

# **OIMMERGAS**

# MAGIS M4-6-8 EH3 M12-14-16 T EH9

Block heat pumps with integrated backup heater Control Panel



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### **Dear Customer**

 $Congratulations for having chosen\ a\ top-quality\ Immergas\ product, able\ to\ assure\ well-being\ and\ safety\ for\ a\ long\ period\ of\ time.\ As\ an\ Im-period\ of\ time\ able\ to\ assure\ well-being\ and\ safety\ for\ a\ long\ period\ of\ time\ able\ to\ assure\ well-being\ and\ safety\ for\ a\ long\ period\ of\ time\ able\ to\ assure\ well-being\ and\ safety\ for\ a\ long\ period\ of\ time\ able\ to\ assure\ well-being\ and\ safety\ for\ a\ long\ period\ of\ time\ able\ to\ assure\ well-being\ and\ safety\ for\ a\ long\ period\ of\ time\ able\ to\ assure\ well-being\ and\ safety\ for\ a\ long\ period\ of\ time\ able\ to\ assure\ well-being\ and\ safety\ for\ a\ long\ period\ of\ time\ able\ to\ assure\ well-being\ able\ to\ assure\ to\ able\ to\ able\ to\ assure\ to\ able\ to\$ mergas customer you can also count on a Qualified Authorised After-Sales Technical Assistance Centre, prepared and updated to guarantee constant efficiency of your appliance. Read the following pages carefully: you will be able to draw useful tips on the proper use of the device, compliance with which will confirm your satisfaction with the Immergas product.

For assistance and routine maintenance, contact Authorised Technical Service Centres: they have original spare parts and are specifically trained directly by the manufacturer.

The company IMMERGAS S.p.A., with registered office in via Cisa Ligure 95 42041 Brescello (RE), declares that the design, manufac $turing and after-sales \ assistance \ processes \ comply \ with the \ requirements \ of \ standard \ UNIEN ISO 9001:2015.$ For further details on the product CE marking, request a copy of the Declaration of Conformity from the manufacturer, specifying the appliance model and the language of the country.

The manufacturer declines all liability due to printing or transcription errors, reserving the right to make any modifications to its technical and commercial documents without forewarning.



### LIST OF ABBREVIATIONS USED

The following is the key of the abbreviations used in this document.

ACS Domestic hot water CO, Carbon dioxide

CVC Fan coil

DHW Domestic hot water

etc. Etc.FCU Fan coilFig. Figure

FHL Floor heating circuit

IBH Backup heater

MFA Maximum fuse amp.

MOP Maximum overcurrent protection

Max. MaximumMin. MinimumNom. RatedPar. ParagraphRAD Radiator

Ta Room temperature

TBH DHW storage tank backup heater

### **GENERAL RECOMMENDATIONS**

- The instruction booklet is an integral and essential part of the product and must be given to the new user in the case of transfer or succession of ownership.
- · It must be stored with care and consulted carefully, as all of the warnings provide important safety indications for installation, use and maintenance stages.
- In compliance with the legislation in force, the systems must be designed by qualified professionals, within the dimensional limits established by the Law. Installation and maintenance must be performed in compliance with the regulations in force, according to the manufacturer's instructions and by professionally qualified staff, meaning staff with specific technical skills in the plant sector, as provided for by Law.
- Improper installation or assembly of the Immergas device and/or components, accessories, kits and devices can cause unexpected problems for people, animals and objects. Read the instructions provided with the product carefully to ensure proper installation.
- This instructions manual provides technical information for installing Immergas products. As for the other issues related to the installation of products (e.g. safety at the workplace, environmental protection, accident prevention), it is necessary to comply with the provisions of the standards in force and the principles of good practice.
- All Immergas products are protected with suitable transport packaging.
- The material must be stored in a dry place protected from the weather.
- Damaged products must not be installed.
- Maintenance must be carried out by skilled technical staff. For example, the Authorised Service Centre that represents a guarantee of qualifications and professionalism.
- The appliance must only be destined for the use for which it has been expressly declared. Any other use will be considered improper and therefore potentially dangerous.
- · If errors occur during installation, operation and maintenance, due to non-compliance with technical laws in force, standards or instructions contained in this booklet (or however supplied by the manufacturer), the manufacturer is excluded from any contractual and extra-contractual liability for any damages and the device warranty is invalidated.
- · In the event of malfunctions, faults or incorrect operation, turn the appliance off and contact an authorised company (e.g. the Authorised Technical Assistance Centre, which has specifically trained staff and original spare parts). Do not attempt to modify or repair the appliance alone.
- For further information regarding legislative and statutory provisions relative to the installation of heat pumps, consult the Immergas site at the following address: www.immergas.com
- This manual provides a detailed explanation on the precautions to be taken during use.
- Read this manual carefully before using the wall-mounted control unit to guarantee its proper operation.
- After you have read this manual, keep it for future consultation.

### SAFETY SYMBOLS USED



### **GENERICHAZARD**

Strictly follow all of the indications next to the pictogram. Failure to follow the indications can generate hazard situations resulting in possible harm to the health of the operator and user in general, and/or property damage.



### **ELECTRICAL HAZARD**

Strictly follow all of the indications next to the pictogram. The symbol indicates the appliance's electrical components or, in this manual, identifies actions that can cause an electrical hazard.



### **WARNING FOR INSTALLER**

Read the instruction booklet carefully before installing the product.



### WARNINGS

Strictly follow all of the indications next to the pictogram. Failure to follow the indications can generate hazard situations resulting in possible minor injuries to the health of both the operator and the user in general, and/or slight material damage.



### **ATTENTION**

Read and understand the instructions of the appliance before carrying out any operation, carefully following the instructions given. Failure to observe the instructions may result in malfunction of the unit.



### INFORMATION

 $Indicates \, useful \, tips \, or \, additional \, information.$ 



### **EARTH TERMINAL CONNECTION**

The symbol identifies the appliance's earth terminal connection point.



### **DISPOSAL WARNING**

The user must not dispose of the appliance at the end of its service life as municipal waste, but send it to appropriate collection centres.

### PERSONAL PROTECTIVE EQUIPMENT



**SAFETY GLOVES** 



EYEPROTECTION



**SAFETY FOOTWEAR** 

### GENERAL SAFETY WARNINGS.

### FOR THE USER.

- If you are not sure how to operate the unit, contact your installer.
- This appliance must not be used by persons (including children) without adequate physical, sensory or mental capacities or without specific experience and knowledge, unless they are supervised or have been instructed as to how to use the appliance by a person responsible for their safety. Supervise children and make sure they do not play with the device.



Do NOT wash the unit as this could result in electrocution or fire.

The devices are marked with the following symbol:



This symbol indicates that electric and electronic products must not be disposed of together with household unsorted waste.

Do NOT try to disassemble the system on your own: only a qualified installer may disassemble the device and process the refrigerant, oil and other components, in compliance with standards in force.

The units must be processed at a specific waste disposal facility so that the materials can be reused, recycled and recovered.

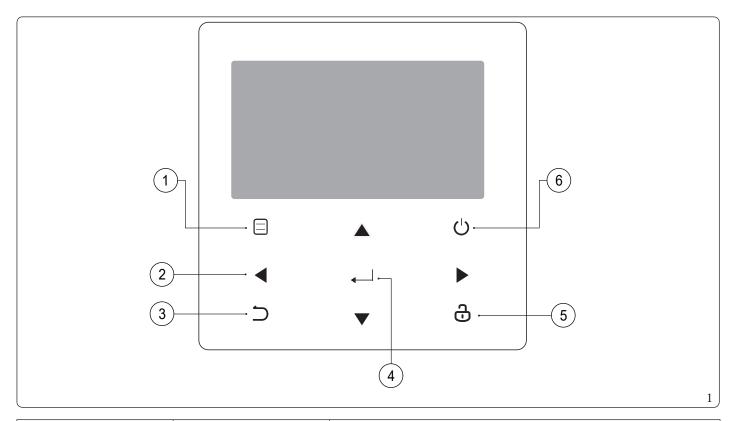
Making sure that the product is disposed of correctly shall avoid possible negative consequences for the environment and human health.

For further information, contact your installer or local authorities.

- Install in a place where there is no radiation present.

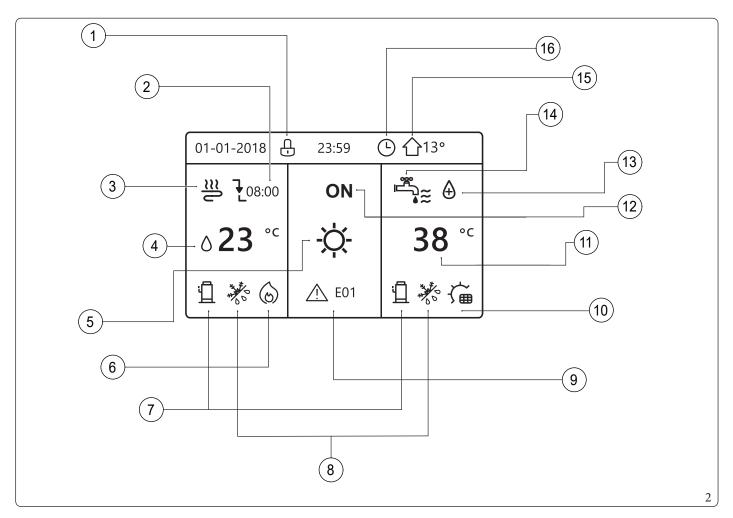
## PRESENTATION OF CONTROL PANEL.

### 2.1 APPEARANCE OF THE CONTROL PANEL.



Reference	Icon	Function				
1		Enter the menu structure from the home page.				
2	<b>* * * *</b>	Move the cursor on the display.  Navigate in the menu structure.  Adjust the settings.				
3	)	Go back to higher level.				
4	<b>←</b>	Go to the next step when programming a schedule in the menu structure.  Confirm a selection.  Enter a submenu in the menu structure.				
5	ъ	Long press to unlock/lock the control panel.  Release/block some functions like "DHW TEMP.ADJUST".				
6	Ů	Activate or deactivate the room operation mode or "DHW MODE". Enable or disable the function in the menu structure.				

### APPEARANCE OF THE CONTROL PANEL.



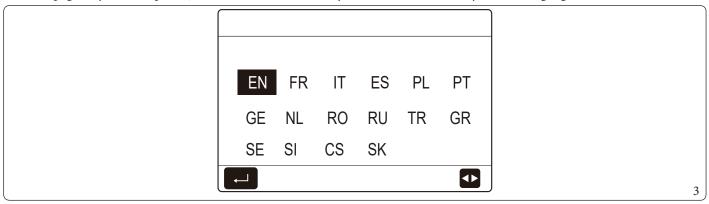
Reference	Icon	Description		
1	<del>.</del>	Lockicon		
	+	Desired temperature does not change		
2	₹	Desired temperature decreases	At the next scheduled action, the desired temperature will decrease	
	<b></b>	Desired temperature increases	- temperature windecrease	
	€≋	Fai	n coil	
3	<b>``</b>	Rac	liator	
	≋	Floor	heating	
4	∆ 23°C Desired water flow		flow temperature	
4	23,5°c	Desired room temperature		
	- <del>\</del> \\	Heatii	ng Mode	
5	*	Cooling Mode		
	(A)	Auto	omode	
6	6	Additional heatir	ng source (not used)	
6	<u>₩</u>	Heating source (l	IBH backup heater)	

Reference	Icon	Description
7	<u> </u>	Compressor on
	**	Anti-freeze mode activated
	**	Defrost mode activated
8	<b>2</b> 3	Holiday away / home activated
	(\$	Silent mode activated
	0	ECO mode activated
	<u></u> £01	Error or protection icon
		PumpIon
9	<b>9</b> ÷	Smart grid: Free electricity
	(4)	Smart grid: Peak end electricity
	Œβ	Smart grid: Peak electricity
	6	Additional heating source (not used)
10	· ·	Photovoltaic contact activated
	7-0-	Storage tank heater on
11	38 °°	Domestic hot water Storage tank temperature
12	OFF	Turn Off/On
13	<b>(</b>	Disinfect function activated
14	<b>□</b> **	Domestic hot water
15		
16	7	Weeklyscheduleicon
10	<u>(b</u>	Timer Icon

	Fancoil	Radiator	Floorheating	Domestic hot water
ON	€≋	<b>``</b>	<b>≅</b>	<b>%</b> ~≈
OFF	<b>③</b>	(CCC)	Ju	<b>,</b>

## **3** USING HOME PAGES.

When the control panel is switched on, the language selection page is displayed. Choose the desired language and then press to view the home pages. If you do not press within 60 seconds, the system will set the currently selected language:

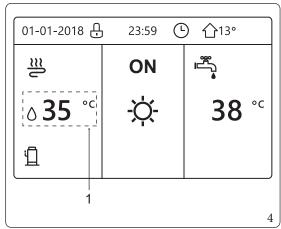


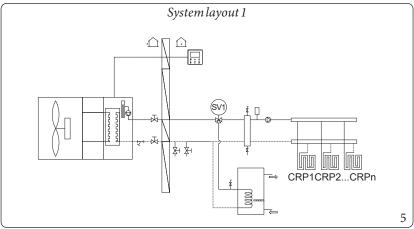
The home pages can be used to read and adjust settings intended for daily use. The settings displayed and that can be set on the home pages are described in the relative sections. The following home pages can be displayed depending on the system layout:

- Desired water flow temperature;
- Desired room temperature;
- DHW storage tank temperature.

### Home page 1.

If "5.1 WATER FLOW TEMP." is set at "YES" and "5.2 ROOM TEMP." is set at "NON" (see "FOR SERVICEMAN" > "5. TEMP. TYPE SETTING" in the Use and Installation Booklet), the system will also include the floor and domestic hot water heating function. The home page will appear (Fig. 4):





### Key (Fig. 4):

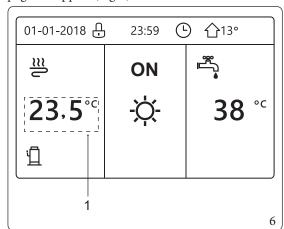
Desired water flow temperature

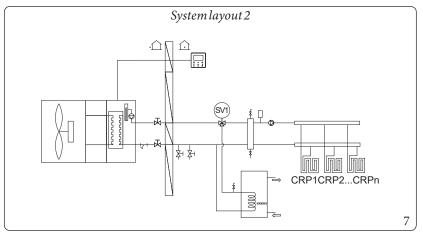


All the images in the manual have been inserted for illustrative purposes. Therefore there could be differences compared to the pages that actually appear on the screen.

### Home page 2.

If "5.1 WATER FLOW TEMP." is set at "NON" and "5.2 ROOM TEMP." is set at "YES" (see "FOR SERVICEMAN" > "5. TEMP. TYPE SET-TING" in the Use and Installation Booklet), the system will also include the floor and domestic hot water heating function. The home page will appear (Fig. 6):





*Key (Fig. 6):* 

- Desired room temperature

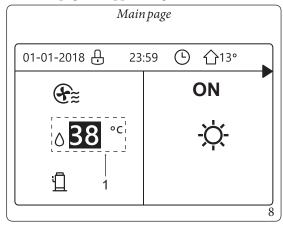


 $The wall-mounted control \, panel \, should \, be \, in stalled \, in \, the \, floor \, heating \, room \, to \, be \, able \, to \, control \, the \, room \, temperature.$ 

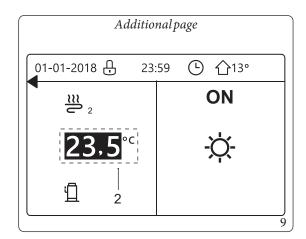
### Home page 3.

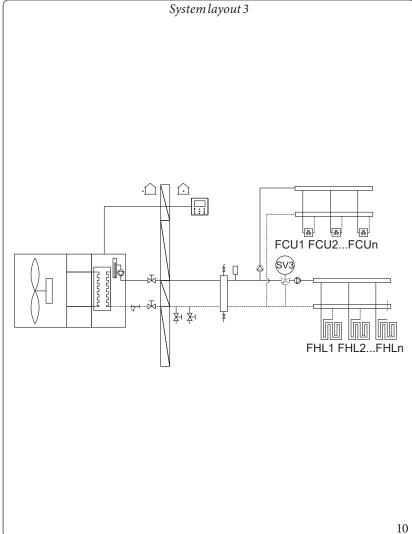
 $If "DHW\ MODE"\ is\ set\ at\ "NON"\ (see\ "FOR\ SERVICEMAN">"1.\ DHW\ MODE\ SETTING"\ in\ the\ Use\ and\ Installation\ Booklet")\ and\ if\ MODE\ SETTING"\ in\ the\ Use\ and\ Installation\ Booklet")\ and\ if\ MODE\ SETTING"\ in\ the\ Use\ and\ Installation\ Booklet")\ and\ if\ MODE\ SETTING\ "In\ MODE\ SETTING"\ in\ the\ Use\ and\ In\ MODE\ SETTING\ "In\ MODE\ SETTING"\ in\ MODE\ SETTING\ "In\ MODE\ SETTING"\ in\ MODE\ SETTING\ "In\ MODE\ SE$ "5.1 WATER FLOW TEMP." is set at "YES", "5.2 ROOM TEMP." is set at "YES" (see "FOR SERVICEMAN" > "5. TEMP. TYPE SETTING" in the Use and Installation Booklet").

 $The re\,will\,be\,a\,main\,page\,and\,an\,additional\,page.\,The\,system\,also\,has\,the\,function\,including\,floor\,heating\,and\,space\,heating\,for\,fan\,coil.$ The home page will appear (Fig. 8):







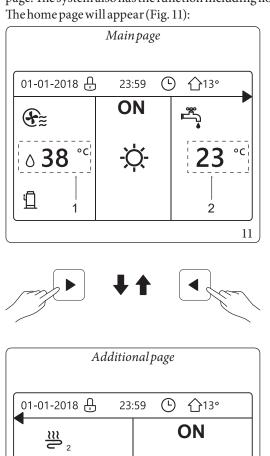


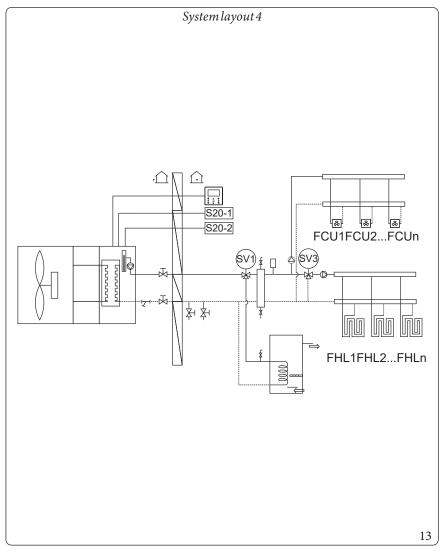
### Key (Fig. 8-9):

- Zone 1 desired water flow temperature 1
- $\quad Zone \, 2 \, desired \, room \, temperature$

### Home page 4.

 $If "6. ROOM\, THERMOSTAT" is\, set\, at\, "DOUBLE\, ZONE" \, or\, "DOUBLE\, ZONE" is\, set\, at\, "YES", there will be\, a\, main\, page\, and\, an\, additional\, and the contraction of the contractio$  $page. \, The \, system \, also \, has \, the \, function \, including \, floor \, heating, space \, heating \, for \, fan \, coil \, and \, domestic \, hot \, water.$ 





### Key (Fig. 11 - 12 - 13):

1 - Zone 1 desired water flow temperature

12

- DHW tank real temperature

- Zone 2 desired room temperature

S20-1 - Zone 1 room thermostat

S20-2 - Zone 2 room thermostat

### MENUSTRUCTURE.

#### ABOUT THE MENU STRUCTURE. 4.1

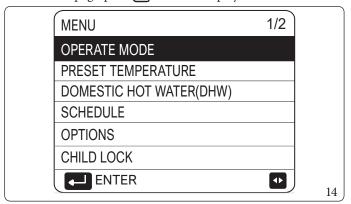
The menu structures can be used to read and adjust settings NOT intended for daily use.

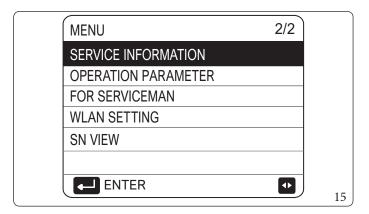
The settings displayed and that can be set in the menu structures are described in the relative sections.

For an overview of the menu structure, see chapter 7 "Menu structure: overview".

#### ACCESS TO THE MENU STRUCTURE. 4.2

From a home page, press. This will display the menu structure:





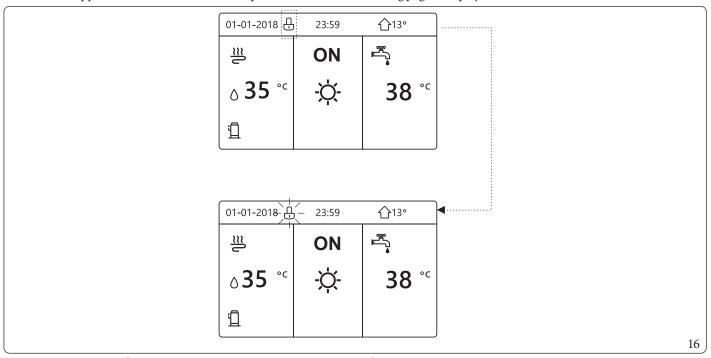
### 4.3 HOW TO NAVIGATE IN THE MENU STRUCTURE.

Use "▼" and "▲" to scroll.

# BASIC USE.

### SCREEN UNLOCK.

If the icon papears on the screen, the control panel is locked. The following page is displayed:



 $Press\,any\,key, the\,icon \\ \begin{picture}(150,0)\put(0,0){\line(150,0)}\pu$ The control panel will lock if no operations are performed for much time (approximately 120 seconds): the setting can be adjusted on the panel, see paragraph 6.7 "Technical information.".

If the control panel is unlocked, press and hold the 🔂 key to lock it.

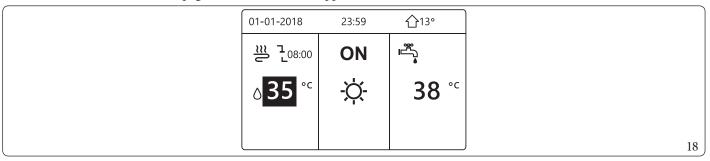
ne control paneris uniocked, press and noid	tine G key to	ockii.						
	01-01-2018	23:59	<b>☆</b> 13°					
	≋	ON						
	∆ <b>35</b> °c	- <u>Ö</u> -	38 °c					
	Ī							
	1	<b>†</b> †	2	'				
	01-01-2018	23:59	<b>☆</b> 13°					
	≋	ON						
	∆35 °c	- <u>Ö</u> -	38 °c					
	П							

1 - Press and hold 0
2 - Press and hold 0

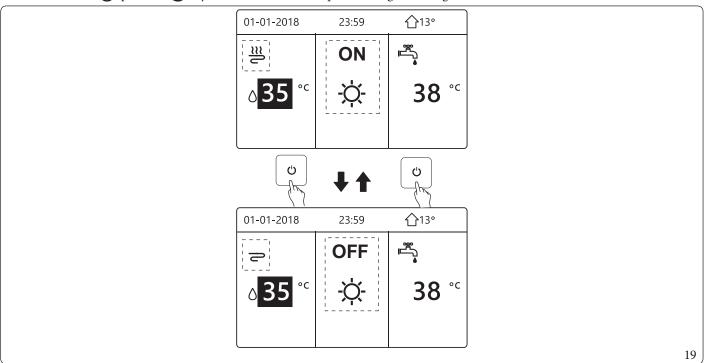
#### SWITCHING CONTROLS ON/OFF. 5.2

### Use the control panel of the unit to switch space heating or cooling on or off.

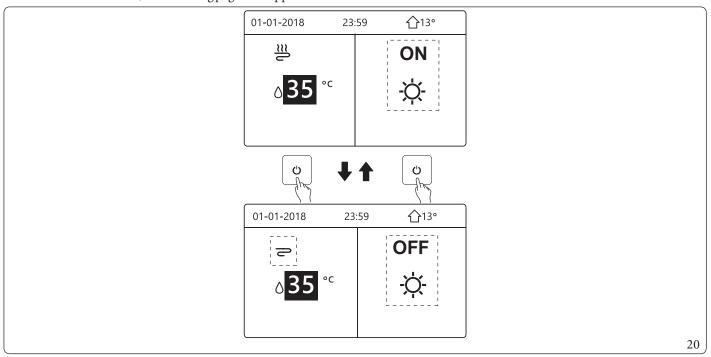
- You may switch the unit on/off from the control panel if "6. ROOM THERMOSTAT" is set at "NON" (see "6. ROOM THERMOSTAT" in the Use and Installation Booklet).
- Press "and" on the home page, the black cursor will appear:



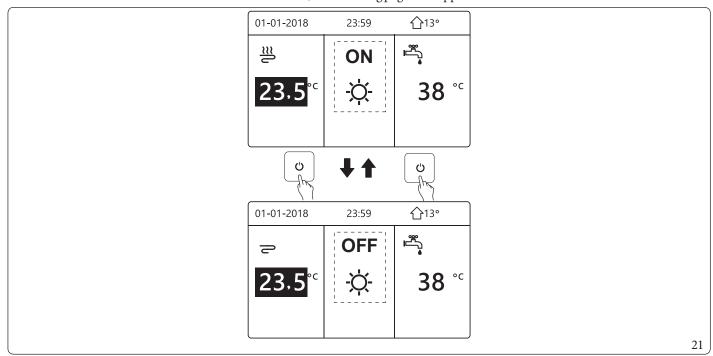
- 1) When the cursor is on the temperature on the space operation mode side (which includes "HEAT" mode - ☼-, "COOL" mode \* ☆ and "AUTO" mode (A), press the (b) key to activate/deactivate space heating or cooling.



### $If DHW\,TYPE is\,set\,at\,NO, the\,following\,pages\,will\,appear:$

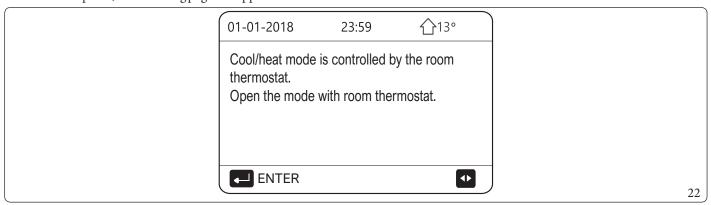


### If "5. TEMP. TYPE SETTING" is set at "5.2 ROOM TEMP.", the following pages will appear:

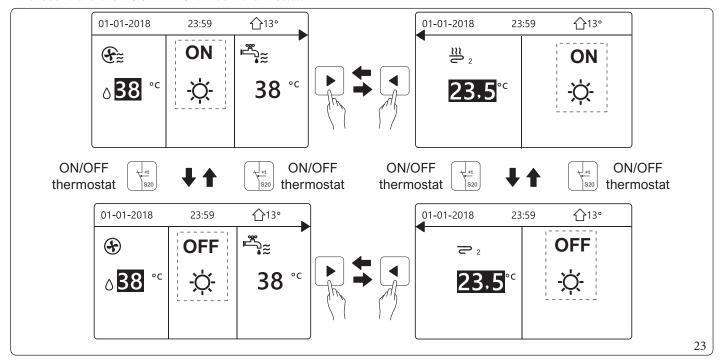


### Use the room thermostat to switch space heating or cooling on or off.

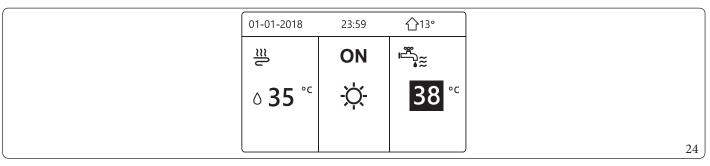
- 1) The room thermostatis set at "ONE ZONE" or "DOUBLE ZONE" or "MODE SET" (see "6. ROOM THERMOSTAT" in the Use and Installation Booklet). The unit for space heating or cooling is activated or deactivated from the room thermostat. If you press "(1)" on the control panel, the following page will appear:



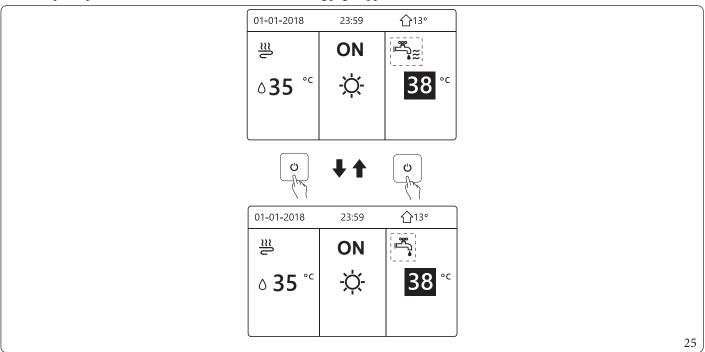
- 2) The room thermostat is set at "ONE ZONE" or "DOUBLE ZONE" (see "6. ROOM THERMOSTAT" in the Use and Installation Booklet). The room thermostat controls the ON/OFF operating mode of the unit, set on the control panel. The following pages show  $the \, control \, of \, the \, DOUBLE \, ZONE \, room \, thermost at.$ 



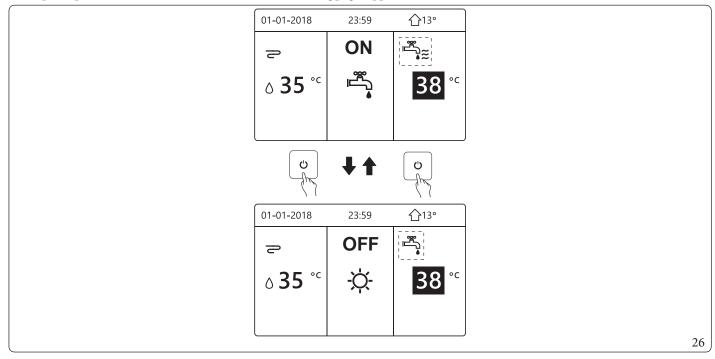
Use the control panel to switch the "DHW" unit on or off. Press "and" on the home page, the black cursor will appear:



- 1) When the cursor is on the temperature of the "DHW MODE", press the " $\bigvee$ " key to activate or deactivate it. If the space operation mode is activated (ON), the following pages appear:

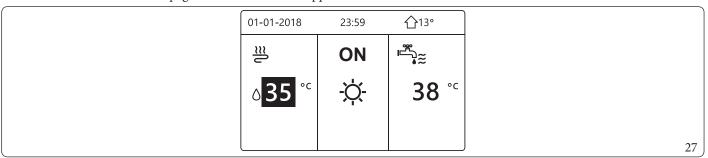


 $If the space operation \, mode \, is \, deactivated \, (OFF), the \, following \, pages \, appear: \,$ 

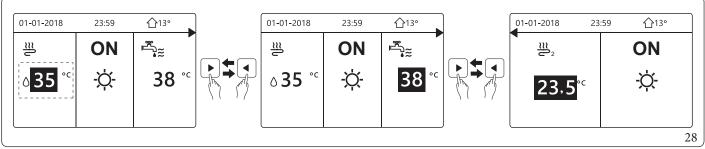


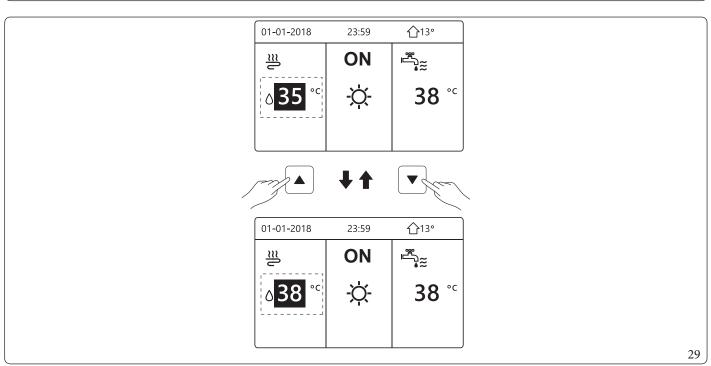
#### 5.3 ADJUSTING THE TEMPERATURE.

Press " $\blacktriangleleft$ " and " $\blacktriangle$ " on the home page, the black cursor will appear:



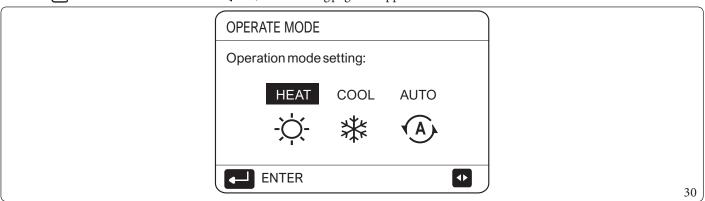
If the cursor is on the temperature, use "◀" and "▶" to select (Fig. 28) and use "▼" and "▲" to adjust the temperature (Fig. 29).





### ADJUSTING SPACE OPERATION MODE.

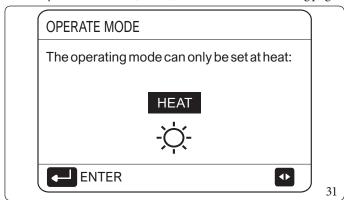
- Adjusting space operation mode from control panel. Go to "=" > "OPERATE MODE". Press  $\longrightarrow$ , the following page will appear:

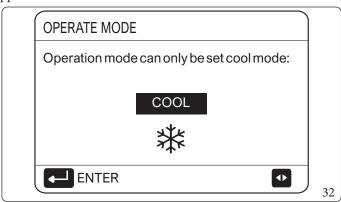


You may select three modes, namely "HEAT", "COOL" and "AUTO". Use "\( \bigcirc\) and "\( \bigcirc\) to scroll, press \( \bigcirc\) to select.

If you do not press \( \bigcirc\) and you exit the page by pressing \( \bigcirc\), the mode will remain operational if the cursor was moved to the operational in the cursor was moved to the operation of the cursor was moved to the cursor was moved ation mode.

If only "HEAT" mode (COOL) is available, the following page will appear:





The operation mode cannot be changed.

If you select	Then the space operation mode is		
- <u>Ö</u> -	Always in Central heating		
HEAT	Alwaysin Centrameating		
*	Always in Cooling		
COOL	Thruly of the Cooling		
	Setting  automatically  changed  by  the  software  based  on  the  outdoor  temperature  (and  depending  on  installer  outdoor  outdoor		
(A)	settings  of the  outdoor  temperature), and  taking  monthly  restrictions  into  account.		
	Note: the automatic change is only possible under certain conditions.		
AUTO	See "FOR SERVICEMAN" > "4.AUTO MODE SETTING"		
	in the Use and Installation Booklet		

le from the room thermostat (see "6. ROOM THERMOSTAT" in the Use and It 2". If you press any key for a selection or adjustment, the following page appears:	nstallation Booklet). Go to '
01-01-2018 23:59 <b>介</b> 13°	
Cool/heat mode is controlled by the room thermostat.  Please adjust the operation mode by the room thermostat.	
<b>■</b> ENTER	33

# OPERATION.

#### 6.1 OPERATION MODE.

See Paragraph 5.4 "Adjusting space operation mode".

### 6.2 PRESET TEMPERATURE.

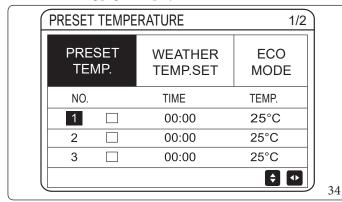
"PRESETTEMPERATURE" has 3 elements:

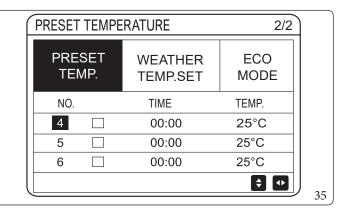
- PRESET TEMP.:
- WEATHER TEMP. SET;
- ECO MODE.

### PRESETTEMP .:

The "PRESET TEMP." function allows you to set a different temperature at a different time when Heat or Cool mode is active.

- PRESETTEMP.=PRESETTEMPERATURE
- The "PRESET TEMPERATURE" function is deactivated under these conditions:
- 1) the "AUTO" mode is on;
- 2) "TIMER" or "WEEKLY SCHEDULE" are running.
- The following page is displayed:



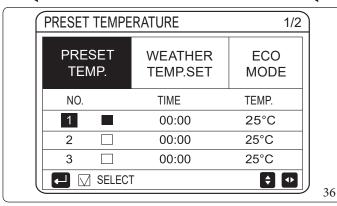


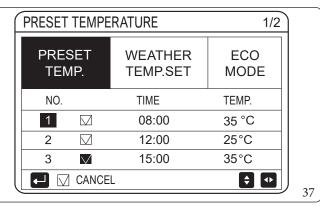
When the "DOUBLE ZONE" function is activated, "PRESET TEMP." is only active for zone 1.

Use "♥", "♥", "♠" to scroll and use "♥" and "♠" to adjust the time and the temperature.

When the cursor is on "■", as in the following page;

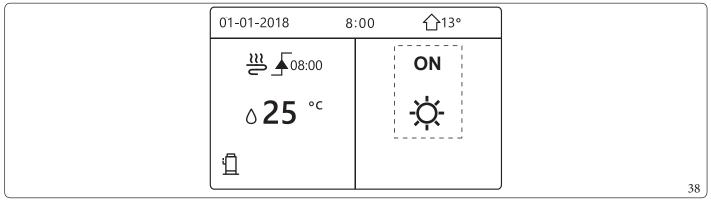
Press ₄ and "∎" becomes "■". Timer 1 is selected. Press "₄ again and "■" becomes "∎". Timer 1 is unselected.



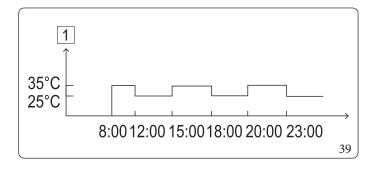


Use "▼", "▼", "▼", "A" to scroll and use "▼" and "A" to adjust the time and temperature. Six periods and six temperatures can be set.

For example: now it is 8:00 and the temperature is 30 °C. We set "PRESET TEMP." as in the table below. The following page is displayed:



NO.	TIME	TEMPER.
1	8:00	35°C
2	12:00	25°C
3	15:00	35°C
4	18:00	25°C
5	20:00	35°C
6	23:00	25°C



Key (Fig. 39):
1 - Temperature



 $When the space operation \,mode \, is \, changed, PRESET\, TEMP. \, automatically \, switches \, off.$ 

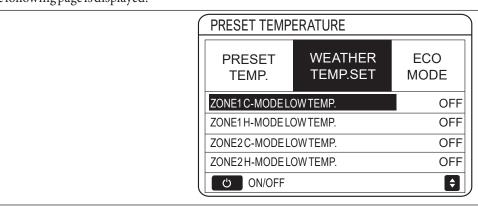
The "PRESET TEMP." function can be used in Heating or Cooling. However if the operation mode is changed, the "PRESET TEMP." function needs to be restored.

The current preset temperature is not valid when the unit is OFF. When the unit is switched back on, it will run at the next preset temperature.

### WEATHER TEMP.SET

- WEATHER TEMP.SET = CLIMATE TEMPERATURE SETTING
- The "WEATHER TEMP. SET" function allows you to preset the desired water flow temperature based on the outdoor air temperature.When the weather heats up, heating is turned down. Therefore to save energy, the desired water flow temperature is reduced when the outdoor temperature increases and the "HEAT mode is active.

The following page is displayed:





- "WEATHER TEMP. SET" has four types of curves:
  - 1) the high temperature heating setting curve;
  - 2) the low temperature heating setting curve;
  - 3) the high temperature cooling setting curve;
  - 4) the low temperature cooling setting curve.

Use only the high temperature heating setting curve if high temperature is set for central heating.

Use only the low temperature heating setting curve if low temperature is set for central heating.

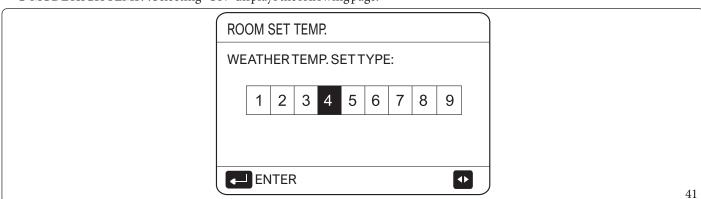
Use only the high temperature cooling setting curve if high temperature is set for cooling.

Use only the low temperature cooling setting curve if low temperature is set for cooling.

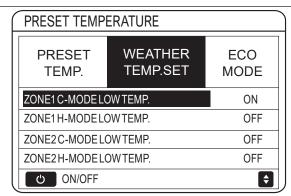
• See "FOR SERVICEMAN" > "2. COOL MODE SETTING" and > "3. HEAT MODE SETTING" in the Use and Installation Booklet.

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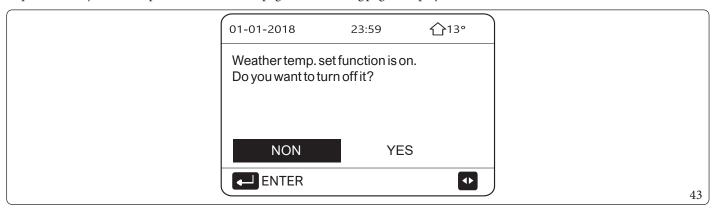
- It is not possible to adjust the desired temperature (T1S), when the temperature curve is set at "ON".
- To use the "HEAT" mode in zone 1, select "ZONE1 H-MODE HIGH TEMP.". To use the "COOL" mode in zone 1, select "ZONE1 C-MODE HIGH TEMP.". Selecting "ON" displays the following page:



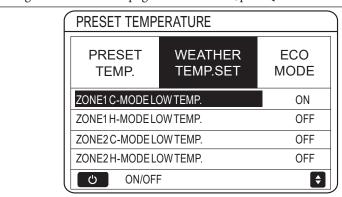
Use "\" and "\" to scroll. Press "\\_\_\_ \" to select.



If the "WEATHER TEMP.SET" function is on, the desired temperature cannot be adjusted on the control panel. If "▼" and "▲" are pressed to adjust the temperature on the home page. The following page is displayed:



Move to "NON", press ← to go back to the home page. Move to "YES", press ← to reset "WEATHER TEMP.SET".

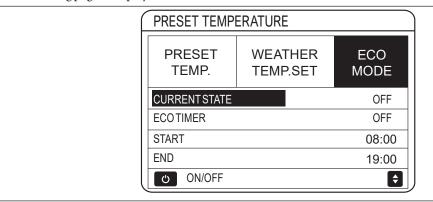


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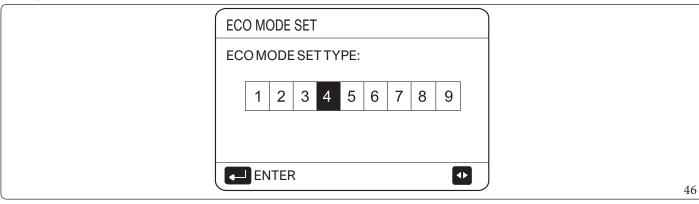
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### ECOMODE.

Eco Mode allows you to save energy. Go to "PRESET TEMPERATURE" > "ECO MODE". Press ". The following page is displayed:

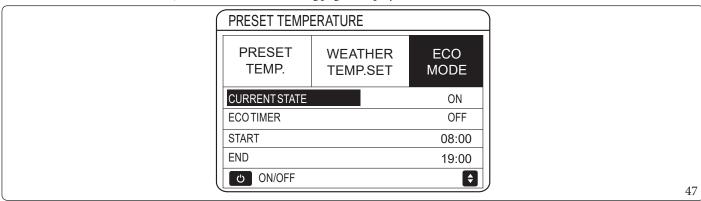


Press (1). The following page is displayed:



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Use "♥" and "▶" to scroll. Press ↓ to select. The following page is displayed:



Use to activate/deactivate; use "▼" and "▲" to scroll.

PRESET TEMPERATURE						
PRESET TEMP.	WEATHER TEMP.SET	ECO MODE				
CURRENT STATE		OFF				
ECOTIMER		OFF				
START		08:00				
END		19:00				
<b>♦</b> ADJUST		•				

When the cursor is on "START" or "END", you can use "♥", "♥", "♥", "\Lambda" to scroll and "\Lambda" and "\Lambda" to adjust the time.



- "ECO MODE SET" has two types of curves:
  - 1) the high temperature heating setting curve;
  - 2) the low temperature heating setting curve;

There is only the high temperature heating setting curve if high temperature is set for central heating. There is only the low temperature heating setting curve if low temperature is set for central heating.

- $\bullet \ \ See ``FORSERVICEMAN"> ``MODESETHEAT"' in the Use and Installation Booklet.$
- It is not possible to adjust the desired temperature (T1S), when the "ECO MODE" is activated (ON).
- You may select the low or high temperature setting for heating: see "Table 1-2".
- $\bullet \ \ If "ECO\,MODE" is activated (ON) and "ECO\,TIMER" is deactivated (OFF), the unit will always \,run \,in "ECO" \,mode.$
- If "ECO MODE" is activated (ON) and "ECO TIMER" is activated (ON), the unit will work in "ECO" mode based on the start and end time.

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#### DOMESTICHOT WATER (DHW). 6.3

"DHW" mode normally includes the following items:

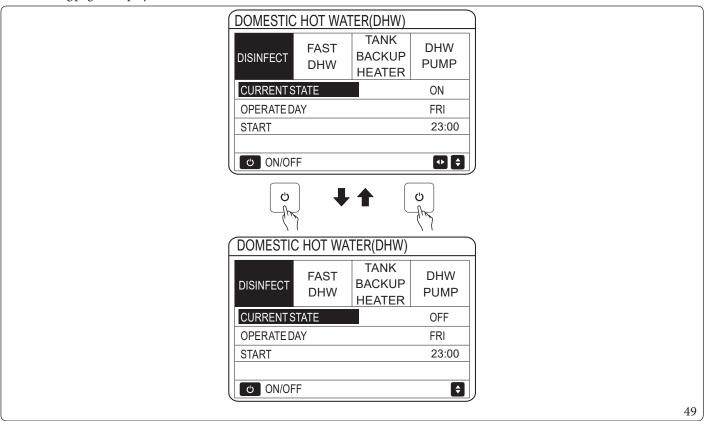
- DISINFECT;
- FAST DHW;
- TANK BACKUP HEATER;
- DHW PUMP.

### DISINFECT.

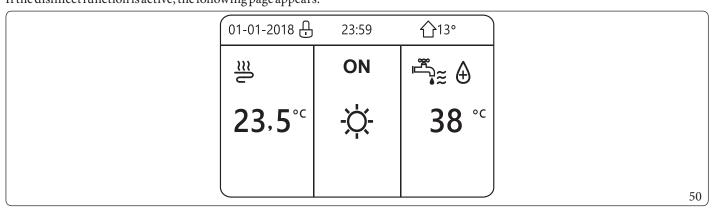
The "DISINFECT" function allows you to eliminate legionella bacteria. The storage tank temperature mandatorily reaches 65-70°C in the disinfect function.

The disinfect temperature is set in "DHW MODE". See "FOR SERVICEMAN" > "1. DHW MODE SETTING" > "1.2 DISINFECT" in the Use and Installation Booklet.

The following page is displayed:



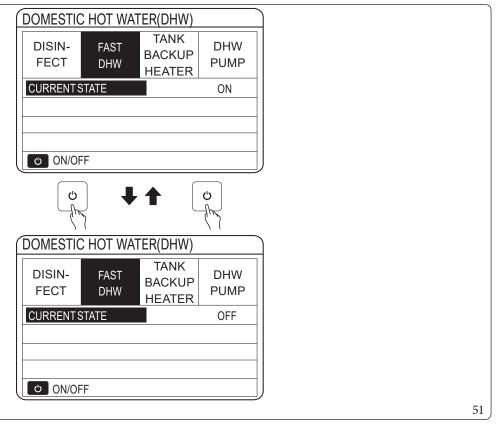
Use ``="", """, """, """ ) `` "", """ ) `` "" ) ``" ] ``" ] ``" ) ``" ] ``" ] ``" ) ``" ] ``" ] ``" ] ``" ] ``" ] ``" ] ``" ] ``" ] ``" ] ``ERATE DAY" is set at "FRI" and "START" is set at 23:00, the disinfect function will activate on Friday at 23:00. If the disinfect function is active, the following page appears:



### FAST DHW.

The "FAST DHW" function forces the system to activate "DHW MODE".

The heat pump and storage tank heater activate together for "DHW MODE" and the desired DHW temperature switches to 60°C.





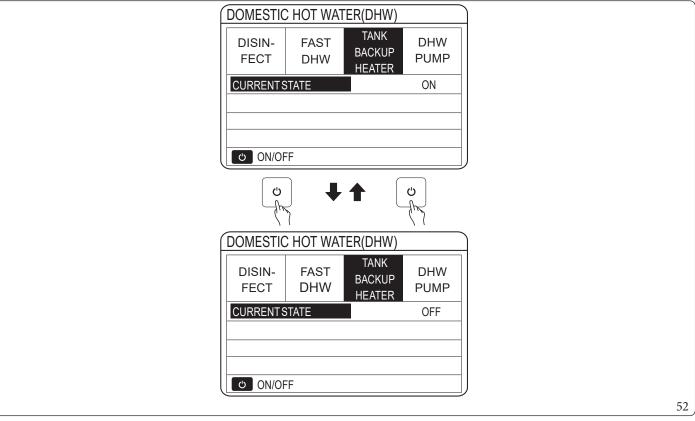
If "CURRENT STATE" is deactivated (OFF), the "FAST DHW" function is not valid, while if it is activated (ON), the "FAST DHW" function is active.

The "FAST DHW" activates once.

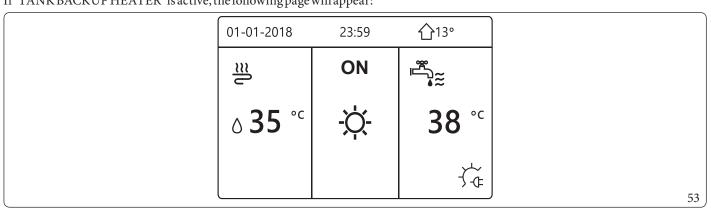
### **TANKBACKUP HEATER**

The "TANK BACKUP HEATER" function forces water heating in the storage tank. In the same situation, cooling or heating is required and the heat pump system is operating for cooling or heating. However there is a domestic hot water demand as well.

Furthermore, if the heat pump system is not sufficient, the "TANK BACKUP HEATER" can also be used to heat water in the storage tank. 



 $Use \begin{picture}(100)\put(0$ If "TANK BACKUP HEATER" is active, the following page will appear:

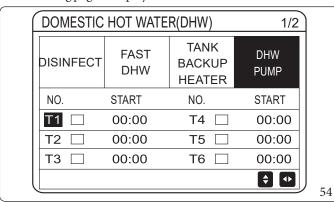


If "CURRENT STATE" is deactivated (OFF), "TANK BACKUP HEATER" cannot be activated. If the storage tank sensor (T5) is a support of the storage tank sensor (T5) is the storage tank sensor (faulty, the storage tank heater cannot work.

### DHW PUMP.

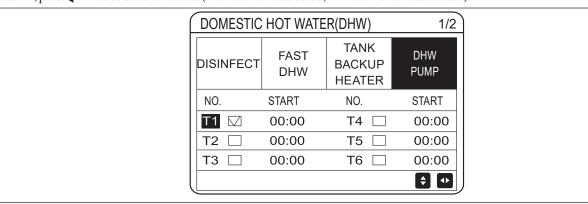
The "DHW PUMP" function allows to maintain the temperature inside the storage tank uniform, by activating a DHW recirculation pump.

The following page is displayed:



DOMESTIC	HOT WATE	ER(DHW)	2/2	
DISINFECT	FAST DHW	TANK BACKUP HEATER	DHW PUMP	
NO.	START	NO.	START	
T7 🗆	00:00	T10 🗆	00:00	
T8 🗆	00:00	T11 🗌	00:00	
T9 🗆	00:00	T12 🗌	00:00	
			₹ •	

Move to " $\blacksquare$ ", press  $\blacksquare$  to select or unselect ( $\square$  the timer is selected;  $\square$  the timer is not selected).

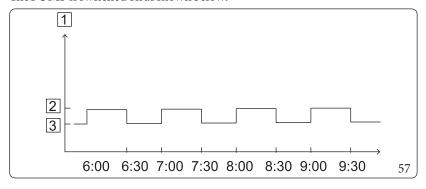


Use " $\blacktriangleleft$ ", " $\blacktriangleright$ ", " $\blacktriangleleft$ " to scroll and use " $\blacktriangledown$ " and " $\blacktriangle$ " to adjust the parameters.

For example: the parameter relative to "DHW PUMP" was set (see "FOR SERVICEMAN" > "1. DHW MODE SETTING" in the Use and Installation Booklet). "PUMP\_D RUNNING TIME" is 30 minutes.

NO.	START
1	6:00
2	7:00
3	8:00
4	9:00

The PUMP is switched on as shown below:



Key (Fig. 57):
1 - Pump

2 - ON 3 - OFF 56

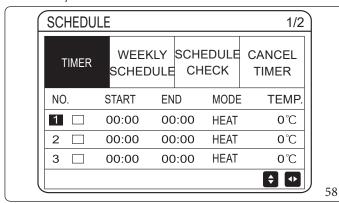
### PROGRAMMING.

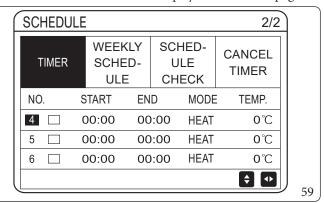
 $The "SCHEDULE\, menu\, contains\, the\, following\, items:$ 

- TIMER;
- WEEKLY SCHEDULE;
- SCHEDULE CHECK;
- CANCELTIMER.

### TIMER.

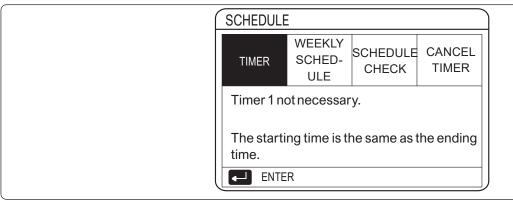
If the weekly schedule is on and the timer is off, the most recent setting applies. If the "TIMER" is on,  $\bigcirc$  is displayed on the home page.





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Use " $\blacktriangledown$ ", " $\blacktriangledown$ ", " $\blacktriangledown$ ", " $\blacktriangledown$ " to scroll and use " $\blacktriangledown$ " and " $\blacktriangle$ " to adjust the time, the mode and the temperature. Move to "∎", press ← to select or unselect ( the timer is selected; the "TIMER" is not selected). Six timers can be set. To cancel the "TIMER", move the cursor to " $\blacksquare$ ", and press  $\blacksquare$ . The icon  $\blacksquare$  becomes  $\square$  and the "TIMER" is not active. If you set the start time later than the end time (or the temperature out of range of the mode), the following page appears:

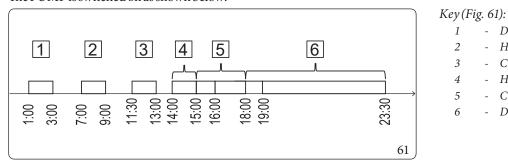


### - Example:

Six timers are set as follows:

NO.	START	END	MODE	ТЕМР.
T1	1:00	3:00	DHW	50°C
T2	7:00	9:00	HEAT	28°C
Т3	11:30	13:00	COOL	20°C
T4	14:00	16:00	HEAT	28°C
T5	15:00	19:00	COOL	20°C
T6	18:00	23:30	DHW	50°C

### The PUMP is switched on as shown below:



The control panel switches on at the following times:

TIME	Operation of the control panel	
1:00	The "DHW MODE" is activated (ON)	
3:00	"DHW MODE" is deactivated (OFF)	
7:00	The "HEAT MODE" is activated (ON)	
9:00	"HEAT MODE" is deactivated (OFF)	
11:30	The "MODE COOL" is activated (ON)	
13:00	"MODE COOL" is deactivated (OFF)	
14:00	The "HEAT MODE" is activated (ON)	
15:00	"MODE COOL" is activated (ON) and "HEAT MODE" is deactivated (OFF)	
18:00	"DHW MODE" is activated (ON) and "MODE COOL" is deactivated (OFF)	
23:30	"DHW MODE" is deactivated (OFF)	

- DHW

- HEAT - COOL HEAT

COOL

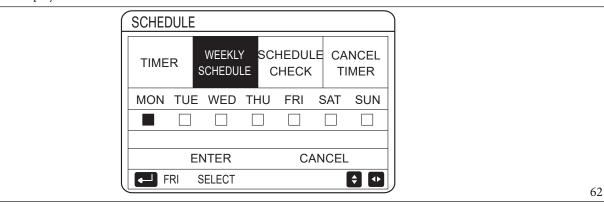
DHW



The timer is not valid if the start and end time are the same.

### Weekly schedule.

The following page is displayed:



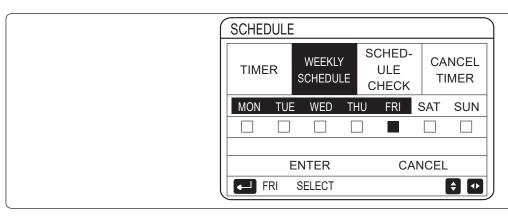
First select the days of the week you wish to schedule.

Use "◀" and "▶" to scroll, press ↓ to select or unselect the day.

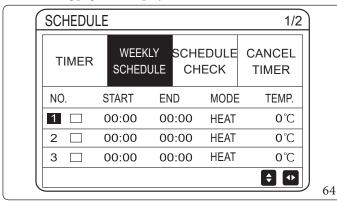
"MON" indicates that the day is selected, "MON" means that that day is selected.

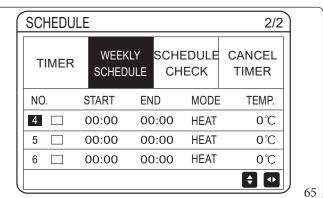


At least two days must be set when activating the "WEEKLY SCHEDULE" function.



Use "\" and "\" to scroll, press \to SET and press "ENTER". Monday to Friday are selected and they have the same schedule. The following pages are displayed:





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Use " $\P$ ", " $\P$ ", " $\P$ ", " $\P$ " to scroll and adjust the time, the mode and the temperature.

Several timer settings can be made, including start and end time, mode and temperature. "HEAT MODE", "MODE COOL" and "DHW MODE" are included.

The setting method refers to the timer setting. The end time must be later than the start time. Otherwise the Timer useless indication will appear, namely that it cannot be activated.

#### Schedule check.

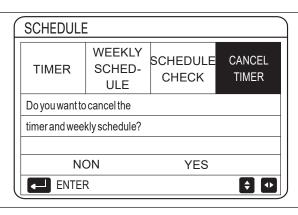
[	SCHEDULE				
	TIMER	WEEKLY SCHED- ULE	SCHEDULE CHECK	CANCEL TIMER	
	WEEKLY SC	HEDULE CHEC	CK		
	ENTER	₹			
`					6

SCHEE	OULE C	HECK			
DAY	NO.	MODE	SET	START	END
	T1 [	HEAT	0℃	00:00	00:00
	T2 [	HEAT	0℃	00:00	00:00
MON	Т3 [	HEAT	0℃	00:00	00:00
	T4 [	HEAT	0℃	00:00	00:00
	T5 [	HEAT	0℃	00:00	00:00
	T6 [	HEAT	0℃	00:00	00:00

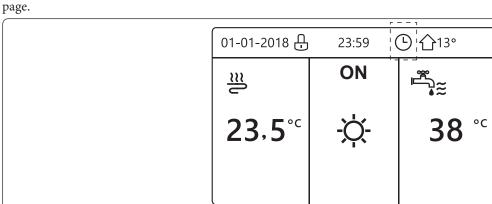
Press "▼" and "▲", the Monday to Sunday timer is displayed.

#### CANCELTIMER.

The following page is displayed:

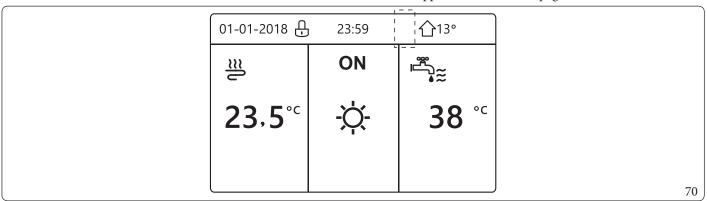


Use " $\P$ ", " $\P$ ", " $\P$ ", " $\P$ " to move to "YES", press  $\P$  to cancel the timer. To exit "CANCEL TIMER", press " $\P$ ". If the "TIMER" or "WEEKLY SCHEDULE" functions are on, the timer icon " $\P$ " or the weekly schedule icon " $\P$ " appear on the home



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If the "TIMER" or "WEEKLY SCHEDULE" is cancelled, the icon "©" or "7" disappears from the home page.





"TIMER"/"WEEKLY SCHEDULE" must be restored if switching from setting "5.1 WATER FLOW TEMP." to "5.2 ROOM TEMP." or from setting "5.2 ROOM TEMP." to "5.1 WATER FLOW TEMP.".

 $"TIMER" \ or "WEEKLY SCHEDULE" \ are not valid if "6. ROOM THERMOSTAT" is active.$ 



- "ECO MODE" has the highest priority. "TIMER" or "WEEKLY SCHEDULE" have the intermediate priority and "PRESET TEMP." or "WEATHER TEMP.SET" have the lowest priority.
- "PRESET TEMP." or "WEATHER TEMP.SET" are no longer valid when "ECO MODE is on. You must reset "PRESET TEMP." or "WEATHER TEMP.SET" when "ECO MODE" is deactivated.
- "TIMER" or "WEEKLY SCHEDULE" are not valid when "ECO MODE" is not activated. "TIMER" or "WEEKLY SCHED-ULE" are activated when "ECO MODE" is not running.
- "TIMER" or "WEEKLY SCHEDULE" have the same priority. The function with the most recent setting is applied."PRESET TEMP." is no longer valid when "TIMER" or "WEEKLY SCHEDULE" are activated. "TIMER" or "WEEKLY SCHEDULE" have no effect on "WEATHER TEMP.SET".
- "PRESET TEMP." and "WEATHER TEMP.SET" have the same priority. The function with the most recent setting is applied.



All the items ("PRESET TEMP.", "ECO" MODE, "DISINFECT", "DHW PUMP", "TIMER", "WEEKLY SCHEDULE", "SILENT MODE", "HOLIDAY HOME") can be programmed by setting the relative function on "ON/OFF" from the starting time to the end time.

#### 6.5 **OPTIONS.**

 $The "OPTIONS" \, menu \, contains \, the \, following \, items: \,$ 

- SILENT MODE;
- HOLIDAY AWAY:
- HOLIDAY HOME;
- BACKUPHEATER.

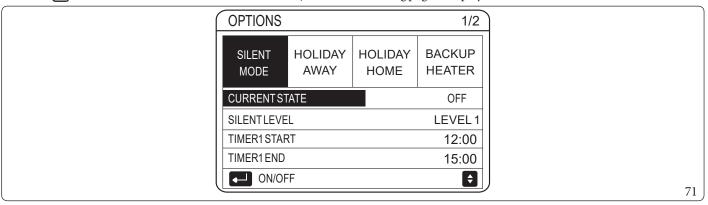
#### **SILENT MODE**

"SILENT MODE" allows you reduce the noise level of the unit. However this also reduces the heating/cooling capacity of the system. Silent mode has two levels.

Level 2 is quieter than level 1 and also has a lower heating or cooling capacity.

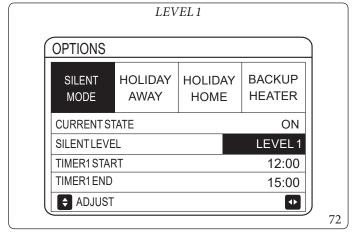
There are two ways to use the Silent mode:

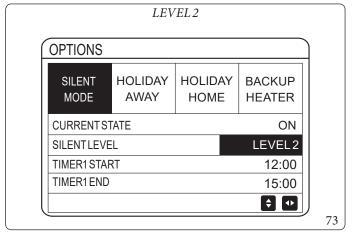
- 1. Silent mode the whole time;
- 2. Silent mode based on timer.
- Go to the home page to check whether Silent mode is on. If silent mode is activated, "will be enabled on the home page.



Use (1) to select activated (ON) or deactivated (OFF).

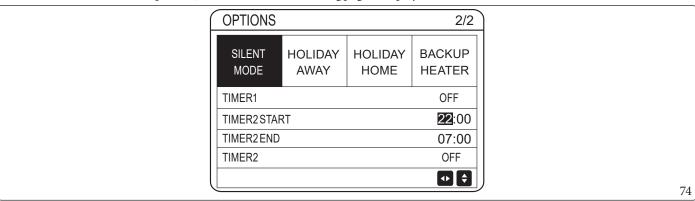
Description: if "CURRENT STATE" is set at "OFF", "SILENT MODE" is not valid. Selecting "SILENT LEVEL" and pressing " is not valid." or " is a displays the following page:





You can use "▲" and "▼" to select level 1 or level 2. Press "
— ".

If the silent TIMER is selected, press " to enter. The following page is displayed:



It is possible to set two timers. Move to " $\blacksquare$ ", press " $\blacksquare$ " to select or unselect.

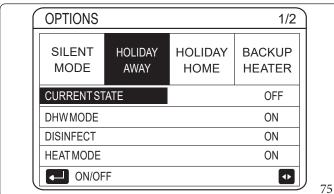
If both timers are unselected, the Silent mode will remain active. Otherwise operation will be time-controlled.

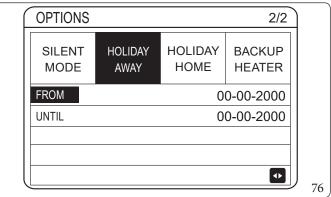
#### HOLIDAY AWAY.

- If the "HOLIDAY AWAY" mode is on, is displayed on the home page.

The "HOLIDAY AWAY" function prevents the system from freezing during winter when away on vacation and reactivates the unit before the end  $\underline{of}$  holidays.

Go to "☐"> "OPTIONS"> "HOLIDAY AWAY". Press "← — ". The following page is displayed:





For example: you leave during winter. Today is 31/12/2018 and holidays start in two days (02/01/2019).

- Let's suppose that you are in this situation: in 2 days you will leave for 2 weeks during winter.
- You want to save energy but without the system freezing.

You can perform the following operations:

- 1. Configure the holiday away settings below.
- 2. Activate Holiday mode.

Go to "D"> "OPTIONS"> "HOLIDAY AWAY". Press ".
Use to select activated (ON) or deactivated (OFF) and use ", ",", "," to scroll and adjust.

Setting	Value
HOLIDAY AWAY	ON
FROM	2 January 2018
UNTIL	16 January 2018
OPERATE MODE	HEAT
DISINFECT	ON



- If "DHW MODE" is on in "HOLIDAY AWAY" mode, the disinfection set by the user is not valid.
- If "HOLIDAY AWAY" mode is activated, the timer and weekly programming are not valid.
- If "CURRENT STATE" is deactivated (OFF), "HOLIDAY AWAY" is deactivated (OFF).
- If "CURRENT STATE" is activated (ON), "HOLIDAY AWAY" is activated (ON).
- The unit is disinfected at 23:00 on the last day, if the disinfect function is activated.
- When "HOLIDAY AWAY" mode is active, the previously set climatic curves are not valid and will automatically take effect at the end of the period set for "HOLIDAY AWAY".
- The preset temperature is not valid when "HOLIDAY AWAY" mode is on, but the preset value still appears on the home page.

#### HOLIDAY HOME.

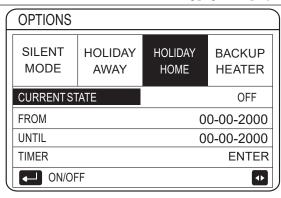
The "HOLIDAY HOME" function allows you to make changes to the normal schedule without needing to adjust them when spending holidays at home.

- During holidays, you may use Holiday mode to make changes to the normal schedules without needing to adjust them.

Period	Schedule	
Before and after holidays	Normal schedules are activated	
During holidays	The configured holiday settings are activated	

If "HOLIDAY HOME" mode is activated, will appear on the home page.

Go to "OPTIONS" > "HOLIDAY HOME". Press " ... The following page is displayed:



Use " $\bigcirc$ " to select activated (ON) or deactivated (OFF) and use " $\bigcirc$ ", " $\bigcirc$ ", " $\bigcirc$ ", " $\bigcirc$ " to scroll and adjust.

If "CURRENT STATE" is deactivated (OFF), "HOLIDAY HOME" is deactivated (OFF).

If "CURRENT STATE" is activated (ON), "HOLIDAY HOME" is activated (ON).

Use "▼" and "▲" to set the date.

- The normal schedule is activated before and after holidays.

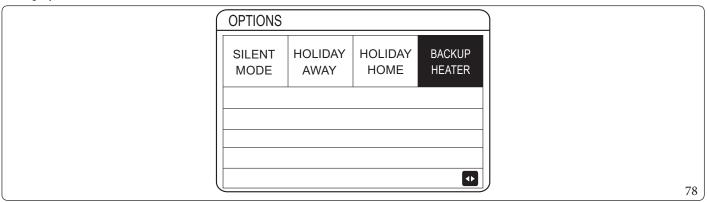


If you change the operation mode of the unit, you must exit "HOLIDAY AWAY" or "HOLIDAY HOME".

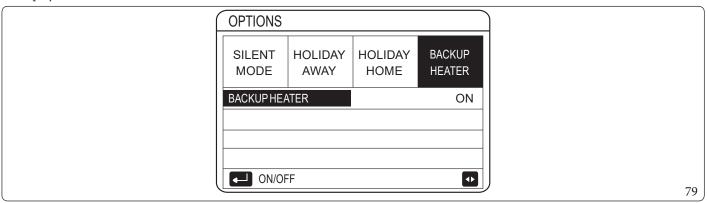
#### **BACKUP HEATER**

The "BACKUP HEATER" function forces activation of the backup heater. Go to " $\Box$ " > "OPTIONS" > "BACKUP HEATER". Press"← ".

- If the system backup heater (IBH) is not set as valid by the DIP switch on the main board of the hydronic module, the following page is displayed:



If the system backup heater (IBH) is set as valid by the DIP switch on the main board of the hydronic module, the following page is displayed:



Use the to select deactivated (OFF) or activated (ON).



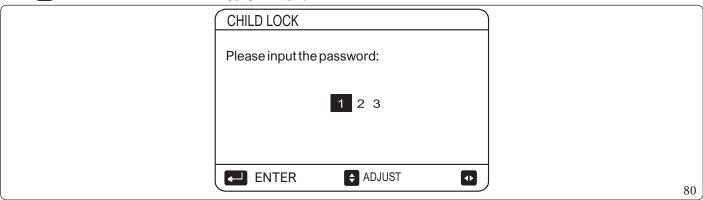
- If automatic operation mode is set on the space heating or cooling side, the "BACKUP HEATER" function cannot be selected.
- $\bullet \ \ The "BACKUP HEATER" function is not valid when only "HEAT MODE" is activated.$

#### 6.6 CHILD LOCK.

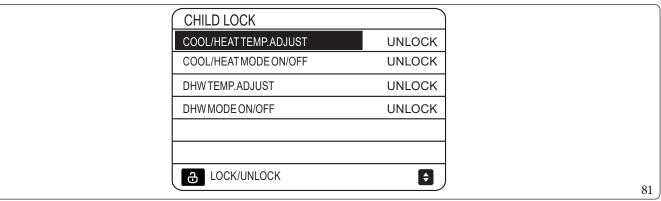
The "CHILD LOCK" function allows you to prevent children from improperly using the unit.

 $Mode \, \underline{settings} \, and \, temperature \, \underline{adjustments} \, \underline{can} \, \underline{belocked} \, \underline{or} \, \underline{unlocked} \, \underline{by} \, \underline{means} \, \underline{of} \, \underline{the} \, \underline{"CHILDLOCK"} \, \underline{function}.$ 

Go to "=" > "CHILD LOCK". The following page is displayed:



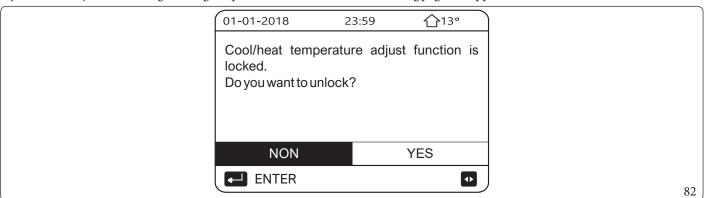
Entering the current password will display the following page:



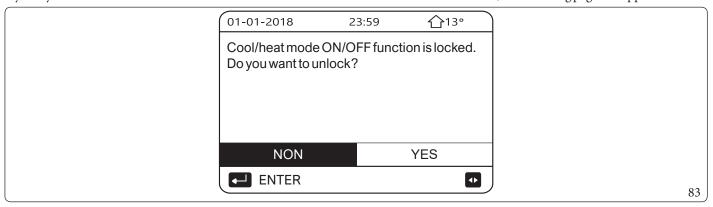
Use " $\nabla$ " and " $\Delta$ " to scroll and  $\bigcup$  to select LOCK or UNLOCK (LOCK / UNLOCK).

 $The cooling/heating \, temperature \, cannot \, be \, adjusted \, when \, the \, "COOL/HEAT \, TEMP. ADJUST" \, function \, is locked.$ 

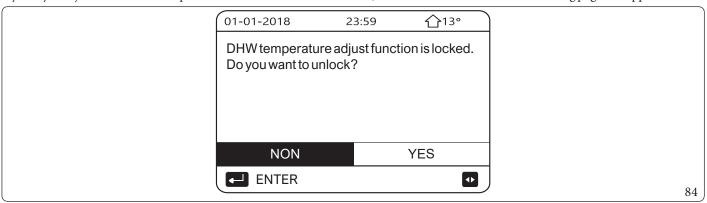
If you wish to adjust the cooling/heating temperature when locked, the following page will appear:



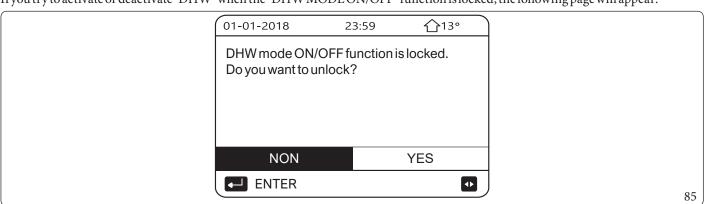
 $"COOL/HEAT\ MODE\ ON/OFF"\ cannot\ be\ activated\ or\ deactivated\ when\ the\ function\ is\ locked.$ If you try to activate or deactivate "COOL/HEAT MODE ON/OFF" when the function is locked, the following page will appear:



It is not possible to adjust the "DHW" temperature when the "DHW TEMP.ADJUST" function is locked. If you try to adjust the "DHW" temperature when the "DHW TEMP. ADJUST" function is locked, the following page will appear:



 $The "DHW" \ mode\ cannot be\ activated\ or\ deactivated\ when\ the\ "DHW\ MODE\ ON/OFF"\ function\ is\ locked.$ If you try to activate or deactivate "DHW" when the "DHW MODE ON/OFF" function is locked, the following page will appear:



#### TECHNICALINFORMATION.

#### **TECHNICALINFORMATION**

The "TECHNICAL INFORMATION" menu contains the following items:

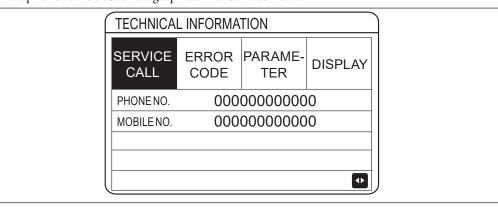
- SERVICE CALL;
- ERROR CODE;
- PARAMETER;
- DISPLAY.

## How to access the "TECHNICALINFORMATION" menus.

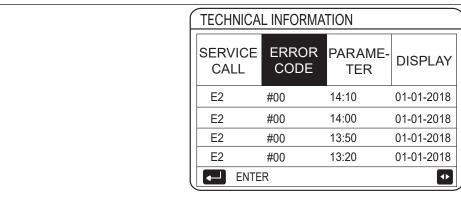
- Go to "[=]" > "SERVICE CALL".
- Press ". The following page is displayed:

The service call can contain a phone number or mobile number.

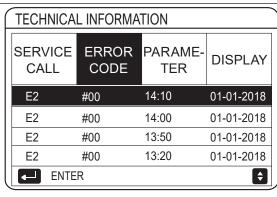
The installer can enter the phone number. See Paragraph 6.9 "For Serviceman.".



The "ERROR CODE" menu indicates when a fault or problem occurs and shows the meaning of the error code.



Press . The following page is displayed:

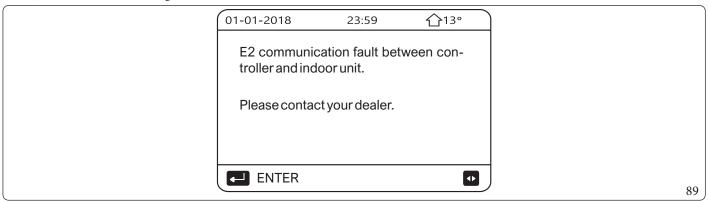


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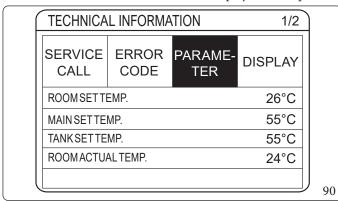
Press to show the meaning of the error code:

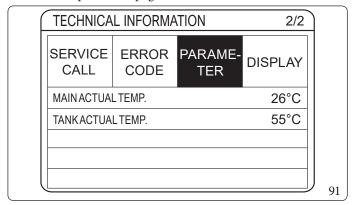




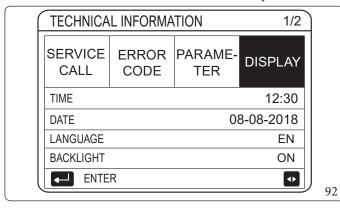
A maximum of eight error codes can be recorded.

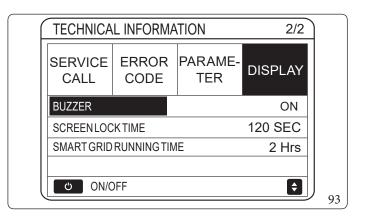
The "PARAMETER" function is used to display the main parameters. There are two parameter pages available:





The "DISPLAY" function is used to set the control panel:





#### OPERATION PARAMETERS. 6.8



This manual is intended for the installer or service engineer controlling the operating parameters.

- On the home page, go to "□"> "OPERATION PARAMETER".

  Press "←□". There are six pages for the operation parameters. Use "▼" and "▲" to scroll.

OPERATION PARAMETER	#00
ONLINE UNITS NUMBER	1
OPERATEMODE	COOL
SV1 STATE	ON
SV2 STATE	OFF
SV3STATE	OFF
PUMP_I	NON
ADDRESS	1/9
	94

OPERATION PARAMETER	#00
T5S_H.A_DHW	53°C
Tw2 CIRCUIT2 WATER TEMP.	35°C
T1S'C1 CLI. CURVE TEMP.	35°C
T1S2'C2 CLI. CURVE TEMP.	35°C
TW_OPLATEW-OUTLETTEMP.	35°C
TW_IPLATEW-INLETTEMP.	30°C
ADDRESS	4/9
	97

OPERATION PARAMETER	#00
FANSPEED	600 R/MIN
IDU TARGET FREQUENCY	46Hz
FREQUENCY LIMITED TYPE	5
SUPPLY VOLTAGE	230V
DCGENERATRIXVOLTAGE	420V
DC GENERATRIX CURRENT	18A
<b>♦</b> ADDRESS	7/9

OPERATION PARAMETER	#00
PUMP_O	OFF
PUMP_C	OFF
PUMP_S	OFF
PUMP_D	OFF
PIPE BACKUP HEATER	OFF
TANK BACKUP HEATER	ON
<b>₽</b> ADDRESS	2/9
	95

OPERATION PARAMETER	#00
Tbt_1BUFFERTANK_UPTE	MP. 35°C
Tbt_2BUFFERTANK_LOWT	EMP. 35°C
Tsolar	25°C
IDUSOFTWARE (	01-09-2019V01
ADDRECC	- /o
ADDRESS	5/9
	9

OPERATION PARAMETER	#00
TW_OPLATEW-OUTLETTEMP.	35°C
TW_IPLATEW-INLETTEMP.	30°C
T2PLATEF-OUTTEMP.	35°C
T2B PLATE F-IN TEMP.	35°C
Th COMP.SUCTION TEMP.	5°C
Tp COMP.DISCHARGE TEMP.	75°C
ADDRESS	8/9
	10

	$\overline{}$
OPERATION PARAMETER	#00
GASBOILER	OFF
T1 LEAVING WATER TEMP.	35°C
WATER FLOW	1,72m <sup>3</sup> /h
HEAT PUMP CAPACITY	11,52kW
POWER CONSUM	1000kWh
Ta ROOM TEMP.	25°C
ADDRESS	3/9

OPERATION PARAMETER	#00
ODUMODEL	6kW
COMP. CURRENT	12A
COMP. FREQUENCY	24Hz
COMP.RUNTIME	54 MIN
COMP.TOTAL RUNTIME	1000Hrs
EXPANSION VALVE	200P
ADDRESS	6/9
	99

OPERATION PARAMETE	ER .	#00
T3OUTDOOREXCHANG	SETEMP.	5°C
T4 OUTDOOR AIR TEMP.		5°C
TF MODULE TEMP.		55°C
P1 COMP. PRESSURE	2	2300kPa
ODUSOFTWARE	01-09-2	2018V01
HMISOFTWARE	01-09-2	2018V01
ADDRESS		9/9
		102



Entering the power consumption parameter is optional.

Parameters not activated in the system are marked "--".

The heat pump capacity is only indicated as a reference and must not be used to assess the efficiency of the unit. Sensor accuracy is ± 1°C.

 $The flow rate parameters are calculated based on the operation parameters of the pump (only for 4-16\,kW units).$ 

The deviation changes depending on the flow rates.

The maximum deviation is 15%.

#### 6.9 FOR SERVICEMAN.

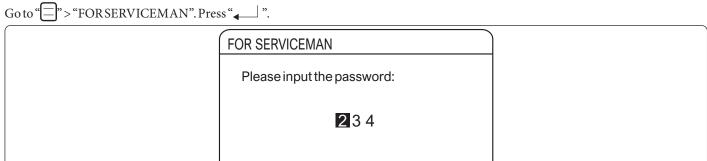
#### Information on "FOR SERVICEMAN" menu.



The "FOR SERVICEMAN" menu is intended for the installer and service engineer.

- Setting the functions of the appliance.
- Setting the parameters.

#### How to access the "FOR SERVICEMAN" menu.



- The "FOR SERVICEMAN" menu is intended for the installer or service engineer. Domestic users must NOT modify the settings through this menu.

**♦** ADJUST

**◆** 

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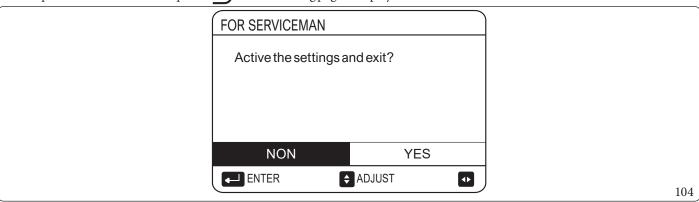
- This is why it is protected by password to prevent unauthorised persons from having access to the service settings.

**ENTER** 

- The password is 234.

#### How to exit the "FOR SERVICEMAN" menu.

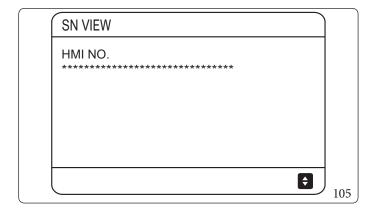
If all the parameters have been set, press " )". The following page is displayed:

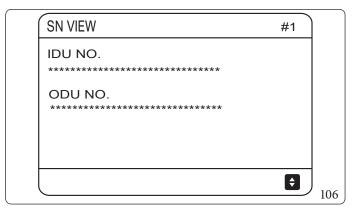


Select "YES" and the press ← to exit the "FOR SERVICEMAN" menu.

After you have exited the menu, the unit shuts down.

## 6.10 SHOWS SN





# ${\bf MENUSTRUCTURE: OVERVIEW.}$

MAINMENU
OPERATEMODE
PRESETTEMPERATURE
DOMESTIC HOT WATER(DHW)
SCHEDULE
OPTIONS
CHILDLOCK
TECHNICALINFORMATION
OPERATION PARAMETER
FORSERVICEMAN
WLAN SETTING (*)
SNVIEW

## (\*) = Application not available.

	НЕАТ
OPERATEMODE	COOL
	AUTO

	PRESETTEMP.
PRESETTEMPERATURE	WEATHER TEMP.SET
	ECOMODE

DOMESTIC HOT WATER(DHW)	DISINFECT	CURRENT STATE
		OPERATE DAY
		START
	FAST DHW	
	TANKBACKUPHEATER	
	DHWPUMP	

SCHEDULE	TIMER
	WEEKLYSCHEDULE
	SCHEDULE CHECK
	CANCELTIMER

		CURRENTSTATE
		SILENTLEVEL
		TIMER1 START
	CHENTMODE	TIMER1 END
	SILENT MODE	TIMER1
		TIMER2START
		TIMER2END
		TIMER2
		CURRENTSTATE
OPTIONS		DHWMODE
		DISINFECT
	HOLIDAY AWAY	HEAT MODE
		FROM
		UNTIL
		CURRENTSTATE
		FROM
	HOLIDAY HOME	UNTIL
		TIMER
	BACKUPHEATER	
	-	
	COOL/HEATTEMP.ADJUST	
	COOL/HEAT MODE ON/OFF	
CHILDLOCK	DHWTEMP.ADJUST	
	DHW MODE ON/OFF	
	SERVICE CALL	
	ERROR CODE	
		ROOM SET TEMP.
TECHNICALINFORMATION		MAINSETTEMP.
		TANK SET TEMP.
	PARAMETER	ROOM ACTUAL TEMP.
		MAIN ACTUAL TEMP.
		TANK ACTUAL TEMP.
		TIME
		DATE
		LANGUAGE
		DIMOUNDE

<b>OPERATION PARAMETER</b>	OPERATION PARAMETER
----------------------------	---------------------

BACKLIGHT BUZZER

SCREENLOCKTIME

SMART GRID RUNNING TIME

DISPLAY

	1. DHW MODE SETTING
	2. COOL MODE SETTING
	3. HEAT MODE SETTING
	4.AUTO MODE SETTING
	5. TEMP. TYPE SETTING
	6. ROOM THERMOSTAT
	7. OTHER HEATING SOURCE
	8. HOLIDAY AWAY SETTING
FORSERVICEMAN	9. SERVICE CALL
	10. RESTORE FACTORY SETTINGS
	11. TEST RUN
	12.SPECIAL FUNCTION
	13. AUTO RESTART
	14. POWER INPUT LIMITATION
	15. INPUT DEFINE
	16.CASCADE SET
	17.HMI ADDRESS SET

WLANSETTING (*)	Not Used
-----------------	----------

# (\*) = Application not available.

	HMINO.
SNVIEW	IDUNO.
	ODUNO.

## For Serviceman Menu Overview.

FOR SERVICEMAN	
	1.1 DHW MODE
	1.2 DISINFECT
	1.3 DHW PRIORITY
	1.4PUMP_D
	1.5 DHW PRIORITY TIME SET
	1.6 dT5_ON
	1.7 dT1S5
	1.8T4DHWMAX
	1.9T4DHWMIN
	1.10t_INTERVAL_DHW
1.DHW MODE SETTING	1.11 dT5_TBH_OFF
	1.12 T4_TBH_ON
	1.13t_TBH_DELAY
	1.14T5S_DISINFECT
	1.15t_DI_HIGHTEMP
	1.16t_DI_MAX
	1.17 t_DHWHP_RESTRICT
	1.18t_DHWHP_MAX
	1.19 PUMP_DTIMER
	1.20 PUMP_D RUNNING TIME
	1.21 PUMP_D DISINFECT RUN

	FORSERVICEMAN
	2.1 COOL MODE
	2.2t_T4_FRESH_C
	2.3T4CMAX
	2.4T4CMIN
2.COOLMODESETTING	2.5 dT1SC
	2.6 dTSC
	2.7t_INTERVAL_C
	2.8T1SetC1
	2.9T1SetC2
	2.10 T4C1
	2.11 T4C2
	2.12 ZONE1 C-EMISSION
	2.13 ZONE2 C-EMISSION

	FOR SERVICEMAN
	3.1 HEAT MODE
	3.2 t_T4_FRESH_H
	3.3 T4HMAX
	3.4T4HMIN
	3.5 dT1SH
	3.6 dTSH
3.HEAT MODE SETTING	3.7 t_INTERVAL_H
5. HEAT MODESETTING	3.8T1SetH1
	3.9T1SetH2
	3.10T4H1
	3.11 T4H2
	3.12 ZONE1 H-EMISSION
	3.13 ZONE2 H-EMISSION
	3.14t_DELAY_PUMP

FORSERVICEMAN				
4.AUTOMODESETTING	4.1 T4AUTOCMIN			
	4.2 T4AUTOHMAX			

FOR SERVICEMAN					
	5.1 WATER FLOW TEMP.				
	5.2 ROOM TEMP.				
	5.3 DOUBLE ZONE				

FORSERVICEMAN					
6. ROOM THERMOSTAT	6.1 ROOM THERMOSTAT				

FOR SERVICEMAN					
	7.1 dT1_IBH_ON				
	7.2 t_IBH_DELAY				
	7.3 T4_IBH_ON				
	7.4dT1_AHS_ON (Not Used)				
7. OTHER HEATING SOURCE	7.5 t_AHS_DELAY (Not Used)				
7.01HERHEATINGSOURCE	7.6T4_AHS_ON (Not Used)				
	7.7 IBHLOCATE				
	7.8 P_IBH1				
	7.9 P_IBH2 (Not Used)				
	7.10 P_TBH				

	FORSERVICEMAN	
o HOLIDAY AWAY	8.1 T1S_H.A_H	
8. HOLIDAY AWAY	8.2 T5S_H.A_DHW	
	FORSERVICEMAN	
o centrace call	PHONENO.	
9. SERVICE CALL	MOBILENO.	
	FORSERVICEMAN	
10. RESTORE FACTORY SETTINGS		
	·	
	FORSERVICEMAN	
11.TESTRUN		
	FORSERVICEMAN	
12.SPECIALFUNCTION		
	FORSERVICEMAN	
12 ALTEO DECEMBE	13.1 COOL/HEAT MODE	
AUTORESTART	13 2 DHW MODE	

13.2 DHW MODE

FORSERVICEMAN						
14. POWER INPUT LIMITATION	14.1 POWER INPUT LIMITATION					

FORSERVICEMAN					
-	15.1 M1/M2				
	15.2 SMART GRID				
	15.3 Tw2				
	15.4Tbt1				
	15.5 Tbt2 (Not Used)				
15.INPUT DEFINE	15.6Ta				
15.1NPU I DEFINE	15.7 Ta-adj.				
	15.8 SOLAR INPUT				
	15.9F-PIPELENGTH				
	15.10 RT/Ta_PCB				
	15.11 PUMP_ISILENT MODE				
	15.12 DFT1/DFT2				

FOR SERVICEMAN					
16.CASCADESET	16.1 PER_START				
	16.2 TIME_ADJUST				
	16.3 ADDRESS RESET				

FORSERVICEMAN						
17.HMI ADDRESS SET	17.1 HMI SET					
	17.2 HMI ADDRESS FOR BMS					
	17.3 STOP BIT					

Table 1  $The room \, temperature \, curve \, of \, the \, low \, temperature \, setting \, for \, heating.$ 

T4	≤-20	-19	-18	-17	-16	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0
1-T1S	38	38	38	38	38	37	37	37	37	37	37	36	36	36	36	36	36	35	35	35	35
2-T1S	37	37	37	37	37	36	36	36	36	36	36	35	35	35	35	35	35	34	34	34	34
3-T1S	36	36	36	35	35	35	35	35	35	34	34	34	34	34	34	33	33	33	33	33	33
4-T1S	35	35	35	34	34	34	34	34	34	33	33	33	33	33	33	32	32	32	32	32	32
5-T1S	34	34	34	33	33	33	33	33	33	32	32	32	32	32	32	31	31	31	31	31	31
6-T1S	32	32	32	32	31	31	31	31	31	31	31	31	30	30	30	30	30	30	30	30	29
7-T1S	31	31	31	31	30	30	30	30	30	30	30	30	29	29	29	29	29	29	29	29	28
8-T1S	29	29	29	29	28	28	28	28	28	28	28	28	27	27	27	27	27	27	27	27	26

T4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	≥2	20
1-T1S	35	35	34	34	34	34	34	34	33	33	33	33	33	33	32	32	32	32	32	32	32
2-T1S	34	34	33	33	33	33	33	33	32	32	32	32	32	32	31	31	31	31	31	31	31
3-T1S	32	32	32	32	32	32	31	31	31	31	31	31	30	30	30	30	30	30	29	29	29
4-T1S	31	31	31	31	31	31	30	30	30	30	30	30	29	29	29	29	29	29	28	28	28
5-T1S	30	30	30	30	30	30	29	29	29	29	29	29	28	28	28	28	28	28	27	27	27
6-T1S	29	29	29	29	29	29	28	28	28	28	28	28	27	27	27	27	27	27	26	26	26
7-T1S	28	28	28	28	28	28	27	27	27	27	27	27	26	26	26	26	26	26	25	25	25
8-T1S	26	26	26	26	26	26	26	25	25	25	25	25	25	25	25	24	24	24	24	24	24

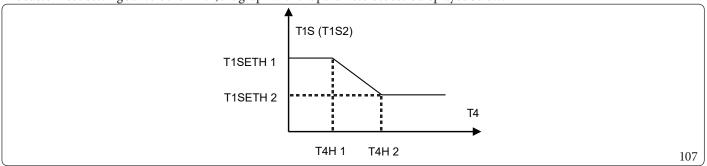
Table 2  $The room \, temperature \, curve \, of \, the \, high \, temperature \, setting \, for \, heating.$ 

T4	≤-20	-19	-18	-17	-16	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0
1-T1S	55	55	55	55	54	54	54	54	54	54	54	54	53	53	53	53	53	53	53	53	52
2-T1S	53	53	53	53	52	52	52	52	52	52	52	52	51	51	51	51	51	51	51	51	50
3-T1S	52	52	52	52	51	51	51	51	51	51	51	51	50	50	50	50	50	50	50	50	49
4-T1S	50	50	50	50	49	49	49	49	49	49	49	49	48	48	48	48	48	48	48	48	47
5-T1S	48	48	48	48	47	47	47	47	47	47	47	47	46	46	46	46	46	46	46	46	45
6-T1S	45	45	45	45	44	44	44	44	44	44	44	44	43	43	43	43	43	43	43	43	42
7-T1S	43	43	43	43	42	42	42	42	42	42	42	42	41	41	41	41	41	41	41	41	40
8-T1S	40	40	40	40	39	39	39	39	39	39	39	39	38	38	38	38	38	38	38	38	37

T4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	≥2	20
1-T1S	52	52	52	52	52	52	52	51	51	51	51	51	51	51	51	50	50	50	50	50	50
2-T1S	50	50	50	50	50	50	50	49	49	49	49	49	49	49	49	48	48	48	48	48	48
3-T1S	49	49	49	49	49	49	49	48	48	48	48	48	48	48	48	47	47	47	47	47	47
4-T1S	47	47	47	47	47	47	47	46	46	46	46	46	46	46	46	45	45	45	45	45	45
5-T1S	45	45	45	45	45	45	45	44	44	44	44	44	44	44	44	43	43	43	43	43	43
6-T1S	42	42	42	42	42	42	42	41	41	41	41	41	41	41	41	40	40	40	40	40	40
7-T1S	40	40	40	40	40	40	40	39	39	39	39	39	39	39	39	38	38	38	38	38	38
8-T1S	37	37	37	37	37	37	37	36	36	36	36	36	36	36	36	35	35	35	35	35	35

#### Automatic central heating setting curve.

 $The \, customised \, setting \, curve \, is \, the \, ninth; the \, graph \, with \, the \, parameters \, to \, set \, is \, displayed \, below: \, curve \, is \, the \, ninth; the \, graph \, with \, the \, parameters \, to \, set \, is \, displayed \, below: \, curve \, is \, the \, ninth; the \, graph \, with \, the \, parameters \, to \, set \, is \, displayed \, below: \, curve \, is \, the \, ninth; the \, graph \, with \, the \, parameters \, to \, set \, is \, displayed \, below: \, curve \, is \, the \, ninth; the \, graph \, with \, the \, parameters \, to \, set \, is \, displayed \, below: \, curve \, is \, the \, ninth; the \, graph \, with \, the \, parameters \, to \, set \, is \, displayed \, below: \, curve \, is \, the \, ninth; the \, graph \, with \, the \, parameters \, to \, set \, is \, displayed \, below: \, curve \, is \, the \, ninth; the \, graph \, with \, the \, parameters \, to \, set \, is \, displayed \, below: \, curve \, is \, the \, ninth; the \, graph \, with \, the \, parameters \, to \, set \, is \, displayed \, below: \, curve \, is \, the \, ninth; the \, graph \, with \, the \, parameters \, to \, set \, is \, displayed \, below: \, curve \, is \, the \, ninth; the \, graph \, with \, the \, parameters \, to \, set \, is \, displayed \, below: \, curve \, is \, the \, ninth; the \, parameters \, to \, set \, is \, displayed \, below: \, curve \, is \, the \, ninth; the \, parameters \, to \, set \, is \, displayed \, below: \, curve \, is \, the \, ninth; the \, parameters \, to \, set \, is \, displayed \, below: \, curve \, is \, the \, ninth; the \, parameters \, to \, set \, is \, displayed \, below: \, curve \, is \, the \, ninth; the \, parameters \, to \, set \, is \, displayed \, below: \, curve \, is \, the \, ninth; the \, parameters \, to \, set \, is \, displayed \, below: \, curve \, is \, the \, ninth; the \, parameters \, to \, set \, is \, displayed \, the \, ninth; the \, parameters \, to \, set \, is \, displayed \, the \, ninth; the \, parameters \, to \, set \, is \, displayed \, the \, ninth; the \, parameters \, to \, set \, is \, displayed \, the \, ninth; the \, parameters \, to \, set \, is \, displayed \, the \, ninth; the \, parameters \, the \, ninth; the \, parameters \, the \, ninth;$ 



State: in the setting of the control panel, if T4H2 < T4H1, exchange their value; if T1SETH1 < T1SETH2, exchange their value.

Table 3 The room temperature curve of the low temperature setting for cooling.

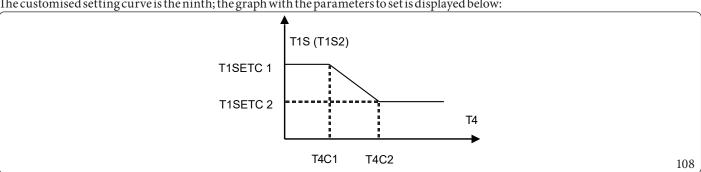
T4	-10≤T4≤15	15≤T4≤22	22≤T4≤30	30≤T4
1-T1S	16	11	8	5
2-T1S	17	12	9	6
3-T1S	18	13	10	7
4-T1S	19	14	11	8
5-T1S	20	15	12	9
6-T1S	21	16	13	10
7-T1S	22	17	14	11
8-T1S	23	18	15	12

Table 4 The room temperature curve of the high temperature setting for cooling.

T4	-10≤T4≤15	15≤T4≤22	22≤T4≤30	30≤T4
1-T1S	20	18	17	16
2-T1S	21	19	18	17
3-T1S	22	20	19	17
4-T1S	23	21	19	18
5-T1S	24	21	20	18
6-T1S	24	22	20	19
7-T1S	25	22	21	29
8-T1S	25	23	21	20

## Automatic cooling setting curve.

 $The \, customised \, setting \, curve \, is \, the \, ninth; the \, graph \, with \, the \, parameters \, to \, set \, is \, displayed \, below: \, curve \, is \, the \, ninth; the \, graph \, with \, the \, parameters \, to \, set \, is \, displayed \, below: \, curve \, is \, the \, ninth; the \, graph \, with \, the \, parameters \, to \, set \, is \, displayed \, below: \, curve \, is \, the \, ninth; the \, graph \, with \, the \, parameters \, to \, set \, is \, displayed \, below: \, curve \, is \, the \, ninth; the \, graph \, with \, the \, parameters \, to \, set \, is \, displayed \, below: \, curve \, is \, the \, ninth; the \, graph \, with \, the \, parameters \, to \, set \, is \, displayed \, below: \, curve \, is \, the \, ninth; the \, graph \, with \, the \, parameters \, to \, set \, is \, displayed \, below: \, curve \, is \, the \, ninth; the \, graph \, with \, the \, parameters \, to \, set \, is \, displayed \, below: \, curve \, is \, the \, ninth; the \, graph \, with \, the \, parameters \, to \, set \, is \, displayed \, below: \, curve \, is \, the \, ninth; the \, graph \, with \, the \, parameters \, to \, set \, is \, displayed \, below: \, curve \, is \, the \, ninth; the \, graph \, with \, the \, parameters \, to \, set \, is \, displayed \, below: \, curve \, is \, the \, ninth; the \, graph \, with \, the \, parameters \, to \, set \, is \, displayed \, below: \, curve \, is \, the \, ninth; the \, parameters \, to \, set \, is \, displayed \, below: \, curve \, is \, the \, ninth; the \, parameters \, to \, set \, is \, displayed \, below: \, curve \, is \, the \, ninth; the \, parameters \, to \, set \, is \, displayed \, below: \, curve \, is \, the \, ninth; the \, parameters \, to \, set \, is \, displayed \, below: \, curve \, is \, the \, ninth; the \, parameters \, to \, set \, is \, displayed \, below: \, curve \, is \, the \, ninth; the \, parameters \, to \, set \, is \, displayed \, below: \, curve \, is \, the \, ninth; the \, parameters \, to \, set \, is \, displayed \, below: \, curve \, is \, the \, ninth; the \, parameters \, to \, set \, is \, displayed \, the \, ninth; the \, parameters \, the$ 



State: in the setting of the control panel, if T4C2 < T4C1, exchange their value; if T1SETC1 < T1SETC2, exchange their value.





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