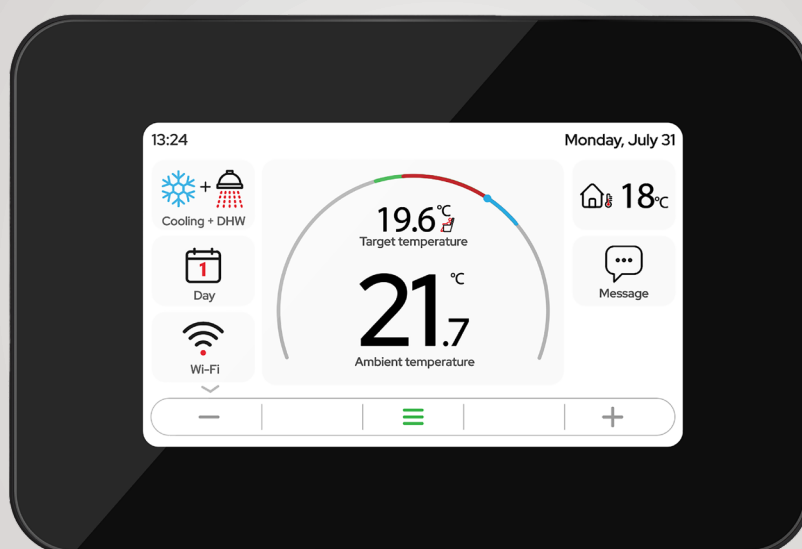



Controller manual

Model

e-PRO



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Rev	Date	Edited	Approved	Notes
Catalogo / Catalogue / Katalog / Catalogue MCO02920100000_00			Serie / Series / Serie / Serie / Série e-PRO	
<p>The electrical and electronic products and any waste should not be disposed of with normal household waste, but disposed of according to WEEE law in accordance with the directives 2012/19/EU and 2003/108/EC as amended, inquiring thereof at the place of residence or with the retailer in the case where the product is replaced with a similar one.</p>				

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1. PURPOSE AND CONTENTS OF THE MANUAL

The purpose of the remote control manual is to provide the essential information necessary for the correct use of all the functions of the machine, in particular, it provides the essential information for the setup of unit control. The informations contained in this manual are written for the installer and for the user who uses the machine: the user, even if he does not have specific information, will find in these pages the indications that will allow him to use it effectively. It is recommended that the user carefully follows the instructions given in this manual, especially the safety instructions.

The manual describes the remote control at the time it was commercialised; the Company reserves the right to make changes and technological improvements to the product and it is not obliged to update manual of previous versions. Besides, the Company declines all responsibility for any errors contained in the manual, if due to printing or transcription errors.

Be sure to use the manual, in case of updates or doubts contact the company.





1.1 HOW TO KEEP THE MANUAL

The manual must always be present with the machine to which it refers. It must be placed in a safe place and easily accessible to the operator, who must necessarily consult it in case of doubt about the use of the control.

Any updates to the remote control programme should be installed when available.

The company remains available to provide further information upon request regarding this manual, as well as information concerning the use and maintenance of its machines.

1.2 GRAPHIC SYMBOLS USED IN THE MANUAL

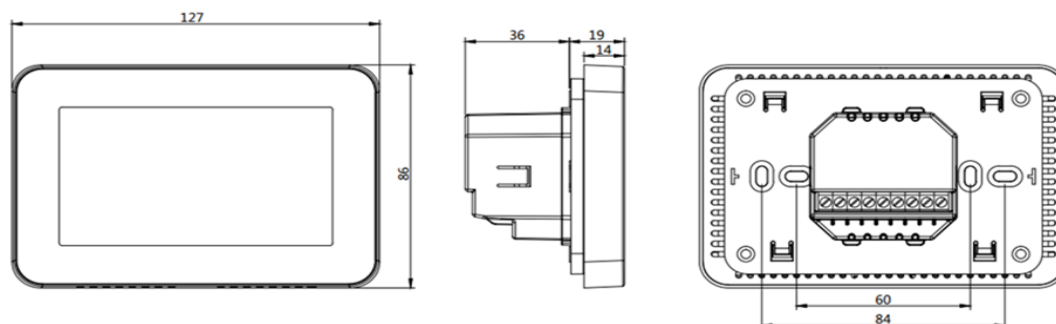
	Indicates prohibited operations.
	Indicates operations that can be dangerous for people and/or for the correct operation of the machine.
	Indicates operations where there is a risk of electrocution due to dangerous electrical voltage.
	Indicates important information that the operator has to follow in order to guarantee the correct operation of the unit in complete safety. Also indicates some general information.

2. PERMITTED USED

- The company excludes all contractual and extra-contractual liability for damage caused to persons, animals or things, due to installation, adjustment and maintenance errors, improper use or partial or superficial reading of the information contained in this manual.
- This device is designed for a specific list of pumps for heating and/or cooling of water. Any other use not expressly authorised by the manufacturer is considered improper and therefore not allowed.
- Modification of the operating logic and/or control parameters must be executed by experienced and qualified personnel. Access to the electrical panel and the connection of external devices are only permitted to qualified personnel.
- The appliance may be used by children at least 8 years old and by persons with reduced physical, sensory or mental capabilities or without experience or the necessary knowledge as long as they are supervised or after they themselves have received instructions on the safe use of the appliance and understand the relevant dangers. Children must not play with the appliance.
- Direct interaction with the unit by personnel with electrically controlled medical devices, such as pacemakers, is prohibited, because it may cause harmful interference. It is recommended to maintain an appropriate distance from the installation site of the unit, as indicated by the medical system used.

3. INTRODUCTION

The e-Pro device is a remote control for heat pumps with a room thermostat function. e-Pro is designed to efficiently manage heating, cooling and domestic hot water (DHW) production in residential and commercial sites. This manual provides instructions on how to install, configure and use the device.



4. TECHNICAL SPECIFICATIONS

- Dimensions: 96 x 86 x max 44 mm
- Working temperature: -5°C to 60°C
- Ambient humidity: 0% to 80% (non condensing)

5. NORMATIVE REFERENCES

The remote control was designed in accordance with the following standards:

- ETSI EN 301 489-1 V2.2.3 (2019-11);
- ETSI EN 301 489-17 V3.3.1 (2024-09);
- ETSI EN 300 328 V2.2.2;
- EN 60730-1:2013, AMD1:2015, AMD2:2020;
- EN 60730-2-9:2010;
- EN 61000-6-3:2007/A1:2011/AC:2012.

To download the Declaration of Conformity, you must register at www.maxa.it by accessing the reserved area.

6. MAIN FEATURES

- **Colour LCD display:** The device has a 4-inch LCD colour graphic display with touch technology.
- **Wi-Fi connection:** It supports Wi-Fi connection with a router in the 2.4GHz band and direct connection to the Internet.
- **Operating modes:** It includes the heat pump control page and the chronothermostat page.
- **Energy saving:** Advanced energy-saving functions such as backlight intensity reduction and intelligent room temperature management.

7. INSTALLATION

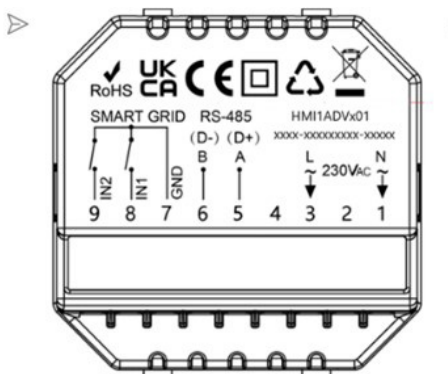
Read the paragraph on the electrical connection before switching on the chronothermostat.

General Requirements:

- **The control is suitable for wall mounting according to the 503 standard. Indoor use.**
- **Main power supply:** 100- 240Vac, 50/60Hz.
- **Power consumption:** <=2W with Wi-Fi active, ~1W in standby mode.

Applying light pressure, detach the screen part from the part to be inserted into the 503 housing.

7.1 ELECTRICAL CONNECTION



Electrical contacts: The device requires at least 4 electrical connections for proper functioning.

- Connection to the main power supply. 100-240 Vac 50/60 Hz (contacts: 1: N, 3: L).
- Low voltage RS485 connection: It uses the low-voltage Mod-Bus protocol for communication with the dedicated heat pump (contacts 5:D+ and 6:D-).
- Optional low voltage connections for intelligent energy saving services (contacts 7: GND, 8:IN1 and 9:IN2).

Two connection cables are required between the chiller or heat pump unit and the remote control.

- Cable suitable for RS485 networks:
 - ◇ Cable with 2 twisted and shielded pairs 2x0,3 mmq (minimum section), characteristic impedance 120Ω.
 - ◇ Maximum length is 1000 m (standard transmission speed 9600 baud).
 - ◇ Lay the serial line separately from other cables, especially power cables, and away from cables or devices that may induce electromagnetic interference.
 - ◇ Do not use the shield as a GND cable.
- 2X1 mmq cable for 230Vac power supply.



ATTENTION:

Do not confuse and do not connect the GND contact with the system's EARTH.

Do not connect electrical cables to contacts number 4 and number 2.

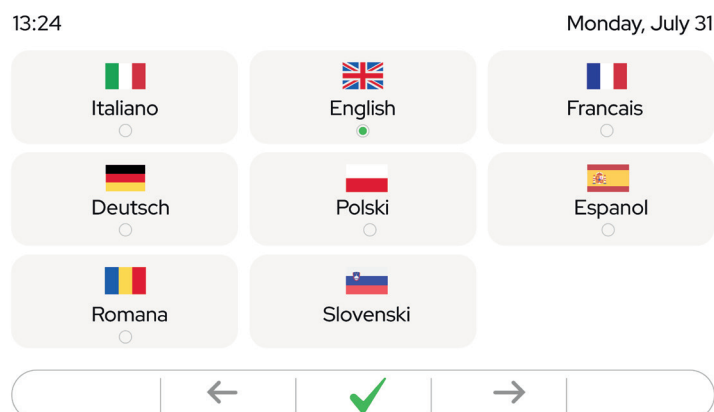
The cable ducts used for data communication (Modbus) must be separate from those for mains voltage.

8. INITIAL CONFIGURATION: (first start-up)

The following screens follow the plausible sequence from the first start-up of the device to its successful installation.

8.1 SCREEN: LANGUAGE SELECTION

Home/menu/settings/Languages



At first start-up, the device will ask you to select your preferred language, after which it is suggested to connect the device to the Internet using the Wi-Fi radio.

If the Wi-Fi network is not available, please set the date and time for correct operation.

8.1.1 SCREEN NAVIGATION

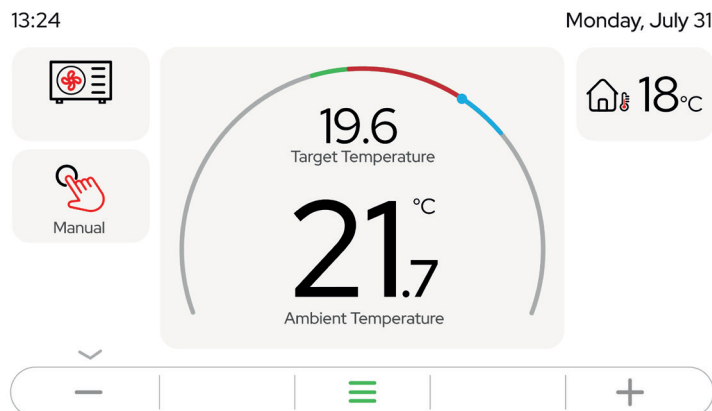
On any screen of the chronothermostat, it is possible to select and interact with the 'objects' using direct touch or the arrow keys at the bottom of the screen to select them.

- **Grey ring:** it moves in the direction selected by the arrow key and cyclically highlights all active objects on the screen.
- **Green ring:** it appears by briefly clicking on the confirmation tick (green tick key is between the arrow keys at the bottom of the screen) or directly on the object highlighted by the grey ring and indicates that the option has been activated or the action has been successful.
- **Blue ring:** it may appear, momentarily in place of the green ring, depending on the object selected and indicates that the function is running, you must wait a few seconds for the result.
- **Red ring:** it may appear, usually after the blue ring, and indicates that the function was unsuccessful and you should wait a few seconds and possibly try again.

In the language selection screen, activate the green ring on the language associated with the flag to configure the language of the chronothermostat.

8.2 'HOME' SCREEN: CHRONOTHERMOSTAT

Home

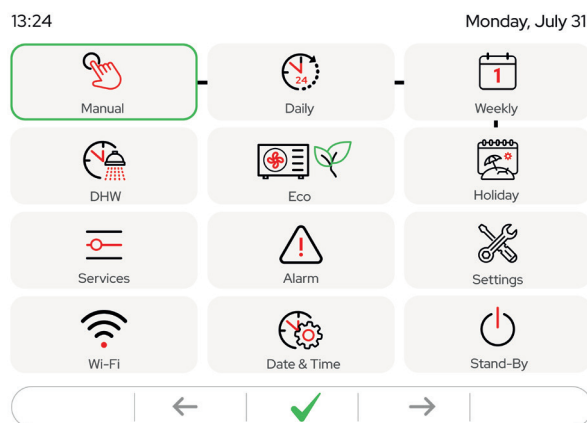


8.2.1 NAVIGATION IN THE MAIN 'HOME' SCREEN OF THE CHRONOTHERMOSTAT

- When switched on for the first time, the chronothermostat is set to manual operation mode.
- The home screen of the device in thermostat mode is designed to provide quick access to key information and functions.
- **Date and time:** This shows the current date and time.
- **Temperature:** The target temperature and actual room temperature are displayed in the centre of the screen. Using the '+' and '-' keys:
 - ◊ **In manual mode**, the newly set room temperature remains indefinitely active until the next power interruption. Therefore, it is advisable to store the new preferred value in the Eco or Comfort target.
 - ◊ **In daily or weekly programming mode**, changing the desired room temperature will activate the 'i-Feel' program (see chapter on Functions: i-Feel).
- **Heat pump status and outside temperature:** if the chronothermostat is connected to the heat pump, the operating status of the heat pump can be read in the top left corner of the screen and the outside temperature in the top right corner.
- The left-hand column displays the various services active in the device in time sequence.
- Pressing and holding down the (3-line) main menu key for 8 seconds will **lock** the screen from occasional input, press for another 8 seconds to unlock it.
- **Main Menu:** The central three-line key (between the '+' and '-' keys) provides access to the main menu.

8.3 SCREEN: MAIN MENU

Home/menu



8.3.1 SCREEN NAVIGATION: MAIN MENU

The main menu screen allows you to refine the functions of the chronothermostat and set the target temperature of the room where the chronothermostat is installed.

8.3.2 OPERATING MODES OF THE CHRONOTHERMOSTAT

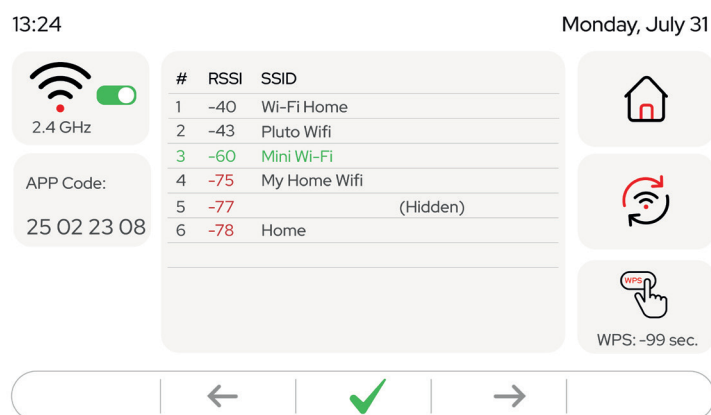
- **Manual Mode.** It allows you to freely set and change the temperature by defining the ECO target and Comfort target.
- **Daily Mode.** It allows the temperature or several temperatures to be programmed depending on the time of day, valid every day of the week.
- **Weekly Mode.** It allows different temperatures to be programmed for each day of the week and up to 7 daily variations.
- **Holiday Mode.** Holiday mode puts the device on standby or maintains a minimum temperature to prevent freezing of the heating pipes.

8.3.3 FURTHER FUNCTIONS

- **Date and Time.** It allows the manual setting of date and time and time zone.
- **Wi-Fi.** It allows the chronothermostat to be connected to the internet via a built-in 2.4 GHz band Wi-Fi radio (b/g/n).
- **D.H.W. Domestic Hot Water.** It allows you to set the desired temperature for domestic water. Two temperatures can be set, Economy and Comfort temperature. The possibility of setting a lower temperature (ECO) is offered because the chronothermostat saves energy by facilitating the almost instantaneous exchange of targets set manually or by programming.
- **Eco or Comfort.** It allows the immediate exchange of all stored heat pump targets to save energy (eco) or boost comfort.
- **Alarms.** It allows you to examine whether there are active or stored alarms in the heat pump.
- **DHW settings.** It enables the activation of accessory functions useful for the perfect maintenance and operation of the heat pump.
- **Stand-By.** It allows you to switch off (deep standby) the chronothermostat and examine the energy performance of your system.
- **Services:** Various services and functions can be activated.

8.4 SCREEN: WI-FI CONNECTION

Home/menu/Wi-Fi



8.4.1 SCREEN NAVIGATION: WI-FI

This screen can be accessed from the main options menu. The Wi-Fi screen allows you to scan the available Wi-Fi networks and select the desired one. It displays signal strength and connection status.

Operating modes:

1. **Activate the Wi-Fi indicator:** selector switch (slider) in the ON position (green tab visible).
2. The matrix will be populated with the names of available Wi-Fi networks sorted by signal strength received. If the chronothermostat is already connected to a network it will be highlighted in green, it is good that the Wi-Fi signal is above -75 dBm (RSSI) to guarantee all connected services.
3. **APP code.** If the remote control has successfully connected to the Internet, an 'APP code' is displayed, which must be entered in the application installed on the mobile phone in order to finalise the connection.
4. Once the connection procedure is complete, an icon with the Wi-Fi symbol and a green dot is added to the home screen if the connection has reached the cloud services and the APP can be used.

Mode for connecting to the Wi-Fi network manually:

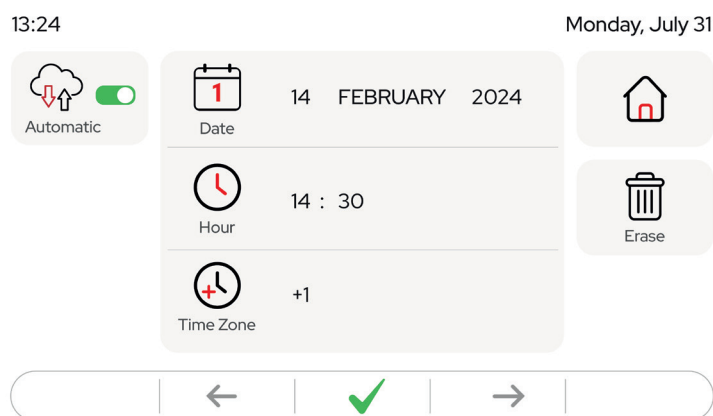
5. Check Visibility: If your network is not listed, scroll through the list by dragging it upwards or refresh the scan by pressing the centre key (Wi-Fi icon with circled arrows).
6. Select Network: Using the arrow keys, locate and select your Wi-Fi network from the list displayed on the chronothermostat.
7. Enter Password: Once you have selected the network with a grey ring, confirm your choice by pressing the central green confirmation key again.
8. A keyboard appears on the screen. You will be prompted to enter the access password of the selected Wi-Fi network.

Automatic Wi-Fi network connection mode

- Look for the WPS button in your router, with 2,4 GHz band enabled, that allows the chronothermostat to connect automatically (without knowing the Wi-Fi password).
- When activating the WPS service on the router, a LED on the router usually lights up or flashes in a particular way only when WPS has been activated.
- WPS on the chronothermostat. Activate WPS on the chronothermostat and then activate the router's WPS. A blue ring and countdown is visible in the chronothermostat while the WPS process is running. The ring will turn red if the connection procedure fails.

8.5 SCREEN: DATE & TIME

Home/menu/date & time



8.5.1 SCREEN NAVIGATION: DATE & TIME

The screen allows you to set the date and time of the chronothermostat. If the remote control has already been connected to the internet, the 'Automatic' slider remains activated because the exact time is detected by the internet. You can adjust the time zone appropriately to manually switch to **daylight saving time** and match the chronothermostat's clock to your current time.

Screen functions:

Select:

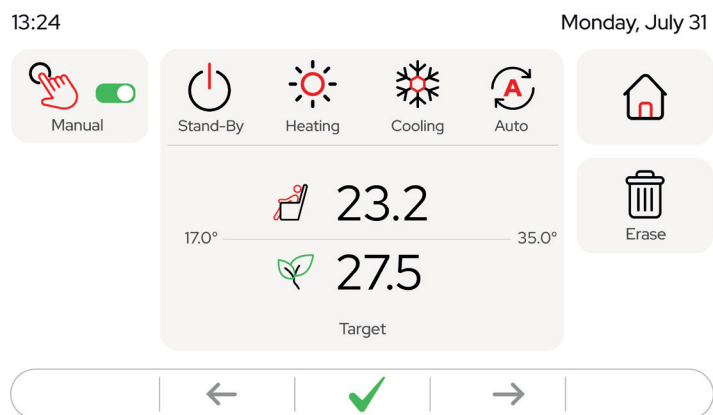
- **Date:** it allows you to set the current date (not necessary if connected to the Internet).
- **Time:** it allows you to set the current time (not necessary if connected to the Internet).
- **Time Zone:** it allows you to select the time zone consistent with the installation location and set the daylight saving time if applicable.

Store the set variations by tapping the confirmation key.

Remote control uses UTC as time reference.

8.6 SCREEN: MANUAL MODE WITH ROOM THERMOSTAT ACTIVE

Home/menu/manual



8.6.1 SCREEN NAVIGATION: MANUAL MODE

The screen allows you to set the desired operating mode (season) and set the desired temperatures according to the season (heating or cooling). In addition, two separate temperatures can be set for each mode, defined as eco and comfort, in order to allow optimisation and energy savings. It is important to define the four temperatures carefully, as they will also be used in cases of programmed operation (daily/weekly) and represented by the corresponding icons.

Screen functions:

Activate manual mode: selector switch (slider) in ON position (green).
In the first line, select the **icon** corresponding to the desired mode.

- **Standby**, room air conditioning is suspended indefinitely.
- **Heating**, activates heating mode.
- **Cooling**, activates cooling mode.
- **Auto**, the chronothermostat maintains the room temperature between the minimum value (corresponding to the winter setting) and the maximum value (corresponding to the summer setting).

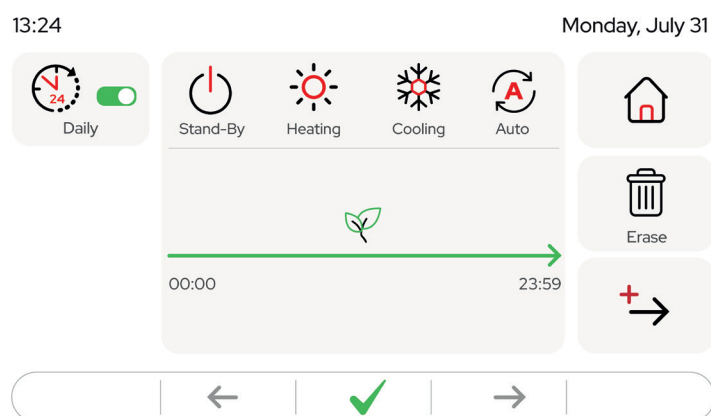
Home key, leaves the screen and goes back to the active home screen.
'Delete' key, resets the initial temperature of the active mode.

The '+' and '-' keys are used to change the value highlighted with the grey outline. When the desired value has been reached, proceed to confirmation using the confirm button (outline turns green).

The operating modes: manual, daily, weekly or holiday are mutually exclusive, so activating one deactivates the others.

8.7 SCREEN: DAILY MODE

Home/menu/daily



8.7.1 SCREEN NAVIGATION: DAILY SCHEDULING

The screen allows you to program different time slots over 24 hours, with a minimum interval of 15 minutes, at which you can set the desired pre-set from those set in the 'manual mode' screen (comfort, eco, stand-by). Daily timer scheduling is available for both heating and cooling and can have separate settings. In this operating mode, all days of the week will follow the same schedule.

Screen functions:

Activate manual mode: selector switch (slider) in ON position (green).
In the first line, select the **icon** corresponding to the desired mode.

- **Standby**: disables room temperature control.
- **Heating**: displays the heating scheduling time bar.
- **Cooling**: displays the cooling scheduling time bar.
- **Auto**: displays both scheduling bars, keeping the room temperature between the set heating and cooling thresholds, according to the set schedules.

Home key, leaves the screen and goes back to the active home screen.

'Delete' key, allows the deletion of deemed superfluous or unwanted scheduling.

+ arrow key, to add a new slot to the schedule.

The grey arrow keys allow you to navigate, in rotation, through the objects on the screen. Use the tick key to execute the task or store the selected value.

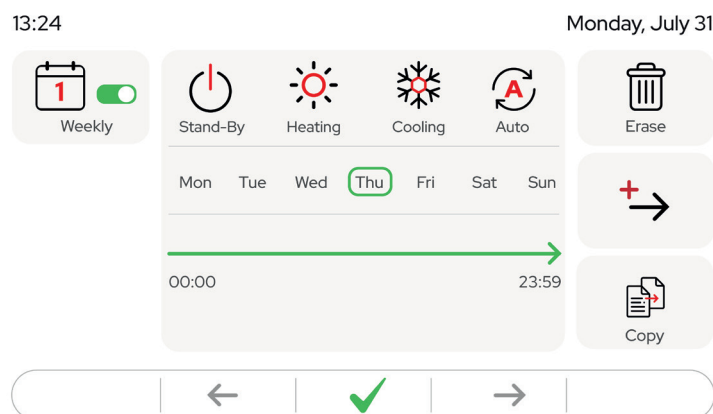
"SHORTCUT": if the comfort or eco icon is held down for a few seconds, the corresponding pre-set value is displayed and can be changed.

The '+' and '-' keys are used to change the value highlighted with the grey outline. When the desired value has been reached, proceed to confirmation using the confirm button (outline turns green).

The operating modes: manual, daily, weekly or holiday are mutually exclusive, so activating one with the selector switch deactivates the others.

8.8 SCREEN: WEEKLY MODE

Home/menu/weekly



8.8.1 SCREEN NAVIGATION: WEEKLY SCHEDULING

The screen allows you to schedule, over the course of 24 hours, different days of the week, different time slots, with a minimum interval of 15 minutes, at which you can set the desired pre-set from those set in the 'manual mode' screen (comfort, eco, stand-by). Weekly scheduling is available for both heating and cooling and can have separate settings.

Screen functions:

Activate the weekly mode: selector switch (slider) in the ON position (green).

In the first line, select **the icon** corresponding to the desired mode.

- **Standby:** disables room temperature control.
- **Heating:** displays the heating scheduling time bar.
- **Cooling:** displays the cooling scheduling time bar.
- **Auto:** displays both scheduling bars, keeping the room temperature between the set heating and cooling thresholds, according to the set schedules.

Select the day of the week that you want to program (grey contour), once the desired day has been activated (green contour), you can proceed with programming.

'Delete' key allows the deletion of deemed superfluous or unwanted programming.

+ arrow key, to add a new slot to the day's schedule.

Copy key, allows you to quickly copy the current schedule to the next day.

The grey arrow keys allow you to navigate, in rotation, through the objects on the screen. Use the tick key to execute the task or store the selected value.

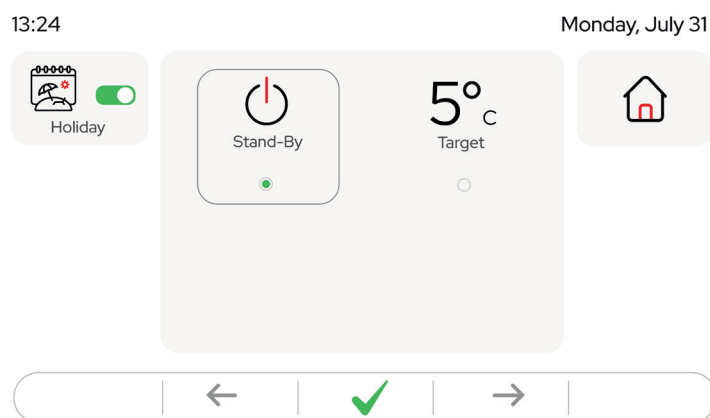
"SHORTCUT": if the comfort or eco icon is held down for a few seconds, the corresponding pre-set value is displayed and can be changed.

The '+' and '-' keys are used to change the value highlighted with the grey outline. When the desired value has been reached, proceed to confirmation using the confirm button (outline turns green).

The operating modes: manual, daily, weekly or holiday are mutually exclusive, so activating one with the selector switch deactivates the others

8.9 SCREEN: HOLIDAY

Home/menu/holiday



8.9.1 SCREEN NAVIGATION: HOLIDAY

The screen allows you to switch off the heat pump and possibly set a minimum temperature to be guaranteed in the room.

Screen functions:

Activate holiday mode: selector switch (slider) in ON position (green).

Select the icon corresponding to the desired mode.

- **Standby:** room air conditioning is suspended.
- **5°C,** activates the standby mode of the heat pump. The value indicated represents the safety ambient temperature. The heat pump will switch on below the indicated threshold. The '+' and '-' keys allow you to change the value in the range between 4 : 9 °C.

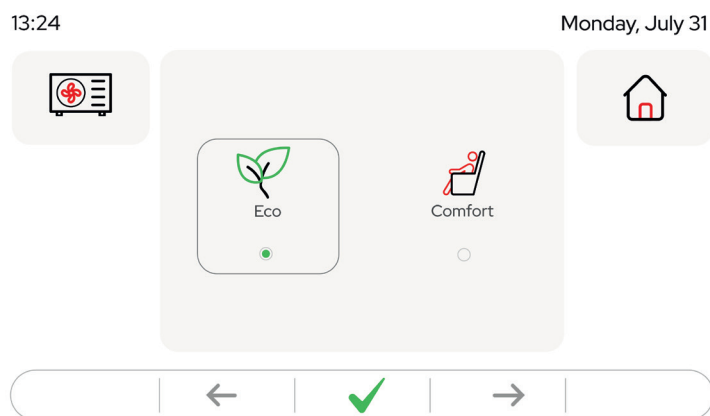
Use the tick key to execute the task or store the selected value.

Use the home key to leave the screen and go back to the active home screen.

The operating modes: manual, daily, weekly or holiday are mutually exclusive, so activating one with the selector switch deactivates the others.

8.9.2 SCREEN: ECO OR COMFORT

Home/menu/Eco or Comfort



8.9.3 SCREEN NAVIGATION: ECO OR COMFORT

The screen allows a choice between eco and comfort room temperatures. The relevant values can be detected and changed from the manual menu.

The choice between room temperature eco or comfort also consistently involves the setpoint temperatures of the heat pump system water.

Screen functions:

Select the icon corresponding to the desired setting.

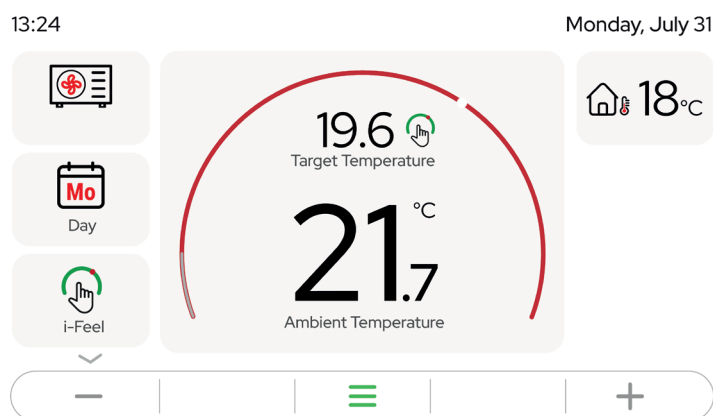
- **Eco Mode,** if activated, Eco values are set in the heat pump.
- **Comfort Mode,** if activated, the Comfort values are set in the heat pump.

Confirm with tick (or green ring).

Home key, leaves the screen and goes back to the active home screen.

8.10 FUNCTION: I-FEEL

Home (active room thermostat mode)



8.10.1 NAVIGATING THROUGH THE FUNCTION: "I-FEEL"

The 'i-Feel' function, lasting 3 hours, can only be used if the scheduling (both daily and weekly) is active, and allows the desired room temperature to be temporarily changed without having to change the scheduling itself.

Screen functions:

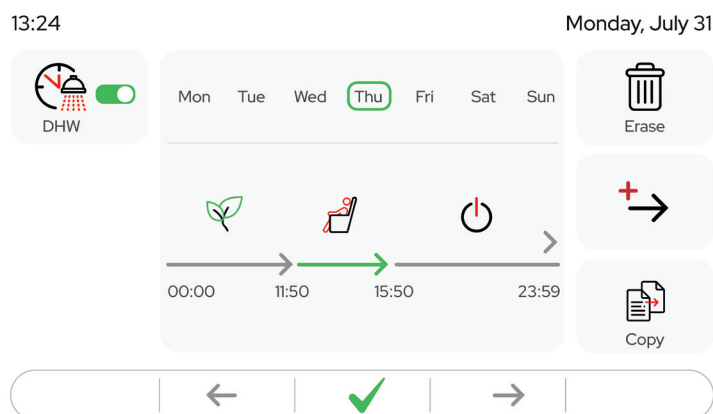
Press the '+' key to raise the desired room temperature.

Press the '-' key to lower the desired room temperature.

- You can cancel 'i-Feel' by setting the room temperature to the original value or by clicking the i-Feel icon for 3 seconds.
- The 'i-Feel' icon (stylised hand) appears next to the newly set temperature.
- The arc turns red, signalling that the 'i-Feel' function is active.
- The arc turns cyan if you request cooling.
- The red arc gradually decreases with the duration of the function.
- Once the 3 hours have elapsed, the schedule is re-established.

8.11 SCREEN: D.H.W. PROGRAMMING (DOMESTIC HOT WATER PROGRAMMING)

Home/menu/D.H.W.



8.11.1 SCREEN NAVIGATION: SCHEDULING OF DOMESTIC HOT WATER

The screen allows you to program, for each day of the week, different time slots according to which the domestic hot water service is available based on the three predefined values: Eco, Comfort or stand-by.

Screen functions:

Activate D.H.W. scheduling: selector switch (slider) in ON position (green).

Select the day of the week you wish to program (grey outline).

Once the desired day (green outline) has been activated, you can proceed with programming.

'Delete' key allows the deletion of deemed superfluous or unwanted programming.

+ arrow key, to add a new slot to the time schedule.

Copy key, allows you to copy the selected schedule to the next day.

The grey arrow keys allow you to navigate, in rotation, through the objects on the screen. Use the tick key to execute the task or store the selected value.

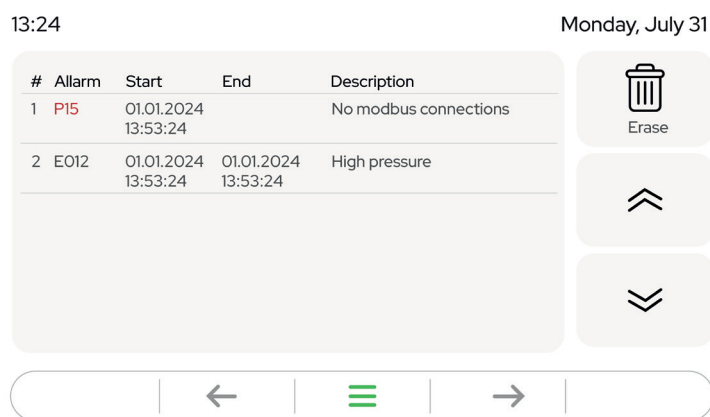
"SHORTCUT": if the selected comfort or eco icon is held down for a few seconds, the corresponding pre-set value is displayed and can be changed.

The '+' and '-' keys are used to change the value highlighted with the grey outline. When the desired value has been reached, proceed to confirmation using the confirm button (outline turns green).

The 'A.C.S. Programming' icon appears in the left column of the home screen when the service is activated. (N.B. The A.C.S. icon on the control home screen must be active).

8.12 SCREEN: ALARMS

Home/menu/alarms



8.12.1 SCREEN NAVIGATION: ALARMS

The alarm screen provides a list of errors or abnormal conditions detected by the system, allowing the user to monitor the status of the heat pump.

Alarms in progress (active) are highlighted in red. A 'delete' button is available to reset stored alarms.

- **Time and date:** Displayed at the top of the screen for precise time references.
- **Alarms table:** It contains a detailed list of recorded events:

→ **(Alarm number)** Progressive event identifier.

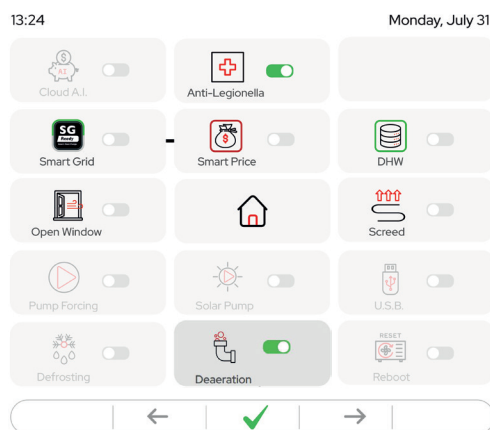
Alarm → **(Error code)** Unique code identifying the type of problem.

Start → Date and time when the alarm occurred.

End → Alarm resolution date and time (if available).

Description → Brief explanation of the fault (in English only).

8.12.2 SCREEN NAVIGATION: SERVICES



8.12.3 SCREEN NAVIGATION: SERVICES

The services menu includes a number of functions that can be activated via selectors (sliders), which turn green when set to ON. Each enabled function, when activated, can be represented in the left column of the home screen. Depending on the configuration of the heat pump, some functions may not be activated and are therefore obscured, as are functions subject to a maintenance password.

- **A.I. Cloud (Artificial Intelligence Cloud).** It allows the cloud system to use artificial intelligence algorithms to optimise heat pump regulation. Ideal for improved energy efficiency and automatic adaptation to environmental conditions. (NON-OPERATIONAL FUNCTION).
- **Anti-Legionella.** It requires the activation of a D.H.W. tank disinfection cycle.
- **Smart Grid.** It allows integration with smart grid systems for optimising consumption based on the availability of renewable energy. If active, the device can adapt to network signals via the IN1, IN2 inputs of the terminal block. If the slider is deactivated, the S.G. signal can be connected directly to the heat pump.
- **Dynamic Price (Energy Price Management).** It allows the system to modulate consumption according to energy prices. It needs the IN2, IN1 connections of the chronothermostat.
- **Smart D.H.W. (Domestic Hot Water).** It allows the storage of domestic hot water when the cost of electricity is advantageous or free. It needs the IN2 connections of the chronothermostat.
- **Open Window.** If activated, it can temporarily switch off the heating when the timer thermostat detects a rapid temperature change (e.g. open window). Useful to avoid wasting energy.
- **Screed.** When activated, it forces the heat pump to heat continuously for a week. Function designed for drying the screed during the installation of a new radiant heating system. Use the + and - keys on the home screen to adjust the water temperature, to switch the slider to OFF. When the 'Screed' function is active, the room thermostat function is automatically inhibited.
- **Circulator (Forced water pump).** It allows you to force the activation of any booster circulator (if correctly set and connected) in the hydraulic system.
- **U.S.B.** It enables reading/writing from a USB device connected to the heat pump. The function is useful for firmware updates or reading diagnostic data from the heat pump.

Insert a USB stick (max. 8 Gbyte, formatted FAT32) into the appropriate connector on the heat pump. In the USB icon:

a) if the USB stick is empty, activating the slider on the icon will display number 1 (a possible option) and the ring will turn green. When the ring turns orange:

- ◊ **clicking once** exports parameters and alarm history to the USB stick

b) if the USB stick only contains one file (parameters or firmware) for the heat pump, activating the slider on the icon will display number 2 (two possible actions) inside the green ring. When the ring turns orange:

- ◊ **clicking once** exports parameters and alarm history to the USB stick
- ◊ **clicking twice** updates the heat pump according to the type of file on the USB stick

c) if the USB stick contains two files (parameters and firmware) for the heat pump, activating the slider on the icon will display number 3 (three possible actions) inside the green ring. When the ring turns orange:

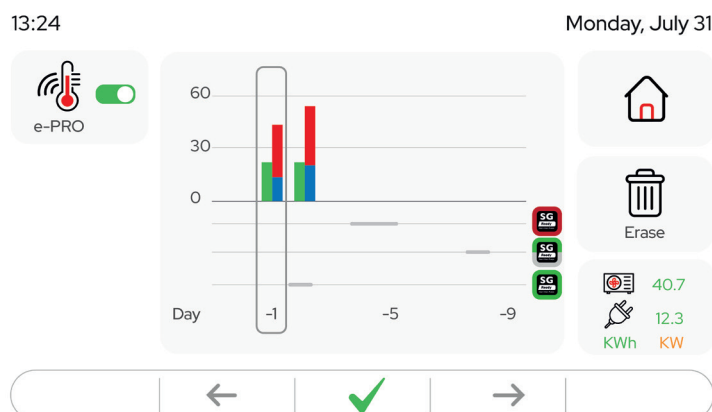
- ◊ **clicking once** exports parameters and alarm history to the USB stick
- ◊ **clicking twice** updates the heat pump parameters
- ◊ **clicking 3 times** updates the heat pump firmware

For example, touching the orange ring once will display 1 and after five seconds will download the parameter files from the heat pump into the pen memory and for all cases (a,b,c). Each action takes a few seconds to execute. A progressive number is displayed during processing.

- **Defrost.** It forces a defrosting cycle of the heat pump.
- **Venting.** If activated, when the heat pump is in stand-by mode (OFF), it forces the heat pump's on-board circulator to run for five minutes. The function is useful to facilitate the venting of any air bubbles from the hydraulic circuit.

8.13 SCREEN: STAND-BY

Home/menu/stand-by



8.13.1 SCREEN NAVIGATION: STAND-BY

The screen allows both the heat pump and the chronothermostat to be switched off at the same time. The latest energy information and the status of the IN1 and IN2 inputs, if any, are also displayed.

Screen functions:

By using the appropriate **selector** switch (slider), normally set to the colour green which means 'active', the chronothermostat and heat pump are switched off, turning grey. The remote control screen switches off completely in a few seconds.

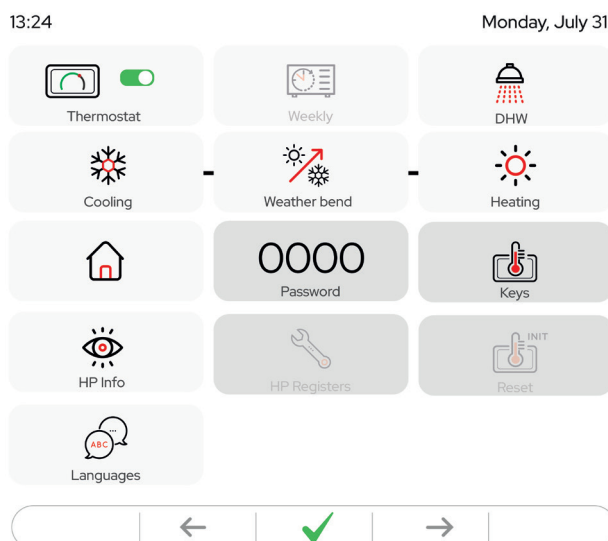
To reactivate the remote control and the heat pump, the screen must be touched for at least five continuous seconds. The system reactivates under the same working conditions as when it was switched off.

The grey arrow keys allow you to select the active objects on the screen and in particular the values of consumed and produced energy for the last few days (up to the last nine days). The values shown come from the control system on board the heat pump. The remote control reads and makes data available on a daily basis. Energy values are represented by coloured histograms. In addition, the numerical values are also shown in a special box.

Trash key allows you to delete current statistics.

8.14 SCREEN: SETTINGS

Home/menu/settings



8.14.1 SCREEN NAVIGATION: CONFIGURATION

The 'configuration' menu has several screens useful for configuring the heat pump connected to the remote control. Some configurations, if dimmed, may be disabled consistent with the current heat pump configuration. Other configurations may only be accessible after entering the maintenance technician's password.

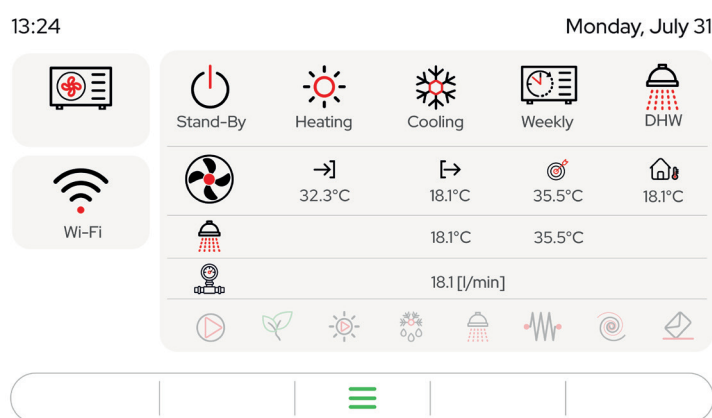
- **Thermostat.** If the selector switch (slider) is in the ON position (green), the device also functions as a room thermostat. If the selector switch (slider) is in the OFF position (grey), the device only functions as a remote control 'control mode' of the heat pump. Activating or deactivating the room thermostat function also entails a consistent change of the main (home) screen.
- **Weekly.** Activated only if the remote control is in 'control mode', it enables weekly scheduling of the heat pump. In this mode, only the water temperature to be provided by the heat pump is programmed according to the set values: Comfort or Eco. Alternatively, the heat pump can also be set to standby mode.

- **D.H.W. - Cooling - Heating.** They allow the Comfort and Eco temperatures to be set for the three possible operating modes. As a result, up to six different water temperature values can be set/changed.
- **Climate bands.** If enabled, they allow the heat pump to deliver water with a variable temperature dependent on the temperature detected by the external probe (located on board the heat pump). The climatic adaptation of the flow temperature can be enabled for only one or both operating modes. Enabling the climate bands excludes the use of pre-set set points.
- **Languages.** It allows you to change the language used by the device.
- **HP info.** It allows you to read some heat pump configuration registers.
- **Password.** It allows you to enter the password to access heat pump maintenance services.
- **HP Registers.** It allows the Modbus registers of the heat pump to be viewed and configured. (access restricted by maintenance technician password).
- **Keys.** It allows the chronothermostat configuration keys to be examined. Some values are only displayed after entering the maintenance technician password.
- **Reset.** It enables initialisation of the remote control to factory conditions. This command also involves the disassociation (if any) of the APP associated with the remote control itself. The reset function, consequently, requires the maintenance technician password to be entered and, if associated with a user via APP, also the simultaneous connection to the internet in order to function. The reset function is mainly useful when it is necessary to change the ownership of the system with certainty of the deletion of previous data.

Depending on the configuration of the system, some services may be deactivated.

8.15 HOME SCREEN: CONTROL MODE

Home



8.15.1 SCREEN NAVIGATION: CONTROL

The device's 'home' screen in control mode allows quick access to the main functions of the heat pump. Some functions may be inhibited consistent with the system settings.

The 'control' screen allows the main operating modes of the heat pump to be activated by touching the icons in the first line:

- **Cooling.** It activates the heat pump in 'Cooling' mode to produce cold water.
- **Heating.** It activates the heat pump in 'Heating' mode to produce hot water.
- **Stand-by.** The heat pump stops producing hot or cold water and goes into stand-by.
- **Weekly.** It enables weekly scheduling of the heat pump.
- **D.H.W. (domestic hot water)** Enables the production of domestic hot water. Also for the 'Thermostat' mode, if you want the DHW mode active, without necessarily enabling the DHW chronothermostat, you have to enable the relevant icon on this screen.

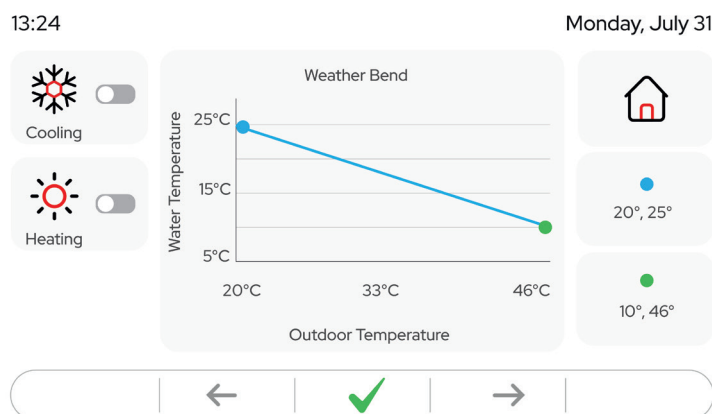
The central part of the screen displays some values communicated by the heat pump concerning mainly temperatures and flows.

The small if visible icons in the bottom row show the active status of some actuators (from left to right):

1. **Pump.** It indicates the status of the heat pump's on-board circulator. If flashing, it indicates that the system is requesting activation of the circulator.
2. **Eco.** If active, it indicates that the heat pump is operating according to the 'Eco' setpoint.
3. **Solar Circulator.** If active, it indicates the operating state of the solar circulator.
4. **Defrost** If active, it indicates that defrosting of the heat pump is taking place. If flashing, it indicates that the system is requesting activation.
5. **Domestic hot water.** If active, it indicates that the heat pump is operating in DHW mode. If flashing, this indicates that the heat pump is requesting activation.
6. **Electric heater.** If active, it indicates that the heat pump is supplying the antifreeze electric heaters on board.
7. **Compressor.** If active, it indicates that the compressor on the heat pump is running. If flashing, this indicates that the heat pump is requesting activation.
8. **Message.** If active, it indicates receipt of a message, tap the icon to read it.

8.16 SCREEN: CLIMATE BANDS

Home/menu/settings/climate bands



8.16.1 SCREEN NAVIGATION: CLIMATE BANDS

The climate band screen enables, limited to heating and cooling modes, the climatic compensation of the flow temperature depending on the outside temperature. Climate compensation can be useful both for environmental comfort and for optimising energy consumption.

Screen functions:

Using the appropriate selector switch (slider) it is possible to enable climatic compensation for the required operating mode.

To **change** climate curve settings:

- Select which climate curve you want to change. The selected curve will be highlighted by the green outline.
- To reposition the green and blue points of the curve, proceed by selecting the point you wish to change, through direct touch.
- Next, proceed using the '+' and '-' keys acting on the vertical axis of the graph. Use the arrow keys with a long touch, to move points on the horizontal axis of the graph.

When active, the climate bands replace the preset setpoints of the relevant heat pump operating modes, both eco and comfort. Consequently, the working temperature of the heat pump can vary continuously according to the reading of the external probe, which is on board the machine.

8.17 SCREEN: HP INFO

Home/menu/settings/HP info

#	Value [unit]	Description
1	0.0 °C	Water inlet temperature
2	0.0 °C	Water outlet temperature
3	0.0 °C	DHW temperature
4	0.0 °C	Extern temperature
5	0.0 °C	Extern temperature for climatic curve
6	0.0 °C	Remote tank temperature
7	0.0 °C	Evaporation temperature
8	0.0 °C	Condensation temperature
9	0.0 °C	Compressor suction temperature
10	0.0 °C	Compressor discharge temperature
11	0.0 °C	High pressure

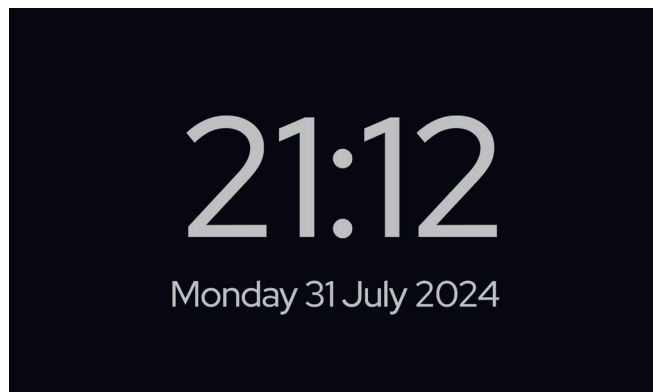
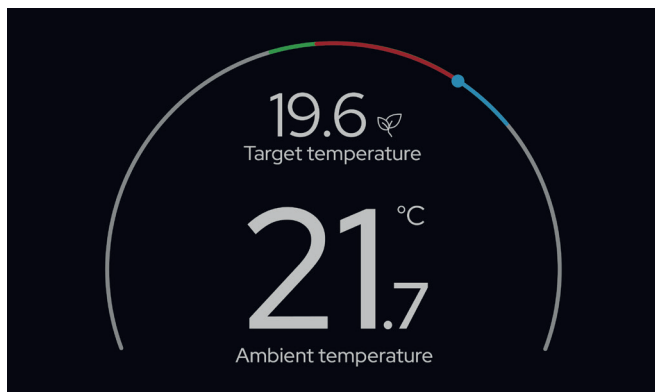
8.17.1 SCREEN NAVIGATION: HEAT PUMP INFORMATION

The heat pump information screen shows the values of certain sensors and component states on the heat pump. The values update automatically.

Screen functions:

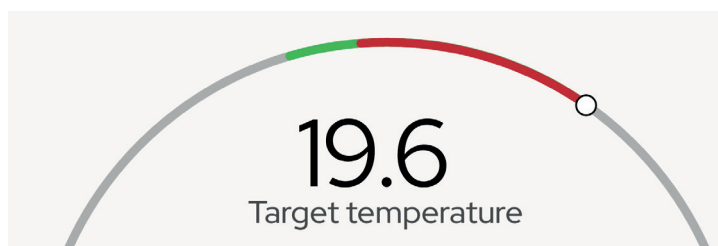
The arrow keys allow you to navigate through the list of values displayed on the screen.

8.18 SCREEN: STAND-BY



Standby screens are activated after a period of non-interaction (about 2 minutes) with the remote control, decreasing the power consumption of the screen. The standby screens can look two different ways, depending on the status of the remote control. During night time, the screen may be completely black. A tap on the screen is enough to display the main (home) screen.

8.19 SCREEN: CIRCULAR THERMOSTAT



The circular thermostat represents the room temperature. The green arc part graphically represents the setpoint room temperature. The dot represents the temperature measured by the probe on board the remote control. This is:

- white, when the desired temperature has been reached and/or the heat pump is in stand-by.
- red, when the remote control is requesting the system to heat the room.
- blue, when the remote control is requesting the system to cool the room.

9. DEVICE ICONS

	Italian language		Comfort Target		Anti-legionella program in progress		Date and time synchronised from the cloud
	English language		ECO Target		Heat pump registers		Open window detected
	French language		No communication with the heat pump		System configuration menu		Forced system venting
	German Language		Weekly programming of PDC (technical water)		Date & Time		USB options

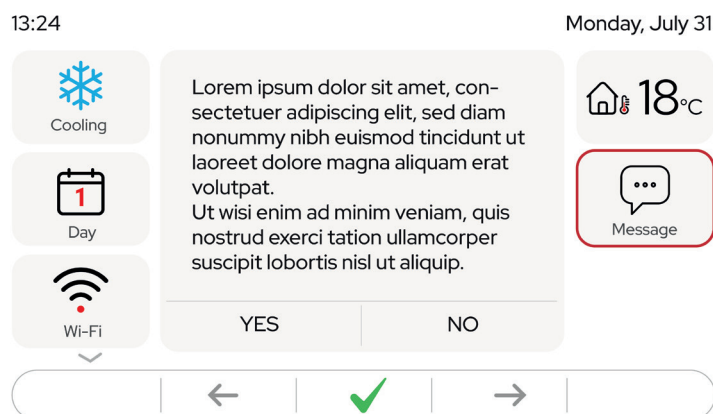
	Polish language		Weekly programming of the PDC (domestic hot water)		Heat pump water inlet probe temperature		Screed
	Spanish language		Manual programming thermostat		Heat pump water outlet probe temperature		A.I. cloud services activated
	Romanian language		Daily programming of room thermostat		Outdoor temperature		Dynamic pricing high cost
	Slovenian language		Weekly programming of room thermostat		Flowmeter		Dynamic pricing Convenient cost
	Cooling and compressor running		Thermostat holidays programming		Defrosting in progress		Dynamic pricing Minimum cost
	Heating and compressor running		ifeel program active		Defrost electric heater active		Smart D.H.W. energy storage
	Cooling operating mode		Functions menu		Solar circuit pump active		Smart Grid Convenient energy
	Heating operating mode		Confirmation		Climate curves		Smart Grid Limit energy consumption
	Automatic operating mode		Locked screen		Room thermostat mode		Smart Grid Incentivising energy consumption
	Domestic hot water operating mode		Copy		Displays heat pump inputs and outputs		Heat pump energy yield
	Compressor in operation		Delete		Remote control parameters menu		Consumed energy
	Active circulator		No connection with heat pump		Energy screen and device standby		Main screen (Home)
	Stand-by (OFF)		Language selection		Heat pump reboot		B.M.S. (*)
	Fan		Heat pump password active		Device initialisation		
	Target		Active alarm in the heat pump		Wi-Fi settings, connection problems		Valid Wi-Fi connection



(*) B.M.S. Building management system: Change of operating mode from heating to cooling managed by an external source. It operates through a dry contact input on the heat pump terminal block. (Refer to the specific paragraph of the heat pump MCO).

9.1 SCREEN: MESSAGE

Home



9.1.1 SCREEN NAVIGATION: MESSAGE

A message icon may appear on the main (home) screen, which must be selected in order to read the text of the message received from the network. The purpose is to inform the user of the availability of free updates or new services.

Screen functions:

Some messages are simply read and deleted with the tick (OK). Other messages may require a response from the user, in which case simply tap YES or NO to share your location.

9.2 SCREEN: HEAT PUMP REGISTERS

Home/menu/settings/HP registers

#	Min	Data	Max	Value	[unit]
1	-500	70	800	7,0	°C
2	-500	450	800	45	°C
3	-500	480	800	48	°C
4	-500	181	800	18,1	°C
5	-500	480	800	48	°C
6	-500	181	800	18,1	°C
7	-500	181	800	18,1	°C

9.2.1 SCREEN NAVIGATION: HEAT PUMP REGISTERS

The screen displays the name and value of the heat pump registers. The number of registers displayed depends on the password previously entered in the configuration menu, and altering the stored values has a direct impact on the performance of the heat pump and system.



Altered values are stored and may invalidate the heat pump warranty.

Screen functions




- Home key, allows you to leave the screen and go back to the home page.
- <<, >> allow reading the previous or next page of HP registers.
- Arrow keys allow selection of the individual register displayed on the screen.
- The '+' and '-' keys increase and decrease the value of the selected register.
- Green tick key to confirm (write) the new value in the selected register.

9.3 SCREEN: REMOTE CONTROL KEYS

Home/menu/settings/Keys

13:24 Monday, July 31

#	Key	Value
1	TimeOffset	0
2	Random_APPcode	0-0-0-0
3	HomeScreen	21
4	ePRO_FW_version	00.001.00
5	Brand	0
6	Open_WindowsDetect	12
7	TimeOffset	xxx
8	Random_APPcode	xxx
9	HomeScreen	xxx
10	ePRO_FW_version	xxx

←
✓
→

9.3.1 SCREEN NAVIGATION: REMOTE CONTROL KEYS

The screen displays the name and value of the remote control keys, and inconsistent alteration of stored values can lead to malfunctions.

Operating modes:

- **Home** key, allows you to leave the screen and go back to the home page.
- <<, >> allow you to read the previous or next keys page.
- Arrow keys allow you to select the individual key displayed on the screen.
- Green tick key activates the keypad for editing the key value.

10. DISPOSAL

Before recycling devices, make sure to restore them to factory settings to protect your personal information. Due to the nature of certain materials used in electronic equipment, discarding old electronic devices with ordinary waste can harm the environment and even your health. For this reason, the European Union's Waste Electrical and Electronic Equipment (WEEE) Directive stipulates that these devices must have the symbol shown on the side. The symbol indicates that these devices must not be thrown away with unsorted waste. Recycle old devices, regulations and disposal information are relevant to your country or region.

The electrical and electronic products and any waste should not be disposed of with normal household waste, but disposed of according to WEEE law in accordance with the directives 2012/19/EU and 2003/108/EC as amended, inquiring thereof at the place of residence or with the retailer in the case where the product is replaced with a similar one.



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