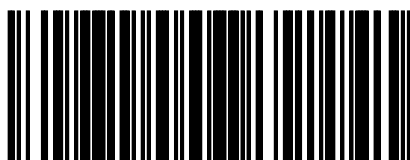


USER MANUAL

HMI series BHP series



6228081_03

Dear customer,

Thank you for choosing an AERMEC product. It's the result of many years of experience and dedicated design studies, and was built using first-class materials and highly advanced technologies.

The quality level is being constantly monitored, so AERMEC products are synonymous with Safety, Quality and Reliability.

The data are subject to any modifications considered necessary to improve the product, at any time and without prior notice.

Thank you again.

AERMEC S.p.A.



This marking indicates that this product should not be disposed with other household wastes in the entire EU. To prevent any harm to the environment or human health caused by incorrect disposal of Waste Electrical and Electronic Equipment (WEEE), please return the device using suitable collection systems, or contacting the retailer where the product was purchased. For further information please contact the appropriate local authority. The incorrect disposal of the product by the user will lead to the application of the administrative sanctions envisaged by the laws in force.

All specifications are subject to modification without prior notice. Although every effort has been made to ensure accuracy, Aermec cannot be held liable for any possible errors or omissions.

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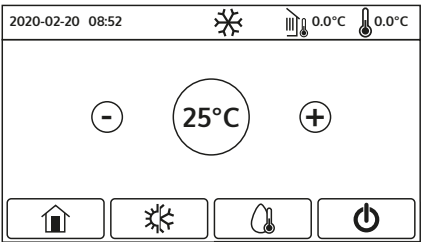
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|-------|---|----|
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1. USER INTERFACE

1.1. Main Page (Home)

After startup, the main page (Home) appears on the display. From this page it will be possible to:

- select one of the menus available to the user;
- turn on / off the unit;
- display information regarding the operating mode, any active errors, in addition to the system date and time;
- set the work set and operating mode for the unit.



Main Page (Home)

NB: after 10 minutes of inactivity, the system will automatically return to the main page.

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 active |
| | Indicates the measured external temperature |
| | Based on the type of regulation specified on the "Control temp." Page (Paragraph 7.2): <ul style="list-style-type: none">• Room temperature;• System delivery temperature; |
| | This icon indicates that an alarm is currently in progress |
| | This icon may indicate that: <ul style="list-style-type: none">• External contact;• Anti-legionella cycle failed; |

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

| Key | Function |
|-----|---|
| | Key to return to the menu selection window |
| | Key to change the operating mode between heating and cooling |
| | 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: <ul style="list-style-type: none">• Green: unit on;• White: unit off; |

2. MENU STRUCTURE

2.1. Function

| Page | Content | Paragraph |
|------|-----------------|-----------|
| 1 | Mode | 4.2. |
| | Fast hot water | 4.3. |
| | Cool+hot water | 4.4. |
| | Heat+hot water | 4.5. |
| | Quiet mode | 4.6. |
| 2 | Weather depend | 4.7. |
| | Weekly timer | 4.8. |
| | Holiday release | 4.9. |
| | Disinfection | 4.10. |
| | Clock timer | 4.11. |
| 3 | Temp. timer | 4.12. |
| | Emergen. mode | 4.13. |
| | Holiday mode | 4.14. |
| | Preset mode | 4.15. |
| | Error reset | 4.16. |
| 4 | Wifi reset | 4.17. |
| | Reset | 4.18. |

2.2. View

| Page | Content | Paragraph |
|------|-----------|-----------|
| 1 | Status | 6.2. |
| | Parameter | 6.3. |
| | Error | 6.6. |
| | Error log | 6.4 |
| | Version | 6.6. |

2.3. Parameter

| Page | Content | Paragraph |
|------|-----------------------|-----------|
| 1 | WOT-Cool | 5.2. |
| | WOT-heat | |
| | RT-Cool | |
| | RT-Heat | |
| | T-tank ctrl. | |
| 2 | ΔT -room temp | 5.2. |
| | ΔT -Cool | |
| | ΔT -Heat | |
| | ΔT -hot water | |

2.4. Commission (Function)

| Page | Content | Paragraph |
|------|-------------------|-----------|
| 1 | Ctrl.state | 7.2. |
| | Cool 2-Way valve | 7.3. |
| | Heat 2-Way valve | 7.4. |
| | Solar setting | 7.5. |
| | Water tank | 7.6. |
| 2 | Thermostat | 7.7. |
| | Other thermal | 7.8. |
| | Optional E-heater | 7.9. |
| | Ambient sensor | 7.10. |
| | Air removal | 7.11. |
| 3 | Floor debug | 7.12. |
| | Manual defrost | 7.13. |
| | Force mode | 7.14. |
| | Gate-Ctrl | 7.15. |
| | Current limit | 7.16. |
| 4 | Address | 7.17. |
| | Refri. recovery | 7.18. |
| | Tank heater | 7.19. |
| | Memory contact | 7.20. |

2.5. Commission (Parameter)

| Page | Content | Paragraph |
|------|---------------|-----------|
| 1 | T HP max | 7.19. |
| | Cool run time | 7.20. |
| | Heat run time | 7.21. |

2.6. General

| Page | Content | Paragraph |
|------|---------------|-----------|
| 1 | Temp. unit | 8.2. |
| | On/off memory | 8.3. |
| | Beeper | 8.4. |
| | Back light | 8.5. |
| | Time&Date | 8.6. |
| 2 | Language | 8.7. |
| | WiFi | 8.8. |

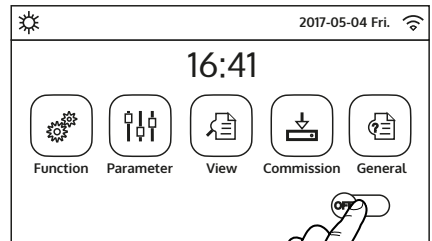
3. BASIC FUNCTIONS

3.1. 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.

NOTES:

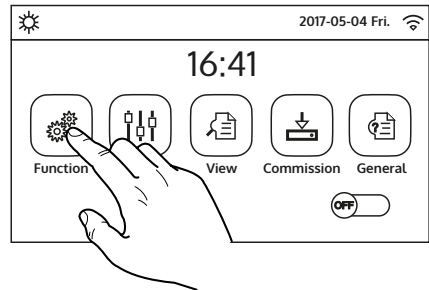
1. Once the voltage supply has been connected for the first start-up, this function will be set on "Off".
2. If the relative function is activated (paragraph 8.3), the value of this parameter will be stored in the memory and automatically reset after any possible voltage failure.



3.2. 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

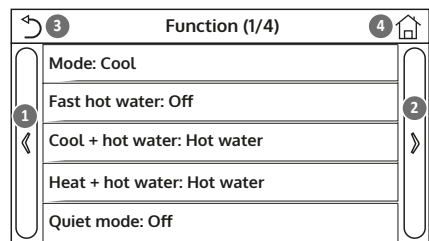


4. FUNCTION MENU

4.1. Navigating the menu

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.

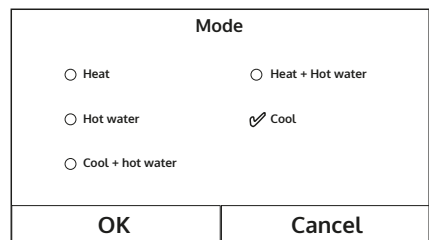


NOTES:

1. while navigating the menu pages, the current page of the selected menu will be displayed in the header (i.e. in the darker upper area)
2. any functions not available will be highlighted by the letters "NA"

4.2. Setting the operating mode (Mode)

after accessing the "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.



NOTES:

1. 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.
2. 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.
3. If the relative function is activated (paragraph 8.3), the value of this parameter will be stored in the memory and automatically reset after any possible voltage failure.
4. The default value for this parameter is: "Heat".

4.3. **Activating the function for fast domestic hot water production (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".

| | |
|--------------------------------------|---------------|
| Fast hot water | |
| <input checked="" type="radio"/> Off | |
| <input type="radio"/> On | |
| OK | Cancel |

NOTES:

1. 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.
2. To ensure even better energy saving, it is advisable to disable this function.
3. If the relative function is activated (paragraph 8.3), the value of this parameter will be stored in the memory and automatically reset after any possible voltage failure.
4. The default value for this parameter is: "Off".

4.4. **Setting the priority between cooling and domestic hot water production (Cool+hot water)**

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.

| | |
|--|---------------|
| Cool + hot water | |
| <input type="radio"/> Cool | |
| <input checked="" type="radio"/> Hot water | |
| OK | Cancel |

NOTES:

1. 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.
2. If the relative function is activated (paragraph 8.3), the value of this parameter will be stored in the memory and automatically reset after any possible voltage failure.
3. The default value for this parameter is: "Cool".

4.5. Set the priority between heating and domestic hot water production (Heat+hot water)

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.

| | |
|--|---------------|
| Heat + hot water | |
| <input type="radio"/> Heat | |
| <input checked="" type="radio"/> Hot water | |
| OK | Cancel |

NOTES:

1. 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.
2. If the relative function is activated (paragraph 8.3), the value of this parameter will be stored in the memory and automatically reset after any possible voltage failure.
3. The default value for this parameter is: “Heat”.

4.6. Setting the noise reduction function (Quiet mode)

After accessing the “Quiet mode” function by clicking on the label, you can change the value to be assigned to the function. The possible values are:

- “On” = Function active
- “Off” = Function not active
- “Clock timer” = Function active but in accordance with the time settings provided

If you select “Clock timer”, two keys will appear. Use them to set the start and end of the “Quiet mode” activation period. 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:

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

| | |
|--------------------|--|
| Quiet mode | |
| Quiet mode: Timer | |
| Start Timer: 00:00 | |
| End Timer: 00:00 | |

NOTES:

1. Every time you press on the label, the value will change. Once you have selected the required value, press the icon to save and implement the setting.
2. The function can still be set if the unit is Off, but it will only be implemented if the unit is activated.
3. 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”.
4. If the relative function is activated (paragraph 8.3), the value of this parameter will be stored in the memory and automatically reset after any possible voltage failure.
5. The default value for this parameter is: “Off”.

4.7. Setting the automatic setting compensation on the basis of external air (Weather depend)

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. The following keys are used to navigate this menu:

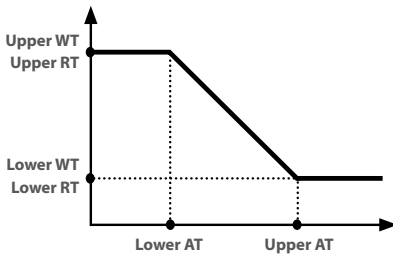
- (1) Move back to the previous page
- (2) Move on to the next page
- (3) Go back to the higher level menu
- (4) Go back to the main page (Home)

| Weather depend (1/3) | |
|----------------------|--|
| Weather depend: Off | |
| Upper AT Heat: 25°C | |
| Lower AT Heat: -20°C | |
| Upper WT Heat: 55°C | |
| Lower WT Heat: 40°C | |

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:

| Weather depend | |
|-------------------------------------|--------|
| <input type="radio"/> off | |
| <input checked="" type="radio"/> On | |
| OK | Cancel |



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.

| Upper AT Heat | | |
|----------------|---------------|---|
| Range: 10~37°C | Default: 25°C | |
| - | 25°C | + |
| OK | Cancel | |

NOTES:

1. The climatic curve can be applied to both the delivery temperature (water adjustment) and the ambient air (only if the specific air probe supplied has been installed); you are advised, however, to use the check on the delivery temperature.
2. The climatic curves can only be applied to heating and cooling, not to domestic hot water production.

3. The function remains active even when the unit has been switched off. To deactivate it, set "Weather depend: Off manually";
4. In the "View" menu, you can see the target value of the climatic curve.
5. The function can still be set if the unit is OFF, but it will only be implemented if the unit is activated.
6. If the relative function is activated (paragraph 8.3), the value of this parameter will be stored in the memory and automatically reset after any possible voltage failure.
7. The default value for this function is "Off".

4.8. Setting a timer for programmed switch-on and/or switch-off (Weekly timer)

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).

Clicking on the label for one of the days of the week allows access to the page for that day, where you can assign a value to the day, including:

- "With" = if the Weekly Timer is active, the system will perform the programmed access as specified in the data for periods 1, 2 and 3
- "Without" = the Weekly Timer is also active, this day will not be considered
- "Holiday" = if the "Holiday release" is active, during this day the set will be kept at 30°C (for water control) or 10°C (for air control)

By clicking on the label for one of the periods during the selected day, you can access the period settings page. The possible period settings are:

- "With" = the period describes a time band when the unit is to be used;; in this case, the labels relating to the start and end times for the period will also be displayed (which will be set first by clicking on the time label to be set and then sliding your fingertip over the time values until you select the ones required; lastly, press the top right button to save the data entered)
- "Without" = the period will not be used

Weekly timer

Weekly timer: On

| | |
|--------------|---------------|
| Mon: Valid | Tue: Invalid |
| Wed: Invalid | Thur: Invalid |
| Fri: Invalid | Sat: Holiday |
| Sun: Holiday | |

Mon

Mon: Valid

Period 1: Invalid

Period 2: Invalid

Period 3: Invalid

Period 1

Period 1: Valid

Start Timer: 00:00

End Timer: 00:00

22 58

23 59

01 00

02 01

02 02

Period 1

Period 1: Valid

Start Timer: 00:00

End Timer: 00:00

NOTES:

- 1. Every time you press on the label, the value will change. Once you have selected the required value, press the icon to save and implement the setting.
- 2. To make the time settings specified on various days of the week effective, the Weekly Timer must be set to "On" (by clicking on the Weekly Timer label itself).
- 3. The "With" setting for one or more days of the week validates the specified time settings only if the Weekly Timer is "On".
- 4. 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).
- 5. If one day or more has been set as "Holiday", you must activate the "Holiday release" function (explained in the next paragraph).
- 6. If the relative function is activated (paragraph 8.3), the value of this parameter will be stored in the memory and automatically reset after any possible voltage failure.
- 7. The default value for this function is "Off".

4.9. Enabling the Holiday Program function used for the weekly timer (Holiday release)

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.

| | |
|-------------------------------------|---------------|
| Holiday release | |
| <input type="radio"/> off | |
| <input checked="" type="radio"/> On | |
| OK | Cancel |

NB:


- 1. 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.
- 2. The default value for this function is "Off".

4.10. Enabling/disabling the anti-legionella cycle (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.

WARNING: if the unit is used for domestic hot water production, the Disinfection MUST necessarily be used.

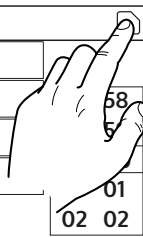
| | |
|---------------------|-------|
| Disinfection | |
| Disinfection: Off | |
| Set clock: 23:00 | 23 58 |
| Set temp.: 70°C | 23 59 |
| Set day: Mon. | 01 00 |
| | 01 01 |
| | 02 02 |



Click on the label relating to the set-point value for the anti-legionella cycle. This will draw up a numerical keypad, that you can use to alter the set-point (within the permitted ranges). Bear in mind that to ensure the effectiveness of the cycle, it will be maintained for a certain duration which will increase when the set value is decreased.

| | | | | |
|---|-----------------|---|---|----|
| ↶ | Min: 40 Max: 70 | | | X |
| | 0 | | | |
| | 1 | 2 | 3 | ← |
| | 4 | 5 | 6 | |
| | 7 | 8 | 9 | OK |
| | 0 | - | | |

| | | | |
|-------------------|--------------|--|-------|
| ↶ | Disinfection | | ⏏ |
| Disinfection: Off | | | |
| Set clock: 23:00 | | | 58 |
| Set temp.: 70°C | | | 5 |
| Set day: Mon. | | | 01 |
| | | | 02 02 |



NOTES:

1. Every time you press on the label, the value will change. Once you have selected the required value, press the icon to save and implement the setting.
2. 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.
3. This function can only be activated if the unit is switched off.
4. This function cannot be activated simultaneously with: "Emergen. mode", "Holiday mode", "Floor debug", "Manual defrost", "Refri. recovery".
5. If the relative function is activated (paragraph 8.3), the value of this parameter will be stored in the memory and automatically reset after any possible voltage failure.
6. 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".
7. An anti-legionella cycle will automatically be interrupted by any possible communication error or an error linked to the storage tank accessory.
8. If the relative function is activated (paragraph 8.3), the value of this parameter will be stored in the memory and automatically reset after any possible voltage failure.
9. The default value for this function is "Off".

4.11. Setting a timed switch-on/switch-off (Clock timer)

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.


| 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 |

| Clock timer | |
|--------------------|-------|
| Start timer: 00:00 | |
| End timer: 00:00 | |
| | 22 58 |
| | 23 59 |
| | 00 00 |
| | 01 01 |
| | 02 02 |



| Min: 20 Max: 60 | | X |
|-----------------|---|----|
| 0 | | |
| 1 | 2 | 3 |
| 4 | 5 | 6 |
| 7 | 8 | 9 |
| 0 | - | OK |

| Clock timer | |
|---------------------|--|
| Clock timer: Off | |
| Mode: Heat | |
| Period: 00:00~00:00 | |
| T water tank: 50°C | |
| WOT Heat: 45°C | |



NOTES:

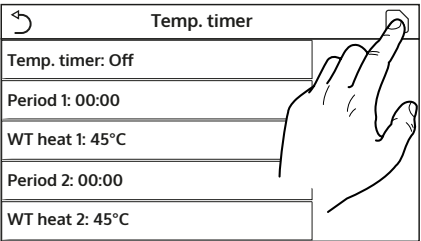
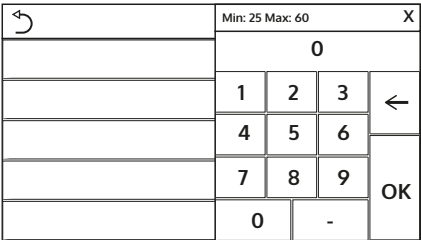
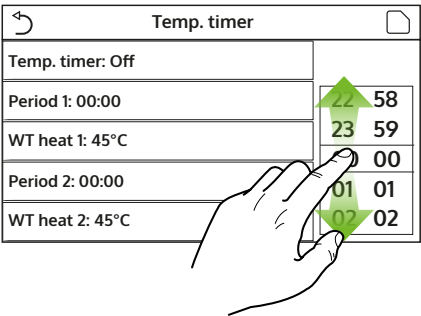
1. If the requested mode is "Hot water", the "WOT-Cool" or "WOT-heat" parameter will not be displayed.
2. Every time you press on the label, the value will change. Once you have selected the required value, press the icon to save and implement the setting.
3. If the compatible Aermec accessory tank for this model (refer to the installation manual for more information) is not installed and correctly set, the references to hot water production will not be available.
4. If the weekly timer and the standard timer are set at the same time, the weekly timer takes priority.
5. The timer start must always be prior to the timer end, otherwise the period will not be valid.

- The timer for hot water production will only be available if the operating mode envisages hot water production.
- The timer function will only work once. If you want to use it again, you must re-set it.
- The timer is deactivated if the unit is manually switched on before the timer start time.
- If the relative function is activated (paragraph 8.3), the value of this parameter will be stored in the memory and automatically reset after any possible voltage failure.
- The default value for this function is "Off".

4.12. Setting programmed setting changes on system water delivery (Temp. timer)

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.



NOTES:

- Press the icon to save and implement the setting.
- This function is not available if DHW mode is set.
- To activate this function, the unit must be enabled.
- The time bands apply to the current day only.
- 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.

6. The setting is only valid if the unit is "On".
7. Depending on the operating mode defined (heating or cooling), the relative set-points will be used.
8. If the start time of "Period 2" is the same as that of "Period 1", the first will be implemented.
9. The time bands are based on the timer inside the unit.
10. During hot water production mode, this function is not available.
11. If the relative function is activated (paragraph 8.3), the value of this parameter will be stored in the memory and automatically reset after any possible voltage failure.
12. The default value for this function is "Off".

4.13. Enabling emergency operation for heating or DHW (Emergen. mode)

If the compatible Aermec accessory tank for this model (refer to the installation manual for more information) - and/or an additional heat source (paragraph 7.7) or electric heater (paragraph 7.8) - 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.

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

NOTES:

1. 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.
2. Emergency mode can only be activated in heating (DHW or Heating, but not simultaneously).
3. 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.
4. The use of Emergency mode (in Heating) will be blocked if the "HP-Water Switch", "Auxi. heater 1", "Auxi. heater 2", "Temp AHLW" errors appear.
5. The use of Emergency mode (in DHW) will be blocked if the "Auxi. WTH" error appears.
6. None of the functions linked to the timers will be available during Emergency mode.
7. The thermostat cannot be used in Emergency mode.
8. After a voltage failure, Emergency mode returns to the OFF status.
9. 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.
10. The default value for this function is "Off".

4.14. Setting the winter period absence function (Holiday mode)

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 | |
| <input type="radio"/> Off | |
| <input checked="" type="radio"/> On | |
| OK | Cancel |

NOTES:

1. 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.
2. 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.
3. None of the functions linked to the timers will be available during Holiday mode.
4. 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.
5. If the relative function is activated (paragraph 8.3), the value of this parameter will be stored in the memory and automatically reset after any possible voltage failure.
6. The default value for this function is "Off".

4.15. Setting the daily timer programming (Preset mode)

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.

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.

| | |
|--------------------|--|
| Preset mode | |
| Period 1: Valid | |
| Period 2: Invalid | |
| Period 3: Invalid | |
| Period 4: Invalid | |

| | |
|--------------------|--|
| Preset mode | |
| Period 1: Valid | |
| Mode: Heat | |
| WOT Heat: 45°C | |
| Start timer: 00:00 | |
| End timer: 00:00 | |

NOTES:

1. 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.
2. If timer programming with the Weekly timer and other settings with Preset mode have been entered

simultaneously, the latter will take priority.

- Up to four time bands can be set for each day, but their start and end times must be coherent (the beginning of one period must be later than the end of the previous period).
- If the unit is switched on manually, the period timer programs will not be implemented.
- If the relative function is activated (paragraph 8.3), the value of this parameter will be stored in the memory and automatically reset after any possible voltage failure.
- The default value for this function is "Off".

4.16. Deleting current errors (Error 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. To reset the alarms, press on the function label and then confirm with "OK" in the dialogue box.

NB: this function can only be performed if the unit is switched off.

4.17. WiFi connection reset function (Wifi reset)

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

4.18. Loading the default settings (Reset)

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

NOTES:

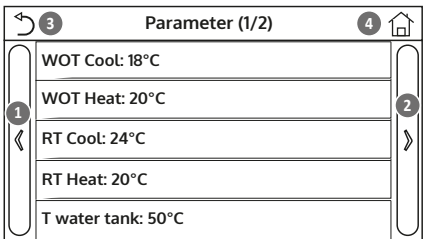
- This function can only be performed if the unit is switched off.
- This function interacts with the "Temp. timer", "Clock timer", "Preset mode", "Weekly timer" and "Weather depend" functions.

5. PARAMETER MENU

5.1. Navigating the menu

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



NB: while navigating the menu pages, the current page of the selected menu will be displayed in the header (i.e. in the darker upper area).

5.2. Setting the temperature set-points used by the unit in the various modes (WOT-Cool~ ΔT -hot water)

The windows of this menu are used to set the values used as a work set for the various modes. The way in which the values are modified and saved is the same for all of them: click on the label of the chosen parameter and set the required value using the "+" or "-" keys, inserting a value within the permitted range. After setting the value, press "OK" to confirm and return to the higher level.

| WOT Cool | |
|---|---------------|
| Range: 7~25°C | Default: 18°C |
| <div style="display: flex; justify-content: space-around; align-items: center;"><div>-</div><div style="border: 1px solid black; border-radius: 50%; padding: 10px; text-align: center;">18°C</div><div>+</div></div> | |
| OK | Cancel |

NOTES:

- 1. The windows show the possible range for the selected parameter at the top left, whereas the value entered during the last modification is shown on the right.
- 2. The following table lists all the parameters available, with their functions and operating ranges.
- 3. If the relative function is activated (paragraph 8.3), the value of these parameters will be stored in the memory and automatically reset after any possible voltage failure.

| Label | Meaning | Range |
|-----------------------|--|---------|
| WOT-Cool | Indicates the work set for cooling mode (used in control based on delivery water) | 7~25°C |
| WOT-heat | Indicates the operating set-point for heating mode (used in control based on delivery water) | 20~60°C |
| RT-Cool | Indicates the operating set-point for cooling mode (used in control based on ambient air) | 18~30°C |
| RT-Heat | Indicates the operating set-point for heating mode (used in control based on ambient air) | 18~30°C |
| T-tank ctrl. | Indicates the operating set-point for domestic hot water production (available only if the storage tank accessory is installed and set) | 40~80°C |
| ΔT -room temp | Indicates the value of ΔT to be applied to the set-point when the control is based on ambient air | 1~5°C |
| ΔT -Cool | Indicates the value of ΔT to be applied to the set-point for cooling when the control is based on delivery water | 2~10°C |
| ΔT -Heat | Indicates the value of ΔT to be applied to the set-point for heating when the control is based on delivery water | 2~10°C |
| ΔT -hot water | Indicates the value of ΔT to be applied to domestic hot water production (available only if the storage tank accessory is installed and set) | 2~8°C |

6. VIEW MENU

6.1. Navigating the menu

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.

| VIEW |
|-----------|
| Status |
| Parameter |
| Error |
| Error log |
| Version |

6.2. Viewing the status of the unit components (Status)

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.

NB: all information contained in this menu is "read only".

| Label | Meaning | Status |
|----------------|--|-----------|
| Compressor | Indicates the current status of the compressor | On |
| | | Off |
| Fan | Indicates the current status of the fan | On |
| | | Off |
| Unit status | Indicates the status of the unit | Cool |
| | | Heat |
| | | Hot water |
| | | Off |
| HP-pump | Indicates the current status of the fan | On |
| | | Off |
| Water tank | Status of the electric heater in the DHW storage tank | On |
| | | Off |
| 3-way valve 1 | Not used | --- |
| 3-way valve 2 | Indicates the status of the 3-way valve on the system | On |
| | | Off |
| Crankc. heater | Indicates the status of the compressor casing heater | On |
| | | Off |
| HP-heater 1 | Indicates the status (for stage 1) of the optional electric heater, if installed (paragraph 7.9) | On |
| | | Off |
| HP-heater 2 | Indicates the status (for stage 2) of the optional electric heater, if installed (paragraph 7.9) | On |
| | | Off |
| Chassis heater | Indicates the status of the anti-freeze heater on the unit base | On |
| | | Off |
| Plate heater | Indicates the status of the anti-freeze heater on the plate heat exchanger of the unit | On |
| | | Off |
| Defrost | Indicates the current status of the defrosting cycle | On |
| | | Off |
| Oil return | Indicates the current status of the oil return cycle | On |
| | | Off |

| | | |
|---------------|--|----------|
| Thermostat | Indicates the current thermostat settings (paragraph 7.7) | Off |
| | | Cool |
| | | Heat |
| Other thermal | Indicates the status of the additional heat source (paragraph 7.8) | On |
| | | Off |
| 2-way valve | Indicates the status of the 2-way valve on the system | On |
| | | Off |
| HP-Antifree | Indicates the status of the anti-freeze protection | On |
| | | Off |
| Gate-Ctrl | Indicates the status of the external contact (paragraph 7.15) | Card in |
| | | Card out |
| 4-way valve | Indicates the status of the 4-way valve on the unit | On |
| | | Off |
| Disinfection | Indicates the current status of the anti-legionella cycle (paragraph 4.10) | Off |
| | | Progress |
| | | Done |
| | | Error |
| Flow switch | Indicates the current status of the flow switch on the unit | On |
| | | Off |

6.3. Viewing the status of the unit parameters (Parameter)

These pages display the current values for the unit's operating parameters. After accessing the "Parameters" 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.

NB: all information contained in this menu is "read only".

| Label | Meaning |
|-----------------------|--|
| T-outdoor | Indicates the external air temperature detected by the unit |
| T-suction | Indicates the temperature on the compressor inlet |
| T-discharge | Indicates the compressor delivery temperature |
| T-Defrost | Indicates the temperature for the defrosting cycle |
| T-water in PE | Indicates the temperature of the water entering the plate heat exchanger |
| T-water out PE | Indicates the temperature of the water leaving the plate heat exchanger |
| T-optional water sen. | Indicates the temperature of the water leaving the optional heater (paragraph 7.9) |
| T-tank ctrl. | Indicates the temperature measured in the compatible Aermec accessory tank |
| T-economizer in | Indicates the temperature on the economiser inlet |
| T-economizer out | Indicates the temperature on the economiser outlet |
| T-floor debug | Indicates the set temperature for radiant floor debug (paragraph 7.12) |
| Debug time | Indicates the set time for radiant floor debug (paragraph 7.12) |
| T-gas pipe | Indicates the temperature detected on the gas side of the cooling circuit |
| T-liquid pipe | Indicates the temperature detected on the liquid side of the cooling circuit |
| T-auto mode | Indicates the current set-point temperature, calculated using the climatic curve (paragraph 4.7) |
| T-remote room | Indicates the room temperature detected by the probe (paragraph 7.10) |
| Dis. pressure | Indicates the compressor delivery pressure value |

6.4. 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.

NOTES:

- 1. This function does not allow current errors to be reset; it only displays them.
- 2. For more information about the error codes, refer to chapter 9.
- 3. There may be several pages, depending on the number of errors (up to 5 errors per page).

6.5. 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.

NOTES:

- 1. There may be several pages, depending on the number of errors; the log lists the last 20 errors.
- 2. For more information about the error codes, refer to chapter 9.

6.6. Viewing software information (Version)

These pages display the version of the software installed on the unit.

7. COMMISSION MENU

7.1. Navigating the menu

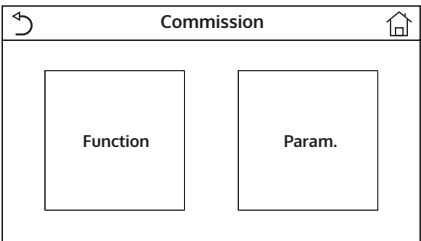
WARNING: these functions and parameters must only be set and/or modified by authorised personnel with the necessary technical skills to install and maintain these units.

Incorrect settings may lead to malfunctioning or damage to the unit and the system!

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

↶ 3

Function (1/4)

4 ↷

1

Ctrl. state: T water out

2

⏪

Cool 2 way valve: On

⏩

Heat 2 way valve: Off

Solar setting: Without

Water tank: With

↶ 3

Parameter (1/1)

4 ↷

1

T HP max: 50°C

2

⏪

Cool run time: 5 min

⏩

Heat run time: 3 min

NB: if the relative function is activated (paragraph 8.3), the value of these parameters will be stored in the memory and automatically reset after any possible voltage failure.

7.2. **Setting the control logic (Ctrl.state)**

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.

Ctrl. state

☒ T water out

☐ T room

OK

Cancel

NOTES:

1. If the ambient air probe accessory is not installed (and correctly set), you can only choose “T-water out”.
2. If the relative function is activated (paragraph 8.3), the value of these parameters will be stored in the memory and automatically reset after any possible voltage failure.

7.3. Setting the status of the 2-way valve in cooling mode (Cool 2-Way valve)

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.

| | |
|---|--------|
| <p>Cool 2 way valve</p> <p><input checked="" type="radio"/> Off</p> <p><input type="radio"/> On</p> | |
| OK | Cancel |

NOTES:

- 1. If you select the “Off” status, the valve will be CLOSED in cooling mode; it will be OPEN if you select “On”.
- 2. If the relative function is activated (paragraph 8.3), the value of these parameters will be stored in the memory and automatically reset after any possible voltage failure.

7.4. Setting the status of the 2-way valve in heating mode (Heat 2-Way valve)

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.

| | |
|---|--------|
| <p>Heat 2 way valve</p> <p><input checked="" type="radio"/> Off</p> <p><input type="radio"/> On</p> | |
| OK | Cancel |

NOTES:

- 1. If you select the “Off” status, the valve will be CLOSED in heating mode; it will be OPEN if you select “On”.
- 2. If the relative function is activated (paragraph 8.3), the value of these parameters will be stored in the memory and automatically reset after any possible voltage failure.

7.5. Setting solar system integration (Solar setting)

Function currently NOT AVAILABLE.

WARNING: this function is not currently available, so its setting must necessarily be “Without”.

7.6. Set the installation of a compatible Aermec accessory tank (DHW tank)

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). Make your selection, then press "OK" to confirm.

| | |
|--|---------------|
| Water tank | |
| <input checked="" type="radio"/> Without | |
| <input type="radio"/> With | |
| OK | Cancel |

NOTES:

1. If the compatible Aermec accessory tank is not installed, operating modes involving DHW production will NOT be available.
2. If the relative function is activated (paragraph 8.3), the value of these parameters will be stored in the memory and automatically reset after any possible voltage failure.

7.7. Setting the use of an external thermostat (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). Make your selection, then press "OK" to confirm.

| | |
|--|---------------|
| Thermostat | |
| <input checked="" type="radio"/> Without | |
| <input type="radio"/> Air | |
| <input type="radio"/> Air + hot water | |
| OK | Cancel |

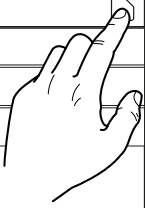
NOTES:

1. The available options depend on the settings associated with the production of domestic hot water (presence of a compatible Aermec accessory tank, etc.);
2. To change the thermostat settings, the unit must be switched off.
3. If the "Floor debug" or "Emergen. mode" function is active, the external thermostat cannot be used.
4. If the use of an external thermostat is activated, the commands for changing the operating mode or for switching the unit on/off from the control panel will not be available.
5. 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).
6. To pass from one setting value to the other, first of all select "Without".
7. If a unit on which the thermostat has been installed and set is disabled, the unit will automatically be switched OFF.
8. If the relative function is activated (paragraph 8.3), the value of these parameters will be stored in the memory and automatically reset after any possible voltage failure.

7.8. Setting an additional heat source (Other thermal)

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:

| Other thermal |
|--------------------------|
| Other thermal: With |
| T Other switch on: -20°C |
| Logic: 1 |



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 (not available for BHP units)

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 4.5), 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.
 2. If the priority is "DHW" (paragraph 4.5), 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.

NOTES:

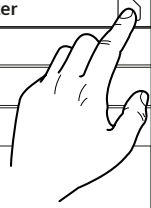
1. When this function is activated, it permits the activation of the replacement heat source (via a 230V ~ 50Hz signal to the "Other thermal" terminals) if the outside temperature falls below the value specified in the "Additional heat source temp." parameter or if "Emergency mode" is activated.
2. If 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).
3. 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).
4. The supplementary water probe must be installed downstream of the 3-way valve (for more information, refer to the installation manual).
5. The maximum value for the heating set-point is 60°C, whereas the set-point in DHW mode must be between "DHW tank T" (paragraph 5.2) + 5°C and 60°C.
6. If this function is used, no additional electric heaters can be enabled (optional elec. heater).
7. If the relative function is activated (paragraph 8.3), the value of these parameters will be stored in the memory and automatically reset after any possible voltage failure.
8. In the case of BHP, only Logic 1 and Logic 3 can be used. The additional water probe supplied must be replaced and positioned as shown in the Installation Manual.

7.9. Setting an additional heater (Optional E-heater)

For the HMI range:

Once you have entered the "Optional elec. heater" function, you can activate or deactivate any additional electric heater. This heater may be single-stage or dual-stage (in the case of a dual-stage model, you can decide whether or not to use both stages by specifying the number of heaters in the first parameter). You can also set the outdoor temperature threshold below which it will be activated in place of the heat pump. **WARNING: it is compulsory to select "Logic 1".** Press the top right button to save the data entered.

| Optional E Heater |
|----------------------|
| Optional E Heater: 1 |
| T Heater: -15°C |
| Logic 1 |



NOTES:

1. When this function is activated, it permits the activation of the supplementary heaters (via a 230V ~ 50Hz signal to the "KM1" and "KM2" terminals; in the case of a single heater, use the "KM1" terminals only) if the outside temperature falls below the value specified in the "Elec. heater T." parameter or if "Emergency mode" is activated.
2. The supplementary water probe must be installed downstream of the electric heater (for more information, refer to the installation manual).
3. If this function is used, no additional heat source can be enabled (Additional heat source).
4. The electric heater must be installed downstream of the 3-way valve (terminal side of the system).
5. The DHW request will be met by the electric heater in the compatible Aermec accessory tank, whereas the system request will be met by the electric heaters.
6. The electric heaters for the system, and the electric heater in the DHW tank available as an Aermec accessory, will never be activated simultaneously.
7. If the relative function is activated (paragraph 8.3), the value of these parameters will be stored in the memory and automatically reset after any possible voltage failure.

For the BHP range:

Once you have entered the "Optional elec. heater" function, you can activate or deactivate the electric heaters installed on the indoor unit, as per the following configurations:

- BHP060W and BHP060F = 1.5kW + 1.5kW
- BHP100W and BHP100F = 3.0kW + 3.0kW

The "Elec. heater T." parameter is used to set the outside temperature threshold below which the heaters should be activated in place of the heat pump. **WARNING: it is compulsory to select "Logic 1".** Press the top right button to save the data entered.

NOTES:

1. Once this function has been activated, it will give consent for the enabling of the electric heaters if the outside temperature falls below the value specified in the "Elec. heater T." parameter or if "Emergency mode" is activated.
2. If this function is used, no additional heat source can be enabled (Additional heat source).
3. The DHW request will be met by the electric heater in the compatible Aermec accessory tank, whereas the system request will be met by the electric heaters.
4. The electric heaters for the system, and the electric heater in the DHW tank available as an Aermec accessory, will never be activated simultaneously.
5. If the relative function is activated (paragraph 8.3), the value of these parameters will be stored in the memory and automatically reset after any possible voltage failure.

7.10. Setting the installation of the remote room temperature probe (Ambient sensor)

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). Select the required logic, then press “OK” to confirm.

| | |
|---|---------------|
| <p style="text-align: center;">Remote sensor</p> <p><input checked="" type="radio"/> Without</p> <p><input type="radio"/> With</p> | |
| OK | Cancel |

NOTES:

- 1. The “T-remote room” option in the “Ctrl.state” function will only be available if the room temperature sensor is enabled.
- 2. If the relative function is activated (paragraph 8.3), the value of these parameters will be stored in the memory and automatically reset after any possible voltage failure.

7.11. Setting the air purging function (Air removal)

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.


| | |
|--|---------------|
| <p style="text-align: center;">Air removal</p> <p><input checked="" type="radio"/> Off</p> <p><input type="radio"/> Air</p> <p><input type="radio"/> Water tank</p> | |
| OK | Cancel |

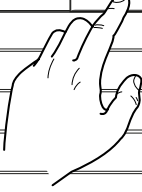
NOTES:

- 1. 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.
- 2. If the relative function is activated (paragraph 8.3), the value of these parameters will be stored in the memory and automatically reset after any possible voltage failure.

7.12. Setting the pre-heating procedure for radiant panels (Floor debug)

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 ΔT indicated, and kept there for the next period. This temperature increase and hold procedure will be repeated for the number of periods specified. At the end, press the button at the top right to start (or interrupt) the pre-heating cycle.

| | |
|---|--------------|
|  | Start |
| Floor debug: On | |
| Segments: 2 | |
| Period 1 temp: 25°C | |
| Segment time: 12H | |
| ΔT of segment: 5°C | |



NOTES:

- 1. During the execution of this function, all other functions are disabled.
- 2. You are advised to use this function to gradually activate the heating function via the radiant panels (this procedure should be carried out at the start of the season).
- 3. If the relative function is activated (paragraph 8.3), the value of these parameters will be stored in the memory and automatically reset after any possible voltage failure.

7.13. Activating the defrost cycle (Manual defrost)

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.

| | |
|--------------------------------------|---------------|
| Manual defrost | |
| <input checked="" type="radio"/> Off | |
| <input type="radio"/> On | |
| OK | Cancel |

NOTES:

- 1. This function can only be activated if the unit is switched Off.
- 2. The defrosting cycle is automatically interrupted if the defrosting temperature rises above 20°C, or in any case after 10 minutes.
- 3. If the relative function is activated (paragraph 8.3), the value of these parameters will be stored in the memory and automatically reset after any possible voltage failure.

7.14. Activating mode forcing (Force mode)

After accessing the "Force mode" function, you can activate or deactivate the command to execute the specific heating or cooling function. Make your selection, then press "OK" to confirm.

| | |
|--|---------------|
| <p style="text-align: center;">Force mode</p> <p><input checked="" type="radio"/> Off</p> <p><input type="radio"/> Force cool</p> <p><input type="radio"/> Force heat</p> | |
| OK | Cancel |

NOTES:

- 1. This function can only be activated if the unit is switched Off after a re-start.
- 2. The unit status (On/Off) cannot be modified while this function is in progress.
- 3. If the relative function is activated (paragraph 8.3), the value of these parameters will be stored in the memory and automatically reset after any possible voltage failure.

7.15. Activating auxiliary device management (Gate-Ctrl)

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.

| | |
|--|---------------|
| <p style="text-align: center;">Gate Ctrl.</p> <p><input checked="" type="radio"/> Off</p> <p><input type="radio"/> On</p> | |
| OK | Cancel |

NB:

- 1. This function must only be activated if an auxiliary device is installed; otherwise the unit will be blocked.
- 2. When this function is active, the unit will only receive operating consent when the circuit on the dedicated terminals (for more information, refer to the installation manual) is CLOSED. The display will show a message if you attempt to start an operation while the circuit is OPEN.
- 3. If the relative function is activated (paragraph 8.3), the value of these parameters will be stored in the memory and automatically reset after any possible voltage failure.

7.16. Setting of max. absorption (A/P limit)

Function currently NOT AVAILABLE.

WARNING: this function is not currently available, so its setting must necessarily be "Off".

7.17. 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.

| Address | |
|--|------------|
| Range: 1~153 | Default: 1 |
| <div>-</div> <div>1</div> <div>+</div> | |
| OK | Cancel |

NOTES:

1. 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).
2. If the relative function is activated (paragraph 8.3), the value of these parameters will be stored in the memory and automatically reset after any possible voltage failure.
3. At the first start-up, the address will be "1".
4. The address can be selected between 1~125 or 127~253.

7.18. Setting the refrigerant recovery function (Refri. recovery)

After accessing the "Refri. recovery" function, you can activate or deactivate the recovery and storage of refrigerant inside the unit.

WARNING: 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.

| Refri. recovery | |
|---|--------|
| <div><input checked="" type="checkbox"/> Off</div> <div><input type="checkbox"/> On</div> | |
| OK | Cancel |

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

7.19. Set the management logic for the compatible Aermec accessory tank heater (elec. 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.

| Tank heater | |
|--|--------|
| <div><input checked="" type="checkbox"/> Logic 1</div> <div><input type="checkbox"/> Logic 2</div> | |
| OK | Cancel |

NOTES:

1. If the compatible Aermec accessory tank is not installed, this function will not be available.
2. To change the thermostat settings, the unit must be switched off.
3. To ensure the maximum energy savings, you are advised to use Logic 1.

- 4. If the relative function is activated (paragraph 8.3), the value of these parameters will be stored in the memory and automatically reset after any possible voltage failure.
- 5. The default value is Tank heater: Logic 1.;

7.20. Set the memory contact function (Memory contact)

After accessing the “Memory contact” function, you can activate or deactivate the storage of the setting for the “External contact” function (refer to paragraph 7.15 for more information about this function).

| | |
|--------------------------------------|---------------|
| Gate-Ctrl Memory | |
| <input checked="" type="radio"/> Off | |
| <input type="radio"/> On | |
| OK | Cancel |

ATTENTION: this function must be used only by technical assistance.

7.21. Setting the maximum temperature for the DHW storage tank via heat pump only (T HP max)

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;

| | | |
|-----------------|---------------|---------------|
| T HP max | | |
| Range: 40–55°C | | Default: 50°C |
| - | 50°C | + |
| OK | Cancel | |

WARNING: this function must only be used by technical assistance personnel.

7.22. Setting the cooling operating time (Cool run time)

This parameter is used to stabilise the temperature of the terminals once the operating set-point has been reached. You are advised to set a higher value if the system terminals have considerable thermal inertia (e.g. radiant floors).

WARNING: this function must only be used by technical assistance and/or installation personnel.

7.23. Setting the heating operating time (Heat run time)

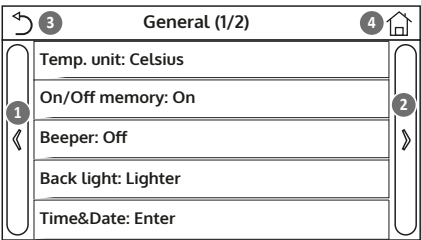
Refer to paragraph 7.21

8. MAIN MENU

8.1. Navigating the menu

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

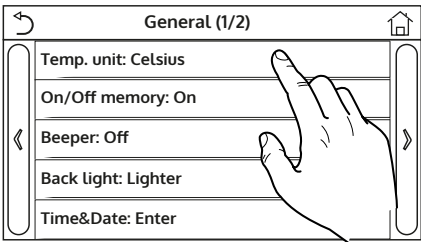
- (1) Move back to the previous page
- (2) Move on to the next page
- (3) Go back to the higher level menu
- (4) Go back to the main page (Home);
- To access a function, click on the text of that function.



NB: while navigating the menu pages, the current page of the selected menu will be displayed in the header (i.e. in the darker upper area).

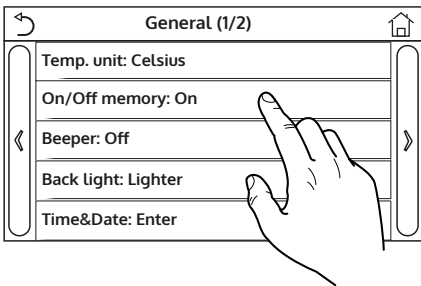
8.2. Setting the unit of measurement (Temp. unit)

Click on the "Temp. unit" label to change the unit of measurement used for temperature (Celsius or Fahrenheit).



8.3. Activating/deactivating the memory (On/off memory)

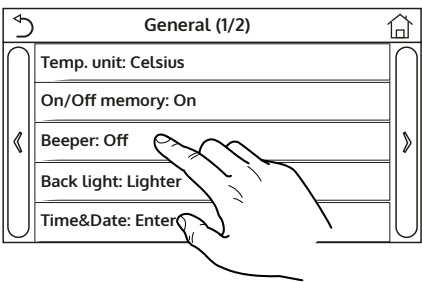
Click on the "On/off memory" label to activate or deactivate the saving of parameter/function settings.



NB: if this option is activated, after a power failure the unit will automatically resume the values set and saved in the memory.

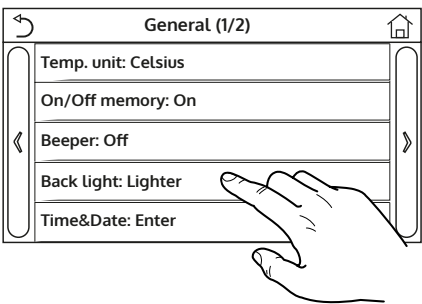
8.4. Activating/deactivating the sound (Beeper)

Click on the "Beeper" label to activate or deactivate the acoustic signal that identifies each touch on the screen.



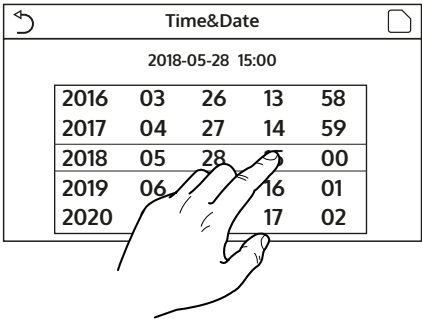
8.5. Setting the display lighting (Back light)

Click on the "Back light" label to define whether to use the "Lighted" logic (display always active) or "Energy save" logic (display switched off after 5 minutes of inactivity; press on the display to automatically switch it back on).



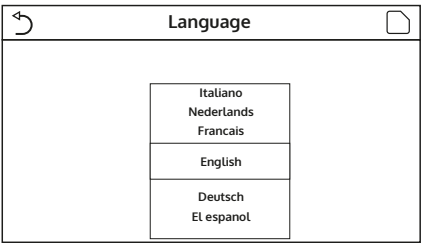
8.6. Setting the system date and time (Time&Date)

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.



8.7. Selecting the system language (Language)

After accessing the “Language” function, you can choose the system language by using your finger to scroll through the options. Make your selection, then press the button indicated to confirm.



8.8. Activating the WiFi (WiFi)

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

NOTES:

- 1. The EWPE SMART app is compatible with ANDROID and iOS systems.
- 2. The unit can only be managed via a WiFi or hotspot 4G signal.
- 3. The system is compatible with routers that use WEP cryptography.

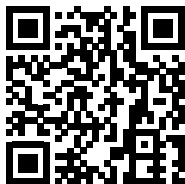
EWPE SMART



8.9. 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>



9. ALARM CODES

If error or alarm conditions arise during normal operation of the unit, faults will be indicated on the display by icons (❗); it will also be possible to obtain more information about active errors by checking the specific page in the "View" "Error" page menu (as specified in paragraph 6.3).

Possible errors (with relative codes) are as follows:

| Label Error | Description | Code |
|------------------|--|------|
| Ambient sensor | indicates a malfunction of the external air sensor | F4 |
| Defrost sensor | Indicates a malfunction of defrosting temperature sensor on the outdoor unit | d6 |
| Discharge sensor | Indicates a malfunction of the temperature sensor on compressor delivery | F7 |
| Suction sensor | Indicates a malfunction of the temperature sensor on compressor intake | F5 |
| Econ. in sens. | Indicates a malfunction of the temperature sensor at the economizer input | F2 |
| Econ. out sens. | Indicates a malfunction of the temperature sensor at the economizer output | F6 |
| Error fan | Indicates a malfunction affecting the fan on the outdoor unit | EF |
| High pressure | Indicates abnormal pressure on the high pressure side of the cooling circuit | E1 |
| Low pressure | Indicates abnormal pressure on the low pressure side of the cooling circuit | E3 |
| Hi-discharge | Indicates an abnormal temperature on the compressor discharge | E4 |
| Capacity DIP | Indicates a DIP SWITCH positioning error on the outdoor unit board | c5 |
| ODU-IDU Com. | Indicates a serial communication error between the AP1 and AP2 cards on the outdoor unit | e6 |
| Drive main com | Indicates a serial communication error between the AP2 and AP4 cards on the outdoor unit | P6 |
| IDU Com. | Indicates a serial communication error between the AP1 cards and flush panel (display) | E6 |
| HI-pre. sens. | Indicates a fault on the high pressure transducer | Fc |
| Temp HELW | Indicates a fault on the temperature sensor at heat exchanger plate outlet (water side) | F9 |
| 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 | dH |
| Temp HEEW | Indicates a fault on the temperature sensor at heat exchanger plate inlet (water side) | — |
| HI-pre. sens. | Indicates a fault on the temperature sensor located on the accessory DHW storage tank | FE |
| T-remote room | indicates a malfunction of the ambient air sensor supplied with the unit | F3 |
| HP-Water Switch | Indicates an alarm generated by the flow switch at the input to the outdoor unit (water side) | Ec |
| Auxi. heater 1 | Indicates a malfunction affecting the auxiliary resistance 1 (KM1) | EH |
| Auxi. heater 2 | Indicates a malfunction affecting the auxiliary resistance 2 (KM2) | EH |
| Auxi. -WTH | Indicates a malfunction affecting the resistance placed in the accessory DHW storage tank (KM3) | eh |
| DC under vol. | Indicates an error caused by low voltage on the DC bus or an error caused by a voltage drop | PL |
| DC over vol. | Indicates an error caused by high voltage on the DC bus | PH |
| AC curr. pro. | Indicates an abnormal value for AC current (AC protection) | PA |
| IPM defective | Indicates an operating fault on the IPM module (inverter power module) | H5 |
| PFC defective | Indicates an operating fault on the PFC module (power correction module) | Hc |
| Start failure | Indicates a fault in the unit's start-up phase | Lc |
| Phase loss | Indicates a problem associated with the loss or unbalance of voltage phases | Ld |
| Driver Com. | Indicates a communication error with the unit's drivers | P6 |
| Driver reset | Indicates a reset made on the unit's drivers | P0 |
| Com. over-cur. | Indicates that an overcurrent on the compressor has been detected | P5 |
| Overspeed | Indicates that an incorrect compressor speed has been detected | LF |
| Current sen. | Indicates an abnormal value for the current sensor | Pc |
| Desynchronize | Indicates that the compressor is out of sync | H7 |

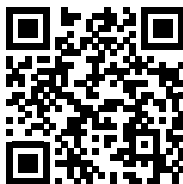
| Label Error | Description | Code |
|--------------------|--|-------------|
| Comp. stalling | Indicates that the compressor is currently stalled | LE |
| Overtemp. mod. | Indicates that an overtemperature has been detected on a component (heatsink, IPM or PFC) | P8 |
| T mod. sensor | Indicates that an error has been detected on the temperature sensor for a component (heatsink, IPM or PFC) | P7 |
| Charge circuit | Indicates an error on the charging circuit | Pu |
| AC voltage | Indicates a power supply error | PP |
| Temp driver | Indicates an error affecting the external air sensor | PF |
| AC contactor | Indicates a protection status on the power supply | P9 |
| Temp. drift | Indicates a protection status for drift temperature | PE |
| Sensor con. | Indicates a protection status for the sensor monitoring the phases | Pd |
| ODU Com. | Indicates a serial communication error between the display and the outdoor unit | E6 |
| Temp RGL | Indicates an error affecting the temperature sensor on the cooling circuit gas line | F0 |
| Temp RLL | Indicates an error affecting the temperature sensor on the cooling circuit fluid line | F1 |

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