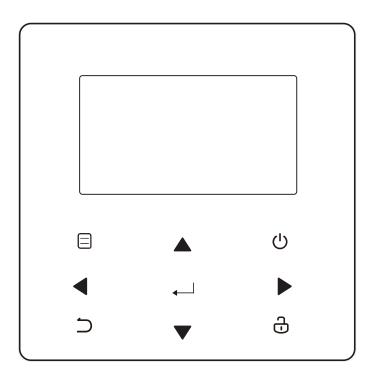
# MANUALE D'USO OPERATION MANUAL

# CONTROLLO REMOTO REMOTE CONTROL



### **NOTA IMPORTANTE**

Grazie per avere acquistato un nostro prodotto. Prima di utilizzare l'unità, prego leggere attentamente il presente manuale e conservarlo per utilizzi futuri.

### **IMPORTANT NOTE:**

Thank you very much for purchasing our product. Before using your unit, please read this manual carefully and keep it for future reference.

This manual gives detailed description of the precautions that should be brought to your attention during operation. In order to ensure correct service of the wired controller, please read this manual carefully before using the unit.

For convenience of future reference, keep this manual after reading it.

1	GENERAL SAFETY PRECAUTIONS	44
1.1	About the documentation	44
1.2	For the user	44
2	USER INTERFACE	45
2.1	The appearance of the wired controller	45
3	USING HOME PAGES	47
3.1	About home pages	47
4	MENU STRUCTURE	49
4.1	About the menu structure	49
4.2	To go to the menu structure	49
4.3	To navigate in the menu structure	49
5	BASIC USAGE	49
5.1	Screen Unlock	49
5.2	Turning ON/OFF controls	50
5.3	Adjusting the temperature	53
6	INSTALLATION MANUAL	56
6.1	Safety precaution	56
6.2	Other Precautions	57
6.3	Installation procedure and matching setting of wired controller	58
6.4	Front cover installation	62
7	OPERATION	63
7.1	Operation mode	63
7.2	Preset temperature	63
7.3	Domestic Hot Water (DHW)	65
7.4	Schedule	67
7.5	Options Child Look	69
7.6 7.7	Child Lock Service information	70 71
7.7 7.8	Operation Parameter	71
7.9	For Serviceman	73
	1 of conviounding	73
8	MENU STRUCTURE: OVERVIEW	74

# 1 GENERAL SAFETY PRECAUTIONS

### 1.1 About the documentation

The precautions described in this document cover very important topics, follow them carefully.

All activities described in the installation manual must be performed by an authorized installer.

# 1.1.1 Meaning of warnings and symbols



# DANGER

Indicates a situation that results in death or serious injury.



# DANGER: RISK OF ELECTRO-CUTION

Indicates a situation that could result in electrocution.



# DANGER: RISK OF BURNING

Indicates a situation that could result in burning because of extreme hot or cold temperatures.



# WARNING

Indicates a situation that could result in death or serious injury.



### CAUTION

Indicates a situation that could result in minor or moderate injury.



### NOTE

Indicates a situation that could result in equipment or property damage.



Indicates useful tips or additional information.

### 1.2 For the user

- If you are not sure how to operate the unit, contact your installer.
- The appliance is not intended for use by persons, including children, with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children must be supervised to ensure that they do not play with the product.

# $\Lambda$

# CAUTION

Do NOT rinse the unit. This may cause electric shocks or fire.



### **NOTE**

Do NOT place any objects or equipment on top of the unit.

Do NOT sit, climb or stand on the unit.

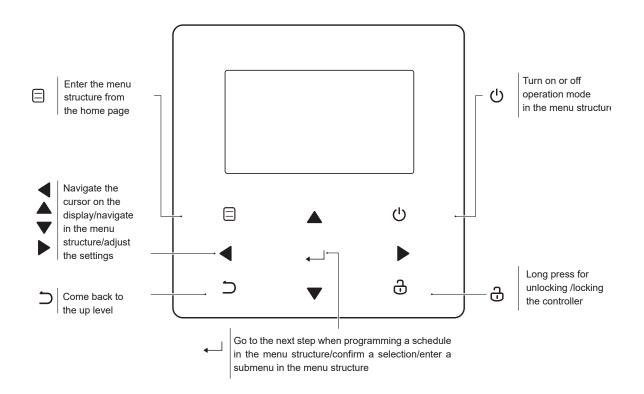
Units are marked with the following symbol:



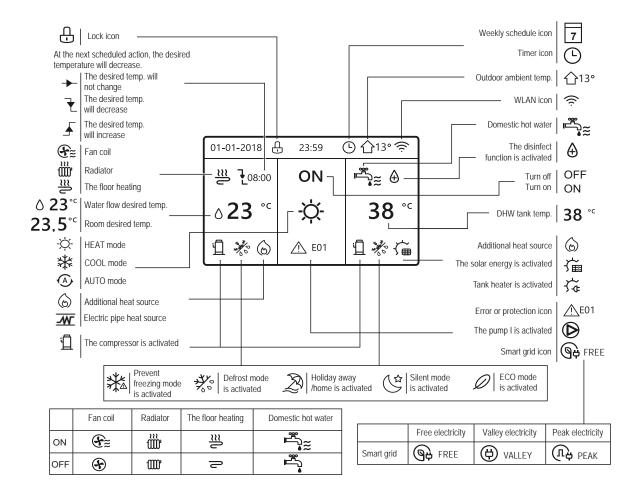
This means that electrical and electronic products may not be mixed with unsorted household waste. Do not try to dismantle the system yourself: the dismantling of the system, treatment of the refrigerant, of oil and of other parts must be done by an authorized installer and must comply with applicable legislation. Units must be treated at a specialized treatment facility for reuse, recycling and recovery. By ensuring this product is disposed of correctly, you will help to prevent potential negative consequences for the environment and human health. For more information, contact your installer or local authority.

# 2 USER INTERFACE

# 2.1 The appearance of the wired controller



# 2.1.1 Status icons

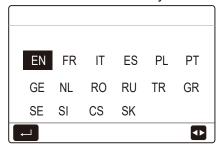


# 3 USING HOME PAGES

# 3.1 About home pages

When you turn on the wired controller; the system will enter the language section page. You can choose your preferred language, then press "

"in 60 seconds, the system will enter in the currently selected language."



You can use the home pages to read out and change settings that are meant for daily usage. What you can see and do on the home pages is described where applicable. Depending on the system layout, the following home pages may be possible:

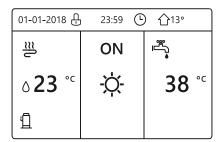
- Room desired temperature (ROOM)
- Water flow desired temperature (MAIN)
- DHW tank actual temperature (TANK) DHW=domestic hot water

# **HOME PAGE 1:**

If you have set the WATER FLOW TEMP. as YES and ROOM TEMP. as NON, the system has the function including floor heating and making hot water. The following page will appear:

### NOTE

All the pictures in the manual are used to explain, the actual pages in the screen may have some difference.

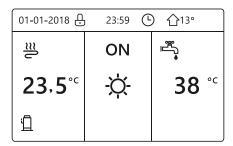


### **HOME PAGE 2:**

If you have set the WATER FLOW TEMP. as NON and ROOM TEMP. as YES, the system has the function including floor heating and making hot water. The following page will appear:

### **NOTE**

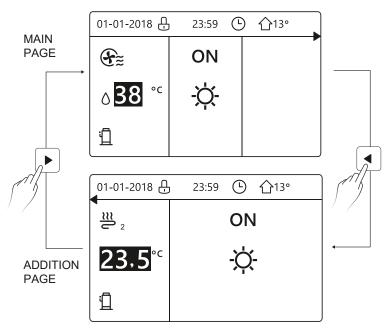
The interface should be installed in the floor heating room to check the room temperature.



# **HOME PAGE 3:**

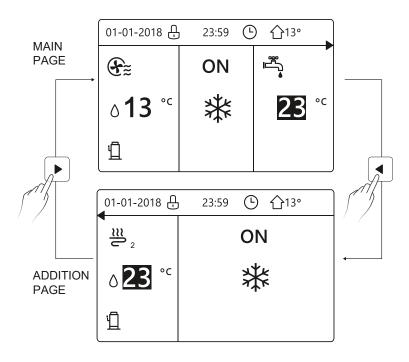
If the DHW MODE is set NON, and if "WATER FLOW TEMP." is set YES, "ROOM TEMP." is set YES, there will be main page and additional page.

The system has the function including floor heating and space cooling for fan coil, home page 3 will appear:



# **HOME PAGE 4**:

If the DHW MODE is set YES. There will be main page and addition page. The system has the function including floor heating, space cooling for fan coil and domestic hot water, home page 4 will appear:



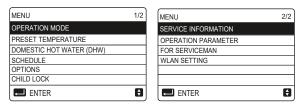
# **4 MENU STRUCTURE**

## 4.1 About the menu structure

You can use the menu structure to read out and configure settings that are NOT meant for daily usage. What you can see and do in the menu structure is described where applicable.

# 4.2 To go to the menu structure

From a home page, press " Result: The menu structure appears.



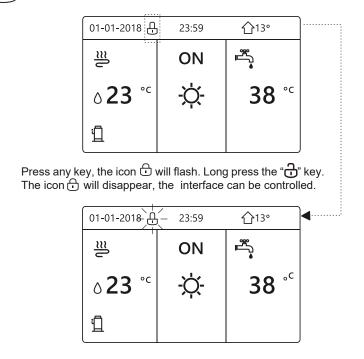
# 4.3 To navigate in the menu structure

Use "▼", "▲" to scroll.

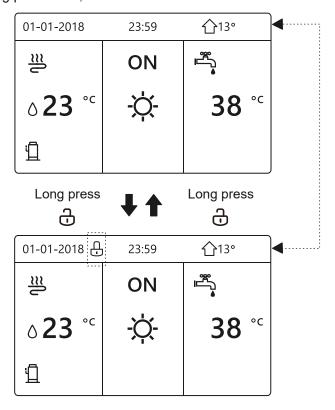
# 5 BASIC USAGE

# 5.1 Screen Unlock

If the icon is on the screen, the controller is locked. The following page is displayed:



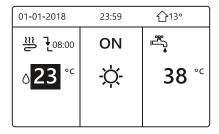
The interface will be locked if there is no handing for a long time (about 120 seconds). If the interface is unlocked, long press "①", the interface will be locked.



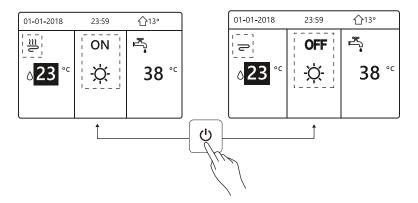
# 5.2 Turning ON/OFF controls

Use the interface to turn on or off the unit for space heating or cooling.

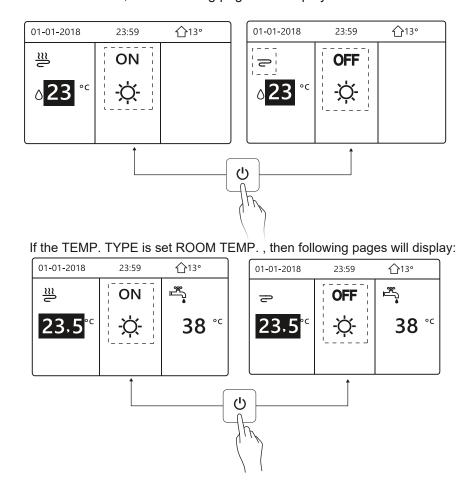
- The ON/OFF of the unit can be controlled by the interface if the ROOM THERMOSTAT is NON (see "ROOM THERMOSTAT SETTING" in "Installation and owner's manual").
- Press "◀" and "▲" on home page, the black cursor will appear:



1) When the cursor is on the temperature of space operation mode side (including heat mode —, cool mode \* and auto mode • ), press "U" key to turn on/off space heating or cooling.

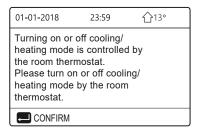


If the DHW TYPE is set NON, then following pages will display:

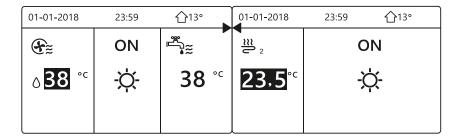


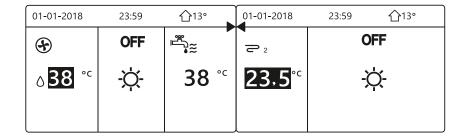
Use the room thermostat to turn on or off the unit for space heating or cooling.

1. The room thermostat is set YES (see "ROOM THERMOSTAT SETTING" on "Installation and owner's manual") the unit is turned on or off by the room thermostat, press  $\circlearrowleft$  on the interface, the following page will display:

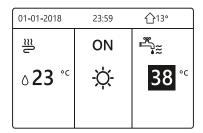


2. DUAL ROOM THERMOSTAT is set YES (see "ROOM THERMOSTAT SETTING" in "Installation and owner's manual). The room thermostat for fan coil is turned off, the room thermostat for the floor heating is turned on and the unit is running, but the display is OFF. The following page is displayed:

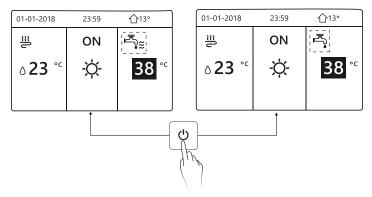




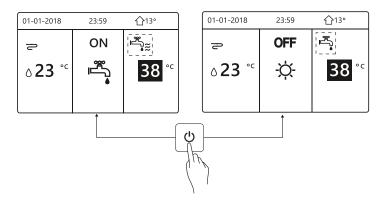
Use the interface to turn on or off the unit for DHW. Press "▶" and "▼"on home page, the black cursor will appear:



When the cursor is on DHW operation mode. Press "U" key to turn on/off the DHW mode. If the space operation mode is ON, then following pages will display:

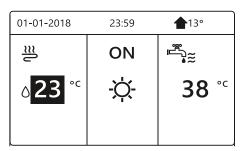


If the space operation mode is OFF, then following pages will display:

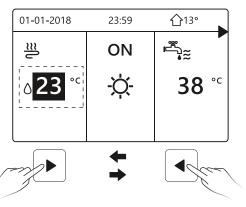


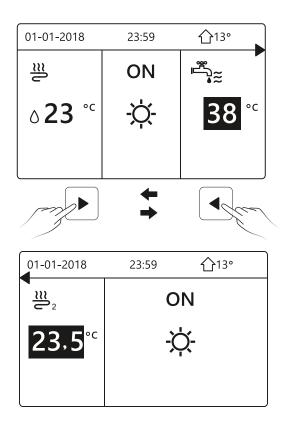
# 5.3 Adjusting the temperature

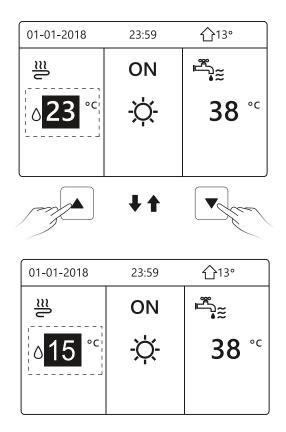
Press "◀" and "▲" on home page, the black cursor will appear



If the cursor is on the temperature, use the "◄"、 "▶" to select and use
 "▼"、 "▲" to adjust the temperature.

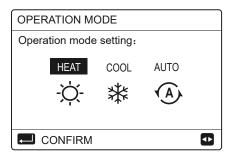






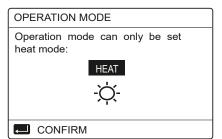
# 5.3.1 Adjusting space operation mode

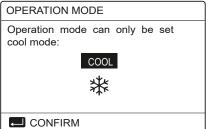
Adjusting space operation mode by interface. Go to "□" > "OPERATION MODE". Press "←—", the following page will appear:



There are three modes to be selected including HEAT, COOL and AUTO mode. Use the "◀" and "▶" to scroll, press "←—" to select.

Even if you don't press "—" button and exit the page by pressing "—" button, the mode would still be effective if the cursor have be moved to the operation mode If there is only HEAT (COOL) mode, the following page will appear:



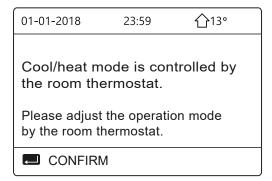


The operation mode can not be changed see COOL MODE SETTING on "Installation and owner's manual".

If you select	Then the space operation mode is
-¤-	Always heating mode heat
*	Always cooling mode
A	Automatically changed by the software based on the outdoor temperature (and depending on installer settings of the indoor temperature), and takes monthly restrictions into account. Note: Automatic changeover is only possible under certain conditions. See the FOR SERVICEMAN> AUTO MODE SETTING in "Installation and ower's manual".

Adjust space operation mode by the room thermostat, see "ROOM THERMOSTAT" on "Installation and owner's manual".

Go to "=">OPERATION MODE, if you press any key to select or adjust, the following page will appear:



# **6 INSTALLATION MANUAL**

# 6.1 Safety precaution

Read the safety precautions carefully before installing the unit.

Stated below are important safety issues that must be obeyed.

Conform here is no abnormal phenomena during test operation after complete, then hand the manual to the user.

Meaning of marks:



# **WARNING**

Means improper handling may lead to personal death or severe injury.



# **CAUTION**

Means improper handling may lead to personal injury or property loss.



# **WARNING**

Please entrust the distributor or professionals to install the unit.

Installation by other persons may lead to imperfect installation, electric shock or fire.

Strictly follow this manual.

Improper installation may lead to electric shock or fire.

Reinstallation must be performed by professionals.

Improper installation may lead to electric shock or fire.

Do not disassemble your heat pump at will.

A random disassembly may cause abnormal operation or heating, which may result in fire. Abnormal operation or heating, which may result in fire.



# **CAUTION**

Do not install the unit in a place vulnerable to leakage of flammable gases. Once flammable gases are leaked and left around the wired controller, fire may occure.

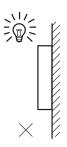
The wiring should adapt to the wired controller current.

Otherwise, electric leakage or heating may occur and result in fire.

The specified cables shall be applied in the wiring. No external force may be applied to the terminal.

Otherwise, wire cut and heating may occur and result in fire.

Do not place the wired remote controller near the lamps, to avoid the remote signal of the controller to be disturbed. (refer to the right figure)



## 6.2 Other Precautions

### 6.2.1 Installation location

Install the unit avoiding:

- locations near heat sources
- direct exposure to sunlight
- places with a lot of oil, steam and/or sulphide gas.

Otherwise, the product may deform and fail.

# **6.2.2 Preparation before installation**

1) Check whether the following assemblies are complete.

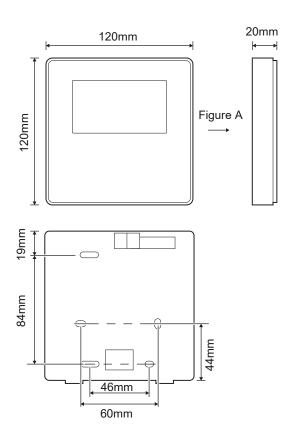
No.	Name.	Qty	Remarks
1	Wired Controller	1	
2	Cross round head wood mounting screw	3	For Mounting on the Wall
3	Cross round head mounting screw	2	For Mounting on the Electrical Switch Box
4	Installation and Owner's Manual	1	
5	Plastic bolt	2	This accessory is used when install the centralized control inside the electric cabinet
6	Plastic expansion pipe	3	For mounting on the Wall

### Note for installation of wired controller:

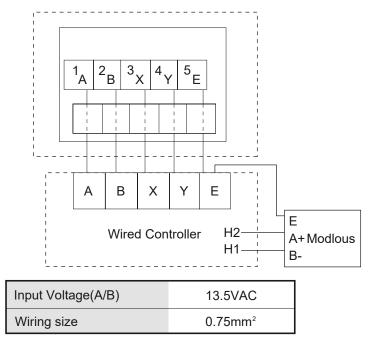
- This installation manual contains information about the procedure of installing Wired Remote Controller. Please refer to Unit Installation Manual for connection between Wired Remote Controller and Indoor Unit.
- 2) Circuit of Wired Remote Controller is low voltage circuit. Never connect it with a standard 220V/380V circuit or put it into a same Wiring Tube with the circuit.
- 3) The shielded cable must be connected stable to the ground, or transmission may fail.
- 4) Do not attempt to extend the shielded cable by cutting, if it is necessary, use Terminal Connection Block to connect.
- 5) After finishing connection, do not use Megger to have the insulation check for the signal wire.

# 6.3 Installation procedure and matching setting of wired controller

# 6.3.1 Structure size figure



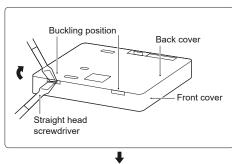
# 6.3.2 Wiring



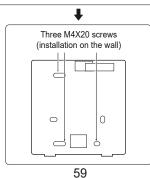
The rotating coded switch S3(0-F) on the main control board of hydraulic module is used for set the modbus address.

By default the units have this coded switch positioned = 0, but this corresponds to the modbus address 16, while the others positions corresponds the number, e.g. pos. = 2 is address 2, pos. = 5 is address 5.

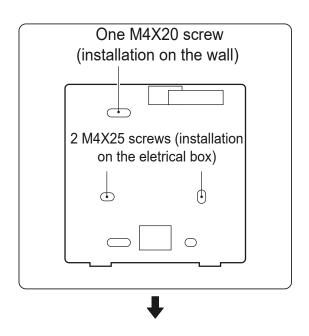
### 6.3.3 Back cover installation

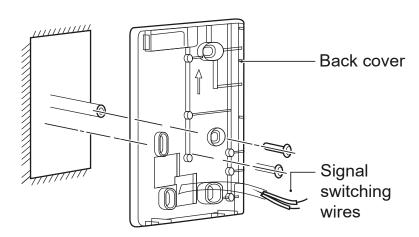


INSTALLATION DIRECTLY ON THE WALL

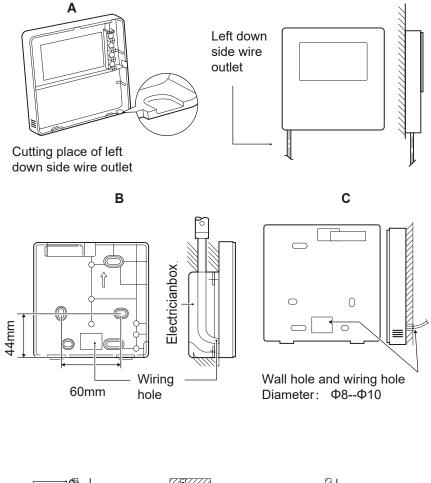


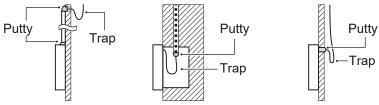
# INSTALLATION ON THE ELECTRICAL BOX AND ON THE WALL





- 1) Use straight head screwdriver to insert in the buckling position in the bottom of wired controller, and spin the screwdriver to take down the back cover (pay attention to spinning direction, otherwise will damage the back cover!)
- 2) Use three M4X20 screws to directly install the back cover on the wall.
- 3) Use two M4X25 screws to install the back cover on the 86 electrician box, and use one M4X20 screws for fixing on the wall.
- 4) Adjust the length of two plastic screw bars in the accessory to be standard length from the electrical box screw bar to the wall. Make sure while installing the screw bar to the wall, making it as flat as the wall.
- 5) Use cross head screws to fix the wired controller bottom cover in the wall through the screw bar. Make sure the wired controller bottom cover is on the same level after installation, and then install the wired controller back to the bottom cover.
- 6) Over fastening the screw will lead to deformation of back cover.

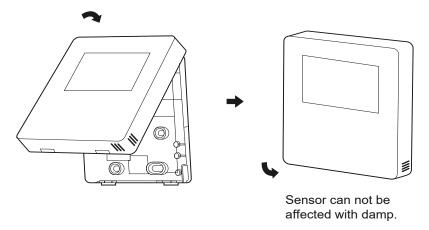




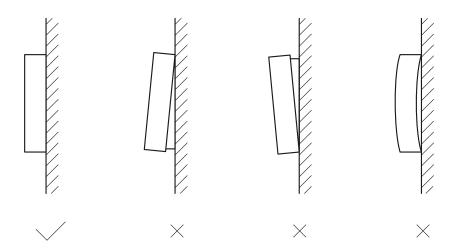
Avoid the water enter into the wired remote controller, use trap and putty to seal the connectors of wires during wiring installation.

# 6.4 Front cover installation

After adjusting the front cover and then buckle the front cover; avoid clamping the communication switching wire during installation.



Correct install the back cover and firmly buckle the front cover and back cover, otherwise will make the front cover drop off.



# 7 OPERATION

# 7.1 Operation mode

See "5.3.1 Adjusting space operation mode".

# 7.2 Preset temperature

PRESET TEMPERATURE has PRESET TEMP.\WEATHER TEMP. SET\ECO MODE 3 items.

### 7.2.1 PRESET TEMP.

PRESET TEMP. function is used to set different temperature on different time when the heat mode or cool mode is on.

- PRESET TEMP. = PRESET TEMPERATURE
- The PRESET TEMP. function will be off in these conditions.
  - 1) AUTO mode is running.
  - 2) TIMER or WEEKLY SCHEDULE is running.
- Go to "□" > "PRESET TEMPERATURE" > "PRESET TEMP". Press "←—".

The following page will show 6 options of setting different "TIME" & "TEMP.".

When double zone is activated, the PRESET function only works for zone 1.

Use "\(\bigvar\_{\pi}\), "\(\bigvar\_{\pi}\), "\(\bigvar\_{\pi}\), "\(\bigvar\_{\pi}\) to scroll and use "\(\bigvar\_{\pi}\), "\(\bigvar\_{\pi}\)" to adjust the time and the temperature.

When the cursor is on "■", as the following page:

PRESET TEMPERATURE 1/2			
PRESET TEMP.	WEATHER TEMP. SET	ECO MODE	
NO.	TIME	TEMP.	
1	00:00	25°C	
2 🗆	00:00	25°C	
3 🗆	00:00	25°C	
<b>□</b> SELECT		♦ Φ	

You press "← ", the symbol "∎" becomes " □ ". The time 1 is selected.

You press "← " again and " " becomes " ... The time 1 is unselected.

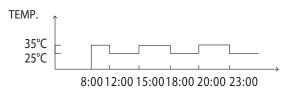
Use "\(\bigvar\_{\pi}\)", "\(\bigvar\_{\pi}\)", "\(\bigvar\_{\pi}\)" to scroll and use "\(\bigvar\_{\pi}\)", "\(\bigvar\_{\pi}\)" to adjust the time and the temperature.

Six periods and six temperatures can be set. For example: now the time is 8:00 and the temperature is 30°C. We set the PRESET TEMP as the following table.

The following page will appear:

01-01-2018	8:00	<b>☆</b> 13°
₩ _ 08:00	ON	
∆25 °c	- <del>\</del> \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	

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



# INFORMATION

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

The PRESET TEMP. function can be used in the heat mode or cool mode. But if the operation mode is changed, the PRESET TEMP. function needs to be reset again.

The running preset temperature is valid when the unit is OFF. It will run according to the next preset temperature when the unit turn on again.

### 7.2.2 WEATHER TEMP. SET

- WEATHER TEMP. SET=WEATHER TEM-PERATURE SET.
- WEATHER TEMP. SET function is used to preset the desired water flow temperature depending on the outside air temperature. During the warmer weather the heating is reduced. To save energy, the WEATHER TEMP. SET can decrease the desired water flow temperature when the outdoor air temperature increased in heating mode.

Go to "□" > "PRESET TEMPERATURE"> "WEATHER TEMP. SET". Press "←□".

The following page will appear:

PRESET TEMPERATURE		
PRESET TEMP.	WEATHER TEMP. SET	ECO MODE
ZONE1 C-MODE LOW TEMP.		OFF
ZONE1 H-MODE LOW TEMP.		OFF
ZONE2 C-MODE LOW TEMP.		OFF
ZONE2 H-MODE LOW TEMP.		OFF
ON/OFF		Ð

# INFORMATION

- WEATHER TEMP. SET have four kinds of curves:
  - 1. the curve of the high temperature setting for heating;
  - 2. the curve of the low temperature setting for heating;
  - 3. the curve of the high temperature setting for cooling;
  - 4. the curve of the low temperature setting for cooling.

It only uses the curve of the high temperature setting for heating, if the high temperature is set for heating.

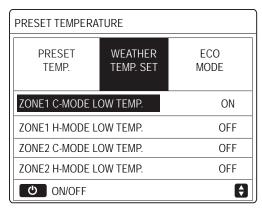
It only uses the curve of the low temperature setting for heating, if the low temperature is set for heating.

It only uses the curve of the high temperature setting for cooling, if the high temperature is set for cooling.

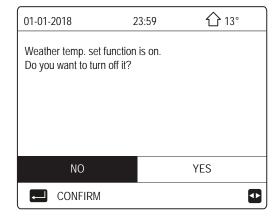
It only uses the curve of the low temperature setting for cooling, if the low temperature is set for cooling.

- See "FOR SERVICEMAN" > "COOL MODE SETTING" and > "HEAT MODE SETTING" in "Installation and owner's manual".
- The desired temperature (T1S) can't be adjusted, when the temperature curve is set ON.
- If you want to use heat mode in zone 1, you select "ZONE1 H-MODE LOW TEMP". If you want to use cool mode in zone 1, you select "ZONE1 C-MODE LOW TEMP". If you select "ON", it will show a page "WEATHER TEMP. SET TYPE" with 9 types to choose.

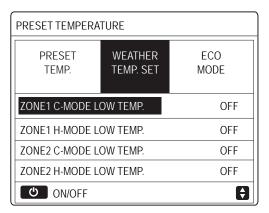
Use "◀", "▶" to scroll. Press "←" to select.



If the WEATHER TEMP. SET is activated, the desired temperature can not be adjusted on the interface. Press the "\[
\begin{align\*}
\text{"\left}\\

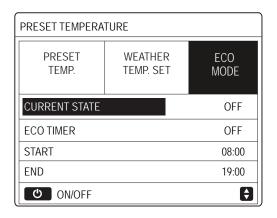


Move to "NO", press "← " to come back to home page, move to "YES", press "← " to reset the WEATHER TEMP. SET.



## **7.2.3 ECO MODE**

ECO MODE is used to save energy. Go to "□" > "PRESET TEMPERATURE" > "ECO MODE". Press "←□". The following page will appear:



Press "U". It will show a page "ECO MODE SET TYPE" with 9 types to choose.

Use "◀", "▶" to scroll. Press "← " to select.

Use "U" to turn ON or OFF, and use "V",
"A" to scroll.

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

# INFORMATION

- ECO MODE SET have two kinds of curves:
   1.the curve of the high temperature setting for heating;
  - 2.the curve of the low temperature setting for heating.

It only uses the curve of the high temperature setting for heating, if the high temperature is set for heating.

It only uses the curve of the low temperature setting for heating, if the low temperature is set for heating.

- See "FOR SERVICEMAN" > "HEAT MODE SETTING" in "Installation and owner's manual".
- The desired temperature (T1S) can't be adjusted, when the ECO MODE is ON.
- You can select the low or high temperature setting for heating to see the "Table 1~2" (pages 78-79).
- If ECO MODE is ON and ECO TIMER is OFF, the unit run ECO MODE all the time.
- If ECO MODE is ON and ECO TIMER is ON, the unit run ECO MODE according to the start time and end time.

# 7.3 Domestic Hot Water (DHW)

DHW mode typically consists of the following:

- 1) DISINFECT
- 2) FAST DHW
- 3) TANK HEATER
- 4) DHW PUMP

# 7.3.1 Disinfect

The DISINFECT function is used to kill the legionella. In disinfect function the tank temperature will be reached 65~70 °C forcely. The disinfect temperature is set in FOR SERVICEMAN. See "FOR SERVICEMAN" > "DHW MODE" > "DISINFECT" in "Installation and owner's manual.

Go to "□" > "DOMESTIC HOT WATER" > "DISINFECT". Press "← " to enter to the page for setting ON of OFF of CURRENT STATE.

Use "\", "\", "\", "\" to scroll and use "\", "\" to adjust the parameters when setting "OPERATE DAY" and "START". If

the OPERATE DAY is set FRIDAY and the START is set 23:00, the disinfect function will be activated on 23:00 Friday.

If the disinfect function is running, the following page will appear:

01-01-2018 🕂	23:59	<b>☆</b> 13°	
<b>≅</b>	ON		
23,5°°	<u>-</u> Ö-	38 ° □	

### **7.3.2 Fast DHW**

The FAST DHW function is used to force the system to operate in DHW MODE.

The heat pump and the booster heater or addition heater will operate for DHW MODE together, and the DHW desired temperature will be changed to 60 °C.

Go to "□" > "DOMESTIC HOT WATER" > "FAST DHW". Press "← ":

Use "U" key to select ON or OFF.



### **INFORMATION**

If CURRENT STATE is OFF, the FAST DHW is invalid; if CURRENT STATE is ON, the FAST DHW function is effective. The FAST DHW function is once effective.

### 7.3.3 TANK HEATER

The TANK HEATER function is used to force the tank heater to heat the water in tank. In the same situation, the cooling or heating is required and the heat pump system is operating for cooling or heating, however there still is a demand for the hot water. Also, even if the heat pump system fails, TANK HEATER can be used to heat water in tank.

Go to "□" > "DOMESTIC HOT WATER" > "TANK HEATER". Press "←—".

Use "Ů" to select ON or OFF. Use "⊃" to exit.

01-01-2018	23:59	<b>☆</b> 13°	
<u></u> ≅	ON	<b>₽</b> *≋	
∆23 °c	- <del>\</del> \\dagger	38 °c	
		74	

# **7.3.4 DHW Pump**

The DHW PUMP function is used to return water of the water net. Go to "□">"DOMESTIC HOT WATER">"DHW PUMP". Press "←—".

Move to " $\blacksquare$ ", press " $\longleftarrow$ " to select or unselect.  $\square$  the timer is selected;  $\square$  the timer is unselected.

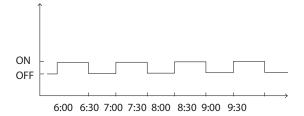


For example: you have set the parameter about the DHW PUMP (see "FOR SER-VICEMAN">"DHW MODE SETTING" on "Installation and owner's manual"). PUMP RUNNING TIME is 30 minutes.

Set as follows:

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

The PUMP will run as follows:



# 7.4 Schedule

SCHEDULE menu contents as follows:

- 1) TIMER
- 2) WEEKLY SCHEDULE
- 3) SCHEDULE CHECK
- 4) CANCEL TIMER

## 7.4.1 Timer

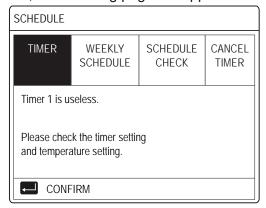
If the WEEKLY SCHEDULE function is on, the TIMER is off, the later setting is effective. If the TIMER is activated "⑤" is displayed on the home page.

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

Move to "■", press " ← " to select or unselect.
" □ " the TIMER is selected; " □ " the TIMER is unselected. Six timers can be set.

If you want to cancel the TIMER, you move the cursor to " $\square$ ", press " $\longleftarrow$ ": " $\square$ " becomes " $\square$ ", the TIMER is invalid.

If you set the start time later than the end time or the temperature out of range of the mode, the following page will appear:

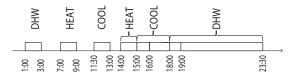


### Example:

Six timers are set as following:

NO.	START	END	MODE	TEMP
T1	1:00	3:00	DHW	50°C
T2	7:00	9:00	HEAT	28°C
T3	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 unit will run as following:



The operation of the controller at the following time:

TIME	The operation of the controller
1:00	DHW MODE is turned ON
3:00	DHW MODE is turned OFF
7:00	HEAT MODE is turned ON
9:00	HEAT MODE is turned OFF
11:30	COOL MODE is turned ON
13:00	COOL MODE is turned OFF
14:00	HEAT MODE is turned ON
15:00	COOL MODE is turned ON and HEAT MODE is turned OFF
18:00	DHW MODE is turned ON and COOL MODE is turned OFF
23:30	DHW MODE is turned OFF

# i

## **INFORMATION**

If the start time is the same to the end time in one timer, the TIMER is invalid.

# 7.4.2 Weekly schedule

If the timer function is ON and the weekly schedule is OFF, the later setting is effective. If WEEKLY SCHEDULE is activated,  $\boxed{\phantom{a}}$  is displayed on the home page.

Go to "□">"SCHEDULE">"WEEKLY SCHEDULE". Press "←".

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

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

means that the day is selected, mon means that the day is unselected.



# **INFORMATION**

We must set two days at least when we want to enable WEEKLY SCHEDULE function.

Use "▼", "▶" to SET, press "←". The days are selected to be scheduled and they have the same schedule.

Use "\(\bigcup\)", "\(\bigcup\)", "\(\bigcup\)", "\(\bigcup\)", "\(\bigcup\)" to scroll and adjust the time, the mode and the temperature. Timers can be set, including start time and end time, mode and temperature.

The mode includes HEAT MODE, COOL MODE and DHW MODE.

The setting method refer to timer setting. The end time must be later than the start time. Otherwise this will show that Timer is useless

### 7.4.3 Schedule check

SCHEDULE CHECK can only check the WEEKLY SCHEDULE.

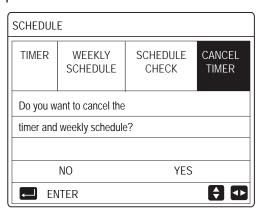
Go to "□">"SCHEDULE">"SCHEDULE CHECK".

Press "← ". The following page will show the setting of the week.

Pressing " \( \bar{V} \)", " \( \bar{A} \)", the timer from Monday to Sunday will appear:

# 7.4.4 Cancel timer

Go to "□">"SCHEDULE'">"CANCEL TI-MER". Press "←□". The following page will appear:



Use "▼", "▼", "▼", "▲" to move to "YES", press "← " to cancel TIMER. If you want to exit CANCEL TIMER, press "⊃".

If TIMER or WEEKLY SCHEDULE is activated, timer icon "©", or weekly schedule icon "7" will display on the home page.

01-01-2018	23:59	<u></u>
≋	ON	
23,5°c	- <del>\</del> \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	38 ° €

If TIMER or WEEKLY SCHEDULE is canceled, icon "©" or "

" will disappear on the home page.

01-01-2018	23:59	     13°
≋_	ON	 
23,5°c	- <del>\</del> \\dagger	38 °℃

# INFORMATION

You have to reset TIMER/WEEKLY SCHEDU-LE, if you change the WATER FLOW TEMP. to the ROOM TEMP. or you change the ROOM TEMP. to the WATER FLOW TEMP. The TI-MER or WEEKLY SCHEDULE is invalid, if ROOM THERMOSTAT is activated.

# INFORMATION

- The ECO has the highest priority, the TIMER or WEEKLY SCHEDULE has the second priority and the PRESETTEMP. or WEATHER TEMP. SET has the lowest priority.
- The PRESET TEMP. or WEATHER TEMP. SET becomes invalid, when we set the ECO valid. We must reset the PRESET TEMP. or WEATHER TEMP. SET when we set the ECO invalid.
- TIMER or WEEKLY SCHEDULE is invalid when ECO is valid. TIMER or WEEKLY SCHEDULE is activated when the ECO is not running.
- TIMER and WEEKLY SCHEDULE are on the same priority. The later setting function is valid. The PRESET TEMP. becomes invalid when TIMER or WEEKLY SCHEDULE is valid. The WEATHER TEMP. SET is not affected by the setting of TIMER or WEEKLY SCHEDULE.
- PRESET TEMP. and WEATHER TEMP. SET are on the same priority. The later setting function is valid.

# INFORMATION

All about the time set items (PRESET TEMP., ECO, DISINFECT, DHW PUMP, TIMER, WEEKLY SCHEDULE, SILENT MODE, HOLIDAY HOME), the ON/OFF of the corresponding function can be activated from the start time to the end time.

# 7.5 Options

OPTIONS menu contents as following:

- 1) SILENT MODE
- 2) HOLIDAY AWAY
- 3) HOLIDAY HOME
- 4) BACKUP HEATER

### 7.5.1 Silent Mode

The SILENT MODE is used to decrease the sound of the unit. However, it also decreases the heating/cooling capacity of the system. There are two silent mode levels. Level 2 is more silent than Level 1, and the heating or cooling capacity is also more decreasing. There are two methods to use the silent mode:

- 1) silent mode in all time;
- 2) silent mode in timer.
- Go to the home page to check if silent mode is activated. If the silent mode is activated,
   will be display on the home page.
- Go to "□">OPTIONS>SILENT MODE. Press "←". The setting page will appear.

Use "U" to select ON or OFF of CURRENT STATE. If CURRENT STATE is OFF, SILENT MODE is invalid. When you select SILENT

LEVEL press "← " or " To use " To select level 1 or level 2. Press " ← ". If the silent TIMER is selected, press " ← " to enter.

There are two timers for setting. Move to "■", press "← " to select or unselect. If the two timers are both unselected, the silent mode will operate in all time. Otherwise, it will operate according as the time.

# 7.5.2 Holiday Away

If the HOLIDAY AWAY mode is activated,
 will display on the home page.

The HOLIDAY AWAY function is used to prevent frozen in the winter during the outside holiday, and return the unit before the end of the holiday.

Go to "□">OPTIONS>HOLIDAY AWAY. Press "← ". The following page will show to set different parameters.

Usage example: You go away during the winter. The current date is 2018-01-31, two days later is 2018-02-02, it is the beginning date of the holiday.

If you are in the following situation:

- in 2 days, you go away for 2 weeks during the winter;
- you want to save energy, but prevent your house from freezing.

Then you can do the following:

- 1) configure the HOLIDAY AWAY settings:
- 2) activate the holiday mode.

Go to "□">OPTIONS>HOLIDAY AWAY.
Press "←".

Use "U" to select "OFF" or "ON" and use "

Setting	Value	
Holiday away	ON	
From	2 February 2018	
Until	16 February 2018	
Operation mode	Heating	
Disinfect	ON	

# 1

# **INFORMATION**

- If DHW mode in HOLIDAY AWAY mode is ON, the disinfect set by user is invalid.
- If HOLIDAY AWAY mode is ON, the TIMER and WEEKLY SCHEDULE are invalid except exit.
- If the CURRENT STATE is OFF, the HOLIDAY AWAY is OFF.
- If the CURRENT STATE is ON, the HOLIDAY AWAY is ON.
- Disinfecting the unit on 23:00 of the last day if disinfect is ON.
- When in HOLIDAY AWAY mode, the climate related curves previously set are invalid, and the curves will automatically take effect after the HOLIDAY AWAY mode ended.
- The preset temperature is invalid when in HOLIDAY AWAY mode, but the preset value still display on the main page.

# 7.5.3 Holiday Home

The HOLIDAY HOME function is used to deviate from the normal schedules without having to change them during the holiday at home.

 During your holiday, you can use the holiday mode to deviate from your normal schedules without having to change them.

Period	Then
Before and after your holiday	Your normal schedules will be used
During your holiday	The configured holiday settings will be used

If the HOLIDAY HOME mode is activated, will display on the home page. Go to " ">OPTIONS>HOLIDAY HOME. Press " — ".

Use "U" to select "OFF" or "ON" and use "

If the CURRENT STATE is OFF, the HOLI-DAY HOME is OFF.

If the CURRENT STATE is ON, the HOLI-DAY HOME is ON.

Use "V", "\( \Lambda \)" to adjust the date.

- Before and after your holiday, your normal schedule will be used.
- During your holiday, you save energy and prevent your house from freezing.

# INFORMATION

You have to exit "HOLIDAY AWAY" or "HOLIDAY HOME", if you change the operation mode of the unit.

# 7.5.4 Backup Heater

- The BACKUP HEATER function is used to force the backup heater. Go to "□"> OPTIONS>BACKUP HEATER. Press " ← ". If IBH and AHS is set invalid by DIP switch on the main control board of hydraulic module, the page will be empty. IBH = Indoor unit backup heater.
  - AHS = Additional heating source.
- If IBH and AHS is set valid by DIP switch on the main control board of hydraulic module.

Use "U" to select "OFF" or "ON".

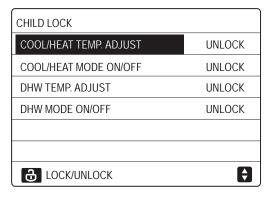
# INFORMATION

 If the operation mode is AUTO mode in space heating or cooling side, the backup heater function can not be selected.  The BACKUP HEATER function is invalid when only ROOM HEAT MODE enabled.

### 7.6 Child Lock

The CHILD LOCK function is used to prevent children error operation. The mode setting and temperature adjusting can be locked or unlocked by using CHILD LOCK function. Go to "=">CHILD LOCK.

Input the corrent password, the following page will appear:



Use "V", "A" to scroll and "U" to select LOCK or UNLOCK.

The cool/heat temperature can't be adjusted when the COOL/HEAT TEMP. ADJUST is locked. If you want to adjust the cool/heat temperature when cool/heat temperature is locked, the following page will ask to confirm if you want to unlock the option.

The cool/heat mode can't turn on or off when the COOL/HEAT MODE ON/OFF is locked. If you want to turn on or off the cool/heat mode when COOL/HEAT MODE ON/OFF is locked, the following page will ask to confirm if you want to unlock the option.

The DHW temperature can't be adjusted when the DHW TEMP. ADJUST is locked. If you want to adjust the DHW temperature when DHW TEMP. ADJUST is locked, the following page will ask to confirm if you want to unlock the option.

The DHW mode can't turn on or off when the DHW MODE ON/OFF is locked. If you want to turn on or off the DHW mode when DHW MODE ON/OFF is locked, the following page will ask to confirm if you want to unlock the option.

# 7.7 Service information

### 7.7.1 About service information

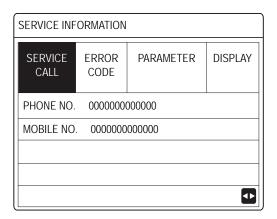
Service information menu contents as following:

- 1) SERVICE CALL
- 2) ERROR CODE
- 3) PARAMETER
- 4) DISPLAY

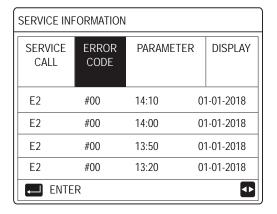
# 7.7.2 How to go to service information menu

Go to "□">SERVICE INFORMATION. Press "←". The following page will appear.

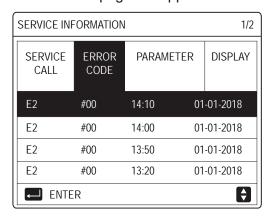
The SERVICE CALL can show the service phone or mobile number. The installer can input the phone number. See "FOR SERVICEMAN".



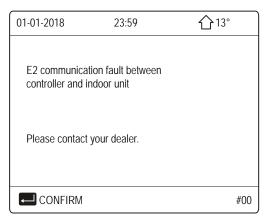
ERROR CODE is used to show when the fault or protection happens and shows the mean of the error code.



Press "← " the page will appear:



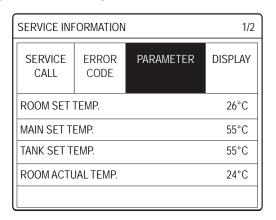
Press "← " to show the mean of the error code.



# INFORMATION

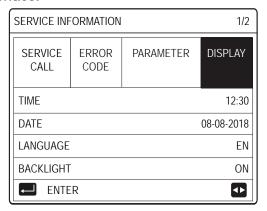
A total of eight fault codes can be recorded.

The PARAMETER function is used to display the main parameter, there are two pages to show the parameter:



SERVICE INFORMATION			2/2
SERVICE ERROR PARAMETER CODE		PARAMETER	DISPLAY
MAIN ACTUAL TEMP. 26°C			26°C
TANK ACTUAL TEMP.			55°C
SMART GRID RUNNING TIME		0 Hrs	

The DISPLAY function is used to set the interface:



SERVICE INFORMATION			2/2
SERVICE CALL	ERROR CODE	PARAMETER	DISPLAY
BUZZER	ZER ON		
SCREEN LOCK TIME 120 SE			120 SEC
SMART GRID RUNNING TIME 2 H		2 Hrs	
ON/OFF 🗦			•

Use "←" to enter and use "←", "▶", "▼ ", "A" to scroll.

### **Operation Parameter** 7.8

This menu is for installer or service engineer reviewing the operation parameter.

At home page, go to "="> OPERATION PA-

RAMETER".

Press "← ". There are nine pages for the operating parameter as following.

Use "V", "A" to scroll.

OPERATION PARAMETER	#01
ONLINE UNITS NUMBER	1
OPERATE MODE	COOL
SV1 STATE	ON
SV2 STATE	OFF
SV3 STATE	OFF
PUMP_I	ON
<b>◆</b> ADDRESS	1/9
OPERATION PARAMETER	#01
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
OPERATION PARAMETER	#01
GAS BOILER	OFF
T1 LEAVING WATER TEMP.	35°C
WATER FLOW	1.72m3/h
HEAT PUMP CAPACITY	11.52kW
POWER CONSUM	1000kWh
Ta ROOM TEMP.	25°C
<b>◆</b> ADDRESS	3/9
OPERATION PARAMETER	#01
T5 WATER TANK TEMP.	53°C
Tw2 CIRCUIT2 WATER TEMP.	35°C
T1S' C1 CLI. CURVE TEMP.	35°C
T1S2' C2 CLI. CURVE TEMP.	35°C
TW_O PLATE W-OUTLET TEMP.	35°C
TW_I PLATE W-INLET TEMP.	30°C
<b>◆</b> ADDRESS	4/9
OPERATION PARAMETER	#01
Tbt1 BUFFERTANK_UP TEMP.	35°C
Tbt2 BUFFERTANK_LOW TEMP.	35°C
Tsolar	25°C
IDU SOFTWARE	01-09-2019V01
<b></b> ADDRESS	5/9

OPERATION PARAMETER	#01
ODU MODEL	6kW
COMP. CURRENT	12A
COMP. FREQUENCY	24Hz
COMP. RUN TIME	54 MIN
COMP. TOTAL RUN TIME	1000Hrs
EXPANSION VALVE	200P
<b>◆</b> ADDRESS	6/9

OPERATION PARAMETER	#01
FAN SPEED	600R/MIN
IDU TARGET FREQUENCY	46Hz
FREQUENCY LIMITED TYPE	5
SUPPLY VOLTAGE	230V
DC GENERATRIX VOLTAGE	420V
DC GENERATRIX CURRENT	18A
<b>■</b> ADDRESS	7/9 🔷

OPERATION PARAMETER	#01
TW_O PLATE W-OUTLET TEMP.	35°C
TW_I PLATE W-INLET TEMP.	30°C
T2 PLATE F-OUT TEMP.	35°C
T2B PLATE F-IN TEMP.	35°C
Th COMP. SUCTION TEMP.	5°C
Tp COMP. DISCHARGE TEMP.	75°C
<b>▲</b> ADDRESS	8/9

OPERATION PARAMETER	#01
T3 OUTDOOR EXCHARGE TEMP.	5°C
T4 OUTDOOR AIR TEMP.	5°C
TF MODULE TEMP.	55°C
P1 COMP. PRESSURE	2300kPa
ODU SOFTWARE	01-09-2018V01
HMI SOFTWARE	01-09-2018V01
<b>▲</b> ADDRESS	9/9

# **INFORMATION**

The power consumption parameter is optional. If some parameter is not be activated in the system, the parameter will show "--". The heat pump capacity is for reference only, not used to judge the ability of the unit. The accuracy of sensor is ±1 °C. The flow rates parameters are calculated according to the pump running parameters, the deviation is different at different flow rates, the maximum of deviation is 15%. The flow parameters are calculated according to the electrical parameters of the pump operation. The operating voltage is different and the deviation is different. The display value is 0 when the voltage is less than 198V.

### 7.9 FOR SERVICEMAN

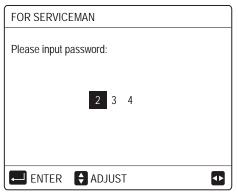
### 7.9.1 About FOR SERVICEMAN

"FOR SERVICEMAN" is used for installer and service engineer.

- Setting the function of equipment.
- Setting the parameters.

# 7.9.2 How To Go To FOR SERVICEMAN

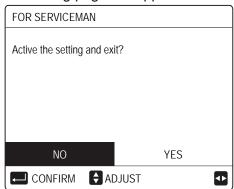
Go to "□">FOR SERVICEMAN. Press "←-".



- The FOR SERVICEMAN is used for installer or service engineer. It is NOT intended the home owner alters setting with this menu.
- It is for this reason password protection is required to prevent unauthorised access to the service settings.
- The password is 234.

### 7.9.3 How To Exit For SERVICEMAN

If you have set all the parameter. Press " ", the following page will appear:



Select "YES" and press "← " to exit the FOR SERVICEMAN. After exiting the FOR 73 SERVICEMAN, the unit will be turned off.

# 8 MENU STRUCTURE: OVERVIEW

MENU		_
OPERATION MODE	OPERATION MODE  HEAT  COOL  AUTO	
PRESET TEMPERATURE	PRESET TEMPERATURE PRESET TEMP. WEATHER TEMP. SET ECO MODE	
DOMESTIC HOT WATER (DHW)	DOMESTIC HOT WATER (DHW)  DISINFECT  FAST DHW  TANK HEATER  DHW PUMP	DISINFECT CURRENT STATE OPERATE DAY START
SCHEDULE	SCHEDULE TIMER WEEKLY SCHEDULE SCHEDULE CHECK CANCEL TIMER	
OPTIONS	OPTIONS SILENT MODE HOLIDAY AWAY HOLIDAY HOME BACKUP HEATER	SILENT MODE CURRENT STATE SILENT LEVEL TIMER1 START TIMER1 END HOLIDAY AWAY CURRENT STATE DHW MODE DISINFECT HEAT MODE FROM UNTIL HOLIDAY HOME CURRENT STATE FROM UNTIL TIMER
CHILD LOCK	CHILD LOCK COOL/HEAT TEMP. ADJUST COOL/HEAT MODE ON/OFF DHW TEMP. ADJUST DHW MODE ON/OFF	
SERVICE INFORMATION	SERVICE INFORMATION SERVICE CALL ERROR CODE PARAMETER DISPLAY	DISPLAY TIME DATE LANGUAGE BACKLIGHT BUZZER SCREEN LOCK TIME SMART GRID RUNNING TIME
OPERATION	OPERATION PARAMETER	

FOR SERVICEMAN*	FOR SERVICEMAN*  DHW MODE SETTING  COOL MODE SETTING  HEAT MODE SETTING  AUTO MODE SETTING  TEMP. TYPE SETTING  ROOM THERMOSTAT  OTHER HEATING SOURCE  HOLIDAY AWAY SETTING  SERVICE CALL  RESTORE FACTORY SETTINGS  TEST RUN  SPECIAL FUNCTION  AUTO RESTART  POWER INPUT LIMITATION  INPUT DEFINE  CASCADE SET  HMI ADDRESS SET		* see next menu structure
-----------------	---	--	---------------------------

FOR SERVICEMAN*	
	1) DHW MODE SETTING
	1.1 DHW MODE
	1.2 DISINFECT
	1.3 DHW PRIORITY
	1.4 PUMP_D
	1.5 DHW PRIORITY TIME SET
	1.6 dT5_ON
	1.7 dT1S5
	1.8 T4DHWMAX
	1.9 T4DHWMIN
1) DHW MODE SETTING	1.10 t_INTERVAL_DHW
1) DIW WODE SETTING	1.11 dT5_TBH_OFF
	1.12 T4_TBH_ON
	1.13 t_TBH_DELAY
	1.14 T5S_DISINFECT
	1.15 t_DI_HIGHTEMP
	1.16 t_DI_MAX
	1.17 t_DHWHP_RESTRICT
	1.18 t_DHWHP_MAX
	1.19 PUMP_D TIMER
	1.20 PUMP_D RUNNING TIME
	1.21 PUMP_D DISINFECT RUN
	2) COOL MODE SETTING
	2.1 COOL MODE
	2.2 t_T4_FRESH_C
	2.3 T4CMAX
	2.4 T4CMIN
	2.5 dT1SC
2) COOL MODE SETTING	2.6 dTSC
2) COOL MODE SETTING	2.7 t_INTERVAL_C
	2.8 T1SetC1
	2.9 T1SetC2
	2.10 T4C1
	2.11 T4C2
	2.12 ZONE1 C-EMISSION
	2.13 ZONE2 C-EMISSION
	3) HEAT MODE SETTING
	3.1 HEAT MODE
	3.2 t_T4_FRESH_H
	3.3 T4HMAX
	3.4 T4HMIN
	3.5 dT1SH
	3.6 dTSH
3) HEAT MODE SETTING	3.7 t_INTERVAL_H
,	3.8 T1SetH1
	3.9 T1SetH2
	3.10 T4H1
	3.11 T4H2
	3.12 ZONE1 H-EMISSION
	3.13 ZONE2 H-EMISSION
	3.14 t_DELAY_PUMP
	4) AUTO MODE SETTING
4) AUTO MODE SETTING	4.1 T4AUTOCMIN
, , , , , , , , , , , , , , , , , , , ,	4.2 T4AUTOHMAX
L	

[	
	5) TEMP. TYPE SETTING
5) TEMP. TYPE SETTING	5.1 WATER FLOW TEMP.
	5.2 ROOM TEMP.
	5.3 DOUBLE ZONE
6) ROOM THERMOSTAT	6) ROOM THERMOSTAT
o, 1.00	6.1 ROOM THERMOSTAT
	7) OTHER HEATING SOURCE
	7.1 dT1_IBH_ON
	7.2 t_IBH_DELAY
	7.3 T4_IBH_ON
7) OTHER HEATING	7.4 dT1_AHS_ON
SOURCE	7.5 t_AHS_DELAY
SOUNCE	7.6 T4_AHS_ON
	7.7 IBH LOCATE
	7.8 P IBH1
	7.9 P IBH2
	7.10 P TBH
	8) HOLIDAY AWAY SETTING
8) HOLIDAY AWAY	8.1 T1S H.A. H
SETTING	8.2 T5S H.A. DHW
	9) SERVICE CALL
9) SERVICE CALL	9.1 PHONE NO
	9.2 MOBILE NO
10) RESTORE FACTORY SETTINGS	10) RESTORE FACTORY SETTINGS
11) TEST RUN	11) TEST RUN
12) SPECIAL FUNCTION	12) SPECIAL FUNCTION
	13) AUTO RESTART
13) AUTO RESTART	13) AUTO RESTART 13.1 COOL/HEAT MODE
13) AUTO RESTART	13.1 COOL/HEAT MODE
	13.1 COOL/HEAT MODE 13.2 DHW MODE
13) AUTO RESTART  14) POWER INPUT LIMITATION	13.1 COOL/HEAT MODE
14) POWER INPUT	13.1 COOL/HEAT MODE 13.2 DHW MODE  14) POWER INPUT LIMITATION  14.1 POWER LIMITATION
14) POWER INPUT	13.1 COOL/HEAT MODE 13.2 DHW MODE 14) POWER INPUT LIMITATION
14) POWER INPUT	13.1 COOL/HEAT MODE 13.2 DHW MODE 14) POWER INPUT LIMITATION 14.1 POWER LIMITATION 15) INPUT DEFINE (M1M2)
14) POWER INPUT	13.1 COOL/HEAT MODE 13.2 DHW MODE 14) POWER INPUT LIMITATION 14.1 POWER LIMITATION 15) INPUT DEFINE (M1M2) 15.1 M1M2
14) POWER INPUT	13.1 COOL/HEAT MODE 13.2 DHW MODE 14.1 POWER INPUT LIMITATION 14.1 POWER LIMITATION 15) INPUT DEFINE (M1M2) 15.1 M1M2 15.2 SMART GRID
14) POWER INPUT	13.1 COOL/HEAT MODE 13.2 DHW MODE  14) POWER INPUT LIMITATION  14.1 POWER LIMITATION  15) INPUT DEFINE (M1M2)  15.1 M1M2  15.2 SMART GRID  15.3 Tw2  15.4 Tbt1
14) POWER INPUT LIMITATION	13.1 COOL/HEAT MODE 13.2 DHW MODE  14) POWER INPUT LIMITATION  14.1 POWER LIMITATION  15) INPUT DEFINE (M1M2)  15.1 M1M2  15.2 SMART GRID  15.3 Tw2  15.4 Tbt1  15.5 Tbt2
14) POWER INPUT	13.1 COOL/HEAT MODE 13.2 DHW MODE  14) POWER INPUT LIMITATION  14.1 POWER LIMITATION  15) INPUT DEFINE (M1M2)  15.1 M1M2  15.2 SMART GRID  15.3 Tw2  15.4 Tbt1  15.5 Tbt2  15.6 Ta
14) POWER INPUT LIMITATION	13.1 COOL/HEAT MODE 13.2 DHW MODE  14) POWER INPUT LIMITATION  14.1 POWER LIMITATION  15) INPUT DEFINE (M1M2)  15.1 M1M2  15.2 SMART GRID  15.3 Tw2  15.4 Tbt1  15.5 Tbt2  15.6 Ta  15.7 Ta-adj
14) POWER INPUT LIMITATION	13.1 COOL/HEAT MODE 13.2 DHW MODE 14) POWER INPUT LIMITATION 14.1 POWER LIMITATION 15) INPUT DEFINE (M1M2) 15.1 M1M2 15.2 SMART GRID 15.3 Tw2 15.4 Tbt1 15.5 Tbt2 15.6 Ta 15.7 Ta-adj 15.8 SOLAR INPUT
14) POWER INPUT LIMITATION	13.1 COOL/HEAT MODE 13.2 DHW MODE 14) POWER INPUT LIMITATION 14.1 POWER LIMITATION 15) INPUT DEFINE (M1M2) 15.1 M1M2 15.2 SMART GRID 15.3 Tw2 15.4 Tbt1 15.5 Tbt2 15.6 Ta 15.7 Ta-adj 15.8 SOLAR INPUT 15.9 F-PIPE LENGTH
14) POWER INPUT LIMITATION	13.1 COOL/HEAT MODE 13.2 DHW MODE 14) POWER INPUT LIMITATION 14.1 POWER LIMITATION 15) INPUT DEFINE (M1M2) 15.1 M1M2 15.2 SMART GRID 15.3 Tw2 15.4 Tbt1 15.5 Tbt2 15.6 Ta 15.7 Ta-adj 15.8 SOLAR INPUT 15.9 F-PIPE LENGTH 15.10RT/Ta_PCB
14) POWER INPUT LIMITATION	13.1 COOL/HEAT MODE 13.2 DHW MODE  14) POWER INPUT LIMITATION  14.1 POWER LIMITATION  15) INPUT DEFINE (M1M2)  15.1 M1M2  15.2 SMART GRID  15.3 Tw2  15.4 Tbt1  15.5 Tbt2  15.6 Ta  15.7 Ta-adj  15.8 SOLAR INPUT  15.9 F-PIPE LENGTH  15.10RT/Ta_PCB  15.11 PUMP_I SILENT MODE
14) POWER INPUT LIMITATION	13.1 COOL/HEAT MODE 13.2 DHW MODE  14) POWER INPUT LIMITATION  14.1 POWER LIMITATION  15) INPUT DEFINE (M1M2)  15.1 M1M2  15.2 SMART GRID  15.3 Tw2  15.4 Tbt1  15.5 Tbt2  15.6 Ta  15.7 Ta-adj  15.8 SOLAR INPUT  15.9 F-PIPE LENGTH  15.10RT/Ta_PCB  15.11 PUMP_I SILENT MODE  15.12DFT1/DFT2
14) POWER INPUT LIMITATION	13.1 COOL/HEAT MODE 13.2 DHW MODE  14) POWER INPUT LIMITATION  14.1 POWER LIMITATION  15) INPUT DEFINE (M1M2)  15.1 M1M2  15.2 SMART GRID  15.3 Tw2  15.4 Tbt1  15.5 Tbt2  15.6 Ta  15.7 Ta-adj  15.8 SOLAR INPUT  15.9 F-PIPE LENGTH  15.10RT/Ta_PCB  15.11 PUMP_I SILENT MODE  15.12DFT1/DFT2  16) CASCADE SET
14) POWER INPUT LIMITATION	13.1 COOL/HEAT MODE 13.2 DHW MODE  14) POWER INPUT LIMITATION  14.1 POWER LIMITATION  15.1 INPUT DEFINE (M1M2)  15.1 M1M2  15.2 SMART GRID  15.3 Tw2  15.4 Tbt1  15.5 Tbt2  15.6 Ta  15.7 Ta-adj  15.8 SOLAR INPUT  15.9 F-PIPE LENGTH  15.10RT/Ta_PCB  15.11 PUMP_I SILENT MODE  15.12DFT1/DFT2  16) CASCADE SET  16.1 PER_START
14) POWER INPUT LIMITATION  15) INPUT DEFINE (M1M2)	13.1 COOL/HEAT MODE 13.2 DHW MODE 14) POWER INPUT LIMITATION 14.1 POWER LIMITATION 15.1 INPUT DEFINE (M1M2) 15.1 M1M2 15.2 SMART GRID 15.3 Tw2 15.4 Tbt1 15.5 Tbt2 15.6 Ta 15.7 Ta-adj 15.8 SOLAR INPUT 15.9 F-PIPE LENGTH 15.10RT/Ta_PCB 15.11 PUMP_I SILENT MODE 15.12DFT1/DFT2 16.1 PER_START 16.2 TIME_ADJUST
14) POWER INPUT LIMITATION  15) INPUT DEFINE (M1M2)	13.1 COOL/HEAT MODE  13.2 DHW MODE  14) POWER INPUT LIMITATION  14.1 POWER LIMITATION  15.1 INPUT DEFINE (M1M2)  15.2 SMART GRID  15.3 Tw2  15.4 Tbt1  15.5 Tbt2  15.6 Ta  15.7 Ta-adj  15.8 SOLAR INPUT  15.9 F-PIPE LENGTH  15.10RT/Ta_PCB  15.11 PUMP_I SILENT MODE  15.12DFT1/DFT2  16.1 PER_START  16.2 TIME_ADJUST  16.3 ADDRESS RESET
14) POWER INPUT LIMITATION  15) INPUT DEFINE (M1M2)	13.1 COOL/HEAT MODE 13.2 DHW MODE 14) POWER INPUT LIMITATION 14.1 POWER LIMITATION 15.1 INPUT DEFINE (M1M2) 15.1 M1M2 15.2 SMART GRID 15.3 Tw2 15.4 Tbt1 15.5 Tbt2 15.6 Ta 15.7 Ta-adj 15.8 SOLAR INPUT 15.9 F-PIPE LENGTH 15.10RT/Ta_PCB 15.11 PUMP_I SILENT MODE 15.12DFT1/DFT2 16) CASCADE SET 16.1 PER_START 16.2 TIME_ADJUST 16.3 ADDRESS RESET 17) HMI ADDRESS SET
14) POWER INPUT LIMITATION  15) INPUT DEFINE (M1M2)	13.1 COOL/HEAT MODE  13.2 DHW MODE  14) POWER INPUT LIMITATION  14.1 POWER LIMITATION  15) INPUT DEFINE (M1M2)  15.1 M1M2  15.2 SMART GRID  15.3 Tw2  15.4 Tbt1  15.5 Tbt2  15.6 Ta  15.7 Ta-adj  15.8 SOLAR INPUT  15.9 F-PIPE LENGTH  15.10RT/Ta_PCB  15.11 PUMP_I SILENT MODE  15.12DFT1/DFT2  16) CASCADE SET  16.1 PER_START  16.2 TIME_ADJUST  16.3 ADDRESS RESET  17.1 HMI SET
14) POWER INPUT LIMITATION  15) INPUT DEFINE (M1M2)  16) CASCADE SET	13.1 COOL/HEAT MODE 13.2 DHW MODE 14) POWER INPUT LIMITATION 14.1 POWER LIMITATION 15.1 INPUT DEFINE (M1M2) 15.1 M1M2 15.2 SMART GRID 15.3 Tw2 15.4 Tbt1 15.5 Tbt2 15.6 Ta 15.7 Ta-adj 15.8 SOLAR INPUT 15.9 F-PIPE LENGTH 15.10RT/Ta_PCB 15.11 PUMP_I SILENT MODE 15.12DFT1/DFT2 16) CASCADE SET 16.1 PER_START 16.2 TIME_ADJUST 16.3 ADDRESS RESET 17) HMI ADDRESS SET

Table 1 - The environment temperature curve of the low temperature setting for heating

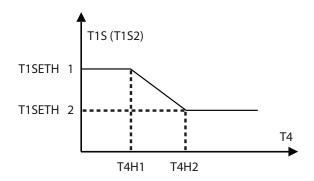
0	35	34	33	32	31	29	28	26	20	32	31	59	28	27	26	25	24
-	35	34	33	32	31	30	29	27	ΛΙ	32	31	29	28	27	26	25	
- 2	35	34	33	32	31	30	29	27	19	32	31	29	28	27	26	25	24
. კ	35	34	33	32	31	30	29	27	18	32	31	30	29	28	27	26	24
- 4	36	35	33	32	31	30	29	27	17	32	31	30	29	28	27	26	24
- 5	36	35	33	32	31	30	29	27	16	32	31	30	29	28	27	26	24
9 -	36	35	34	33	32	30	29	27	15	32	31	30	29	28	27	26	25
- 7	36	35	34	33	32	30	29	27	14	33	32	30	29	28	27	26	25
<b>&amp;</b>	36	35	34	33	32	30	29	27	73	33	32	30	29	28	27	26	25
6 -	36	35	34	33	32	31	30	28	12	33	32	31	30	29	28	27	25
- 10	37	36	34	33	32	31	30	28	7	33	32	31	30	29	28	27	25
- 11	37	36	34	33	32	31	30	28	9	33	32	31	30	29	28	27	25
- 12	37	36	35	34	33	31	30	28	တ	33	32	31	30	29	28	27	25
- 13	37	36	35	34	33	31	30	28	∞	34	33	31	30	29	28	27	25
- 14	37	36	35	34	33	31	30	28	7	34	33	31	30	29	28	27	26
- 15	37	36	35	34	33	31	30	28	ဖ	34	33	32	31	30	29	28	26
- 16	38	37	35	34	33	31	30	28	2	34	33	32	31	30	29	28	26
- 17	38	37	35	34	33	32	31	29	4	34	33	32	31	30	29	28	26
- 18	38	37	36	35	34	32	31	29	က	34	33	32	31	30	29	28	26
- 19	38	37	36	35	34	32	31	29	7	35	34	32	31	30	59	28	26
≥ - 20	38	37	36	35	34	32	31	29	_	35	34	32	31	30	29	28	26
<b>T</b> 4	1- T1S	2-T1S	3- T1S	4- T1S	5- T1S	6- T1S	7- T1S	8-T1S	<b>T</b> 4	1-T1S	2-T1S	3-T1S	4- T1S	5- T1S	6- T1S	7-T1S	8- T1S

Table 2 - The environment temperature curve of the high temperature setting for heating

0	52	20	49	47	45	42	40	37	20	20	48	47	45	43	40	38	35
								38									
- 2	53	51	20	48	46	43	41	38	19	20	48	47	45	43	40	38	35
ი .	53	51	20	48	46	43	4	38	9	20	48	47	45	43	40	38	35
- 4	53	51	20	48	46	43	4	38	17	20	48	47	45	43	40	38	35
- 5	53	51	20	48	46	43	41	38	16	20	48	47	45	43	40	38	35
9 -	53	51	20	48	46	43	41	38	15	51	49	48	46	44	41	39	36
-7	53	51	20	48	46	43	4	38	4	51	49	48	46	44	41	39	36
<b>∞</b>	53	51	20	48	46	43	41	38	<del>1</del> 3	51	49	48	46	44	41	39	36
6 -	54	52	51	49	47	44	42	39	12	51	49	48	46	44	41	39	36
- 10	54	52	51	49	47	44	42	39	7	51	49	48	46	44	41	39	36
- 11	54	52	51	49	47	44	42	39	9	51	49	48	46	44	41	39	36
- 12	54	52	51	49	47	44	42	39	တ	51	49	48	46	44	41	39	36
- 13	54	52	51	49	47	44	42	39	œ	51	49	48	46	44	41	39	36
- 14	54	52	51	49	47	44	42	39	7	52	20	49	47	45	42	40	37
- 15	54	52	51	49	47	44	42	39	9	52	20	49	47	45	42	40	37
- 16	54	52	51	49	47	44	42	39	2	52	20	49	47	45	42	40	37
- 17	55	53	52	20	48	45	43	40	4	52	20	49	47	45	42	40	37
- 18	55	53	52	20	48	45	43	40	က	52	20	49	47	45	42	40	37
- 19	55	53	52	20	48	45	43	40	7	52	20	49	47	45	42	40	37
≥-20	55	53	52	20	48	45	43	40	-	52	20	49	47	45	42	40	37
T4	1-T1S	2-T1S	3-T1S	4- T1S	5- T1S	6- T1S	7-T1S	8-T1S	<b>T</b> 4	1-T1S	2-T1S	3-T1S	4- T1S	5- T1S	6- T1S	7-T1S	8-T1S

# The automatic setting curve

The automatic setting curve is the ninth curve, this is the calculation:



State: In the setting the wired controller, if T4H2<T4H1, then exchange their value; if T1SETH1<T-1SETH2, then exchange their value.

Table 3 - The environment temperature curve of the low temperature setting for cooling

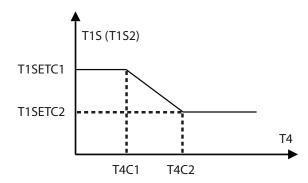
T4	- 10≤ T4<15	15≤ T4<22	22≤ T4<30	30≤ T4
1- T1S	16	11	8	5
2- T1S	17	12	9	6
3- T1S	18	13	10	7
4- T1S	19	14	11	8
5- T1S	20	15	12	9
6- T1S	21	16	13	10
7- T1S	22	17	14	11
8- T1S	23	18	15	12

Table 4 - The environment 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	19
8- T1S	25	23	21	20

# The automatic setting curve

The automatic setting curve is the ninth curve, this is the calculation:



State: In the setting the wired controller, if T4C2<T4C1, then exchange their value; if T1SETC1<T-1SETC2, then exchange their value.

### Riello S.p.A.

Poiché l'Azienda è costantemente impegnata nel continuo perfezionamento di tutta la sua produzione, le caratteristiche estetiche e dimensionali, i dati tecnici, gli equipaggiamenti e gli accessori, possono essere soggetti a variazione.

In order to improve its products, our company reserves the right to modify the characteristics and information contained in this manual at any time and without prior notice. Consumers statutory rights are not aected.