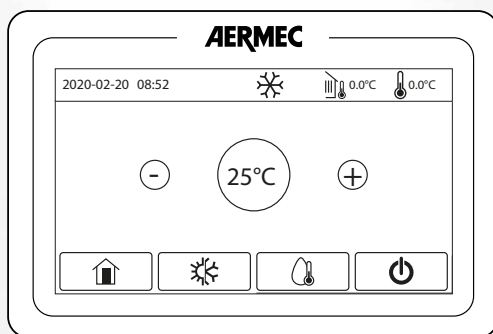


# HMI

## User manual



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■ WIRED CONTROLLER



*Dear Customer,*

*Thank you for wanting to learn about a product Aermec. This product is the result of many years of experience and in-depth engineering research, and it is built using top quality materials and advanced technologies.*

*The manual you are about to read is meant to present the product and help you select the unit that best meets the needs of your system.*

*However, please note that for a more accurate selection, you can also use the Magellano selection program, available on our website.*

*Aermec, always attentive to the continuous changes in the market and its regulations, reserves the right to make all the changes deemed necessary for improving the product, including technical data.*

*Thank you again.*

*Aermec S.p.A.*

## CERTIFICATIONS

### COMPANY CERTIFICATIONS



### SAFETY CERTIFICATIONS



This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled disposal of Waste Electrical and Electronic Equipment (WEEE), please return the device using appropriate collection systems, or contact the retailer where the product was purchased. Please contact your local authority for further details. Illegal dumping of the product by the user entails the application of administrative sanctions provided by law.



In accordance with Italian Legislative Decree 116 / 2020, the machine's packaging is marked; for unmarked packaging parts, the composition is as follows: **Expanded polystyrene - PS 6**

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## 1 WARNING AND HAZARD TERMS

Before proceeding with any assessment or operation on the unit, carefully read this manual and all of its notes marked with the following symbols, which indicate the various levels of hazard or situations that are potentially hazardous to prevent malfunctioning or physical damage to property or personal injury:

### WARNING



Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

### CAUTION



Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

### MANDATORY



This indicates a mandatory action that, if not carried out, could cause death or serious injuries.

### PROHIBITION



Indicates a prohibited action which, if not avoided, could result in death or serious injury.

### NOTICE



IMPORTANT additional information on how to use the product

## 2 USER NOTICE

### PROHIBITION



Never install the wired controller in the moist circumstance or expose it directly under the sunlight.



Never beat, throw, and frequently disassemble the wired controller and the wireless remote controller.



Never operate the wired controller and the wireless remote controller with wet hands.



Do not remove or install the wired controller by yourself. If there is any question, please contact our after-sales service center.

### MANDATORY



If the units are installed in a location exposed to electromagnetic interference, shielded twisted pair cables must be used for the communication connections between the units.



Ensure to be able to use the correct communication ports, otherwise the connection may not work properly.

### NOTICE



Please read the manual carefully before using and installing this product.

### 3 USER INTERFACE

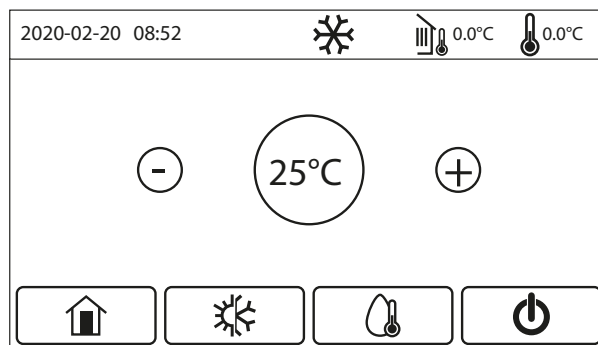
This display panel uses the capacitor touch screen for input operation. The valid touching area indicates the black rectangle when the display panel lights off.

This control panel is of high sensitivity and will response to unexpected click by the foreign matters on the display panel. Therefore, please keep it clean during operation.

This is a generous-purpose controller, whose control functions might not be completely the same as those of the actually purchased. As the control program will update, the actual always prevails.

The unit is equipped with temperature sensors such as remote room temperature sensors, outlet water temperature sensors, etc., and pressure sensors. Among them, the temperature sensors are used to detect outdoor, indoor, outlet water temperature, etc. The pressure sensors are used to detect the pressure value at the discharge port which then will be converted into temperature values through their relationship. All of them are to detect the operating state of the unit itself, make the unit run stably, and display the operating state on the control panel in real time.

#### 3.1 MAIN PAGE (HOME)





After startup, the main page (Home) appears on the display.

Depending on status and active mode, one or more icons may be displayed at the top of the screen:





Icon	Meaning
	HEATING mode active
	COOLING mode active
	Domestic hot water mode (DHW) active
	Indicates the measured external temperature
	Leaving water temperature of the main unit, leaving water temperature of the auxiliary electric heater, remote room temperature.
	This icon indicates that an alarm is currently in progress
	This icon may indicate: — External contact; — Anti-legionella cycle failed;
	This icon indicates that the panel is locked
	The main unit keeps the standby status under the SG control command

while several keys are available at the bottom of the display:

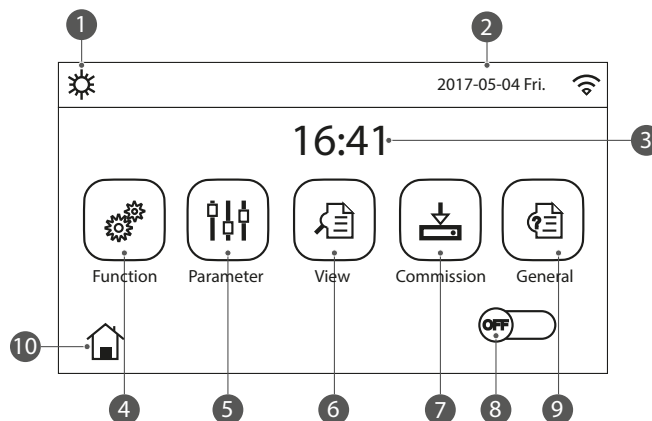
Button	Function
	Key to return to the menu selection window
	Key to change the operating mode between heating and cooling

Button	Function
	Key to enable domestic hot water production (which will add to the operating mode already set)
	Button to turn the unit on or off; the color of the button will indicate the status of the unit: — Green: unit on; — White: unit off;

**NOTICE**


-  **The ON/OFF icon will turn to green when the control panel is turned on.**
-  **Under the “Water heating” mode, what displayed at the upper corner of the controller is the water temperature of the water tank. Under the “Space heating” or “Space cooling” mode, what displayed depends on the setting of the control mode, that is, it will be the room temperature or leaving water temperature.**
-  **Under the combined modes, the temperature set points is for space heating or cooling. Only under the water heating mode, it is for water heating.**
-  **After 10 minutes of inactivity, the system will automatically return to the main page.**

**3.2 MENU PAGE**



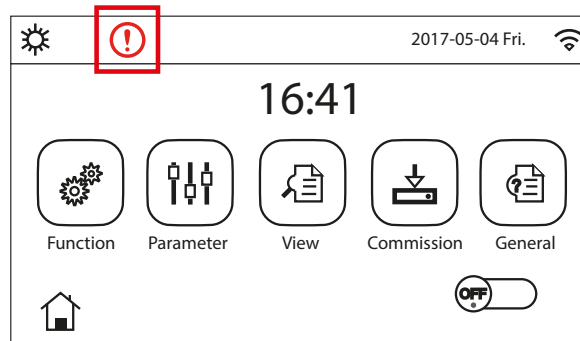
Above the menu, the corresponding icon will be displayed based on the mode and status of the controller.

Number	Function	Description
1	Mode	Operating mode
2	Date	Current data
3	Time	Current time
4	Functions	Allows to go to the user settings page
5	Parameters	Allows to go to the parameter settings page
6	Displays	Allows to go to the parameter viewing page
7	Start-up	Allows to go to the commissioning parameter setting page
8	ON/OFF	It used to turn on or off the unit. “OFF” indicates the unit has turned off and “ON” indicates the unit has turned on. Where there is failure-level error, this button will turn to OFF once the unit is automatically turned off.
9	General	Allows to go to the general parameter settings page
10	Home Page	Back to the home page

Icon	Meaning	Icon	Meaning
	Heating		Floor commissioning
	Cooling		Floor commissioning error

Icon	Meaning	Icon	Meaning
	Hot domestic water		Card pulling
	Heating + Hot water		Defrost
	Hot water + Heating		Absent
	Cooling + Hot Water		WiFi
	Hot Water + Cooling		Back
	Quiet		Menu Page
	Sanitation		Save
	Emergency		Error
	EVU		

Error icon

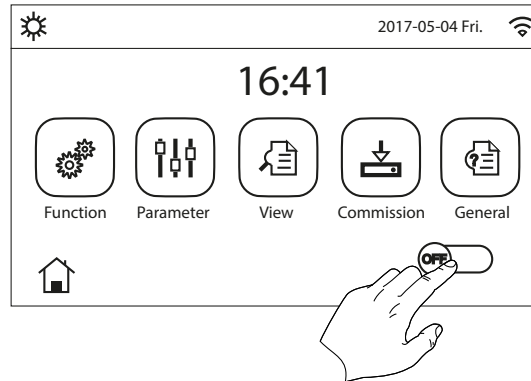


### 3.3 BACK-LIGHTING

Among the general setting page, when "Back light" is set to "Energy save", the display panel will light off when there is no operation in 5 minutes. However, it will light on again by touching any valid area. When "Back light" is set to "Lighted", the display panel will be kept lighting on. It is suggested to set it to "Energy save" so as to extend its service life.

## 4 BASIC FUNCTIONS

### 4.1 SWITCHING THE UNIT ON AND OFF (ON/OFF)



To switch the unit on or off, press the flag shown in the figure; once this is done, the system will ask for confirmation of the switching on or off through another window where the on/off command can be confirmed or cancelled.

#### NOTICE



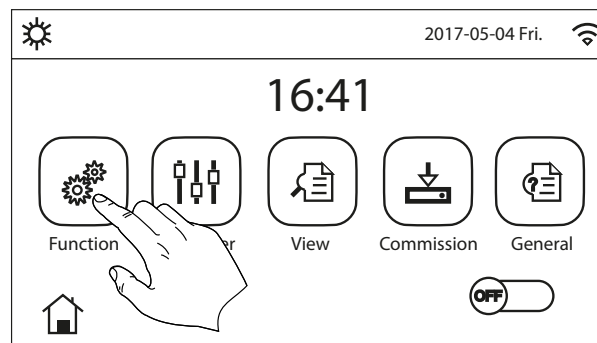
**Once the voltage supply has been connected for the first start-up, this function will be set on "Off";**



**ON/OFF operation will be memorized by setting "On/Off Memory" to be "On" at the General menu.**

That is, in case of power failure the unit will resume running upon power recovery. Once "On/Off Memory" is set to be "Off", in case of power failure the unit will keep "Off" upon power recovery.

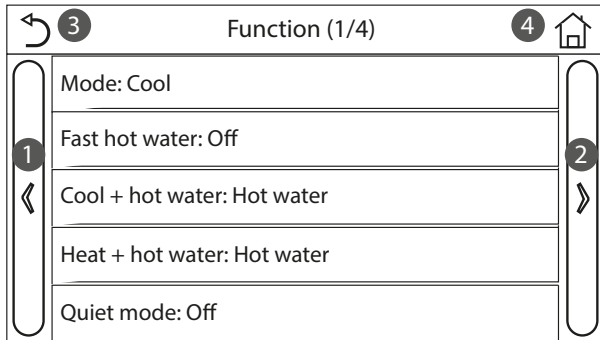
### 4.2 SELECTING A MENU



To enter one of the menus available to the user; click on the corresponding icon; on entering them, each menu (depending on the one selected) will allow you to browse the various pages or enter other sub-menus linked to specific functions. Press the HOME icon to return to the main page.

## 5 FUNCTION MENU

At the menu page, by touching "Function", it will go to the function setting page as shown in the figure below:



This menu is used to set operating functions for the unit. The following keys are used to navigate this menu:

1. Move back to the previous page;
2. Move on to the next page;
3. Go back to the higher level menu;
4. Go back to the main page;

To access a function, click on the text of that function.

At the function setting page of some function option, by touching "OK", this setting will be saved; by touching the "CANCEL" key, this setting will be canceled.

NOTICE

- i
At the function setting page with setting of any function changed, if the function is set to be memorized upon power failure, this setting will be saved automatically and memorized upon next power-on.
- i
When there is submenu for the selected function option, by pressing it the control will go directly the setting page of the submenu.
- i
Any functions not available will be highlighted by the letters "NA".

Page	Number	Function	Range	Default	Note
1	1	Mode	Cooling _____ Heating _____ Hot domestic water Cooling + hot water Heating + DHW	Heating	When the water tank is unavailable, then only "Cool" and "Heat" are available.
	2	Fast hot water	On/Off	Off	When the water tank is unavailable, it will be reserved.
	3	Cooling + hot water	Cool/hot water	D.H.W.	When the water tank is available, it will be defaulted to be "Hot water"; when unavailable, it will be reserved.
	4	Heating + DHW	Heating/DHW	D.H.W.	When the water tank is available, it will be defaulted to be "Hot water"; when unavailable, it will be reserved.
	5	Quiet mode	One time/Off/ Timer/Always ON	Off	---
2	6	Energy-saving mode	On/Off	Off	---
	7	Weekly timer	On/Off	Off	---
	8	Holiday release	On/Off	Off	---
	9	Disinfection	On/Off	Off	When the water tank is unavailable, it will be reserved. The date ranges from Monday to Sunday, Saturday is defaulted. The time ranges from 00:00~23:00. 23:00 is defaulted.
3	10	Timer	On/Off	Off	---
	11	Temp. timer	On/Off	Off	---
	12	Emergen. mode	On/Off	Off	---
	13	Holiday mode	On/Off	Off	---
	14	Preset mode	On/Off	Off	---
	15	Error reset	---	---	Some error can be cleared only when it has been reset manually.

Page	Number	Function	Range	Default	Note
4	16	WiFi reset	---	---	It is used to reset the WiFi.
	17	Reset	---	---	It is used to reset all user parameter setting.
	18	Child-lock	On/Off	Off	---
	19	Daylight Saving Time	On/Off	Off	Time lag: 0.5~3h, 1 defaulted. Time lead: 0.5~3h, 1 defaulted. Transform time point: 0:00~3:00
	20	Clear Power Consumption	/	/	/

## 5.1 MODE

At the function setting page with the unit turned off, by touching "Mode", it will go to the mode setting page, where desired mode can be selected. Then by touching "OK" this setting will be saved and the display panel will back to the function setting page.

### NOTICE

- i** The default value for this parameter is: "Heat";
- i** Before changing the operating mode, the unit must be OFF, otherwise a message will warn you to turn the unit off before changing the mode;
- i** If the compatible Aermec accessory tank for this model (refer to the installation manual for more information) is not installed and correctly set, the only modes available will be HEATING and COOLING;
- i** If the relative function is activated (paragraph "9.1 Activating/deactivating the memory (On/off memory) [on page 48](#)"), the value of this parameter will be stored in the memory and automatically reset after any possible voltage failure;
- i** When the water tank is available, all modes are allowed..

## 5.2 FAST HOT WATER

After accessing the "Fast hot water" function, you can choose whether to activate - along with the unit compressor - the electric heater inserted in the compatible Aermec accessory tank (specific for this model) for the production of domestic hot water. To activate this function, click directly on "ON" and then confirm with "OK".

### NOTICE

- i** This function can be set to "On" only when the water tank is available. When the water tank is unavailable, this function will be reserved.
- i** If the relative function is activated (paragraph "9.1 Activating/deactivating the memory (On/off memory) [on page 48](#)"), the value of this parameter will be stored in the memory and automatically reset after any possible voltage failure.

### 5.3 COOLING + HOT WATER

Cool + hot water

Cool  
 Hot water

OK
Cancel

At the function setting page with the unit turned off, by touching "Cool + hot water", the display panel will go to the corresponding setting page, where desired option can be selected. Then by pressing "OK" this setting will be saved and the display panel will back to the function setting page. After accessing the "Cool+hot water" function, you can select "Cool" to force the unit to first of all satisfy the system terminal side; by selecting "Hot water", priority is given to domestic hot water production. Select the priority, then press "OK" to confirm.

#### NOTICE

- i** If the compatible Aermec accessory tank for this model (refer to the installation manual for more information) is not installed and correctly set, this function will not be available;
- i** If the relative function is activated (paragraph "9.1 Activating/deactivating the memory (On/off memory) on page 48"), the value of this parameter will be stored in the memory and automatically reset after any possible voltage failure.

### 5.4 HEATING + DHW

Heat + hot water

Heat  
 Hot water

OK
Cancel

At the function setting page with the unit turned off, by touching "Heat + hot water", the display panel will go to the corresponding setting page, where desired option can

be selected. Then by pressing "OK" this setting will be saved and the display panel will back to the function setting page. After accessing the "Heat+hot water" function, you can select "Heat" to force the unit to first of all satisfy the system terminal side; by selecting "Hot water", priority is given to domestic hot water production. Select the priority, then press "OK" to confirm.

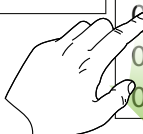
#### NOTICE

- i** If the compatible Aermec accessory tank for this model (refer to the installation manual for more information) is not installed and correctly set, this function will not be available;
- i** If the relative function is activated (paragraph "9.1 Activating/deactivating the memory (On/off memory) on page 48"), the value of this parameter will be stored in the memory and automatically reset after any possible voltage failure.

### 5.5 QUIET MODE

Quiet mode

Quiet mode: Timer	
Start Timer: 00:00	22 58
End Timer: 00:00	23 59
	00 00
	01 01
	02 02



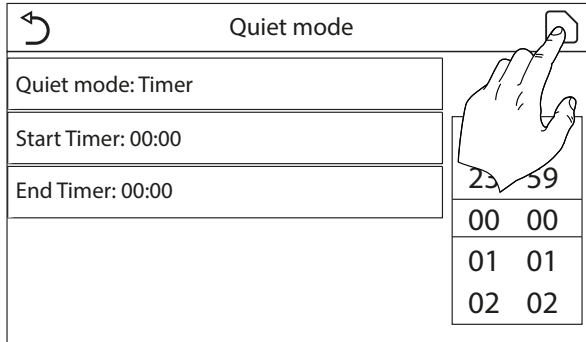
At the function setting page with the unit turned off, by touching "Quiet mode", there will be a choice box, where "Quiet mode" can be set to "Off", "One time", "Timer" or "Always ON".


When it is set to "One time", it will automatically back to "Off" when the main unit is turned off.

When it is set to "Always ON", this function can be deactivated only through changing its setting, and would not be deactivated as the main unit is turned off.




When it is set to "Timer", it is also required to set the "Start timer" and "End timer". Unless otherwise stated, otherwise time setting is all the same.

To set the values, press the time label in question and set the hours and minutes by sliding the value up or down with your fingertip (the value highlighted in blue in the middle of the selection window), as shown in the figure:

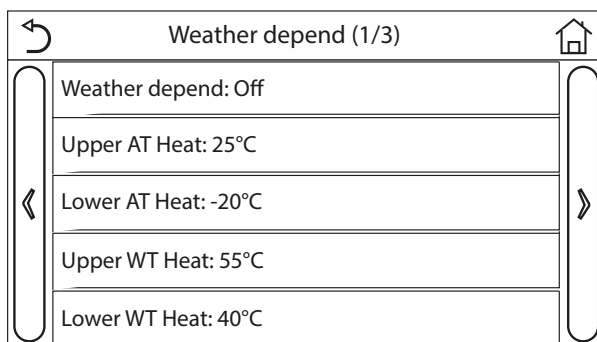


This setting will be saved by touching the corner  at the upper right corner.

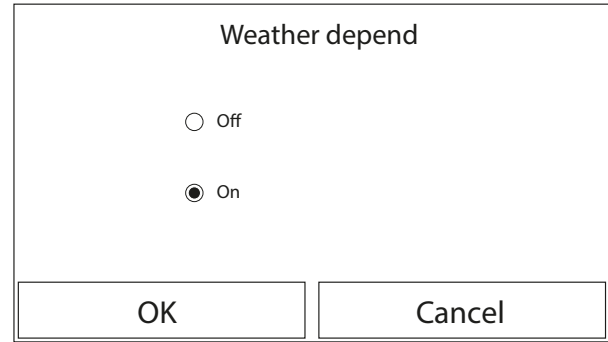
**NOTICE**

-  **The function can still be set if the unit is Off, but it will only be implemented if the unit is activated;**
-  **When the function is set to "On", it will automatically be set to "Off" if the unit is switched off manually, whereas the setting will remain valid until the end of the selected period if the function value is set to "Clock timer";**
-  **If the relative function is activated (paragraph "9.1 Activating/deactivating the memory (On/off memory) on page 48"), the value of this parameter will be stored in the memory and automatically reset after any possible voltage failure.**

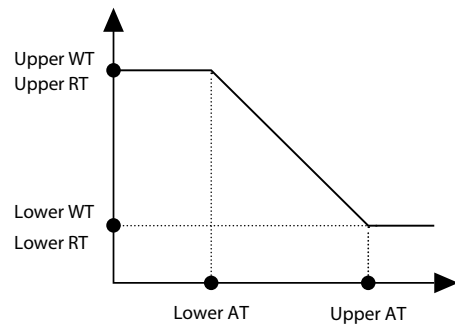
**5.6 ENERGY-SAVING MODE**



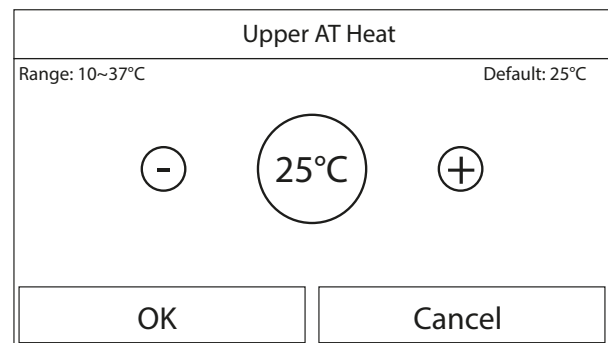
After accessing the "Weather depend" function, you can set all the parameters related to offsetting work set-points in accordance with variations in outside air temperature. To activate this function, click on the "Weather depend" label (the first item on the first page of the function). Select "On" and then confirm with "OK".






Subsequently, the values for the various parameters that make up climatic curves will be set; these parameters represent the curves that the system will use to change the set automatically on the delivery temperature or the ambient air temperature (if an air-based control has been set, using the specific accessory air probe) to both hot and cold:



To set values for each parameter to create the climatic curves, click on the label of the parameter in question and set the desired value using the "+" or "-" keys to enter a value within the permitted range. After setting the value, press "OK" to confirm and return to the higher level;



**NOTICE**

-  **The function remains active even when the unit has been switched off. To deactivate it, set "Weather depend: Off manually";**
-  **In the "View" menu, you can see the target value of the climatic curve;**
-  **When this function has been activated, it is still allowed to set the room temperature,**

however, this setting becomes valid only when “Weather depend” has been deactivated.

- i** The function can still be set if the unit is OFF, but it will only be implemented if the unit is activated;
- i** The climatic curves can only be applied to heating and cooling, not to domestic hot water production;
- i** If the relative function is activated (paragraph "9.1 Activating/deactivating the memory (On/off memory) on page 48"), the value of this parameter will be stored in the memory and automatically reset after any possible voltage failure;
- i** When the set point of the maximum temperatures is lower than that of the minimum temperatures, a message will advise to reset the temperatures.

## 5.7 WEEKLY TIMER

At the function setting page, by touching “Weekly timer”, it will go to the setting page as shown below. After accessing the “Weekly timer” function, you can set up to three time bands for each single day of the week; during these time bands, the unit will work with the current mode and set-point. Alternatively, you can assign the “Holiday” value to one day or more; if the specific “Holiday program” function is enabled, an operating set-point of 30°C will be automatically set if you use the check on the delivery water, or 10°C if you use the ambient air check (installing the specific air probe accessory).

Weekly timer	
Weekly timer: On	
Mon: Valid	Tue: Invalid
Wed: Invalid	Thur: Invalid
Fri: Invalid	Sat: Holiday
Sun: Holiday	

At the “Weekly timer” setting page, as shown in the figure above, the weekly timer can be set to “On” or “Off”. At the “Weekly timer” setting page, by touching the desired day (Monday~Sunday) it will access to the setting page of this option. At the weekday setting page, it is able to set the timer to “With” or “Without”. Also, it is able to set three timing periods, each of which can be set to “with” or “Without”. Then, by touching the “Save” icon, this setting will be saved.

Period 1	
Period 1: Valid	
Start Timer: 00:00	
End Timer: 00:00	
25	39
00	00
01	01
02	02

### NOTICE

- i** You can set up to three time bands (periods) for each day; their start and end times must be coherent (the start of one period must be later than the end of the previous one);
- i** When the weekly timer has been activated, the display panel will act based on the current mode and temperature setting;
- i** The “With” setting for one or more days of the week validates the specified time settings only if the Weekly Timer is “On”;
- i** “Without” = the Weekly Timer is also active, this day will not be considered;
- i** When both “Weekly timer” and “Holiday release” have been activated, setting of “Weekly timer” is invalid.
- i** The priority sequence for timer setting from high to low is “Temperature timer”, “Clock timer”, “Preset mode” and “Weekly timer”. Setting with lower priority sequence is allowed but does not work when setting with higher priority has been activated. However, it will work when the setting with higher priority has been deactivated.
- i** If the relative function is activated (paragraph "9.1 Activating/deactivating the memory (On/off memory) on page 48"), the value of this parameter will be stored in the memory and automatically reset after any possible voltage failure.

## 5.8 HOLIDAY RELEASE

Holiday release

Off  
 On

OK
Cancel

After accessing the "Holiday release" function, you can enable or disable this program if applied as a daily setting on one or more days of the weekly timer. Select the setting, then press "OK" to confirm.

### NOTICE

- If one day or more is set on "Holiday" in the weekly timer, this function must be "On" if you want the program specified in the timer to be respected;**
- If the relative function is activated (paragraph "9.1 Activating/deactivating the memory (On/off memory) on page 48"), the value of this parameter will be stored in the memory and automatically reset after any possible voltage failure.**

## 5.9 DISINFECTION

After accessing the "Disinfection" function, you can enable or disable this function, as well as choose the time and day to run it and the temperature to be used:

Disinfection

Disinfection: Off	
Set clock: 23:00	
Set temp.: 70°C	00 00
Set day: Mon.	01 01
	02 02

Then, by touching the "Save" icon, this setting will be saved.

### NOTICE

- If the compatible Aermec accessory tank for this model (refer to the installation manual for more information) is not installed and**

correctly set, this function will not be available;

- This function can only be activated if the unit is switched off;**
- This function cannot be activated simultaneously with: "Emergen. mode", "Holiday mode", "Floor debug", "Manual defrost", "Refri. recovery";**
- If the anti-legionella cycle is not completed, the unit will produce a message on the screen to indicate the anomaly. This message can be reset by pressing "OK";**
- An anti-legionella cycle will automatically be interrupted by any possible communication error or an error linked to the storage tank accessory;**
- If the relative function is activated (paragraph "9.1 Activating/deactivating the memory (On/off memory) on page 48"), the value of this parameter will be stored in the memory and automatically reset after any possible voltage failure.**

### CAUTION

- If the unit is used to produce domestic hot water, the Anti-Legionella Cycle MUST be set. The ANTI-LEGIONELLA CYCLE is related to only the mandatory tank accessory. To ensure a reduction in and control of the legionella risk, the preventive measures indicated in the guidelines, regulations and local rules must be adopted.**

## 5.10 TIMER

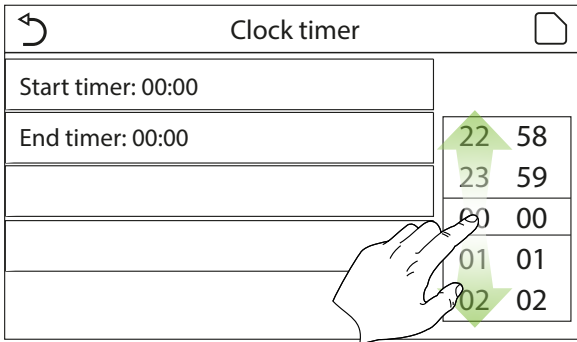
Clock timer

Clock timer: Off	
Mode: Heat	22 58
Period: 00:00~00:00	23 59
T water tank: 50°C	00 00
WOT Heat: 45°C	01 01
	02 02

After accessing the "Clock timer" function, you will be able to set all the parameters needed for a timed start of the unit:

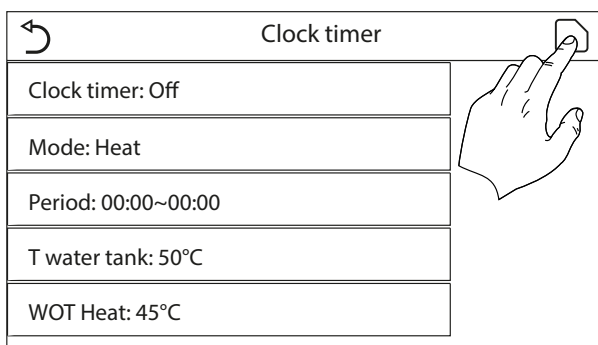
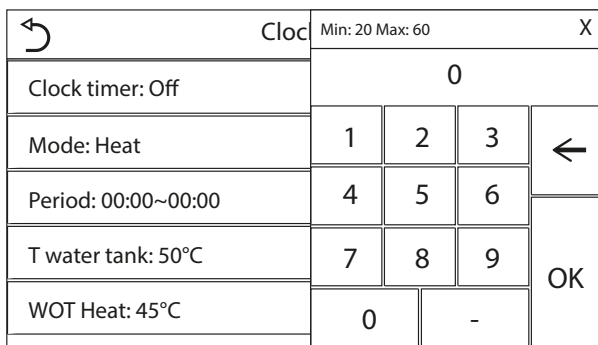
— "Clock timer" = enable or disable the timer;

- “Mode” = select the mode to be used during the time band (each click changes the mode);
- “Period” = access this page to set the start and end time for the time band;
- “T-tank ctrl.” = set (if the mode so envisages) the set for the domestic hot water production storage tank;
- “WOT-heat” = set the value (if envisaged) for the water production set-point (terminal system side);



Click on the “Period” label to open the page with the timer start and end time labels; set by first of all clicking on the label of the time you want to set, then sliding your fingertip over the time values until you select those required. Lastly, press the top right button to save the data entered.

Click on the labels for parameters with numeric values to be inserted to display a numeric keypad (with an indication of the range of permitted values) which you can use to enter the required values:



**NOTICE**

**i** When “Clock timer” has been set and “Hot water” mode is involved, in this case, if

“Water tank” is changed to “Without”, “Hot water” will be automatically switched to “Heat”, and “Cool/Heat + Hot water” will be switched to “Cool/Heat”.

- i** If the weekly timer and the standard timer are set at the same time, the weekly timer takes priority;
- i** When the water tank is available, “Heat”, “Cool”, “Hot”, “Heat + Hot water”, and “Cool + Hot water” are allowed; however, when the water tank is unavailable, only “Heat” and “Cool” are allowed;
- i** The timer start must always be prior to the timer end, otherwise the period will not be valid;
- i** Water tank temperature can be set only when “Hot water” is involved in the operation mode;
- i** The timer function will only work once. If you want to use it again, you must re-set it;
- i** The timer is deactivated if the unit is manually switched on before the timer start time;
- i** When “Weather depend” has been activated and the mode for “Clock timer” is set to “Hot water”, “Weather depend” will be deactivated when the setting mode has been switched;
- i** If the relative function is activated (paragraph “9.1 Activating/deactivating the memory (On/off memory) on page 48”), the value of this parameter will be stored in the memory and automatically reset after any possible voltage failure.

### 5.11 TEMP. TIMER

At the function setting page, access to the “Temp.timer” setting page, that it can be set to “On” or “Off”.


After accessing the “Temp. timer” function, you can set programmed variations of the water delivery set-point (this set-point will depend on the currently active operating mode). The function can be activated or deactivated by clicking on the “Temp. timer” label; click on the “Period 1” label to specify the time at which the water delivery set-point is to be changed, setting it to the value specified in the “WOT-heat 1” parameter (which when clicked will display a numeric keypad to change its value). Set “Period 2” with related “WOT-heat 2” in the same way.

Click on the labels for the delivery temperature parameters to display a numeric keypad (with an indication of the

range of permitted values) which you can use to enter the required values:

Temp. ti	Min: 25 Max: 60			X
Temp. timer: Off	0			
Period 1: 00:00	1	2	3	←
WT heat 1: 45°C	4	5	6	OK
Period 2: 00:00	7	8	9	
WT heat 2: 45°C	0	-		

Temp. timer	
Temp. timer: Off	
Period 1: 00:00	
WT heat 1: 45°C	
Period 2: 00:00	
WT heat 2: 45°C	



### NOTICE

- i** If “Weekly timer”, “Preset mode”, “Clock timer”, “Temp. timer” are set at the same time, priority is given to the last one of these to be set;
- i** The setting is only valid if the unit is “On”;
- i** Depending on the operating mode defined (heating or cooling), the relative set-points will be used;
- i** If the start time of “Period 2” is the same as that of “Period 1”, the first will be implemented;
- i** The time bands are based on the timer inside the unit;
- i** During this setting, when temperature is set manually, then this setting will take priority.
- i** This function is not available if DHW mode is set;
- i** If the relative function is activated (paragraph “9.1 Activating/deactivating the memory (On/off memory) [on page 48](#)”), the value of this parameter will be stored in the memory and automatically reset after any possible voltage failure.

## 5.12 EMERGEN. MODE

Emergen. mode	
<input type="radio"/>	Off
<input checked="" type="radio"/>	On
OK	Cancel

If the compatible Aermec accessory tank for this model (refer to the installation manual for more information) - and/or an additional heat source (paragraph “7.9 Thermostat [on page 30](#)”) or electric heater (paragraph “7.10 Setting an additional heat source (Other thermal) [on page 31](#)”) - is installed and correctly set on the system, you can enable the “Emergency mode” function which excludes the heat pump for hot water (domestic or system) production, using only the electric heater of the storage tank and/or the additional heat source (or electric heater) to meet the requests. After accessing the “Emergen. mode” function, you can enable or disable this program; you must then press “OK” to confirm.

1. At the function setting page, set the mode to “Heat” or “Hot water”.
2. At the function setting page, select “Emergen.mode” and set it to “On” or “Off”.
3. When “Emergen.mode” has activated, the corresponding icon will appear at the upper side of the menu page.
4. When the mode is not set to “Heat” or “Hot water”, the display panel will tell “Wrong running mode!”

### NOTICE

- i** Emergency mode can only be activated when the unit is OFF, or if the compressor displays an error and, despite a reset, the error resumes and persists for at least 3 minutes;
- i** Emergency mode can only be activated in heating (DHW or Heating, but not simultaneously);
- i** Emergency mode cannot be activated without the installation (and activation) of the electric heater on the storage tank and/or the additional heat source or electric heater;
- i** The use of Emergency mode (in Heating) will be blocked if the “HP-Water Switch”, “Auxiliary heater 1”, “Auxiliary heater 2”, “Temp AHLW” errors appear;

- i** The use of Emergency mode (in DHW) will be blocked if the "Auxi. WTH" errors appears;
- i** None of the functions linked to the timers will be available during Emergency mode;
- i** The thermostat cannot be used in Emergency mode;
- i** Certain functions are not available in Emergency mode so, if you attempt to activate them, the system will tell you to disable Emergency mode first;
- i** After a voltage failure, Emergency mode returns to the OFF status.

### 5.13 HOLIDAY MODE

At the function setting page, select "Holiday mode" and set it to "On" or "Off".

You can use the weekly timer to assign the "Holiday" program to at least one day of the week. On those days, the unit will work in heating mode, maintaining a 30°C set-point on delivery water (or 10°C if the check is based on the ambient air). To enable the implementation of the Holiday Program (if set on the weekly timer), you must activate this function.

After accessing the "Holiday mode" function, you can choose one of the modes available by clicking directly on the text that identifies it and then confirming with the "OK" key.

Holiday mode

Off  
 On

#### NOTICE

- i** Before changing the operating mode, the unit must be OFF, otherwise a message will warn you to turn the unit off before changing the mode;
- i** During the use of Holiday mode (as set in the weekly timer), the operating mode will be automatically set on "Heating" and the On/Off command from the panel cannot be used;

- i** None of the functions linked to the timers will be available during Holiday mode;
- i** You can use the weekly timer to assign the "Holiday" program to at least one day of the week. On those days, the unit will work in heating mode, maintaining a 30°C set-point on delivery water (or 10°C if the check is based on the ambient air). To enable the implementation of the Holiday Program (if set on the weekly timer), you must activate this function.
- i** Certain functions are not available in Emergency mode so, if you attempt to activate them, the system will tell you to disable Emergency mode first;
- i** If the relative function is activated (paragraph "9.1 Activating/deactivating the memory (On/off memory) [on page 48](#)"), the value of this parameter will be stored in the memory and automatically reset after any possible voltage failure.

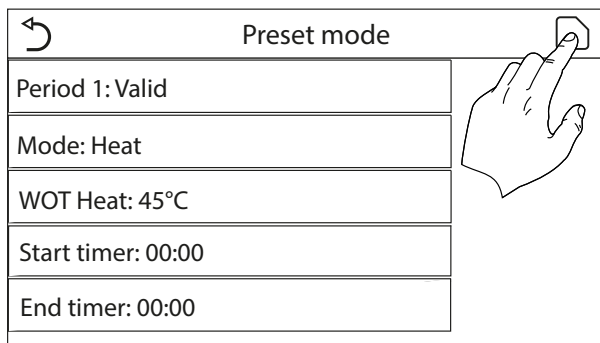
### 5.14 PRESET MODE

At the function setting page, select "Preset mode" and go to the corresponding setting page.

This function is used to set one to four daily periods, whose commands will then be executed every day. After accessing the "Preset mode" function, you can press the key for each period to activate or deactivate an individual period, choose the operating mode to be used, the temperature set-point for processed water, and the start and end times of the period itself.

<span style="margin-left: 20px;">Preset mode</span> <span style="float: right;"></span>
Period 1: Valid
Period 2: Invalid
Period 3: Invalid
Period 4: Invalid

At the time period setting page, each time period can be set to "with" or "Without".



Clicking on the "Period" label will open the page with the labels relating to period activation, the mode to be used during the period, the water delivery temperature and the start and end times. Click on each of these to set the appropriate value (each data item may draw up additional windows for selecting or entering the required values). Lastly, press the top right button to save the data entered.

### NOTICE

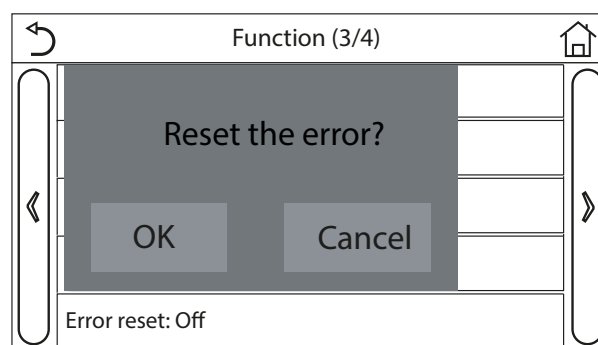
- i** If the compatible Aermec accessory tank for this model (refer to the installation manual for more information) is not installed and correctly set, the "DHW" function will not be available;
- i** If timer programming with the Weekly timer and other settings with Preset mode have been entered simultaneously, the latter will take priority;
- i** When the water tank is available, the preset mode can be "Heat", "Cool", or "Hot Water"; however, when the water tank is unavailable, the preset mode can only be "Heat" or "Cool".
- i** Up to four time bands can be set for each day, but their start and end times must coherent (the beginning of one period must be later than the end of the previous period);
- i** If the unit is switched on manually, the period timer programs will not be implemented;
- i** When "Start timer" is reached, the unit will perform the preset mode. When "End timer" is reached, the unit will perform OFF operation.
- i** If the relative function is activated (paragraph "9.1 Activating/deactivating the memory (On/off memory) on page 48"), the value of this parameter will be stored in the memory and automatically reset after any possible voltage failure;



When "Weather depend" has been activated and the mode for "Preset mode" is set to "Hot water", "Weather depend" will be deactivated when the setting mode has been switched.

## 5.15 DELETING CURRENT ERRORS (ERROR RESET)

At the function setting page, by touching "Error reset", a choice box will pop up, where by touching "OK" the error will be reset and by touching "Cancel" the error will not be reset.



This function is used to reset any errors active on the system. This operation must only be performed after having resolved the alarm condition signalled.

### NOTICE



This function can only be performed if the unit is switched off.

## 5.16 WIFI RESET

This function is used to reset the WiFi connection, eliminating any conflicts.

The procedure for resetting WiFi is the following:

- At the function menu, press the "Reset WiFi" icon;
- Then a box opens where "OK" or "Delete" can be selected;
- Press "OK" to reset WiFi, press "Cancel" to cancel the operation and exit.

## 5.17 LOADING THE DEFAULT SETTINGS (RESET)

This function is used to load the default values (values preset in the factory) for all functions by resetting the changes made by the user.

### NOTICE




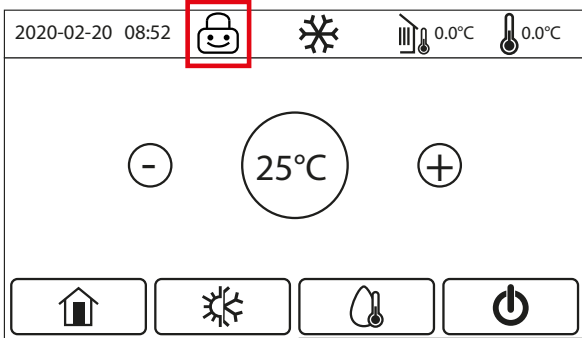
This function can only be performed if the unit is switched off;

**i** This function interacts with the “Temp. timer”, “Clock timer”, “Preset mode”, “Weekly timer” and “Weather depend” functions.


### 5.18 CHILD-LOCK

At the function setting page, by touching "Child Lock", it can be set to "On" or "Off".

When set to "on", the panel returns to the home page and the icon  is shown in the upper part of the display.



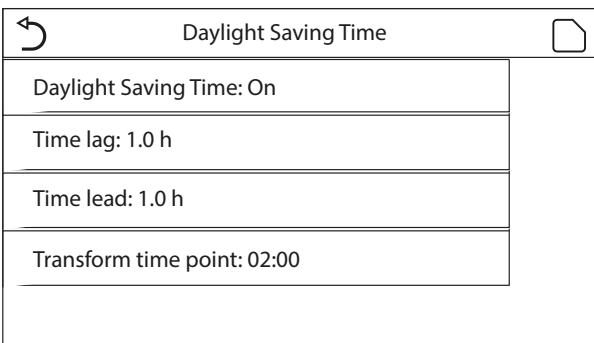
In this case, the panel is locked and cannot respond to any commands.

To unlock the panel, press the icon  for 6 seconds; however, the "child-lock" function is still set to "on" and, if no other operations are performed within 30 seconds, the panel locks again.

It is only actually disabled when set to “off”.

### 5.19 DAYLIGHT SAVING TIME

When it has been activated, it allows to set “Time lag”, “Time lead” and “Transform time”. The system clock of the control panel will be delayed for some time at the “Transform time” of last Sunday in March, and will be advanced for some time at the “Transform time” of last Sunday in October. “Time lag” is used for last Sunday of March and “Time lead” is for last Sunday of October.



For example, if March 30 is the last Sunday of this month, when the system clock goes to March 30, 2:00, the system clock will be lagged automatically for one hour. That is, the displayed system time will become to be March 30, 3:00.

For example, if October 30 is the last Sunday of this month, when the system clock goes to October 30, 2:00, the system clock will be advanced automatically for one hour. That is, the displayed system time will become to be October 30, 1:00. When there is a timer setting at the “Time lag” period, then this timer setting goes invalid in this period.

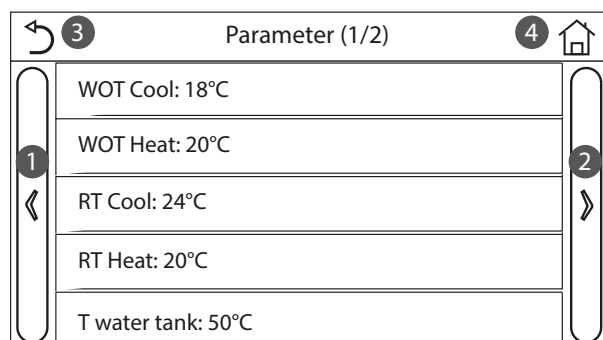
If a timer is set during the "Move Back" period, the timer setting for that period will not be valid.

### 5.20 CLEAR POWER CONSUMPTION

At the function setting page, by touching "Clear P .C.", a choice box will pop up, where by touching "OK" , power consumption data will be cleared, and by touching "Cancel" power consumption data will be kept.

## 6 PARAMETER MENU

At the menu page, by touching "PARAMETER", it will back to the parameter setting page, as shown in the figure below:



This menu is used to set the machine adjustment values. The following keys are used to navigate this menu:

1. Move back to the previous page;
2. Move on to the next page;
3. Go back to the higher level menu;
4. Go back to the main page (Home).

At the menu setting page, by touching the page turning keys, it is able to switch to the page where the desired parameter is.

After that, this setting will be saved by touching "OK" and then unit will run based on this setting. While this setting will give up by touching "Cancel".

### NOTICE



**For parameters with different defaults under different conditions, when conditions changes, the default value also will change as the corresponding condition changes;**



**If the relative function is activated (paragraph "9.1 Activating/deactivating the memory (On/off memory) on page 48"), the value of this parameter will be stored in the memory and automatically reset after any possible voltage failure.**

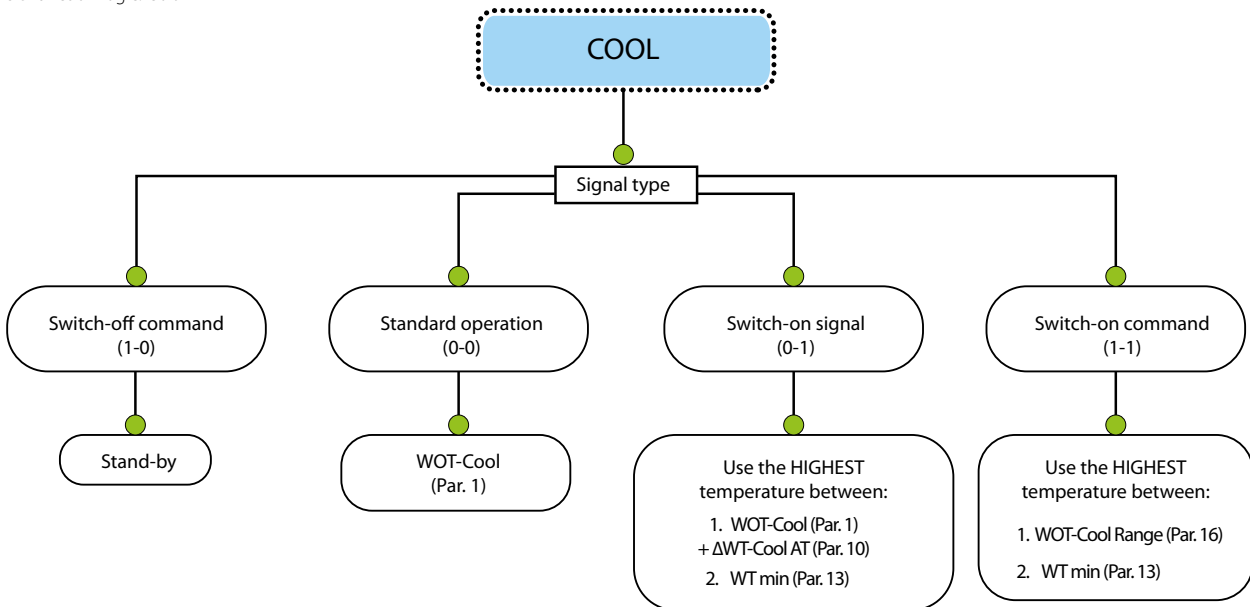
The following table lists all the parameters available, with their functions and operating ranges:

Number	Name	Displayed name	Range (°C)	Default
1	Leaving water temperature for cooling (T1)	WOT-Cool	5~25°C	18°C
2	Leaving water temperature for heating (T2)	WOT-heat	20~65°C	45°C
3	Room temperature for cooling (T3)	RT-Cool	18~30°C	24°C
4	Room temperature for heating (T4)	RT-Heat	18~30°C	20°C
5	Water tank temperature (T5)	T-tank ctrl.	40~80°C	50°C
6	Leaving water temperature difference for cooling ( $\Delta t_1$ )	$\Delta T$ -Cool	2~10°C	5°C
7	Leaving water temperature difference for heating ( $\Delta t_2$ )	$\Delta T$ -Heat	2~10°C	10°C
8	Leaving water temperature difference for water heating ( $\Delta t_3$ )	$\Delta T$ -hot water	2~25°C	5°C
9	Room temperature control difference ( $\Delta t_4$ )	$\Delta T$ -room temp	1~5°C	2°C
10	Temperature difference between actual and target water for cooling	$\Delta WT$ -Cool AT	-10~0°C	-5°C
11	Temperature difference between actual and target water for heating	$\Delta WT$ -Heat AT	0~15°C	5°C
12	Temperature difference between actual and target water for water heating	$\Delta WT$ -hot water AT	0~15°C	5°C
13	Minimal allowable water temperature by users	WT min	5~25°C	5°C
14	Maximal allowable water temperature by users for heating	WT-Heat max	20~65°C	65°C
15	Maximal allowable water temperature by users for water heating	WT-hot water max	40~80°C	80°C
16	Leaving water temperature setting range for cooling	WOT-Cool Range	5~25°C	10°C
17	Leaving water temperature setting range for heating	WOT-Heat Range	20~65°C	55°C
19	Leaving water temperature setting range for water heating	T-water tank Range	40~80°C	60°C

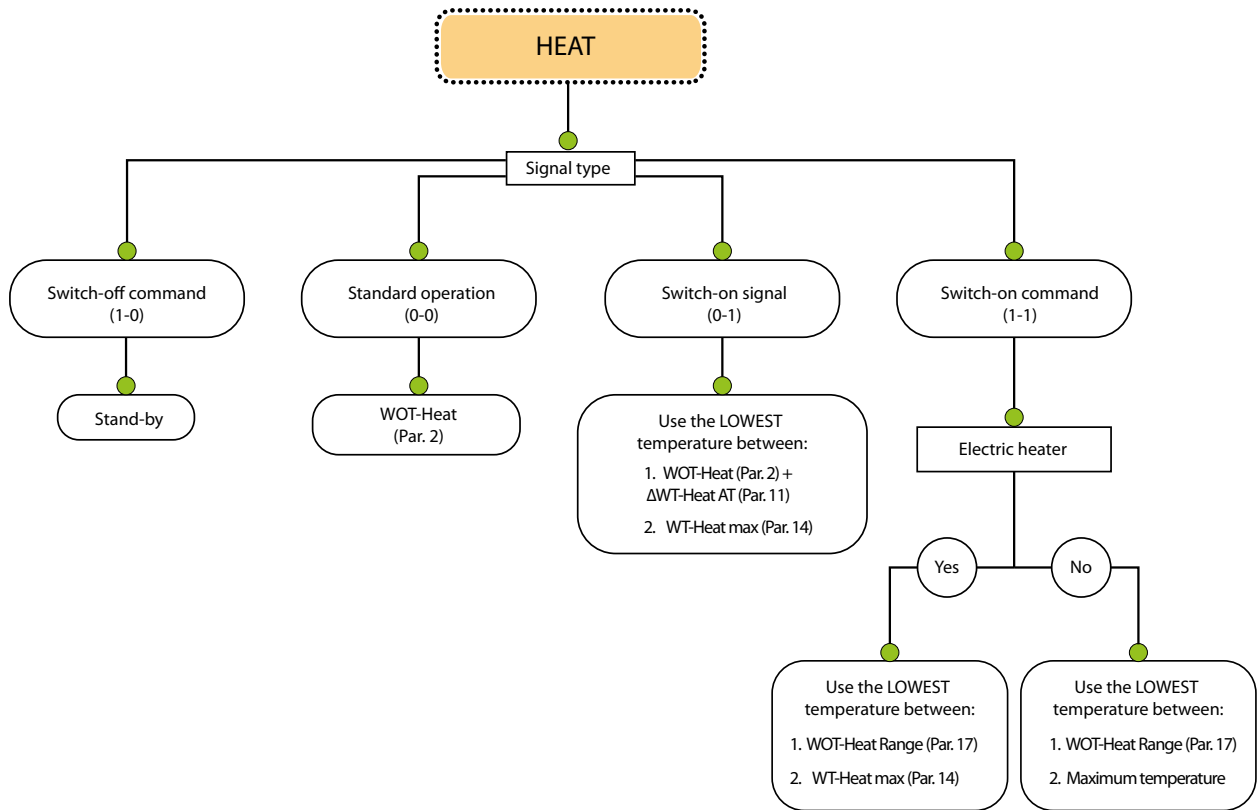
Parameters from No.10 to No.19 are for setting target water temperature under the SG function. When SG (Smart Grid) has been activated, the unit after receiving the grid signal will go under the control as stated below:

Setpoint water temperature				
Operating mode	Switch-on signal	Switch-on command	Standard operation	Switch-off command
Cooling	Take the larger between ("WOT-Cool" + "ΔWT-Cool AT") and "WT min".	Take the larger between "WOT-Cool Range" and "WT min".	WOT-Cool	/
Heating	Take the smaller between ("WOT-Heat" + "ΔWT-Heat AT") and "WT-Heat max".	When the electric heater works, take the smaller between "WOT-Heat Range" and "WT-Heat max".	WOT-heat	/
		When the electric heater does not work, take the smaller between "WOT-Heat Range" and "Tmax". Tmax is the highest leaving water temperature corresponding to the current ambient temperature.		/
D.H.W.	Take the smaller between ("T-water tank" + "ΔWT-hot water AT") and "WT-hot water max".	When the electric heater works, take the smaller between "T-water tank Range" and "WT-hot water max".	T-tank ctrl.	/
		When the electric heater does not work, take the smaller between "T-water tank Range" and "T-HP max".		/

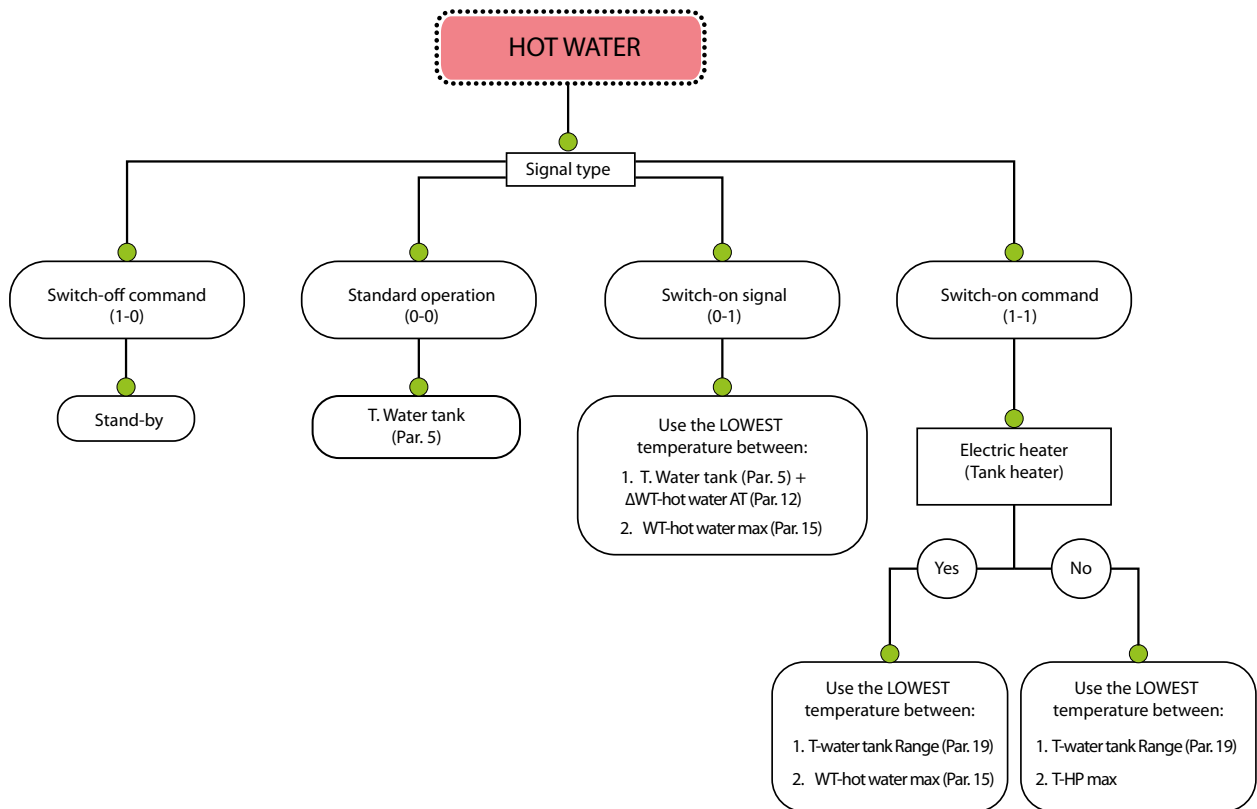
SG function logic: COOL



SG function logic: HEAT



SG function logic: HOT WATER



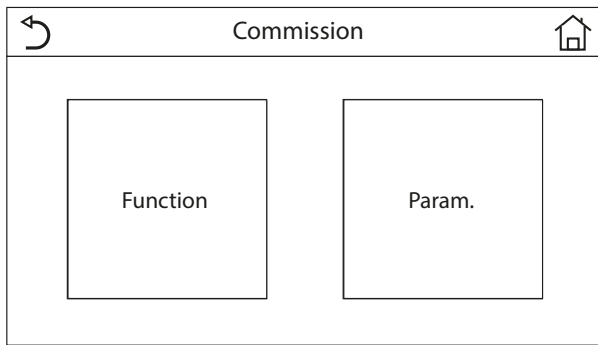
## 7 COMMISSION MENU

Access to the “Start” menu is password-protected. The access mode depends on the firmware version installed in the control panel. Two access modes are available, but the user will only see the one provided by the version in use:

- Factory preset password access
- User-configurable password login

### 7.1 FACTORY PRESET PASSWORD ACCESS

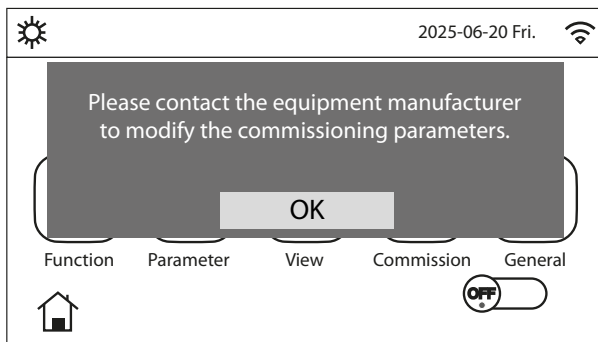
On the menu page, tapping 'Start-up' and entering the correct password (000048) in the window will take you to the commissioning page, where the left-hand side is for setting functions and the right-hand side is for setting parameters, as shown in the figure below:



**PASSWORD:** 000048

### 7.2 USER-CONFIGURABLE PASSWORD LOGIN

If there is no factory-set password, the user will be prompted to set a new one the first time the “Start-up” menu is accessed. In this case, the following message will be displayed:



It is therefore necessary to proceed as indicated below:

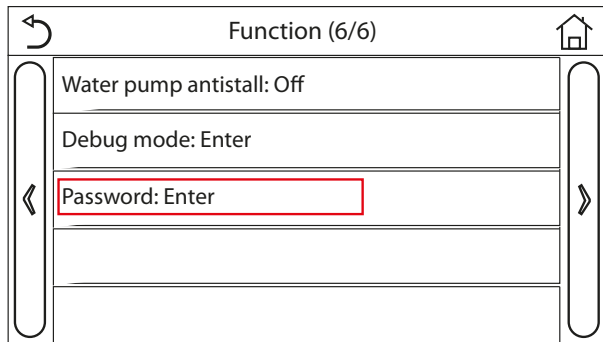
1. Press "OK" to exit;
2. Press the “Start-up” icon for 5 seconds and then set the new password (6 digits) and enter the Start-up page.



**NOTICE**

**i** It is advisable to make a note of the password set as it will be needed to access the Start-up page in the future.

This screen shows how to change the password:



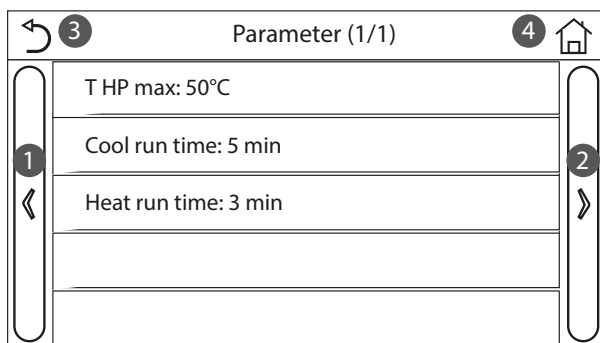
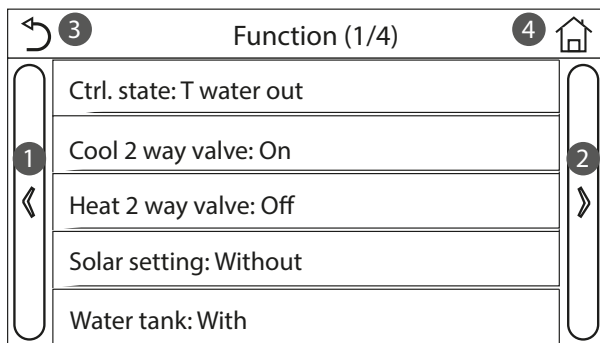
**NOTICE**

**i** If an incorrect password is entered 3 times consecutively, the panel will be locked for 1 minute; if an incorrect password is entered 5 times consecutively, it will be locked for 5 minutes; if 10 or more incorrect passwords are entered consecutively, it will be locked for 30 minutes.

### 7.3 NAVIGATING THE MENU

This menu is used to make the settings needed for correct unit operation: the logics, the components installed on the system and the accessories envisaged for each installation will be set using the functions in this menu. The information in the menu is sub-divided into two large macro groups:

- “Function” (containing the settings and any functions needed for unit operation);
- “Parameter” (containing the general operating parameters);



To navigate the "Function" or "Parameter" sub-menu, use the following keys:

1. Move back to the previous page;
2. Move on to the next page;
3. Go back to the higher level menu;
4. Go back to the main page;

### NOTICE



If the relative function is activated (paragraph "9.1 Activating/deactivating the memory (On/off memory) on page 48"), the value of these parameters will be stored in the memory and automatically reset after any possible voltage failure.

### CAUTION



These functions and parameters must only be set and/or modified by authorised personnel with the necessary technical skills to install and maintain these units. Incorrect settings may lead to malfunctioning or damage to the unit and the system!

Commissioning Function Setting

Number	Displayed name	Range	Default	Note
1	Ctrl.state	T-water out / T-room	T-water out	When "Remote sensor" is set to "Avec", it can be set to "T-room".
2	2-Way valve	Cool 2-Way valve	Off	It will decide the status of the 2-way valve under the "Cool" and "Cool + Hot water" modes. Under "Cool" or "Cool + Hot water" mode, the status of the 2-way valve depends on this setting. This setting is unavailable to heating only units.
		Heat 2-Way valve	On	It will decide the status of the 2-way valve under the "Heat" and "Heat + Hot water" modes.
3	Solar setting	With / Without	Without	When the water tank is unavailable, this setting will be reserved. When it is set to "With", the solar kitting will work on its own. When it is set to "Without", hot water by the solar kitting is unavailable.
4	Water tank	With / Without	Without	---
5	Thermostat	Without / Air / Air+ hot water / Air+ hot water2	Without	This setting cannot be interchanged among "Air", "Air+ hot water" and "Air+ hot water2" directly but via "Without" this option.
6	Other thermal	With / Without	Without	---
7	Electric heater	Off / 1 / 2	Off	---
8	Ambient sensor	With / Without	Without	When it set to "Sans", and the "Ctrl. state" will be defaulted to be "T-water out".
9	Air removal	On/Off	Off	---
10	Floor debug	On/Off	Off	---
11	Manual defrosting	On/Off	Off	---
12	Force mode	Off / Force-cool / Force-heat	Off	---
13	Tank heater	Logic 1 / Logic 2	Logic 1	This setting is allowed when the water tank is available and the unit is OFF.
14	External contact	On/Off	Off	---

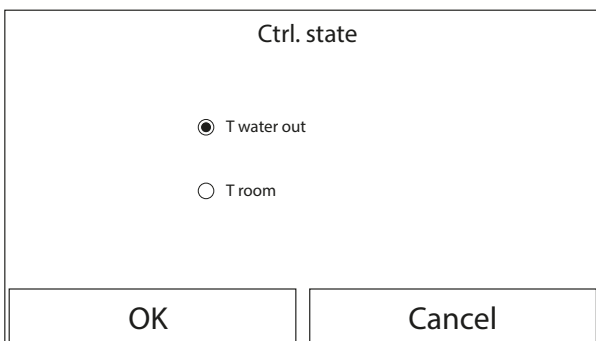
Number	Displayed name	Range	Default	Note
15	Current limit	Off / Current limit / Power limit	Off	When it is set to "Current limit" or "Power limit", sub-parameters stated as below can be set: <b>"Value"</b> : power or current limit value, which varies for different main units. <b>"ΔSet min"</b> : 1~15% and 5% defaulted. <b>"Electric heater"</b> : it can be set to "With" or "Without", which determines if the power of electric heater should be taken into account for current/power limit. When other thermal source or the optional electric heater of the water tank is equipped, the corresponding electric heater can be set to "Standard" or "Field-supplied". Once it is set to "Field-supplied", power value can be adjusted.
16	Address	[1~125] [127~253]	1	---
17	Refri. recovery	On/Off	Off	---
18	Memory contact	On/Off	Off	---
19	3-Way valve1	Without / DHW / AIR	Without	---
20	Hot water control mode	On/Off	Off	It can be set only when the control panel is turned off.
21	SG	On/Off	Off	It can be set only when the control panel is turned off.
22	Cool control mode	On/Off	Off	It can be set only when the control panel is turned off.
23	Heat control mode	On/Off	Off	It can be set only when the control panel is turned off.
24	HWPS Limit Function	On/Off	Off	There are five limits for highest speeds of the water pump: high, medium, low, superlow, minimum. It can be set only when the control panel is turned off.
25	Water pump antistall	On/Off	Off	Water pump antistall interval: 1~12h, 2h defaulted; Water pump antistall duration: 10~100s, 30s defaulted;

Commissioning Parameters Setting

Number	Name	Displayed name	Range	Default	Note
1	T-HP max	T-HP max	40~55°C	50°C	

### 7.4 SETTING THE CONTROL LOGIC (CTRL.STATE)

At the commissioning parameter setting page, by touching "Ctrl. state", it can be set to "T-water out" or "T-room".



After accessing the "Ctrl.state" function, you can choose whether to base the unit control logic on the processed water temperature or on the ambient air temperature (if the air probe accessory is installed and correctly set). Select the required logic, then press "OK" to confirm.

**NOTICE**

**i** If the ambient air probe accessory is not installed (and correctly set), you can only choose "T-water out";

**i** If the relative function is activated (paragraph "9.1 Activating/deactivating the memory (On/off memory) on page 48"), the value of these parameters will be stored in the memory and automatically reset after any possible voltage failure.

## 7.5 SETTING THE STATUS OF THE 2-WAY VALVE IN COOLING MODE (COOL 2-WAY VALVE)

Cool 2 way valve

Off  
 On

After accessing the "Cool 2-Way valve" function, you can set the status of the 2-way valve in cooling mode (for more information about the assembly and use of the 2-way valve, refer to the installation manual). Select the required logic, then press "OK" to confirm.

It is optional. When there is a radiant floor system and radiators, it can be used to control the system.

### NOTICE

- i** If you select the "Off" status, the valve will be CLOSED in cooling mode; it will be OPEN if you select "On";
- i** If the relative function is activated (paragraph "9.1 Activating/deactivating the memory (On/off memory) [on page 48](#)"), the value of these parameters will be stored in the memory and automatically reset after any possible voltage failure.

## 7.6 SETTING THE STATUS OF THE 2-WAY VALVE IN HEATING MODE (HEAT 2-WAY VALVE)

Heat 2 way valve

Off  
 On

After accessing the "Heat 2-Way valve" function, you can set the status of the 2-way valve in heating mode (for more information about the assembly and use of the 2-way valve,

refer to the installation manual). Select the required logic, then press "OK" to confirm.

### NOTICE

- i** If you select the "Off" status, the valve will be CLOSED in heating mode; it will be OPEN if you select "On";
- i** If the relative function is activated (paragraph "9.1 Activating/deactivating the memory (On/off memory) [on page 48](#)"), the value of these parameters will be stored in the memory and automatically reset after any possible voltage failure.

## 7.7 SETTING SOLAR SYSTEM INTEGRATION (SOLAR SETTING)

Function currently NOT AVAILABLE.

### NOTICE

- i** This function is not currently available, so its setting must necessarily be "Without".

## 7.8 WATER TANK

For production of domestic hot water, the "TANK DHW" function must be activated.

At the commissioning parameter setting page, by touching "Water tank", the control panel will access to the corresponding setting page, where "Water tank" can be set to "With" or "Without".

Water tank

Without  
 With

After accessing the "Water tank" function, you can specify whether the DHW storage tank accessory is installed in the system (for more information about the assembly and use of the DHW storage tank accessory, refer to the installation manual).

### NOTICE

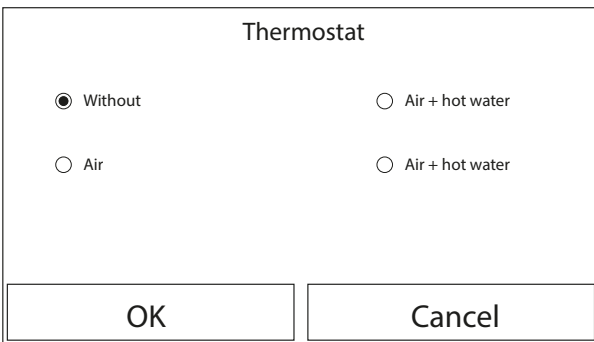
- i** If the relative function is activated (paragraph "9.1 Activating/deactivating the memory (On/off memory) [on page 48](#)"),

the value of these parameters will be stored in the memory and automatically reset after any possible voltage failure;

**i** In the case of DHW production, the "ANTI-LEGIONELLA CYCLE" Function must be activated, see paragraph 5.9 Disinfection [on page 17](#);

**i** This setting will become valid only when the unit is turned off.

## 7.9 THERMOSTAT



After accessing the "Thermostat" function, you can specify which type of management to apply to a hypothetical external thermostat (for more information about the assembly and use of an external thermostat, refer to the installation manual).

At the commissioning parameter setting page, by touching "Thermostat", the control panel will access to the corresponding setting page, where it can be set to "Air", "Without", "Air + hot water" and "Air + hot water2".

When it is set to "Air", "Air + hot water" or "Air + hot water2", the unit will run based on the mode set by the thermostat; when it is set to "Without" the function will be deactivated.

### NOTICE

**i** When "Water tank" is set to "Without", the "Air + hot water" or "Air + hot water2" mode is unavailable.

**i** If the "Floor debug" or "Emergen. mode" function is active, the external thermostat cannot be used;

**i** When "Thermostat" is active, "Temp.timer" function will be deactivated automatically and the unit will run based on the mode set by the thermostat. Meanwhile, mode setting and On/Off operation by the control panel will be ineffective;

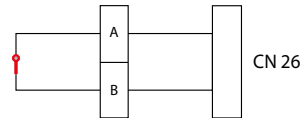
**i** When "Thermostat" is set to "Air", the unit will run based on the setting of the thermostat;

**i** If the external thermostat is set for "Cool+hot water", and the unit is "Off" because of the thermostat, any requests from the DHW side will be met automatically by the unit, even though the display does not show the "On" status (but you can still see the values in the parameters menu while the unit is working);

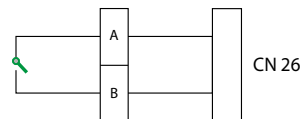
**i** When "Thermostat" is set to "Air + hot water", operation priority can be set by the control panel (see Section "5.3 Cooling + hot water [on page 14](#)" and "5.4 Heating + DHW [on page 14](#)" for more details.);

When the "Thermostat" function is set to "Conditioned+ACS2", there are two possible conditions:

1. If CN26 is closed (clean contact, 0VAC), the unit will operate in "Domestic Hot Water" or Cooling/Heating mode, depending on the system requirements. When this condition is met, the unit will operate according to the thermostat requirements.



2. If CN26 is open, the unit will operate in Cooling/Heating mode, depending on the system requirements; it will not be possible to produce Domestic Hot Water.



The thermostat state can only be changed when the unit is off:

- To change the thermostat settings, the unit must be switched Off;
- When it has been activated, "Floor debug", "Air removal", and "Emergen.mode" are not allowed to be activated;
- If the relative function is activated (paragraph "9.1 Activating/deactivating the memory (On/off memory) [on page 48](#)"), the value of these parameters will be stored in the memory and automatically reset after any possible voltage failure.

### NOTICE

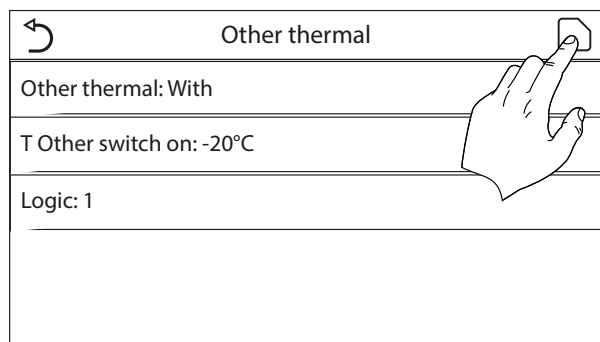
**i** When the main unit is under the control of the thermostat, the operation mode set at the control panel varies with the thermostat, that is, the actual operation status of the main unit, as shown in the table below. Once the thermostat is disabled, restart the

main unit after check if the operation mode set at the control panel is expected or not.

Thermostat				
Thermostat setting	Thermostat status	Priority	Control panel	Main unit
Without	Off	/	/	/
	Heating	/	Heating	On for heating
	Cooling	/	Cooling	On for cooling
Air conditioning	Off	/	Last operation mode	Off
	Heating	ACS	DHW + Heating	First water heating and then heating
Air+ hot water	Heating	Heat/Cool	Heating + DHW	On for heating; water heated by the water heater electric heater
	Cooling	ACS	Hot water + cooling	First water heating and then cooling
	Off	/	Cooling + hot water	On for cooling; water heated by the water heater electric heater
	Heating	/	ACS	On for water heating
	Cooling	/	Cooling	On for cooling
Air+ hot water2	Hot domestic water	/	ACS	On for water heating
	Heating + DHW	ACS	DHW + Heating	First water heating and then heating
	Heating + DHW	Heat/Cool	Heating + DHW	On for heating; water heated by the water heater electric heater
	Cooling + hot water	ACS	Hot water + cooling	First water heating and then cooling
	Cooling + hot water	Heat/Cool	Cooling + hot water	On for cooling; water heated by the water heater electric heater
	Off	/	Last operation mode	Off

## 7.10 SETTING AN ADDITIONAL HEAT SOURCE (OTHER THERMAL)

At the commissioning parameter setting page, by touching "Other thermal", the control panel will access to the corresponding setting page.



After accessing the "Additional heat source" function, you can activate or deactivate the substitute heat source and set the outdoor temperature threshold below which it will be activated in place of the heat pump; you can also define the logic for managing the substitution. The available logic items are:

### Logic 1

With this logic, the 2-way valve is managed on the basis of the control panel settings; the operating modes will therefore be managed when the temperature measured by the

outside air probe is lower than the "Additional heat source temp." parameter:

- **Heating:** the unit (and its circulator) will not be active, the 3-way valve will be blocked on the system side, and the additional heat source will be activated; once the set value has been reached, the additional heat source will be deactivated and the unit will activate its circulator.
- **DHW:** the unit (and its circulator) will not be active, the 3-way valve will be blocked on the DHW side, and the additional heat source will be activated.
- **Heating + DHW:** the unit (and its circulator) will not be active, the 3-way valve will be blocked on the system side, and the additional heat source will be activated; once the set value has been reached, the additional heat source will be deactivated and the unit will activate its circulator; the DHW side will be managed using only the electric heaters of the compatible Aermec accessory tank.

### Logic 2

With this logic, the 2-way valve is managed on the basis of the control panel settings; the operating modes will therefore be managed when the temperature measured by the outside air probe is lower than the "Additional heat source temp." parameter:

- **Heating:** the unit (and its circulator) will not be active, the 3-way valve will be blocked on the system side, and the additional heat source will be activated; once the set value has been reached, the additional heat source will be deactivated and the unit will activate its circulator.

— **DHW:** the unit (and its circulator) will not be active, the 3-way valve will be blocked on the DHW side, and the additional heat source will be activated.

— **Heating + DHW:**

1. If the priority is "Heating" (paragraph "5.4 Heating + DHW [on page 14](#)"), the unit (and its circulator) will not be active, the 3-way valve will be blocked on the system side, and the additional heat source will be activated; once the set value has been reached, the additional heat source will be deactivated and the unit will activate its circulator; the DHW side will be managed using only the electric heaters of the compatible Aer-mec accessory tank;
2. If the priority is "DHW" (paragraph "5.4 Heating + DHW [on page 14](#)"), the unit (and its circulator) will not be active, the 3-way valve will be blocked on the DHW side, and the additional heat source will be activated; once the set value has been reached on the DHW side, the 3-way valve will be moved to the system side and the additional heat source will work for heating;

**Logic 3**

This logic disables the heat pump and activates a 230V signal to the "Other thermal" terminals (refer to the installation manual for more information); this signal activates the additional heat source when the temperature measured by the outside air probe is lower than the "Additional heat source temp." parameter (which will work in stand alone mode compared with the unit).

Lastly, press the top right button to save the data entered.

**NOTICE**

**i** When this function is activated, it permits the activation of the replacement heat source (via a 230V ~ 50Hz signal to the "Other thermal" terminals) if the outside temperature falls below the value specified in

**the "Additional heat source temp." parameter or if "Emergency mode" is activated;**

**i** If you select "Logic 1" or "Logic 2", the additional heat source must be set so as to produce hot water with a set-point equal to that selected for the heat pump. This setting must be made manually by the user, as the heat pump gives consent only (without the possibility to alter the hot water production set-point on the additional heat source);

**i** If you select "Logic 2", the system must be designed to supply the system terminal side and the DHW side with water at the same temperature (so the system-side terminals must necessarily be fitted with mixer valves to ensure the hot inlet water is correctly managed);

**i** The supplementary water probe must be installed downstream of the 3-way valve (for more information, refer to the installation manual);

**i** If this function is used, no additional electric heaters can be enabled (optional elec. heater);

**i** If the relative function is activated (paragraph "9.1 Activating/deactivating the memory (On/off memory) [on page 48](#)"), the value of these parameters will be stored in the memory and automatically reset after any possible voltage failure;

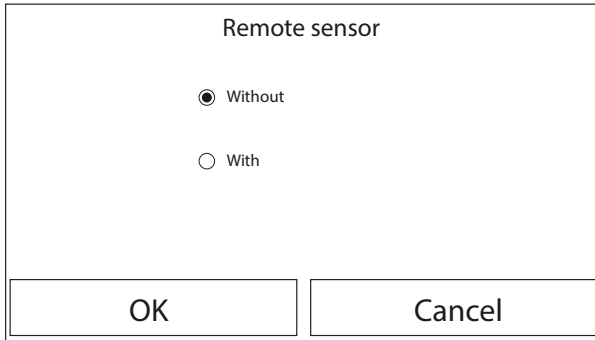
The heat pump will only send a signal to other thermal, but all the logic of control must be "stand alone".

Other thermal			
Number	Mode	Note	Required accessories
Logic 1	Heating	Available	RT5 temperature sensor
	ACS	Available	Extra 3-way valve, water tank sensor
	Heating + DHW	Available	RT5 temperature sensor, water tank sensor
Logic 2	Heating	Available	RT5 temperature sensor
	ACS	Available	Extra 3-way valve, water tank sensor
	Heating + DHW	Available	Extra 3-way valve, RT5 temperature sensor, Water tank sensor
Logic 3	Heating	Available	/
	ACS	Available	/
	Heating + DHW	Available	/

**7.11 SETTING THE INSTALLATION OF THE REMOTE ROOM TEMPERATURE PROBE (AMBIENT SENSOR)**

At the commissioning parameter setting page, by touching "Remote sensor", the control panel will access to the cor-

responding setting page, where it can be set to "With" or "Without".



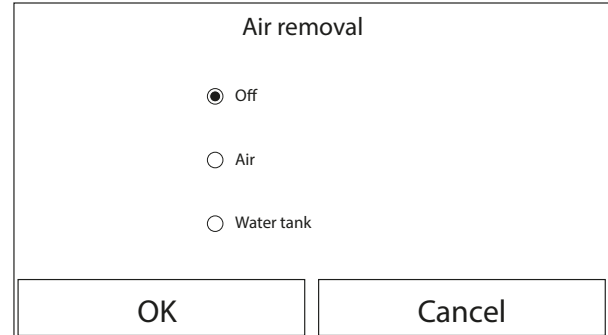
After accessing the "Ambient sensor" function, you can specify whether or not to enable the remote room temperature probe (for more information about this component, refer to the installation manual).

**NOTICE**

- i** The "T-remote room" option in the "Ctrl. state" function will only be available if the room temperature sensor is enabled;
- i** If the relative function is activated (paragraph "9.1 Activating/deactivating the memory (On/off memory) [on page 48](#)"), the value of these parameters will be stored in the memory and automatically reset after any possible voltage failure.

## 7.12 AIR REMOVAL

At the commissioning parameter setting page, by touching "Air removal", the control panel will access to the corresponding setting page, where it can be set to "On" or "Off".



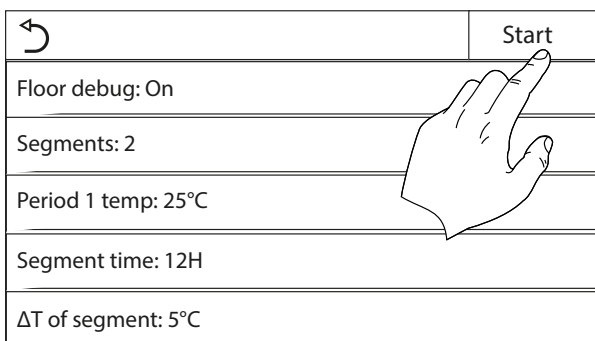
After accessing the "Air removal" function, you can activate water circulation (in the selected circuit) to eliminate any air from the circuit. Select the required logic, then press "OK" to confirm.

**NOTICE**

- i** This function can only be activated if the unit is switched Off. In addition, this function must be disabled before the unit can be switched On;
- i** If the relative function is activated (paragraph "9.1 Activating/deactivating the memory (On/off memory) [on page 48](#)"), the value of these parameters will be stored in the memory and automatically reset after any possible voltage failure.

## 7.13 SETTING THE PRE-HEATING PROCEDURE FOR RADIANT PANELS (FLOOR DEBUG)

At the commissioning parameter setting page, by touching "Floor debug", the control panel will access to the corresponding setting page.










After accessing the "Floor debug" function, you can activate or deactivate any possible procedure for pre-heating the radiant panels. This procedure creates a heating cycle during which the temperature is kept stable for a certain

time (period), then increased by a value equal to  $\Delta T$  indicated, and kept there for the next period. This temperature increase and hold procedure will be repeated for the number of periods specified.

Floor debug					
Number	Name	Displayed name	Range	Default	Accuracy
1	Floor debug switch	Floor debug	On/Off	Off	/
2	Quantity of segments	Segments	1~10	1	1
3	Temperature of the first segment	Period 1 temp	25~35°C	25°C	1°C
4	Duration of each segment	Segment time	12~72 hours	0	12 hours
5	Temperature difference of each segment	$\Delta T$ of segment	2~10°C	5°C	1°C

At the end, press the button at the top right to start (or interrupt) the pre-heating cycle.

### NOTICE

-  This function can be activated only when the unit is turned off. When it is done with the unit keeping "On", a warning will appear telling you to turn off the unit first;
-  When this function has been activated, "On/Off" operation will be deactivated. By pressing On/Off, a warning will appear telling you to turn off the function.
-  During the execution of this function, all other functions are disabled;
-  Upon power failure, function will back to "Off" and the runtime will be zeroed;
-  When "Floor debug" has been activated, "T-floor debug" and "Debug time" can be viewed;
-  When "Floor debug" has been activated and works normally; the corresponding icon will be displayed at the upper side of the menu page;
-  Before activating "Floor debug", make sure "Segment time" of each segment is not zero. If so, a warning will appear telling you that the time is wrong. In this case, "Floor debug" is allowed to be activated only when "Segment time" has changed.




## 7.14 MANUAL DEFROSTING

Manual defrost

Off  
 On

After accessing the "Manual defrost" function, you can activate or deactivate the command for forced execution of a defrost cycle. Make your selection, then press "OK" to confirm.

### NOTICE

-  This function can only be activated if the unit is switched Off;
-  The defrosting cycle is automatically interrupted if the defrosting temperature rises above 20°C, or in any case after 10 minutes;
-  If the relative function is activated (paragraph "9.1 Activating/deactivating the memory (On/off memory) on page 48"), the value of these parameters will be stored in the memory and automatically reset after any possible voltage failure.

## 7.15 FORCE MODE

At the commissioning parameter setting page, by touching "Force mode", the control panel will access to the corresponding setting page.

Force mode




Off  
 Force cool  
 Force heat

After accessing the "Force mode" function, you can activate or deactivate the command to execute the specific heating or cooling function.

The function can be set to "Force-cool", "Force-heat", and "Off". When it is set to "Force-cool" or "Force-heat", the control panel will directly go back to the menu page and

response to any touching operation except the ON/OFF operation. In this case, by touching ON/OFF, "Force mode" will quit.

### NOTICE

-  This function can only be activated if the unit is switched Off after a re-start;
-  The unit status (On/Off) cannot be modified while this function is in progress;
-  If the relative function is activated (paragraph "9.1 Activating/deactivating the memory (On/off memory) on page 48"), the value of these parameters will be stored in the memory and automatically reset after any possible voltage failure.

## 7.16 ACTIVATING AUXILIARY DEVICE MANAGEMENT (GATE-CTRL)


At the commissioning parameter setting page, by touching "Gate-Ctrl.", the control panel will access to the corresponding setting page.

Gate Ctrl.

Off  
 On

After accessing the "Gate-Ctrl" function, you can activate or deactivate the management of the switch-on/switch-off command via the external contact (for more information about this contact, refer to the installation manual). Make your selection, then press "OK" to confirm.

### NOTICE

-  When "Gate-Ctrl." has been activated; the display panel will detect the card state. When the card has inserted, the unit will run normally. When the card is drawn out, the controller will turn off the unit at once and back to the homepage. In this case, all touching operation become ineffective, and a prompt dialog box will pop up. The unit will resume normal operation until the card has inserted back and the ON/OFF status of the control panel will resume to that before the card is drawn out;

**i** If the relative function is activated (paragraph "9.1 Activating/deactivating the memory (On/off memory) [on page 48](#)"), the value of these parameters will be stored in the memory and automatically reset after any possible voltage failure.

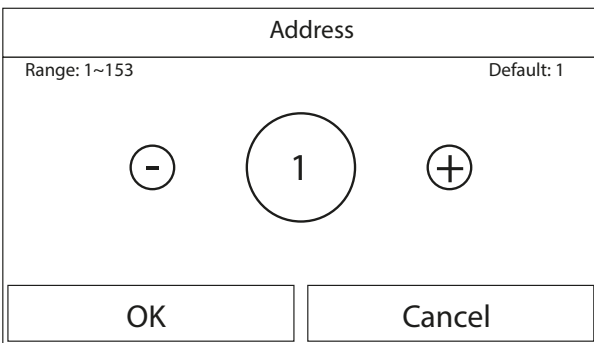
### 7.17 SETTING OF MAX. ABSORPTION (A/P LIMIT)

Function currently NOT AVAILABLE.

**NOTICE**

**i** This function is not currently available, so its setting must necessarily be "Without".

### 7.18 SETTING THE SERIAL ADDRESS OF THE UNIT (ADDRESS)



After accessing the "Address" function, you can set the address assigned to the unit for possible control via Modbus. To set the required value, use the "+" and "-" keys, entering a value within the permitted range. After setting the value, press "OK" to confirm and return to the higher level.

**NOTICE**

**i** The unit can be used to create a BMS supervision system with the Modbus protocol (for more information, refer to the specific documentation available on the website);

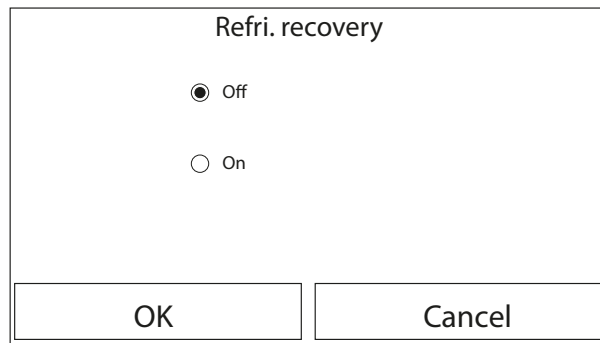
**i** If the relative function is activated (paragraph "9.1 Activating/deactivating the memory (On/off memory) [on page 48](#)"), the value of these parameters will be stored in the memory and automatically reset after any possible voltage failure;

**i** The address can be selected between 1~125 or 127~253;

**i** At the first start-up, the address will be "1".

### 7.19 REFRIGERANT RECOVERY

At the commissioning parameter setting page, by touching "Refri. recovery", it will access to the refrigerant recovery page. When "Refri. recovery" is set to "On", the control panel will go back to the home page. At this time, any touch operation except ON/OFF will get no response, with a prompt dialog box popping up, indicating that refrigerant recovery is in progress. By touching ON/OFF, function will quit.



**NOTICE**

**i** This function can only be activated if the unit is switched Off after a re-start;

**i** If the relative function is activated (paragraph "9.1 Activating/deactivating the memory (On/off memory) [on page 48](#)"), the value of these parameters will be stored in the memory and automatically reset after any possible voltage failure.

**i** This function is only useful only if technical maintenance intervention on the unit is required; consequently, it must only be activated by personnel authorised to provide technical assistance and/or install the units.

**i** This function should only be used by technical assistance personnel. In addition, remember that this function is not stored in the memory.

### 7.20 SET THE MANAGEMENT LOGIC FOR THE COMPATIBLE AERMEC ACCESSORY TANK HEATER (ELEC. TANK HEATER)

At the commissioning parameter setting page, by touching "Tank heater", it will access to the setting page of control logic for the water tank heater.

After accessing the “Elec. tank heater” function, you can select the logic for managing the electric heater of the compatible Aermec accessory tank. The available logic items are:

- **Logic 1:** the unit compressor and the electric heater in the tank cannot work simultaneously;
- **Logic 2:** the unit compressor and the electric heater in the tank can work simultaneously;

#### NOTICE

- i** If the compatible Aermec accessory tank is not installed, this function will not be available;
- i** To change the thermostat settings, the unit must be switched Off;
- i** If the relative function is activated (paragraph "9.1 Activating/deactivating the memory (On/off memory) [on page 48](#)"), the value of these parameters will be stored in the memory and automatically reset after any possible voltage failure;
- i** The default value is Tank heater: Logic 1;

## 7.21 MEMORY CONTACT

At the commissioning parameter setting page, by touching "Gate-Ctrl Memory", it will access to the setting page.

After accessing the “Memory contact” function, you can activate or deactivate the storage of the setting for the “External contact” function (refer to paragraph "7.16 Activating

auxiliary device management (Gate-Ctrl) [on page 35](#)" for more information about this function).

#### NOTICE

- i** When it is enabled, "Gate-Ctrl" will be memorized upon power failure;
- i** When it is disabled, "Gate-Ctrl" will not be memorized upon power failure.
- i** This function must be used only by technical assistance.

## 7.22 3-WAY VALVE1

At the commissioning parameter setting page, by touching "3-Way valve1", it will access to the setting page.

#### NOTICE

- i** If the relative function is activated (paragraph "9.1 Activating/deactivating the memory (On/off memory) [on page 48](#)"), the value of these parameters will be stored in the memory and automatically reset after any possible voltage failure;
- i** Three options are available, "Without", "DHW", and "AIR".When it is set to "AIR", it will be closed (230VAC) under the cooling/heating mode and opened under the DHW(Hot water) mode; when it is set to "DHW", it will be closed (230VAC) under the DHW(Hot water) mode and opened under the cooling/heating mode;
- i** This function can only be activated if the unit is switched Off.

## 7.23 HOT WATER CONTROL MODE

### CAUTION



**Modification and/or setting of these functions and these parameters must only be carried out by authorized personnel possessing the necessary technical skills to install and service these units. Incorrect settings may lead to malfunctioning or damage to the unit and the system! An incorrect setting may lead to not reaching the set-point, prolonged times or excessive absorption.**

At the commissioning parameter setting page, by touching "Hot water control mode", it can be set to "On" or "Off". When it is set to "On", "Running Frequency Setting" can be set, and the user could change the parameter to fix the frequency of the compressor in the "Hot water" mode, otherwise, the unit will automatically run based on the original logic. After that, this setting will be saved by touching the "Save" icon.

Hot water control mode	
Hot water control mode: On	
Running Frequency Setting: 75Hz	

### NOTICE



**If the relative function is activated (paragraph "9.1 Activating/deactivating the memory (On/off memory) [on page 48](#)"), the value of these parameters will be stored in the memory and automatically reset after any possible voltage failure.**

## 7.24 SG FUNCTION (SMART GRID)

It is allowed to be activated only when the control panel is turned off. When it has been activated, the operating main unit will receive and execute control commands from the

smart grid, except when the control panel has been turned off. See the table below for the SG control commands.

SG (Smart Grid)	EVU (Photovoltaic signal)	Command	Note
1	0	Switch-off command	Stand-by command with "EVU" displayed at the control panel
0	0	Standard operation	Switch-on command, the main unit operates freely
0	1	Switch-on signal	Switch-on signal (raise the target water temperature)
1	1	Switch-on command	Switch-on command (raise the target water temperature to the highest)

## 7.25 COOL CONTROL MODE

When it has been activated, it will limit the highest frequency of the compressor for cooling operation.

## 7.26 HEAT CONTROL MODE

When it has been activated, it will limit the highest frequency of the compressor for heating operation.

## 7.27 HIGHEST WATER PUMP SPEED LIMIT FUNCTION

When it has been activated, there are five options for the highest speed of the water pump, "High", "Medium", "Low", "SuperLow" and "Minimum".

"High" is for the speed level 10, "Medium" for level 9, "low" for level 8, "SuperLow" for level 7 and "Minimum" for level 6. Once it has been set, the operating speed of the water pump is not allowed to exceed this set value.

Speed	Speed level	Note
Minimum	Level 6	
SuperLow	Level 7	
Bassa	Level 8	
Average	Level 8 or Level 9	
Alta	Level 8, Level 9 or Level 10	

## 7.28 WATER PUMP ANTISTALL

When it has been activated, it allows to set the antistall interval and antistall duration for the water pump. Once the main unit has been turned off, the water pump will run at the highest speed for antistall duration every antistall interval so as to prevent the water pump from being damaged.

## 7.29 SETTING OF PARAMETERS

At the commissioning parameter setting page, by touching "PARAM.", it will access to the pages as shown below.

After accessing the "Max HP T" function, you can indicate the maximum temperature for heating the water in the compatible Aermec accessory tank via the heat pump only. To set the required value, use the "+" and "-" keys, entering a value within the permitted range. Once the value has been set, press the "OK" button to confirm it and return to the upper level.

Commissioning Parameters Setting

Number	Name	Displayed name	Range	Default	Note
1	T-HP max	T-HP max	40~55°C	50°C	

### NOTICE

- i** For parameters with different defaults at different conditions, once the current condition changes, the corresponding default also will change;
- i** If the relative function is activated (paragraph "9.1 Activating/deactivating the memory (On/off memory) [on page 48](#)"), the value of these parameters will be stored in the memory and automatically reset after any possible voltage failure.

## 8 VIEW MENU

1	VIEW (1/2)	2	Home
Status			
Parameter			
Error			
Error log			
Version			

This menu is used possible to display a great deal of information related to machine operation. Each label brings together a set of information so that the user can check the status of the unit and any current errors or faults. The following keys are used to navigate this menu:

1. Go back to the higher level menu;
2. Go back to the main page (Home).

To access a function, click on the text of that function.

### 8.1 VIEWING THE STATUS OF THE UNIT COMPONENTS (STATUS)

←	Status view (1/5)	Home
Compressor: Off		
Fan: Off		
Unit Status: Off		
HP-pump: Off		
Tank heater: Off		

These pages display the status of the various components in the system. After accessing the "Status" function, you can browse the various pages using the buttons on the left and right sides of the window. The following table shows the information available, and the possible statuses.

#### NOTICE



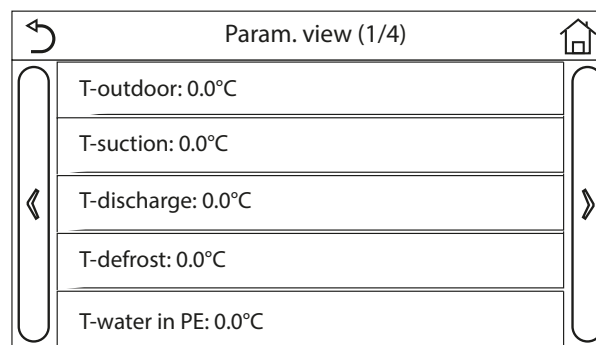
All information contained in this menu is "read only".

Number	Label	Meaning	State
1	Compressor	Indicates the current status of the compressor	On
			Off
2	Fan	Indicates the current status of the fan	On
			Off
3	Unit status	Indicates the status of the unit	Cooling
			Heating
			ACS
			Off
			On
4	Circulator	Indicates the current status of the fan	On
			Off
5	Water tank	Status of the electric heater in the DHW storage tank	On
6	3-way valve 1	Not used	Off
7	3-way valve 2	Indicates the status of the 3-way valve on the system	NA
			On
8	Crankc. heater	Indicates the status of the compressor casing heater	On
			Off
9	HP-heater 1	Indicates the status (for stage 1) of the optional electric heater, if installed	On
			Off
10	HP-heater 2	Indicates the status (for stage 2) of the optional electric heater, if installed	On
			Off
11	Chassis heater	Indicates the status of the anti-freeze heater on the unit base	On
			Off
12	Plate heater	Indicates the status of the anti-freeze heater on the plate heat exchanger of the unit	On
			Off
13	Defrost	Indicates the current status of the defrosting cycle	On
			Off
14	Oil return	Indicates the current status of the oil return cycle	On
			Off

Number	Label	Meaning	State
15	Thermostat	Indicates the current thermostat settings (paragraph "7.9 Thermostat <a href="#">on page 30</a> ")	Off
			Cooling
			Heating
			ACS
			Cool+hot water
			Heat+hot water
16	Other thermal	Indicates the status of the additional heat source (paragraph "7.9 Thermostat <a href="#">on page 30</a> ")	On
			Off
17	2 way valve	Indicates the status of the 2-way valve on the system	On
			Off
18	HP-Antifree	Indicates the status of the anti-freeze protection	On
			Off
19	External contact	Indicates the status of the external contact (paragraph "7.16 Activating auxiliary device management (Gate-Ctrl) <a href="#">on page 35</a> ")	Card in
			Card out
20	4-way valve	Indicates the status of the 4-way valve on the unit	On
			Off
21	Anti-legionella	Indicates the current status of the anti-legionella cycle (paragraph "5.9 Disinfection <a href="#">on page 17</a> ")	Off
			Progress
			Done
			Error
22	Flow switch	Indicates the current status of the flow switch on the unit	On
			Off
23	Tank Pump	Indicates the status of the tank pump	On
			Off
24	SG signal	SG signal	On/Off
25	EVU signal	EVU signal	On/Off
26	SG	SG control command	Switch-off command / Standard operation / Switch-on signal / Switch-on command

## 8.2 VIEWING THE STATUS OF THE UNIT PARAMETERS (PARAMETER)

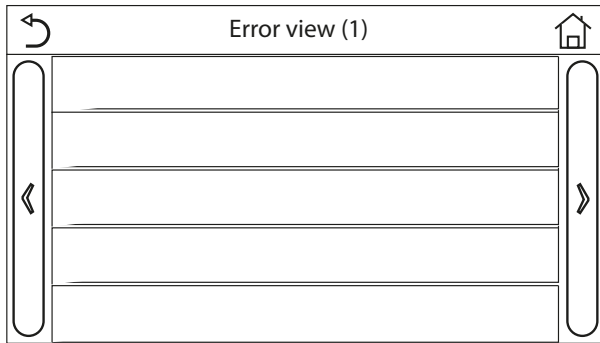
At the "VIEW" page, by touching "Parameter", it is able to view each parameter of the unit, as shown in the figure below:



Viewable Parameters

Number	Label	Meaning
1	T-outdoor	Indicates the external air temperature detected by the unit
2	T-suction	Indicates the temperature on the compressor inlet
3	T-discharge	Indicates the compressor delivery temperature
4	T-Defrost	Indicates the temperature for the defrosting cycle
5	T-water in PE	Indicates the temperature of the water entering the plate heat exchanger
6	T-water out PE	Indicates the temperature of the water leaving the plate heat exchanger
7	T-optional water sen.	Indicates the temperature of the water leaving the optional heater
8	T-tank ctrl.	Indicates the temperature measured in the compatible Aermec accessory tank
9	T-economizer in	Indicates the temperature on the economiser inlet
10	T-economizer out	Indicates the temperature on the economiser outlet
11	T-floor debug	Indicates the set temperature for radiant floor debug (paragraph "7.13 Setting the pre-heating procedure for radiant panels (Floor debug) <a href="#">on page 33</a> ")
12	Debug time	Indicates the set time for radiant floor debug (paragraph "7.13 Setting the pre-heating procedure for radiant panels (Floor debug) <a href="#">on page 33</a> ")
13	T-gas pipe	Indicates the temperature detected on the gas side of the cooling circuit
14	T-liquid pipe	Indicates the temperature detected on the liquid side of the cooling circuit
15	T-auto mode	Indicates the current set-point temperature, calculated using the climatic curve (paragraph "5.6 Energy-saving mode <a href="#">on page 15</a> ")
16	T-remote room	Indicates the room temperature detected by the probe (paragraph "7.11 Setting the installation of the remote room temperature probe (Ambient sensor) <a href="#">on page 32</a> ")
17	Dis. pressure	Indicates the compressor delivery pressure value

### 8.3 VIEWING THE ACTIVE ERRORS ON THE UNIT (ERROR)



These pages display the current errors and alarms active on the unit. After accessing the "Error" function, you can

browse any pages using the buttons on the left and right sides of the window.

**NOTICE**

**i** This function does not allow current errors to be reset; it only displays them;

**i** There may be several pages, depending on the number of errors (up to 5 errors per page).

If error or alarm conditions arise during normal operation of the unit, faults will be indicated on the display by icons (⚠).

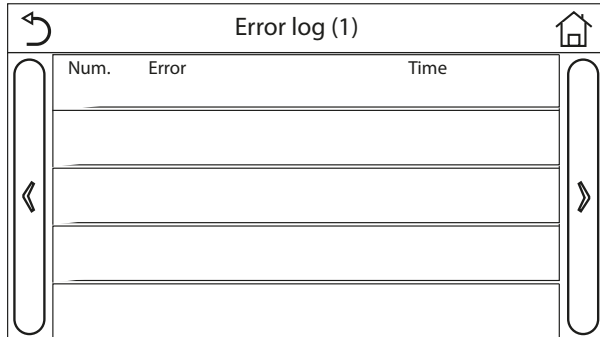
Possible errors (with relative codes) are as follows:

Code	Label Error	Description
F4	Ambient sensor	indicates a malfunction of the external air sensor
d6	Ambient sensor	Indicates a malfunction of defrosting temperature sensor on the outdoor unit
F7	Discharge sensor	Indicates a malfunction of the temperature sensor on compressor delivery
F5	Suction sensor	Indicates a malfunction of the temperature sensor on compressor intake
EF	Outdoor fan	Indicates a malfunction affecting the fan on the outdoor unit
Fc	HI-pre. sens.	Indicates a fault on the high pressure transducer
E1	High pressure	Indicates abnormal pressure on the high pressure side of the cooling circuit
E3	Low pressure	Indicates abnormal pressure on the low pressure side of the cooling circuit
E4	Hi-discharge	Indicates an abnormal temperature on the compressor discharge
E6	ODU-IDU Com.	Indicates a serial communication error between the AP1 and AP2 cards on the outdoor unit
F2	Econ. in sens.	Indicates a malfunction of the temperature sensor at the economizer input
F6	Econ. out sens.	Indicates a malfunction of the temperature sensor at the economizer output
Ec	HP-Water Switch	Indicates an alarm generated by the flow switch at the input to the outdoor unit (water side)
PL	DC under vol.	Indicates an error caused by low voltage on the DC bus or an error caused by a voltage drop
PH	DC over vol.	Indicates an error caused by high voltage on the DC bus
PR	AC curr. pro.	Indicates an abnormal value for AC current (AC protection)
H5	IPM defective	Indicates an operating fault on the IPM module (inverter power module)
Hc	PFC defective	Indicates an operating fault on the PFC module (power correction module)
Lc	Start failure	Indicates a fault in the unit's start-up phase
Ld	Phase loss	Indicates a problem associated with the loss or unbalance of voltage phases
P0	Driver reset	Indicates a reset made on the unit's drivers
P5	Com. over cur.	Indicates that an overcurrent on the compressor has been detected
Pc	Current sen.	Indicates an abnormal value for the current sensor
H7	Desynchronize	Indicates that the compressor is out of sync
P8	Overtemp. mod.	Indicates that an overtemperature has been detected on a component (heatsink, IPM or PFC)
P7	T mod. sensor	Indicates that an error has been detected on the temperature sensor for a component (heatsink, IPM or PFC)
Pu	Charge circuit	Indicates an error on the charging circuit
PP	AC voltage	Indicates a power supply error
Pd	Sensor con.	Indicates a protection status for the sensor monitoring the phases
F9	Temp HELW	Indicates a fault on the temperature sensor at heat exchanger plate outlet (water side)
dH	Temp AHLW	Indicates a fault on the temperature sensor located downstream of the 3-way valve if the installation includes an auxiliary electrical resistance or a supplementary heat source



Code	Label Error	Description
--	Temp HEEW	Indicates a fault on the temperature sensor at heat exchanger plate inlet (water side)
F1	Temp RLL	Indicates an error affecting the temperature sensor on the cooling circuit fluid line
F2	Temp RGL	Indicates an error affecting the temperature sensor on the cooling circuit gas line
FE	Tank sensor	Indicates a fault on the temperature sensor located on the accessory DHW storage tank
F3	T-remote room	Indicates a malfunction of the ambient air sensor supplied with the unit
E6	ODU Com.	Indicates a serial communication error between the display and the outdoor unit
c5	Jumper cap error	Jumper cap error
E2	Anti-freeze protection	Anti-freeze protection
E4	High temperature error	High temperature error
EH	Auxi. WTH	Indicates a malfunction affecting the resistance placed in the accessory DHW storage tank
P6	Drive-main com.	Indicates a communication error with the unit's drivers
E6	IDU Com.	Indicates a serial communication error between the AP1 cards and flush panel (display)
U7	4-way valve	Indicates a 4-way valve fault

### 8.4 VIEWING THE ERROR LOG (ERROR LOG)

These pages display the alarm log for the unit. After accessing the "Error" function, you can browse any pages using the buttons on the left and right sides of the window.

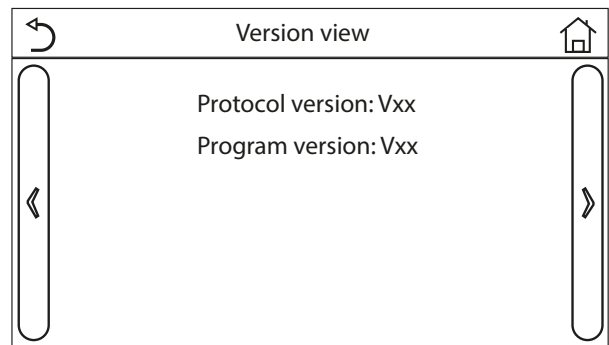


**NOTICE**

-  **There may be several pages, depending on the number of errors; the log lists the last 20 errors;**
-  **When error log exceeds 20, the latest will supersede the earliest.**

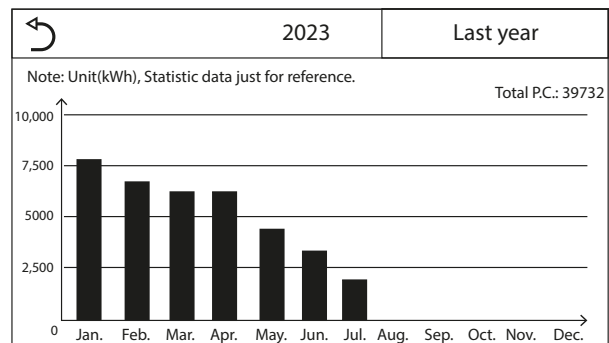
### 8.5 VIEWING SOFTWARE INFORMATION (VERSION)

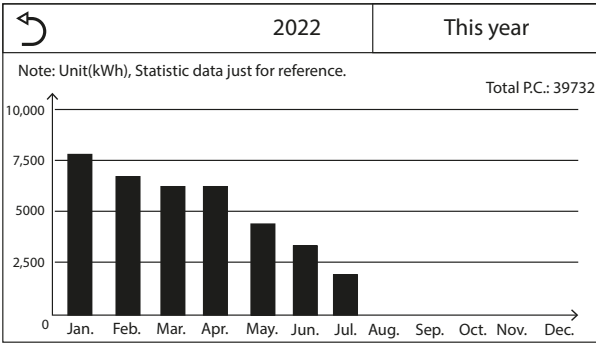
At the "VIEW" page, by touching "Version", the control panel will go to the version view page, where it is able to view both the program version and protocol version.



### 8.6 POWER CONSUMPTION

Power data is stored locally, not on the server. The power data can be cleared by "FUNCTION" and "Clear P.C.". Monthly and yearly power consumption (based on the system date of the control panel) can be recorded and displayed through a bar chart.

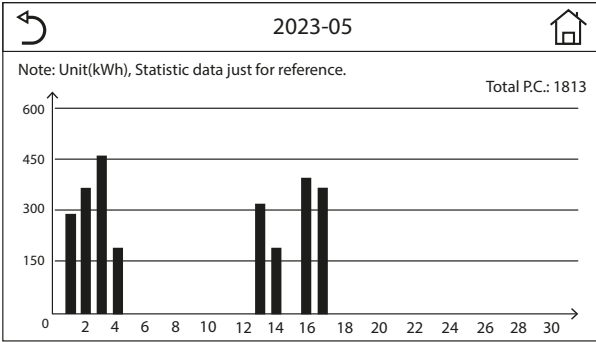




**NOTICE**

**i** As the power consumption statistics is calculated and may differ with the actual, therefore it is just for reference.

Click the current month and then go to the daily power consumption page, as shown in the figure below:



Click anywhere at this page to viewing the monthly power consumption page, as shown in the figure below:

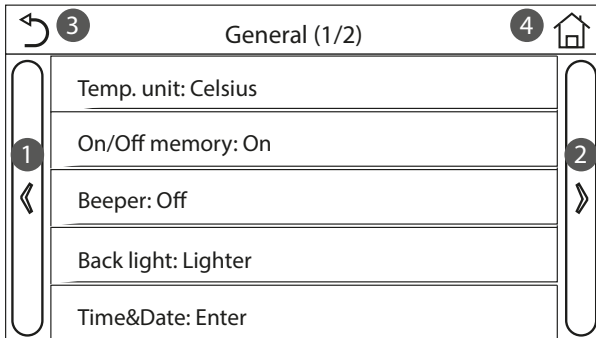
2022		
1	2	3
7813.8	6154.5	5832.3
4	5	6
6094.0	4659.2	3678.1
7	8	9
2607.5	0.0	0.0
10	11	12
0.0	0.0	0.0

Click the middle of some day and then go to the power consumption value page, as shown in the figure below:

2023-05					
1	2	3	4	5	6
0.0	0.0	0.0	0.0	0.0	0.0
7	8	9	10	11	12
0.0	0.0	0.0	0.0	0.0	0.0
13	14	15	16	17	18
0.0	0.0	0.0	0.0	0.0	0.0
19	20	21	22	23	24
0.0	0.0	0.0	56.7	84.9	0.0
25	26	27	28	29	30
0.0	0.0	0.0	0.0	0.0	0.0
31					
0.0					

## 9 MAIN MENU

At the menu page, by touching "GENERAL", the control panel will go to the setting page, as shown in the figure below:

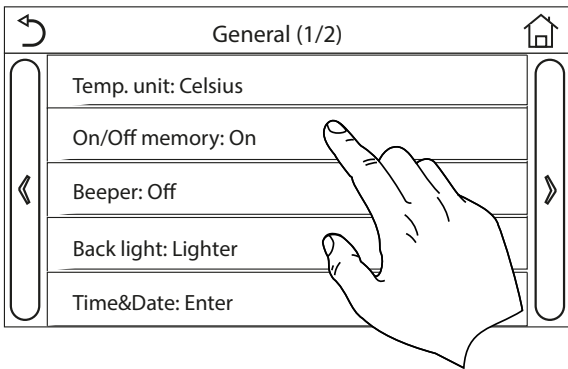


The following keys are used to navigate this menu:

1. Move back to the previous page;
2. Move on to the next page;
3. Go back to the higher level menu;
4. Go back to the main page (Home).

Number	Label	Range	Default	Note
1	Temp. unit	°C/°F	°C	
2	On/off memory	On/Off	On	
3	Beeper	On/Off	On	
4	Back light	Lighted / Energy Save	Energy Save	"Lighted": the control panel will always light on. "Energy save": When there is no touching operation in 5 minutes, the control panel will be lighted off automatically, but will light on again once there is any touching operation.
5	Time&Date	Enter	---	
6	Language	Italiano/English/Español/ Nederlands/Français/ Deutsch/Български/ Polski/Suomi/Svenska/ Türkçe/Magyar/Lietuvių/ Hrvatski/Čeština/Srpski/ Slovenski/...	English	
7	WiFi	On/Off	On	

### 9.1 ACTIVATING/DEACTIVATING THE MEMORY (ON/OFF MEMORY)



Click on the "On/off memory" label to activate or deactivate the saving of parameter/function settings.

**NOTICE**

**i** If this option is activated, after a power failure the unit will automatically resume the values set and saved in the memory.

### 9.3 ACTIVATING THE WIFI (WIFI)

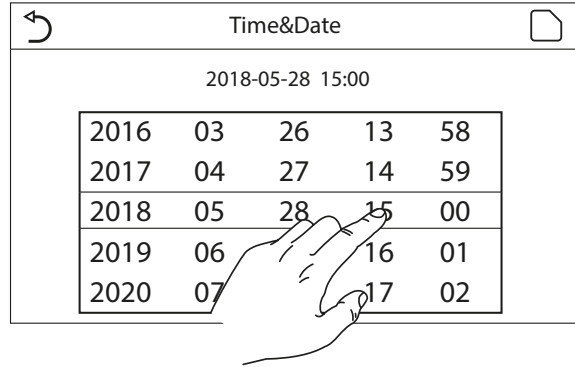
This function activates the WiFi signal that allows you to use the app to control the unit.

**NOTICE**

- i** The EWPE SMART app is compatible with ANDROID and iOS systems;
- i** The unit can only be managed via a WiFi or hotspot 4G signal;
- i** The system is compatible with routers that use WEP cryptography.
- i** Software operation interface is universal and its control functions may not be completely corresponding to the unit. Software operation interface may vary along with APP upgrading or different operation system. Please refer to the actual program.

### 9.2 SETTING THE SYSTEM DATE AND TIME (TIME&DATE)

At the "GENERAL" menu, by touching "Time&Data", it will go to the setting page as shown in the figure below:



After accessing the "Time&Date" function, you can set the current date and time to be used on the system. Lastly, press the top right button to save the data entered while by touching the "Back" icon, this setting will give up and the control panel will directly go back to the General menu.

### 9.3.1 EWPE SMART



#### User manual

Italian:



<http://www.aermec.com/qrcode.asp?q=15587>

English:



<http://www.aermec.com/qrcode.asp?q=15588>

French:



<http://www.aermec.com/qrcode.asp?q=15589>

German:



<http://www.aermec.com/qrcode.asp?q=15590>

Spanish:



<http://www.aermec.com/qrcode.asp?q=15591>

### 9.3.2 Technical data for the Wi-Fi module

**Wi-Fi frequency range:** 2.4 - 2.4835GHz

**Wi-Fi frequency modulation mode:** CCK, OFDM

**Wi-Fi rate:**

802.11b: 1/2/5.5/11 Mbps

802.11g: 6/9/12/18/24/36/48/54 Mbps

802.11n(HT20): 6.5/13/19.5/26/39/52/58.5/65 Mbps

**Wi-Fi bandwidth:** ≤ 20MHz

**BLE frequency range:** 2402-2480MHz

**BLE frequency modulation mode:** GFSK

**BLE rate:** 1 Mbps

**BLE bandwidth:** ≤ 2MHz

**Antenna type:** PCB ANT

**Antenna gain:** 1.5dBi

**Label location:** fixed in the shield

**Transmission power:**

11b:18dBm

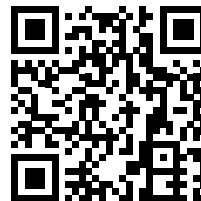
11g:14dBm

11n:13dBm

### 9.4 MODBUS RS485 CONNECTION

If you want to manage the unit via a BMS connected via ModBus RS485, refer to the information available in the dedicated manual, available at the following address:

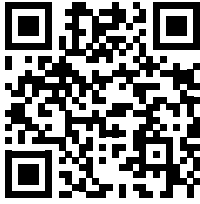
<http://www.aermec.com/qrcode.asp?q=14459>





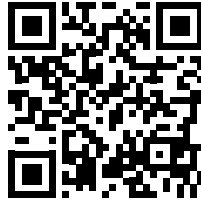


SCARICA L'ULTIMA VERSIONE:



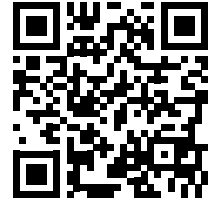
<http://www.aermec.com/qrcode.asp?q=19786>

DOWNLOAD THE LATEST VERSION:



<http://www.aermec.com/qrcode.asp?q=19787>

TÉLÉCHARGER LA DERNIÈRE VERSION:



<http://www.aermec.com/qrcode.asp?q=19788>



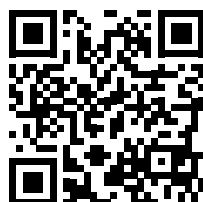
Aermec S.p.A.

Via Roma, 996 - 37040 Bevilacqua (VR) - Italia

Tel. +39 0442 633 111 - Fax +39 0442 93577

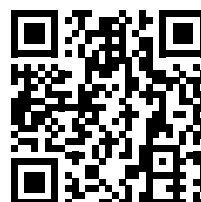
marketing@aermec.com - www.aermec.com

BITTE LADEN SIE DIE LETZTE VERSION  
HERUNTER:



<http://www.aermec.com/qrcode.asp?q=19789>

DESCARGUE LA ÚLTIMA VERSIÓN:



<http://www.aermec.com/qrcode.asp?q=19790>