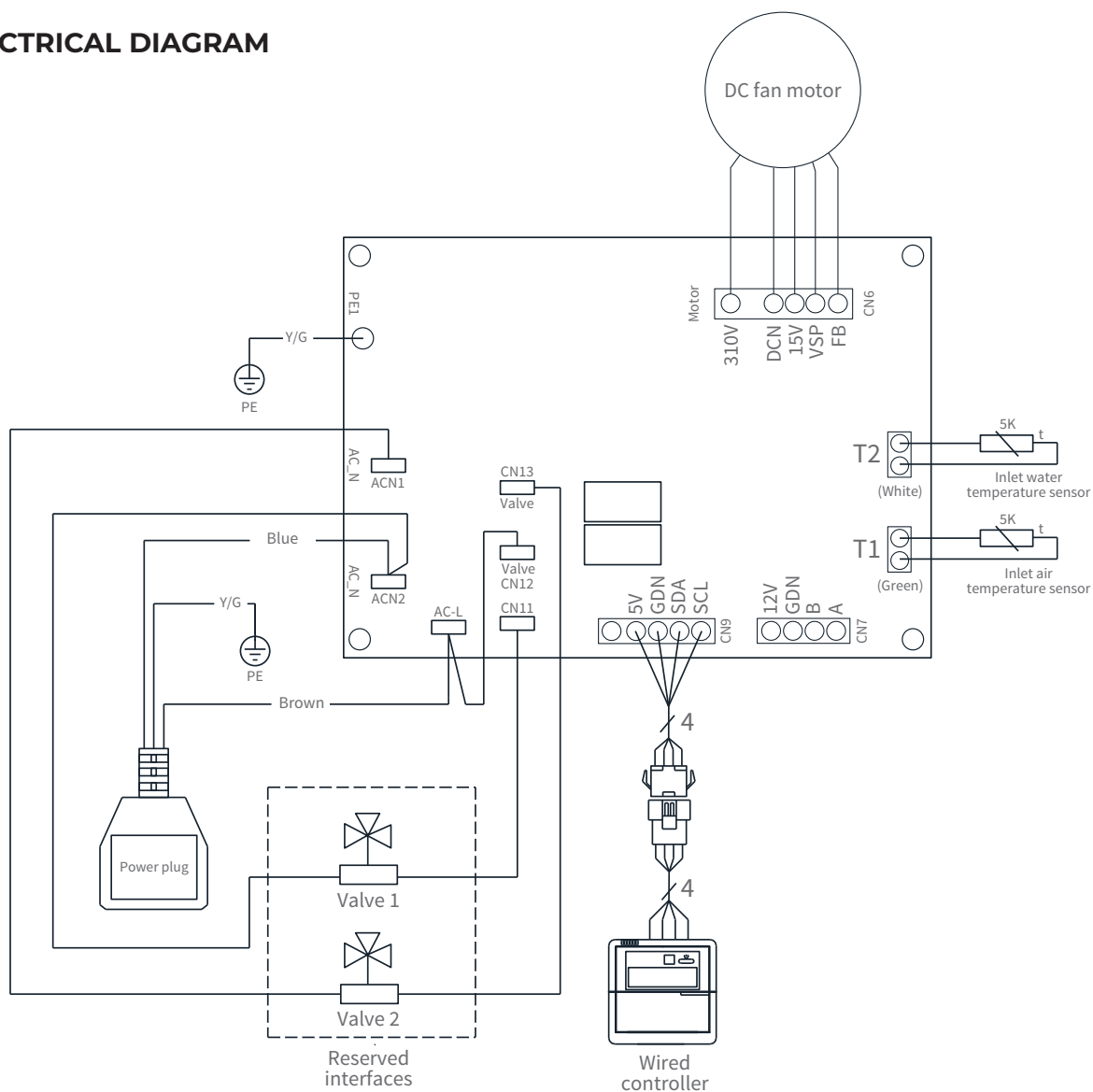
8.3. Medium fan speed

Supply temperature (°C)	TH-200-C-W TH-200-C-G	TH-400-C-W TH-400-C-G	TH-600-C-W TH-600-C-G	TH-800-C-W TH-800-C-G
	Heating capacity [kW]			
35	0,49	0,99	1,34	1,89
38	0,58	1,17	1,51	2,24
40	0,62	1,24	1,82	2,65
43	0,73	1,47	1,97	2,75
45	0,80	1,61	2,23	3,36
48	0,89	1,79	2,52	3,62
50	0,93	1,87	2,67	3,66
53	0,99	1,98	3,06	4,20
55	1,02	2,05	3,32	4,45
58	1,13	2,26	3,49	4,52
60	1,16	2,33	3,66	5,05
63	1,21	2,43	3,80	5,33
65	1,30	2,61	3,95	5,44
68	1,35	2,71	4,13	5,70
70	1,45	2,91	4,33	6,33
Supply temperature (°C)	Cooling capacity [kW]			
7	0,68	1,36	2,00	2,92
12	0,38	0,76	1,11	1,90

8.4. High fan speed

Supply temperature (°C)	TH-200-C-W TH-200-C-G	TH-400-C-W TH-400-C-G	TH-600-C-W TH-600-C-G	TH-800-C-W TH-800-C-G
	Heating capacity [kW]			
35	0,55	1,10	1,55	2,10
38	0,61	1,22	1,73	2,42
40	0,68	1,36	1,93	2,93
43	0,75	1,51	2,10	3,04
45	0,83	1,66	2,39	3,41
48	0,93	1,86	2,63	3,89
50	0,99	1,98	2,83	4,22
53	1,07	2,14	3,13	4,46
55	1,12	2,24	3,53	4,77
58	1,19	2,38	3,78	4,99
60	1,28	2,56	3,86	5,41
63	1,33	2,67	4,17	5,70
65	1,39	2,78	4,28	5,74
68	1,45	2,91	4,54	5,96
70	1,55	3,10	4,62	6,33
Supply temperature (°C)	Cooling capacity [kW]			
7	0,74	1,49	2,15	3,12
12	0,48	0,96	1,41	2,06

9. ELECTRICAL DIAGRAM



10. ERROR CODES

Error codes flash on the display. Several fault codes will appear on the display one after another:

Parameter number	Possible causes	Error code displayed
1	Inlet air temperature sensor failure	E1
2	Inlet water temperature sensor failure	E2
3	DC motor failure	E3
4	Wired controller temperature sensor failure	E4 (Parameter 9 valid)
5	Wired controller humidity sensor failure	E5 (Parameter 9 valid)
6	Communication error with lower wired controller	E6
7	Wired controller 485 communication error	E7 (Parameter 9 valid)

Error codes will appear when:

- Inlet air temperature sensor error – disconnected/damaged room temperature sensor.
- Inlet water temperature sensor error – disconnected/damaged inlet water temperature sensor.
- Fan error – fan motor failure.
- External control temperature sensor error – disconnected/damaged room temperature controller.
- External control humidity sensor error – only error code is displayed.
- Built-in controller communication error – disconnected/damaged device controller.
- 485 external controller communication error – the unit stops operating.

MANUFACTURER'S STAMP

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