

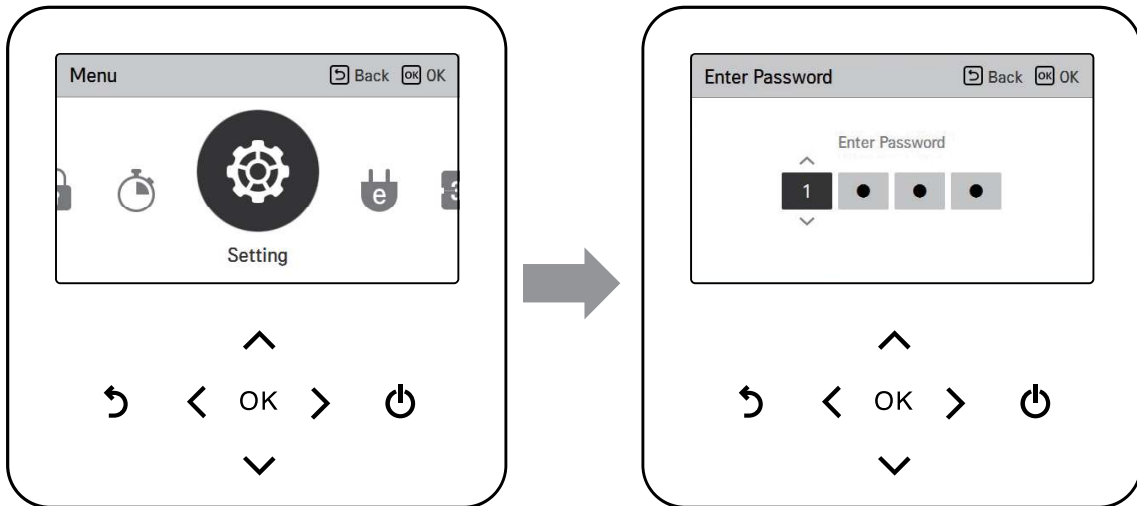
INSTALLER SETTING

How to enter installer setting

! CAUTION

The installer setting mode is the mode to set the remote controller's detail function. If the installer setting mode is incorrectly set, it may cause product failure, user's injury, or property damage. It must be set by the installation specialist with the installation license, and if it is installed or changed without installation license, all problems caused will be the responsibility of the installer, and may void the LG warranty.

- In the menu screen, press [<, > (left/right)] button to select the setting category, and press [^ (up)] button for 3 seconds to enter the password input screen for the installer setting.
- Input the password and press [OK] button to move to the installer setting list.



※ Installer setting password

Main screen → menu → setting → service → RMC version information → SW Version

Example) SW version : 1.00.1 a

In the above case, the password is 1001.

! NOTE

Some categories of the installer setting menu may not be available depending on the product function or the menu name may be different.

Installer setting

- You can set the product user functions.
- Some functions may not be displayed/operated in some product types.

Function	Description
3 Minutes Delay	Factory use only
Select Temperature Sensor	Selection for setting temperature as air temperature or leaving water temperature or air+leaving water temperature
Dry Contact Mode setting	Dry contact function is the function that can be used only when the dry contact devices is separately purchased and installed.
Central Control address	When connecting the central control, set the central control address of the unit.
Pump Test run	Water pump test run
Air cooling set temp. setting	Adjusting range of 'Setting Air Temperature' in cooling mode
Water cooling set temp. setting	Adjusting range of 'Setting Leaving Water Temperature' in cooling mode
Air heating set temp. setting	Adjusting range of 'Setting Air Temperature' in heating mode
Water heating set temp. setting	Adjusting range of 'Setting Heating Flow Temperature' in heating mode
DHW Set Temp.setting	Setting DHW set temperature
Screed drying setting	Setting for using Step 1 or 2 capacity of electric
Heater on temperature	Setting outdoor air temperature where half capacity of electric heater starts operation.
Water supply off temp. during cooling setting	Determine leaving water temperature when the unit is turned off. This function is used for preventing condensation on the floor in cooling mode
Tank disinfection setting 1	Setting start/maintain time for pasteurisation
Tank disinfection setting 2	Setting pasteurisation temperature
Tank setting 1	Setting start temperature for operation
Tank setting 2	Setting maintain temperature for operation
Heater priority	Determine electric heater and water heater on and off
DHW time setting	Determine follow time duration : operation time of domestic hot water tank heating, stop time of domestic hot water tank heating, and delay time of DHW tank heater operating
TH on/off Variable, heating air setting	Heating air temperature TH On / Off Type setting
TH on/off Variable, heating Water setting	Heating Water Outlet Temperature TH On / Off Type

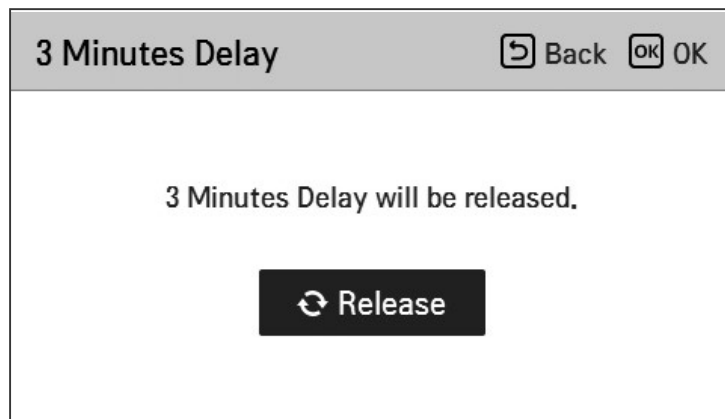
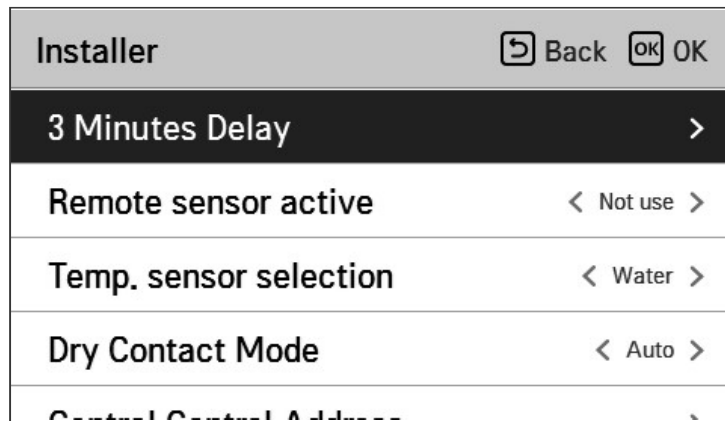
Function	Description
TH on/off Variable, cooling air setting	Cooling air temperature TH On / Off Type setting
TH on/off Variable, cooling Water setting	Cooling Water Outlet Temperature TH On / Off Type
Heating temp. setting	At the leaving water control in heating mode, the control reference water temperature position setting
Cooling temp. setting	At the leaving water control in cooling mode, the control reference water temperature position setting
Pump setting in heating	Set water pump on / off delay option in heating mode
Pump setting in cooling	Set water pump on / off delay option in cooling mode
Forced operation	Water pump off After 20 consecutive hours, disable / enable the logic that drives the water pump by itself
CN_CC setting	It is the function to set whether to install (use) Dry Contact. (It is not a function for Dry Contact installation, but it is a function to set the usage of the unit's CN_CC port.)
Pump Capacity	Function to change Water Pump Capacity
Smart Grid(SG) setting	Select whether to use or not use the SG Mode function of the product, set the operation option value in SG1 step.
Seasonal auto temp setting	Set the operating temperature in Seasonal Auto mode
Modbus Address	It is function to set the address of the Modbus device that is externally linked to the product. Modbus address setting function is available from indoor unit.
CN_EXT	Function to set external input and output control according to DI / DO set by customer using dry contact port of indoor unit. Determine the use of the contact port (CN_EXT) mounted on the indoor unit PCB
Anti-freezing Temperature	This function prevents the product from freezing.
Add Zone	Install additional valve in product to control additional operation area
Use External Pump	Set up to control an external water pump
3rd Party Boiler	Configuration to control 3rd party boiler
Meter Interface	When installing the meter interface to measure energy / calorie in the product, set unit spec for each port
Pump Prerun/Overrun	Set to reach the optimum flow rate by circulating the heating water with the water pump before heat exchange. After the operation stop, additional water pump is activated to circulate the heating water.
Data logging setting	Display error history of connected unit
Password Initialization setting	It is the function to initialize (0000) the password when you forgot the password set in the remote controller.

3 Minutes Delay

Temporarily eliminates the 3-minute delay function of the outdoor unit Comp

- Factory use only

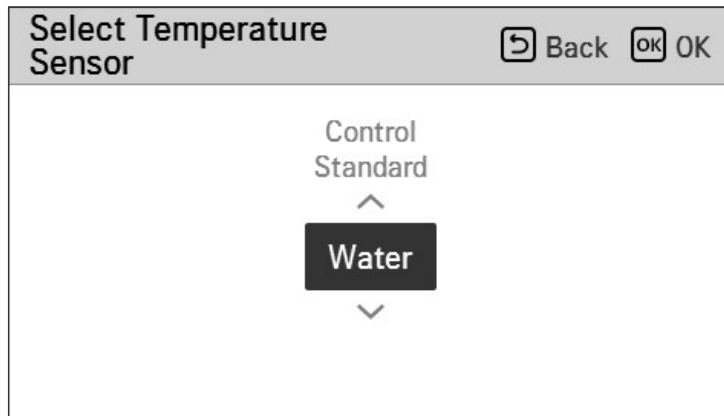
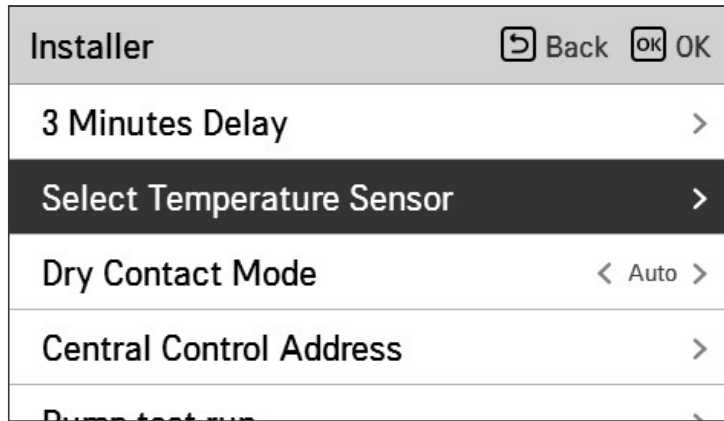
- In the installer setting list, select 3 Minutes Delay category, and press [OK] button to move to the detail screen.



Select Temperature Sensor

The product can be operated according to air temperature or leaving water temperature. The selection for setting temperature as air temperature or leaving water temperature is determined.

- In the installer setting list, Select Temperature Sensor category, and press [OK] button to move to the detail screen.



Value		
Water	Air	Air+Water

NOTE

Air temperature as setting temperature is ONLY available when Remote Air Sensor Connection is enabled and Remote Air Sensor Connection is set as 02.

Dry Contact Mode

Dry contact function is the function that can be used only when the dry contact devices is separately purchased and installed.

- Change setting values using [<,>(left/right)] button.

Installer		⏪ Back	OK
3 Minutes Delay		>	
Remote sensor active		< Not use >	
Temp. sensor selection		< Water >	
Dry Contact Mode		< Auto >	
Control Control Address			

Value
Auto
manual

! NOTE

For dry contact mode related detail functions, refer to the individual dry contact manual.

What is dry contact?

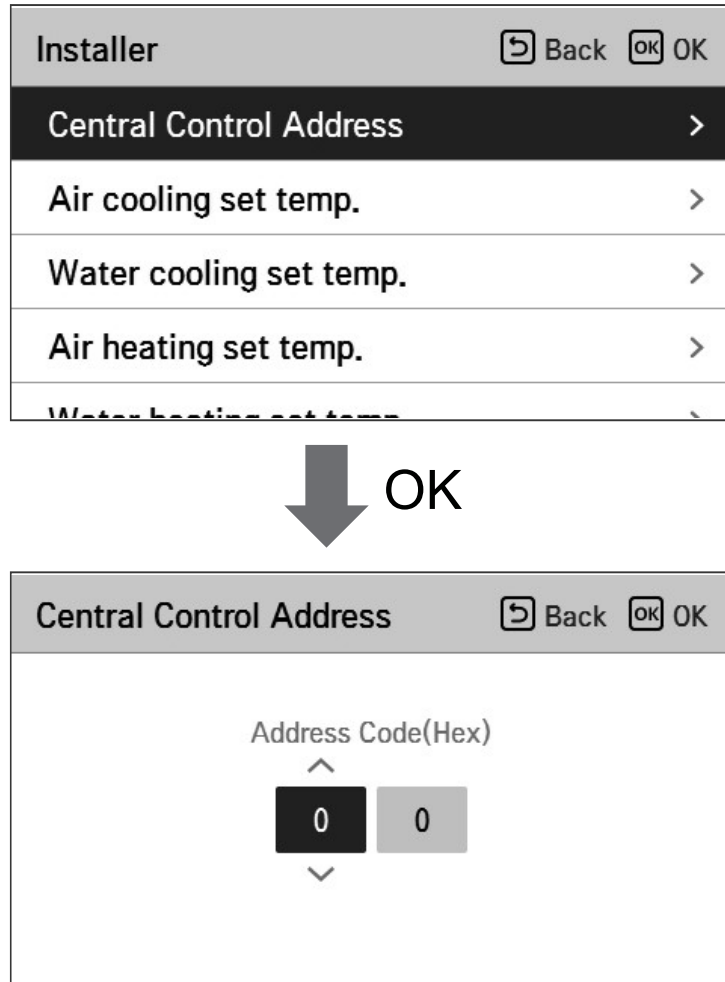
It means the contact point signal input when the hotel card key, human body detection sensor, etc. are interfacing with the air conditioner.

Added system functionality by using external inputs (dry contacts and wet contacts).

Central Control Address

When connecting the central control, set the central control address of the unit.

- In the installer setting list, select Central Control Address category, and press [OK] button to move to the detail screen.



! NOTE

Enter address code as hexadecimal value
 Front: Central Control Gr. No.
 Back side: Central control indoor the number

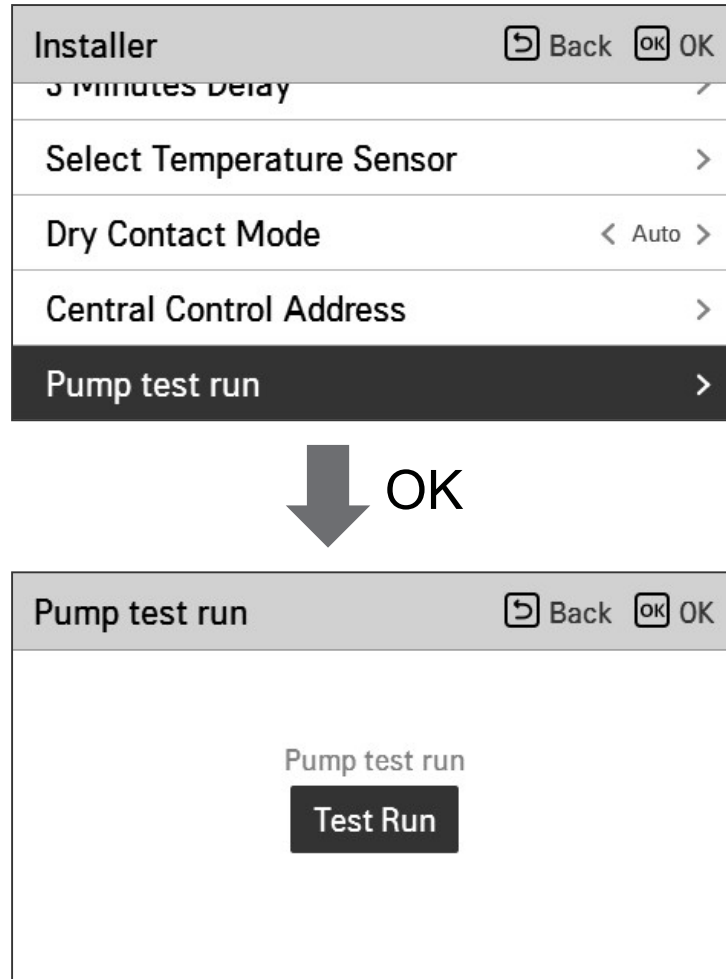
! NOTE

This function is not available for monobloc

Pump test run

The pump test run is the function to test run by operating the water pump. This function can be used for air vents / flow sensors and others.

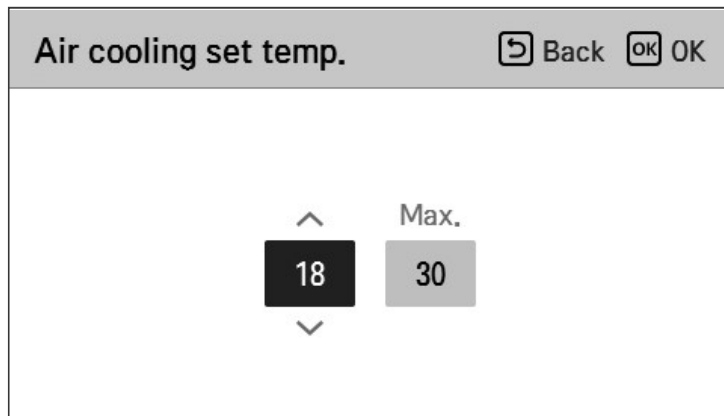
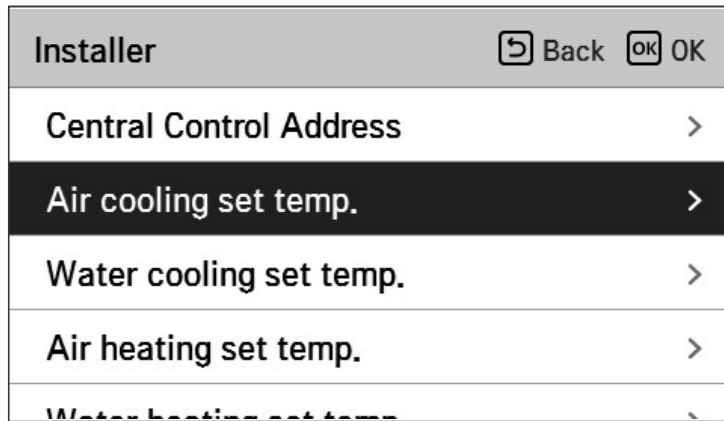
- In the installer setting list, Pump Test run category, and press [OK] button to move to the detail screen.



Air cooling set temp

Determine cooling setting temperature range when air temperature is selected as setting temperature.

- In the installer setting list, select Air cooling set temp category, and press [OK] button to move to the detail screen.



Value	Default	Range
Max.	30	30~24
Min.	18	22~16

* Upper / lower limit / default value is in °C

! NOTE

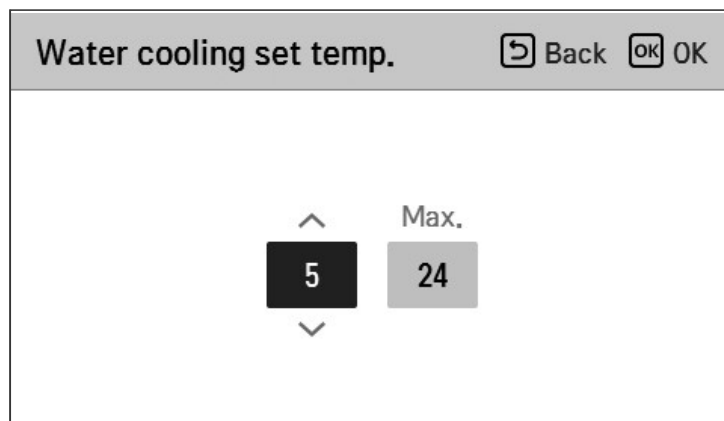
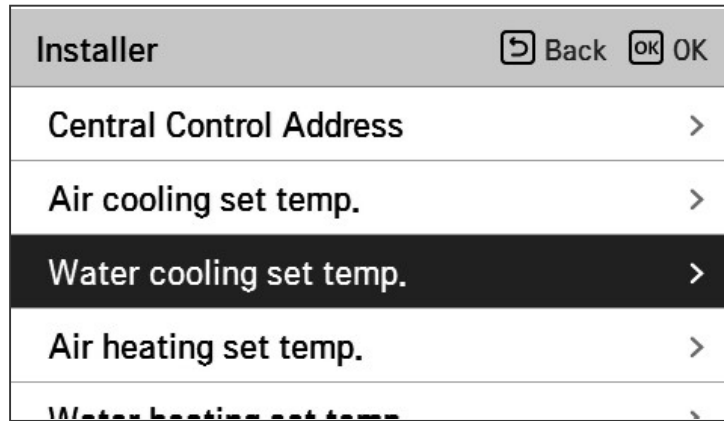
Only available when remote air temperature sensor is connected.

- Accessory PQRSTA0 should be installed.
- Also, Remote air sensor connection should be set properly.

Water cooling set temp

Determine cooling setting temperature range when leaving water temperature is selected as setting temperature.

- In the installer setting list, select water cooling set temp category, and press [OK] button to move to the detail screen.



Value	Default	Range
Max.	24	27~22
Min.	18	20~5

* Upper / lower limit / default value is in °C

! NOTE

Water condensation on the floor

- While cooling operation, it is very important to keep leaving water temperature higher than 16 °C. Otherwise, dew condensation can be occurred on the floor.
- If floor is in humid environment, do not set leaving water temperature below 18 °C.

! NOTE

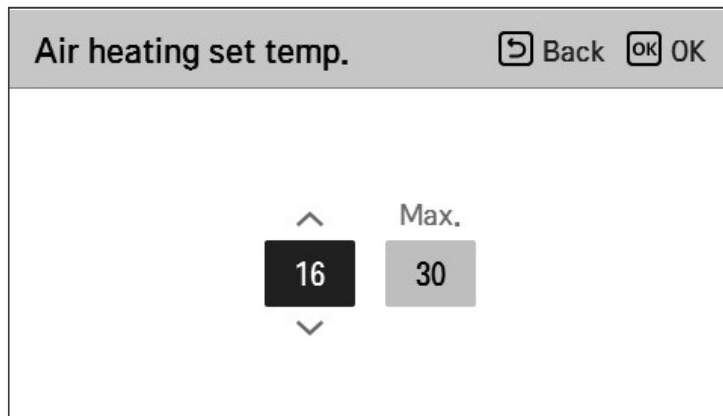
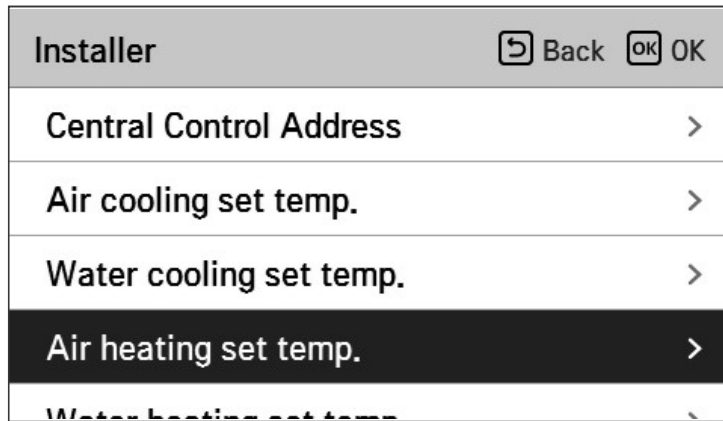
Water condensation on the radiator

- While cooling operation, cold water may not flow to the radiator. If cold water enters to the radiator, dew generation on the surface of the radiator can be occurred.

Air heating set temp

Determine heating setting temperature range when air temperature is selected as setting temperature

- In the installer setting list, select Air heating set temp. category, and press [OK] button to move to the detail screen.



Value	Default	Range
Max.	30	30~24
Min.	16	22~16

* Upper / lower limit / default value is in °C

CAUTION

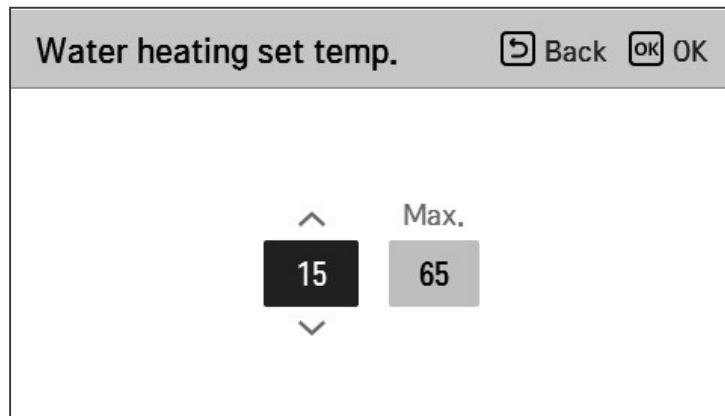
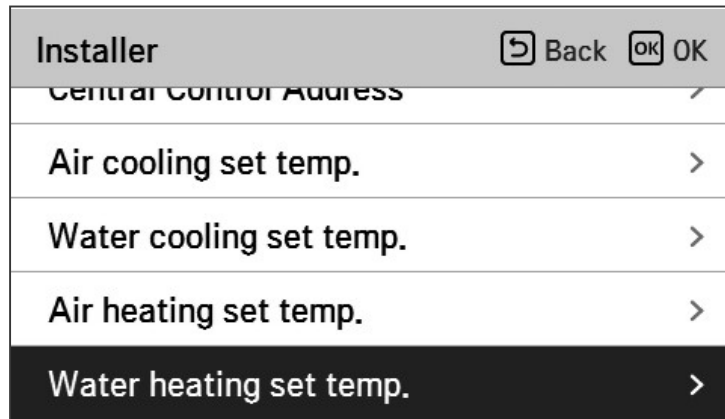
Only available when remote air temperature sensor is connected.

- Accessory PQRSTA0 should be installed.
- Also, Remote air sensor connection should be set properly.

Water heating set temp

Determine heating setting temperature range when leaving water temperature is selected as setting temperature

- In the installer setting list, select Water heating set temp. category, and press [OK] button to move to the detail screen.



Value	Default	Range
Max.	65	65~35
Min.	15	34~15

* Upper / lower limit / default value is in °C

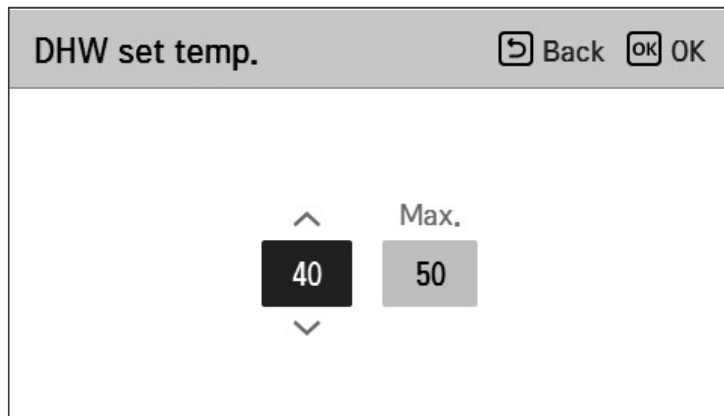
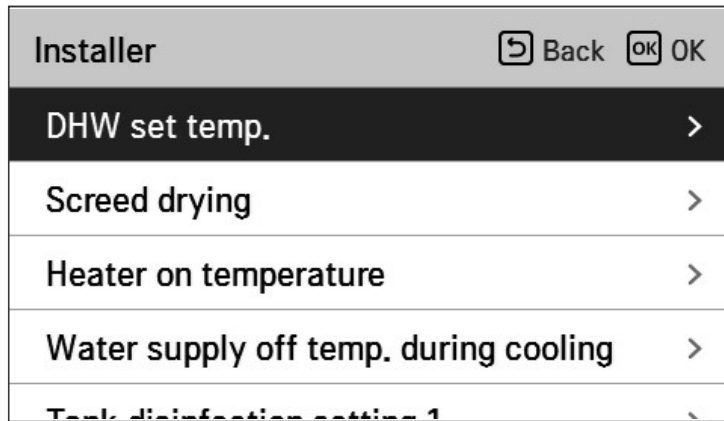
! NOTE

- When the E/heater is not used, the minimum temperature of the water temperature can be set from 34 °C to 20 °C

DHW set temp

Determine heating setting temperature range when DHW temperature is selected as setting temperature

- In the installer setting list, select DHW set temp. category, and press [OK] button to move to the detail screen.



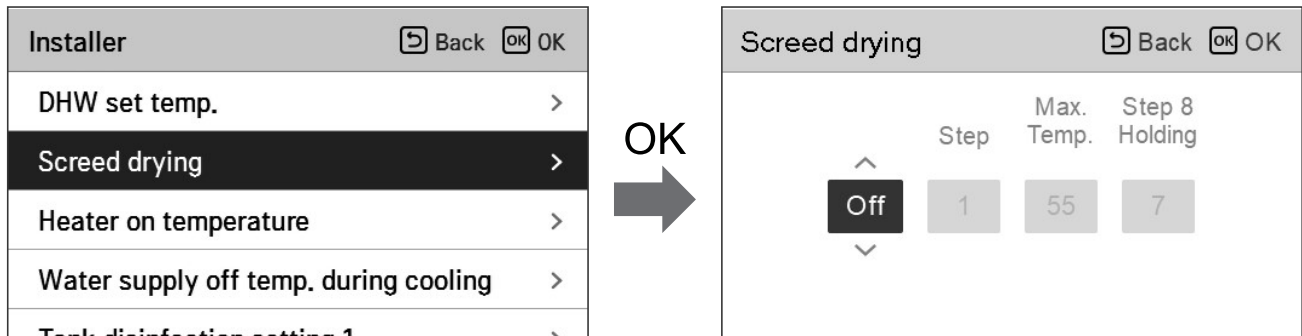
Value	Range
Max.	80~50
Min.	40~30

* Upper / lower limit / default value is in °C

Screed drying

This function is a unique feature of AWHP that, when AWHP is installed in a new concrete structure, controls the specific temperature floor heating out temperature for a certain period of time to cure the floor cement.

- In the installer setting list, select Screed drying category, and press [OK] button to move to the detail screen.



How to display

Main Screen - Displays 'Screed drying' on the desired temperature display. The step in progress at the bottom of the display is displayed.

Setting value

- Start-up step: 1 ~ 11
- Maximum temperature : 35 °C ~ 55 °C
- Step 8 Holding time : 1 days ~ 30 days

Function operation

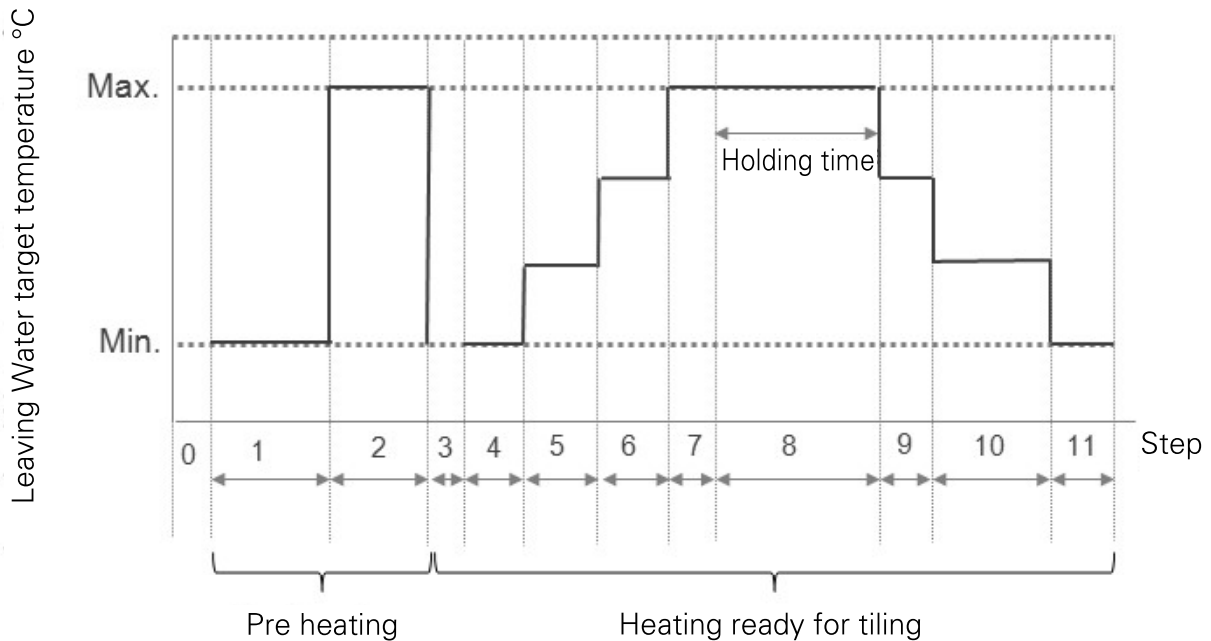
- It is performed by the following procedure from the selected starting step.
- After all steps are completed, turn off the cement curing operation.

Step	1	2	3	4	5	6	7	8	9	10	11
Leaving Water target temperature[°C]	25	Max.T	Off	25	35	45	Max.T	Max.T	45	35	25
Duration [hours]	72	96	72	24	24	24	24	Holding time	72	72	72

- ※ If the upper limit setting value of the heating LW temperature is 55 °C or lower, it is set to 55 °C forcibly.
- If the lower limit setting value of the heating LW temperature is 25 °C or higher, it is set to 25 °C forcibly.

NOTE

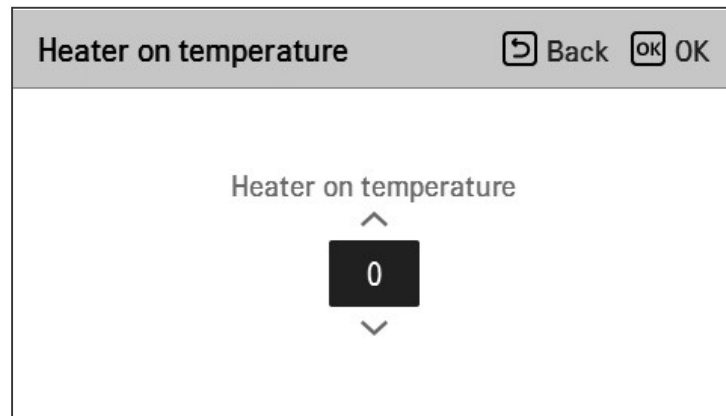
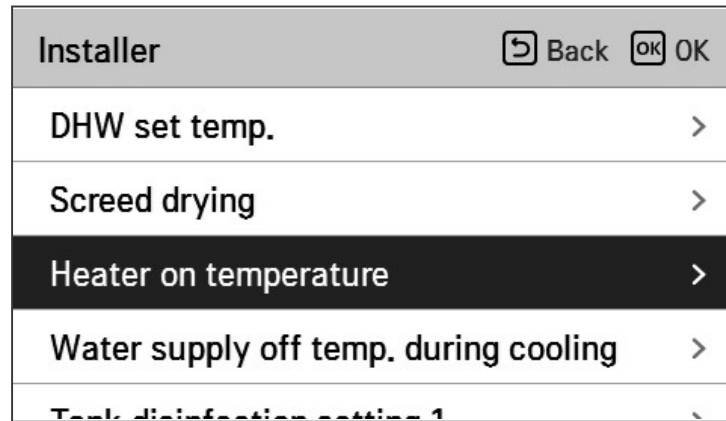
- During Screed drying operation, button input except for installer function and temperature display is restricted.
- When the power is applied again after a power outage during product operation, the product operation state before power failure is remembered and the product is automatically operated.
- Screed drying operation stops when an error occurs / When error is cleared, restart cement Screed drying. (However, if the wired remote control is reset to the error occurrence state, it is compensated in the unit of one day)
- Upon releasing after an error, Screed drying operation may take up to 1 minute of waiting time after boot up. (The Screed drying operation status is judged as 1 minute cycle.)
- During Screed drying operation, installer function Screed drying operation is selectable.
- During Screed drying operation, starting operation, low noise mode off, low noise time setting off, hot water off, solar heat off.
- During Screed drying operation, simple, sleep, on, off, weekly, holiday, heater does not execute reservation operation.



Heater on temperature

Depending on local climatic conditions, it is necessary to change the temperature condition in which electric heater turns on / off.

- In the installer setting list, Heater on temperature category, and press [OK] button to move to the detail screen.



	Default	Range
Split	-5	18~-15
Mono	-5	18~-25

* Upper / lower limit / default value is in °C

! NOTE**• Heater on temperature**

Using Half capacity of electric heater : when DIP Switch No. 6 and 7 is set as 'OFF-ON' :

- Example : If Heater on temperature is set as '-1' and DIP switch No 6. and 7 is set as 'OFF-ON', then half capacity of electric heater will start operation when outdoor air temperature is below -1 °C and current leaving water temperature or room air temperature is much below than target leaving water temperature or target room air temperature.

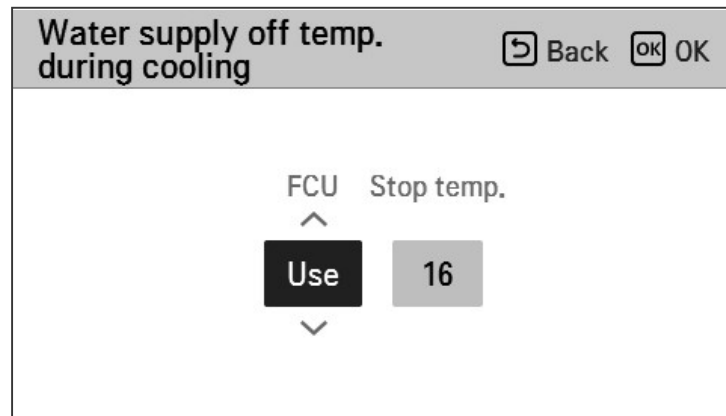
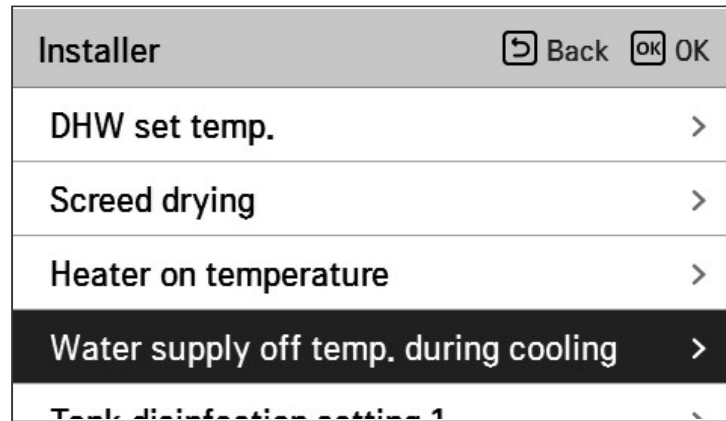
Using Full capacity of electric heater : when DIP Switch No. 6 and 7 is set as 'OFF-OFF' :

- Example : If Heater on temperature is set as '-1' and DIP switch No 6. and 7 is set as 'OFF-OFF', then full capacity of electric heater will start operation when outdoor air temperature is below -1 °C and current leaving water temperature or room air temperature is much below than target leaving water temperature or target room air temperature.

Water supply off temp. during cooling

Determine leaving water temperature when the unit is turned off. This function is used for preventing condensation on the floor in cooling mode

- In the installer setting list, select Water supply off temp. during cooling category, and press [OK] button to move to the detail screen.



Function	Value	Default	Setting Rang
cooling water temperature	Water supply off temperature	16	25~16
	FCU Use/ not use	use	Use / Not Use

- Stop temp. : cut-off temperature. Stop temp. is valid when FCU is installed.
- FCU : determines if FCU is installed or not.
- Example : If Stop temp. is set as '10' and FCU is 'Use' and actually FCU is NOT installed in the water loop, the unit stop operation in cooling mode when the leaving water temperature is below 10 °C.
- Example : If Stop temp. is set as '10' and FCU is 'Not use' and actually FCU is installed in the water loop, the Stop temp. is not used and the unit do NOT stop operation in cooling mode when the leaving water temperature is below 10 °C.

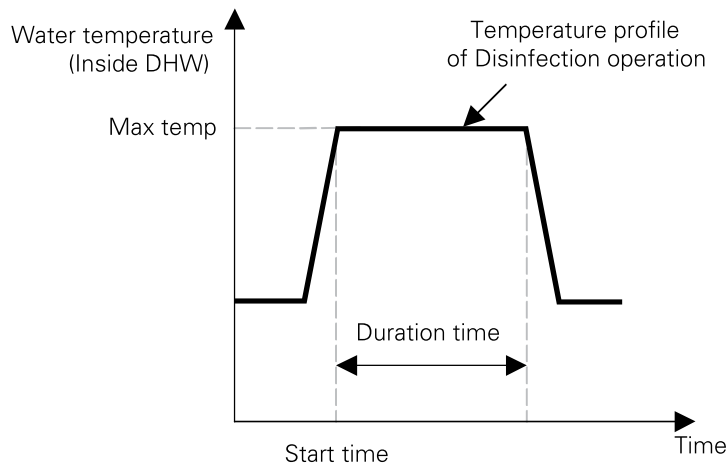
CAUTION

FCU Installation

- If FCU is used, related 2way valve should be installed and connected to the unit PCB.
- If FCU is set as 'Not use' but FCU or 2way valve is NOT installed, the unit can do abnormal operation.

Tank disinfection setting 1, 2

- Disinfection operation is special DHW tank operation mode to kill and to prevent growth of viruses inside the tank.
 - Disinfection active : Selecting enable or disable of disinfection operation.
 - Start date : Determining the date when the disinfection mode is running.
 - Start time : Determining the time when the disinfection mode is running.
 - Max temp. : Target temperature of disinfection mode.
 - Duration time : Duration of disinfection mode.



Installer	Back	OK
Tank disinfection setting 1	>	
Tank disinfection setting 2	>	
Tank setting1	>	
Tank setting2	>	
Heater priority	>	



Tank disinfection setting 1	Back	OK
Disinfection active	Start date	Start time
Not use	Fri.	23

Installer	Back	OK
Tank disinfection setting 1	>	
Tank disinfection setting 2	>	
Tank setting1	>	
Tank setting2	>	
Heater priority	>	



Tank disinfection setting 2	Back	OK
Max temp.	Duration time	
70	10	

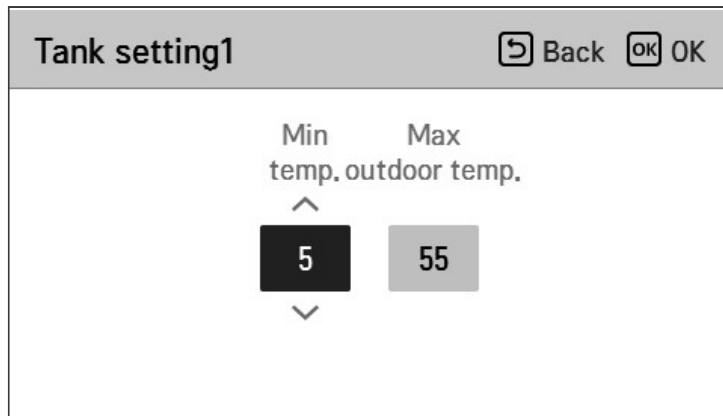
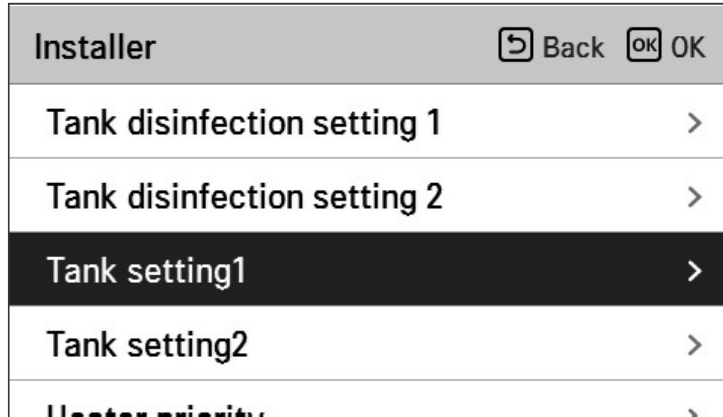
NOTE

DHW heating should be enable

- If Disinfection active is set as 'Not use', that is 'disable disinfection mode', Start date and Start time is not used.

Tank setting 1

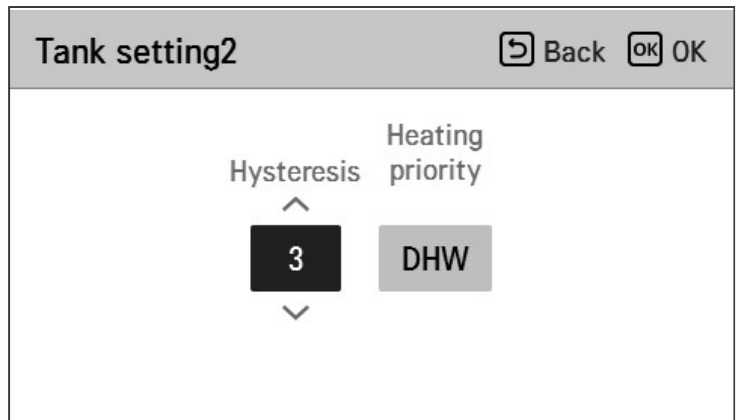
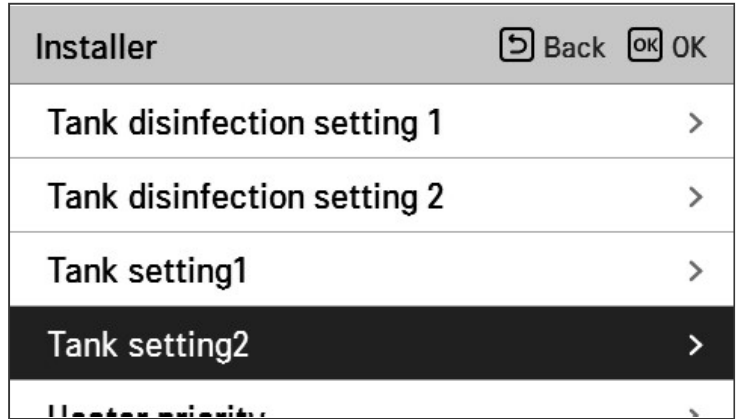
- In the installer setting list, select tank setting 1 category, and press [OK] button to move to the detail screen.



Value	Range
Max outdoor temp	55~40
Min temp	30~1

Tank setting 2

- In the installer setting list, select tank setting 2 category, and press [OK] button to move to the detail screen.

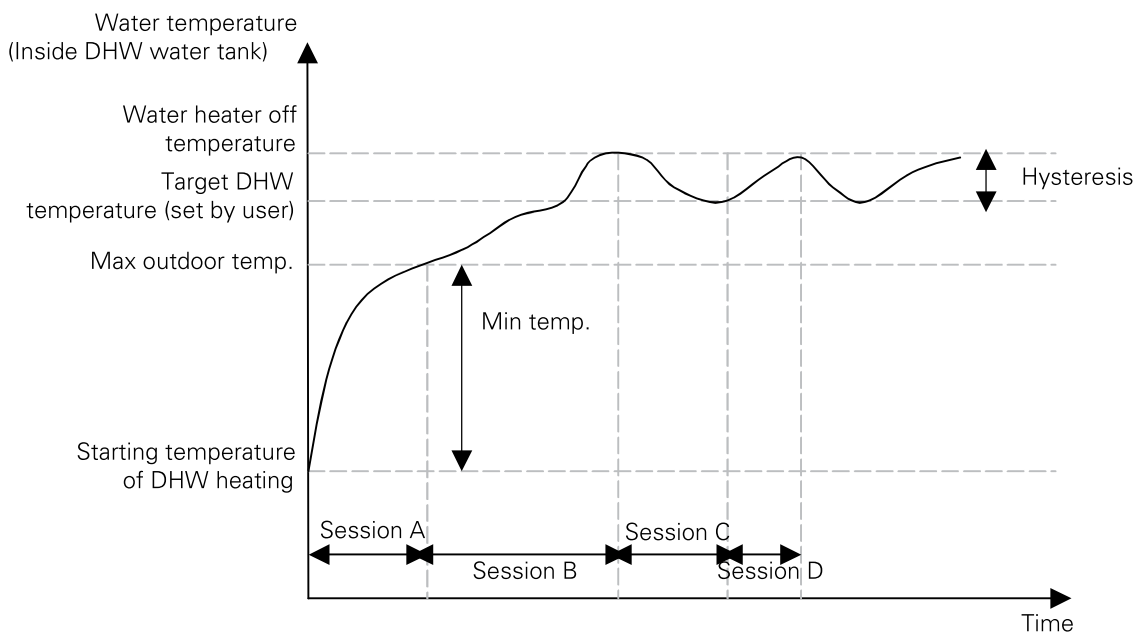


Value	Range
Hysteresis	4~2
Heating priority	Floor heating / DHW

• Tank setting 1, 2

Descriptions for each parameters are as following.

- Min temp. : temperature gap from Max outdoor temp.
- Max outdoor temp. : maximum temperature generated by AWHP compressor cycle.
- Example : If Min temp. is set as '5' and Max outdoor temp. is set as '48', then Session A (see the graph) will be started when the water tank temperature is below 45 °C.... If temperature is above 48 °C..., then Session B will be started.
- Hysteresis : temperature gap from target DHW temperature. This value is required to frequent On and Off of water tank heater.
- Heating priority : Determining heating demand priority between DHW tank heating and under floor heating.
- Example : If user's target temperature is set as '70' and Hysteresis is set as '3', then the water tank heater will be turned off when the water temperature is above 73 °C. The water tank heater will be turned on when the water temperature is below 70 °C.
- Example : If Heating priority is set as 'DHW', that means heating priority is on DHW heating, DHW is heated by AWHP compressor cycle and water heater. In this case the under floor can not be heated while DHW heating. On the other hand, if the Heating priority is set as 'Floor heating', that means heating priority is on under floor heating, DHW tank is ONLY heated by water heater. In this case the under floor heating is not stopped while DHW is heated.



- Session A : Heating by AWHP compressor cycle and water heater
- Session B : Heating by water heater
- Session C : No heating (Water heater is Off)
- Session D : Heating by water heater

! NOTE

DHW heating does not operate when it is disabled.