NIMBUS S NET

EN - USER OPERATING MANUAL

FR - MODE D'EMPLOI POUR L'UTILISATEUR

Introduction

Dear Madam,
Dear Sir,
thank you for choosing the **ARISTON NIMBUS S NET** system.

This manual was drawn up with the aim of informing you on how to use the system, in order to enable you to optimally use all the functions.
Store this booklet, as it contains all the necessary information regarding the product following its initial installation.
To find your nearest Technical Assistance Service, please see our Internet website www.Ariston.com.
Please also refer to the Warranty Certificate that you will find inside the packaging, or which was handed to you by the installer.

Symbols used throughout this manual and their meaning

i **WARNING** Indicates important information and particularly delicate operations.

! **WARNING: DANGER** Indicates actions that, if not performed correctly, can lead to general injuries or malfunctions or material damages to the appliance; they therefore require special attention and adequate training.

Warranty

The ARISTON product is covered by a conventional warranty, which takes effect from the date of purchase of the appliance. For the warranty conditions, refer to the warranty certificate accompanying the product.

Compliance

The CE marking applied to the appliance certifies that it conforms with the essential requirements of the following European Directives:

- 2014/30/EU (Electromagnetic Compatibility Directive)
- 2014/35/EU (Low Voltage Directive)
- RoHS 3 2015/863/EU on restrictions regarding the use of certain hazardous substances in electrical and electronic appliances (EN 50581)
- Regulation (EU) no. 813/2013 relative to ecodesign (no. 2014/C 207/02 - transitional methods of measurement and calculation)
- 2014/68/EU (PED)

Disposal

PRODUCT CONFORMING TO EU DIRECTIVE 2012/19/EU and to Italian Legislative Decree 49/2014 pursuant to Art. 26 of Legislative Decree no. 49 of 14 March 2014, "Implementation of Directive 2012/19/UE on waste of electrical and electronic equipment (WEEE)".

The barred wheeled bin symbol appearing on the appliance or on its packaging indicates that the product must be collected separately from other waste at the end of its useful life.
The user must therefore deliver the decommissioned product to an appropriate local facility for separate collection of electrotechnical and electronic waste. Alternatively, the appliance to be scrapped can be delivered to the dealer when purchasing a new equivalent appliance. Electronic products for disposal measuring less than 25 cm can also be delivered free of charge to electronic equipment dealers having a surface area of at least 400 m², without having to purchase other products.
Proper separated collection of the decommissioned appliance for its subsequent recycling, treatment and eco-compatible disposal helps to prevent negative effects on the environment and human health, besides encouraging reuse and/or recycling of its constituent materials.

Contents

1. Safety advices

1.1 General warnings and safety instructions

[i] This manual is the property of ARISTON and it is forbidden to reproduce or transfer to third parties the contents of this document. All rights reserved. This document is an integral part of the product; make sure that it always accompanies the appliance, also when the latter is sold/transferred to another owner, so that it can be consulted by the user or by personnel authorised to perform maintenance and repairs.

[i] Read the information and warnings given in this manual in full; they are essential to the safe installation, use and maintenance of the product.

[i] Do not use the product for any purpose other than that specified in this manual. The manufacturer is not liable for damage resulting from improper use of the product or failure to install it as instructed herein.

[i] All routine and extraordinary maintenance operations must be carried out exclusively by qualified personnel exclusively using original spare parts. The manufacturer is not liable for damage resulting from failure to observe this instruction, which may compromise the safety of the installation.

[i] Product dismantling and recycling operations must be carried out by qualified technical personnel.

[!] If a leakage detection device is installed in the system, it is necessary to check for leakages at least every 12 months. When inspecting the unit for the absence of leakages, we recommend keeping a detailed register of all the inspections.

[!] The appliance must be installed in a well-ventilated room having adequate dimensions as specified for the appliance's operation.

[!] The Heat pump can be used by children older than 8 years and by people with reduced physical, sensory or mental abilities, or who lack adequate experience and the necessary knowledge, provided they are supervised or have been instructed on the safe use of the appliance and on the potential risks connected with it. Children must not play with the appliance. Any cleaning and maintenance which should be performed by the user must not be done by unsupervised children.

[!] For electrical interventions, observe the provisions of the national electrical standard, local rules, applicable regulations, and the instructions of the installation manual. It is necessary to use an independent circuit and a single power outlet. Do not connect other appliances to the same power outlet. An insufficient electrical capacity or defective electrical installation may lead to potential electrocution or fire.

[!] Perform all electrical connections using suitably-sized cables.

[!] Protect connection piping and cables so as to prevent damage to them.

[i] Make sure the installation site and any systems to which the appliance must be connected comply with applicable regulations.

[!] During all work procedures, wear individual protective clothing and equipment. Do not touch the installed product if barefoot and/or with any wet part of the body.

⚠ If you notice a burnt smell or see smoke coming out of the device, disconnect it from the power supply, open all windows and contact the technician.

⚠ Do not climb the outdoor unit.

⚠ Do not leave flammable material in the vicinity of the system. Make sure that all components of the system are positioned as required by regulations.

⚠ Do not start up the system if steam or dangerous powders are present in the installation room.

⚠ Do not place fluid containers and other foreign objects on the indoor or outdoor units.

⚠ The removal of the product's protective panels and all operations involving maintenance and connection of electrical equipment must be performed by qualified personnel.

1.2   Use of the R32 refrigerant

⚠ **FLAMMABLE MATERIAL**

ℹ The R32 refrigerant is odourless.

⚠ This system contains fluorinated refrigerant. For specific information on the type and quantity of refrigerant, refer to the data plate. Always observe the national regulations on the use of refrigerant.

⚠ Interventions on the refrigeration circuit must only be carried out by operators possessing a valid certification, issued by an accredited body, certifying their expertise in manipulating refrigerants safely and in accordance with the specifications in force in the sector.

⚠ The refrigerant used within this heat pump is flammable. A loss of refrigerant exposed to an external source of ignition may cause the risk of fire.

1.3   System interface SENSYS HD

The SENSYS HD system interface offers simple and efficient room temperature adjustment and domestic hot water control.
SENSYS HD is compatible with Ariston NET.
Thanks for choosing Ariston NET, the system designed and manufactured by ARISTON to offer a whole new experience in using a domestic heating and hot water system.
Ariston NET allows you to start, stop and check the temperature of space heating and domestic hot water at any time and anywhere via your smartphone or PC.
It constantly monitors energy consumption to cut your gas bills and notifies you in real time of any heat generator malfunctions. Also, when the remote assistance service is activated, the service centre will be able to solve most problems remotely.
For further information, visit the website dedicated to Ariston NET: www.ariston.com/it/ariston-net. Or call us on 800 300 633. Our Customer Service is available 7 days a week (from 8 am to 8 pm).

2. Description

The system interface is a device that controls the heating system. It can be used as a room thermostat and/or as a system interface for monitoring the installation's operation and configuring the desired settings.

2.1 Glossary of terms

Zone: a heating system can be divided into multiple hydraulically independent areas, which are referred to as "zones". Each zone can autonomously generate a heating/cooling request towards the heat generator. For example, a building can be divided into a zone with radiant panels and a zone with radiators.
Time slot: by selecting the scheduled operating mode for a zone, the user can define a specific time schedule. The time schedule is divided into intervals which are referred to as "slots"; for each slot it is possible to define a target temperature (setpoint) according to the time schedule set during the system's configuration.
Daily 2-level time scheduling: the daily 2-level scheduling allows for dividing the schedule into a maximum of 4 comfort slots and 4 reduced-temperature slots within the 24 hours of each day.
Daily multi-level time scheduling: in this mode, available only on specially configured products, it is possible to define up to 12 daily slots, each of which can be associated with a specific target temperature value.

2.2 Menu navigation

The interface is equipped with a colour display, a selector and two buttons.
The interface menus can be navigated using the "Menu" button **(A)**, the selector **(B)** and the "Back" button **(C)**.

– ▤ "Menu" button **(A)**: when pressed, it opens up the main menu.

– Turning ⟳ the selector **(B)** allows the user to perform the following functions:

  – move through the items that can be selected on the screen.

  – scrolling the settings for a specific function or parameter.

– Pressing ⟳ the selector **(B)** allows the user to perform the following functions:

  – accessing the items that can be selected on the screen.

  – confirming the settings for a specific function or parameter.

– ↩ The "Back" button **(C)** allows the user to perform the following functions:

  – returning to the previous menu or sub-menu.

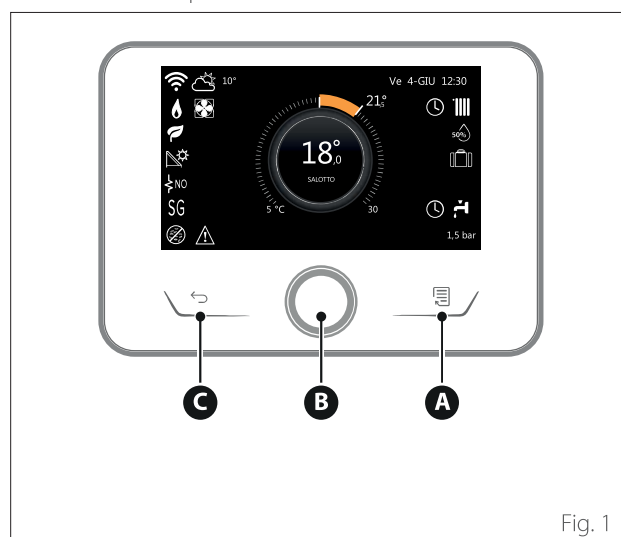 – cancelling the entry of a setting for a specific function or parameter.
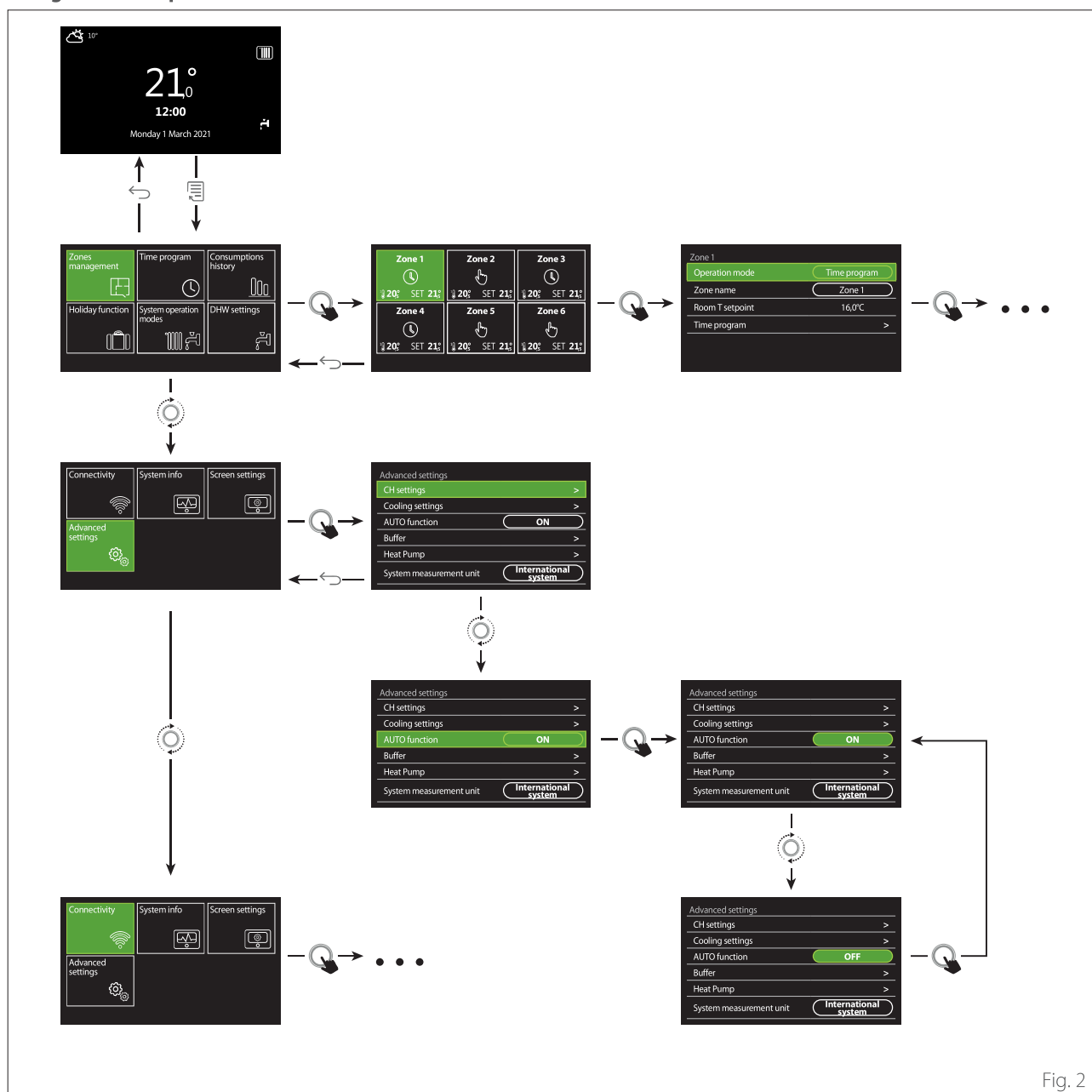

Fig. 1

Navigation example

Fig. 2

Key

⤺   Back button

☰   Menu button

◎   Turn the selector

👆   Press the selector
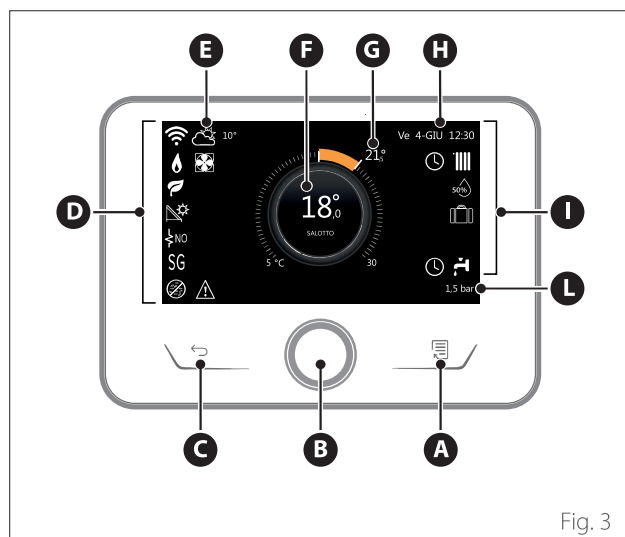
2.3 Complete home page

Fig. 3

A Menu button
B Selector
C Back button
D Function icons
E Weather and outdoor temperature
F Room temperature
G Required temperature
H Time & Date
I Operation icons
L Pressure indication

ℹ️ **The SENSYS HD interface is compatible with Ariston NET when used with an ARISTON Wi-Fi module. Find out more on www.ariston.com/it/ariston-net**

SYMBOLS	
	Wi-Fi module update in progress
AP	Access Point Opening in progress
	Wi-Fi Off or not connected
	Wi-Fi connected but internet access failed
	Wi-Fi active
	Outside air temperature
	Flame present
	Optimum boiler efficiency
	Solar heating module connected
PV	Photovoltaic contact enabled
PV	Photovoltaic contact active
SG	Smart Grid system enabled
NO	Supplementary heating elements not enabled
	Number of heating element stages active
	Heat pump active
	Room set-point extension active
	CH
	Heating active

SYMBOLS	
	Domestic hot water
	Domestic hot water active
❄	Cooling service enabled
	Cooling service active
90%	Relative humidity index
	Time program
	Manual
auto	Temperature regulation function active
	Holiday function active
BOOST	Domestic hot water Boost function enabled
HC	Hot water comfort enabled in electricity reduced band rate
HC 40	Hot water comfort enabled in electricity reduced band rate and domestic hot water set-point at 40°C in electricity full band rate
	Test mode active
	Thermal sanitation function active
	Anti-frost function active
	Dehumidification function active
	Silent mode active (only for heat pumps)
⚠	Error in progress

2.4 Base home page

The "Base" home page can be selected if the device is configured as a system interface (Zone 0).
The central area shows information about the heating, cooling or domestic hot water modes.
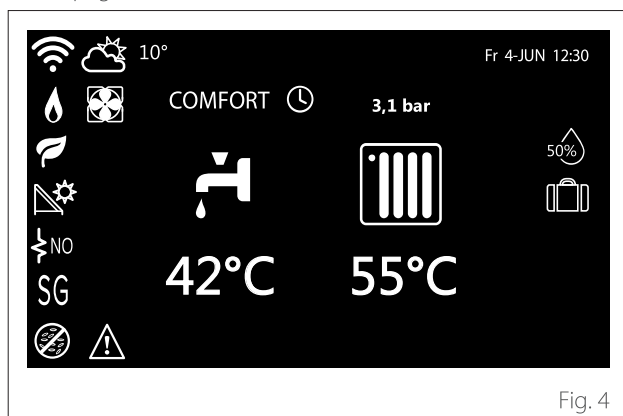For the meaning of the icons, refer to the paragraph "Complete home page".

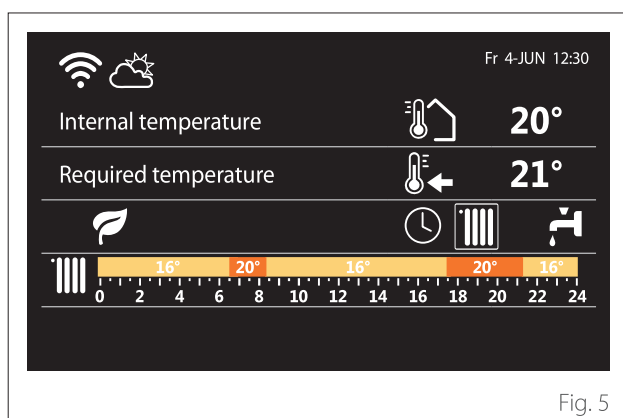Fig. 4

2.5 Customizable home page

Fig. 5

The home page "Customizable" allows the user to view information that can be selected in the following options:
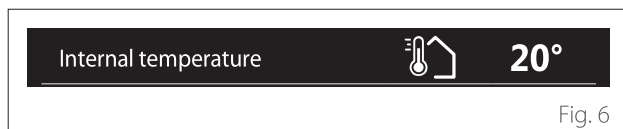
Internal temperature

Fig. 6

If the device is associated with a zone, the room temperature of the relevant zone is shown. If the device is configured as a system interface (Zone 0), the room temperature of the zone defined by the 0.4.0 parameter is shown.

Required temperature

Fig. 7

If the device is associated with a zone, the room set-point temperature of the relevant zone is displayed. If the device is configured as a system interface (Zone 0), the room set-point temperature of the zone defined by the 0.4.0 parameter is shown.

Outside air temperature

Fig. 8

The information is available if an outdoor temperature sensor is connected or if the "weather from the Internet" function is activated once the Wi-Fi module has been activated.

Heating time schedule profile

Fig. 9

If the device is associated with a zone, the heating time schedule profile of the relevant zone is displayed. If the device is configured as a system interface (Zone 0), the heating time schedule profile of the zone defined by the 0.4.0 parameter is shown.

Cooling time schedule profile

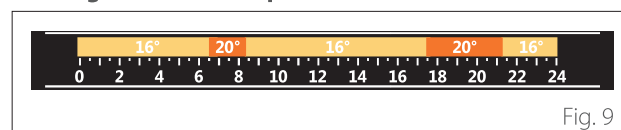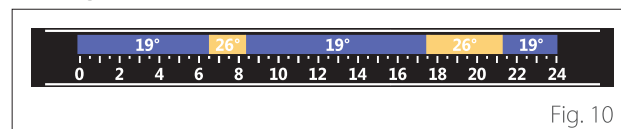Fig. 10

Available only for products configured for the cooling mode. If the device is associated with a zone, the cooling time schedule profile of the relevant zone is displayed. If the device is configured as a system interface (Zone 0), the cooling time schedule profile of the zone defined by the 0.4.0 parameter is shown.
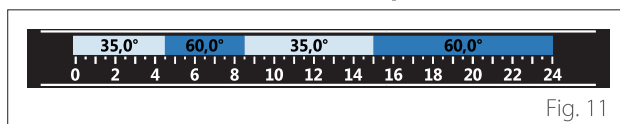
Domestic hot water time schedule profile

Fig. 11

If the system is configured for producing domestic hot water, the domestic hot water time schedule profile is displayed.

Domestic hot water heat pump mode

| Operation mode | **55°C** |

Fig. 12

If there is a domestic hot water heat pump, the product's operating mode and the set-point temperature of the water are shown.

For the meaning of the icons, refer to the paragraph "Complete home page".
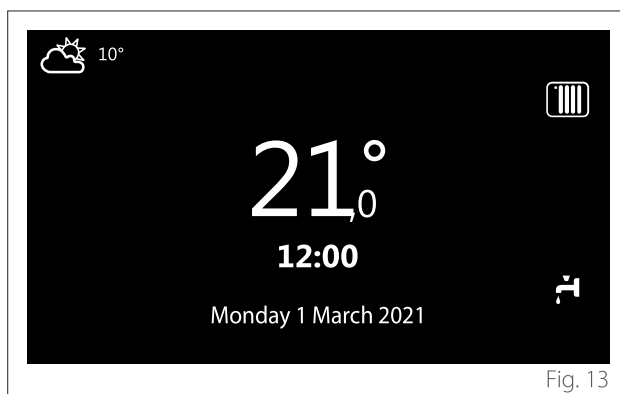
2.6 Stand-by page

Fig. 13

2.7 Basic functions

Manual room temperature adjustment
The operating mode of the zone associated with the device is set to MANUAL **(1)**.
Turn the selector to select the temperature value indicated on the display using the movable cursor near the ring. Press the selector to confirm.
The display shows the set temperature.

Fig. 14

Room temperature adjustment in programmed mode
The operating mode of the zone associated with the device is set to PROGRAMMED **(2)**. During operation in scheduled programming mode, the set room temperature can be changed temporarily.
Turn the selector to select the temperature value indicated using the movable cursor near the ring. Press the selector to confirm.
The display shows the set temperature.
Turn the selector to set the time until which the change must be maintained.
Press the selector to confirm. The **(3)** symbol appears on the display.
The system interface will maintain the temperature value until the set time, after which the pre-set room temperature is restored.

Fig. 15

Room temperature adjustment with AUTO function on
If the heating hot water temperature does not match the desired value, it can be increased or decreased via the "Heating Settings". The correction bar will appear on the display.
Press the selector to confirm, or press the back button to return to the previous screen without saving.

2.8 Operation

The main page of the system interface can be customised.
The main page can be used to check the time, date, operating mode, the set or measured temperatures, the time scheduling and the active energy sources.

3. User Menu

– On the home page press the "Menu" button ▤ to access the user menu.
– The display will show the user menu consisting of two pages.
– Turn the selector ⊙ to highlight the desired menu.
– Press the selector ⊙ to access the selected menu.
– To access the second page, turn the selector and scroll the cursor past the last icon of the first page.
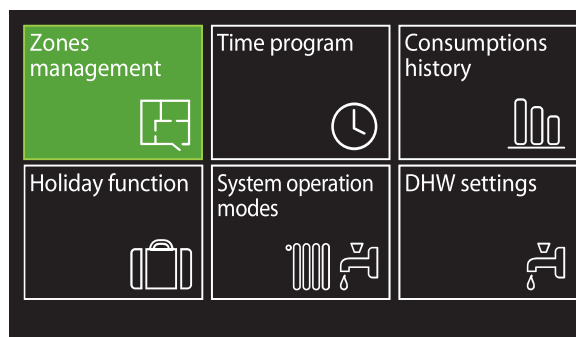
Page 1

Zones management	Time program	Consumptions history
Holiday function	System operation modes	DHW settings

Fig. 16

SYMBOLS		Description
⊞	Zone	Allows you to check the main information on the operating status of the zones and to set the operating mode of the single zone.
⊙	Time program	Allows you to choose the type of operation:
		⊙
		SCHEDULED the system will operate according to the set schedule.
		☞
		MANUAL the system will operate in continuous mode
▥	Energy Consumption	Shows the estimated energy consumption (gas and electricity) and their performance over time for the heating, cooling and domestic hot water modes.
🧳	Holiday function	The holiday function disables the heating during the holiday period and sets the room heating and domestic hot water system to anti-frost protection until the set date.
🔥🚰	Operation mode	Can be used to select the operating mode:
		🚰
		SUMMER domestic hot water production, space heating off.
		🚰🔥
		WINTER domestic hot water production and space heating on.
		🔥
		HEATING ONLY indirect cylinder heating off (where present).
		🚰❄
		COOLING AND DOMESTIC HOT WATER (if present).
		❄
		COOLING ONLY indirect cylinder heating off (where present).
		🚰❄
		OFF system off, anti-frost function enabled.
🚰	Domestic hot water settings	Can be used to select the desired temperature, the operating mode for domestic hot water production and the thermal sanitisation function of the DHW storage tank (if present).

– To access the second page, turn the selector and scroll the cursor past the last icon of the first page.

Page 2

Connectivity	System info	Screen settings
Advanced settings		
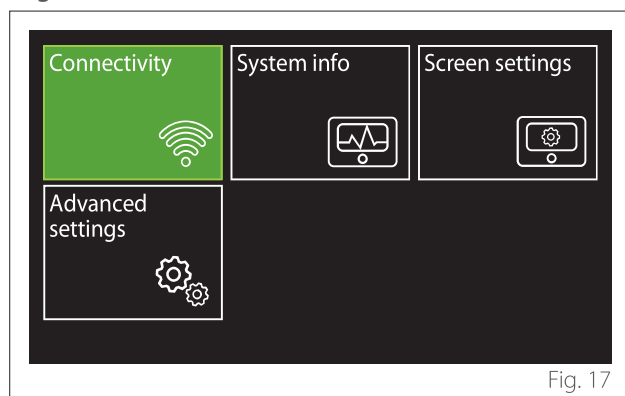
Fig. 17

– Turn the selector to highlight the desired menu.
– Press the selector to access the selected menu.

SYMBOLS		Description
	Connectivity	Allows you to enter the settings of the remote connection service when a WiFi device is connected to the bus and allows you to consult the main diagnostics information.
	System info	Allows you to consult the main diagnostics information.
	Screen settings	Allows you to configure the main display settings.
	Advanced Settings	Allows you to access the following functions: - Heating temperature regulation - Cooling temperature regulation - Buffer settings - Advanced settings of the connected devices - Units of measurement - Type of time scheduling - Measured temperature correction

3.1   Zones management

The zone menu allows the user to view general information and to configure the main settings of the zones.
The system allows the user to view up to 6 zones.

Zone 1	Zone 2	Zone 3
20,5 SET 21,5	20,5 SET 21,5	20,5 SET 21,5
Zone 4	Zone 5	Zone 6
20,5 SET 21,5	20,5 SET 21,5	20,5 SET 21,5
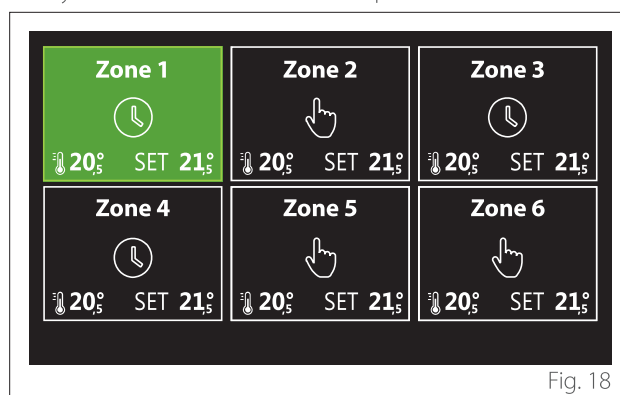
Fig. 18

By selecting the single zone, the following information will be available:

Zone 1

Operation mode	Time program
Zone name	Zone 1
Room T setpoint	16,0°C
Time program	>
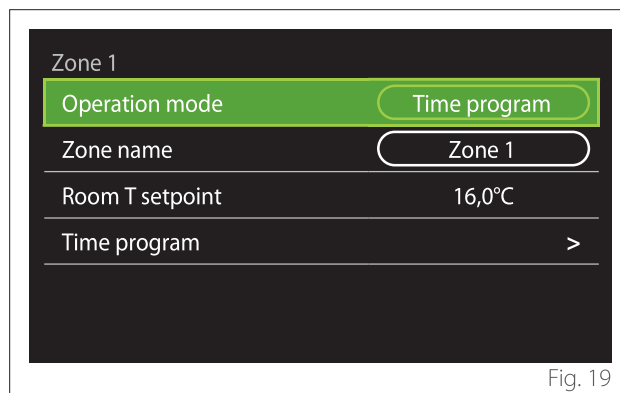
Fig. 19

– Turn the selector to highlight the item to be edited.
– Press the selector to enter the edit mode (the field to be edited is highlighted in green).
– Turn the selector to set the desired value.
– Press the selector to confirm.

3.1.1 Operation mode

Allows for selecting the zone's operating mode.

– **"OFF":** the zone is in anti-freeze protection mode. The room protection temperature is set to 5°C by default.

– **"Manual":** the set-point temperature is maintained for 24 hours.

– **"Time program":** the room temperature of the zone follows the time schedule profile for the zone.

3.1.2 Zone name

Through this field you can assign a name to the zone from a list of pre-set values. (Note: the function is only available if the interface is connected to configured products).

3.1.3 Room T setpoint

In manual mode you can set the temperature of the zone.

3.1.4 Time program

Quick access to the time scheduling of the zone (visible only in the Programmed operating mode).

3.2 Time program

3.2.1 Heating/Cooling time scheduling - 2 levels

The time scheduling allows the user to heat the room based on personal preferences.
Two-level time scheduling can be selected under "Advanced settings" in the user menu or from the 0.4.3 parameter of the technical menu.
Select the desired operating mode.
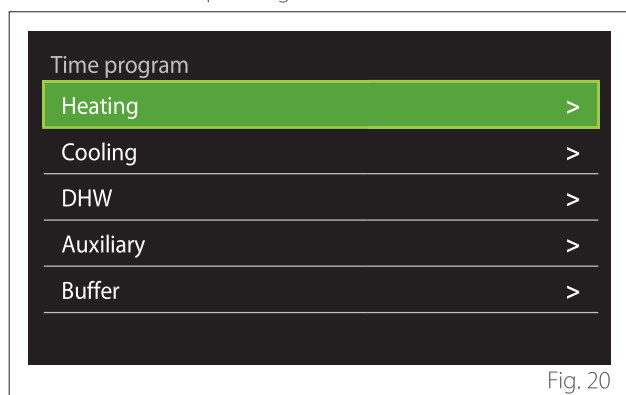
Fig. 20

The time scheduling can be defined in the same way for both the heating and cooling profiles.
The heating and cooling modes have dedicated set-points in their respective schedules.

Zone selection
Select and confirm the zone for time scheduling.
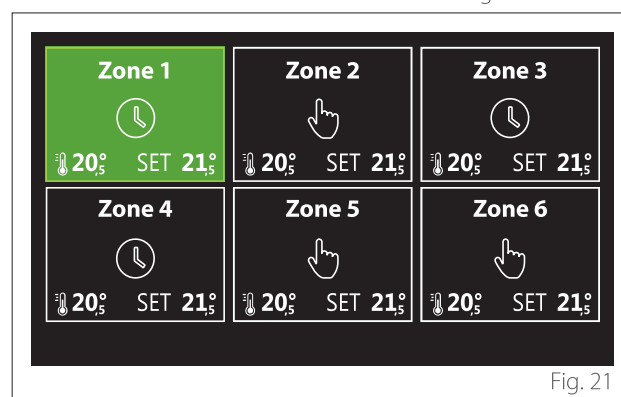
Fig. 21

Defining the comfort and reduced set-point temperatures
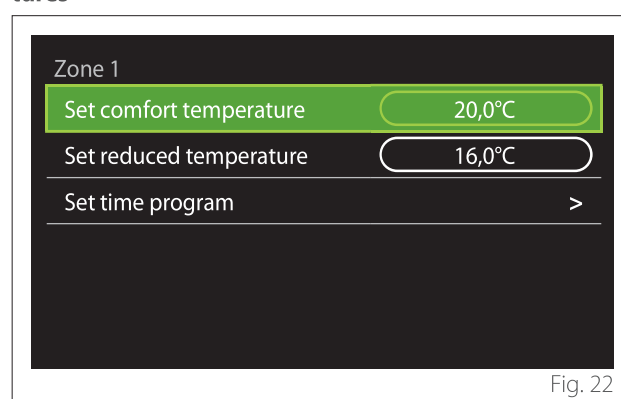
Fig. 22

– Turn the selector to highlight either "Set comfort temperature" or "Set reduced temperature".

– Press the selector to enter the edit mode. Turn the selector to define the temperature set-point.

– Press the selector to confirm the value.

– The "Set time program" allows the user to define the day of the week to be scheduled.

Selecting the type of time schedule: free or pre-set
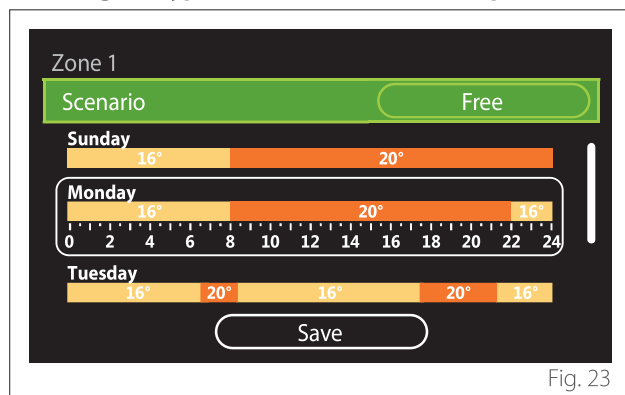
Fig. 23

- Press the selector ⟨icon⟩ to enter the edit mode.
- Select "Free" to proceed with the creation of a custom-ised weekly schedule, otherwise select one of the pre-set profiles:
  - "Family"
  - "No lunch"
  - "Midday"
  - "Always active"
  - "GREEN"
- Press the selector ⟨icon⟩ to confirm "Scenario".
- Turn the selector ⟨icon⟩ to move to the selection of the day of the week to be scheduled.

Selecting the day of the week
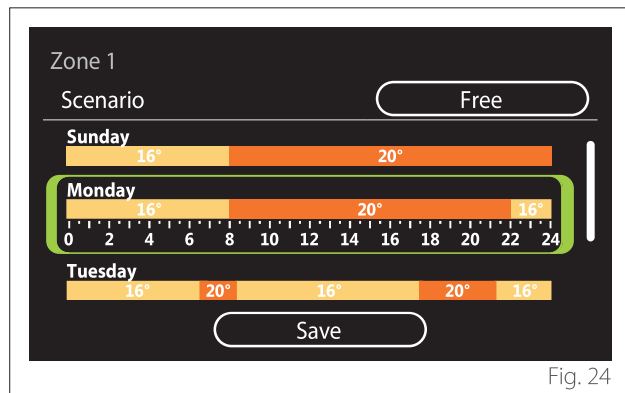
Fig. 24

- Turn the selector ⟨icon⟩ to scroll the days of the week. A preview of the current time schedule will be displayed.
- Press the selector ⟨icon⟩ to select the day.
- In this way you can define the time slot for the selected day.

NOTE: To maintain the weekly time schedule currently shown:

- Turn the selector ⟨icon⟩ to navigate to "Save" then press the selector ⟨icon⟩ to confirm.
- The user will be taken directly to the "Copying zones" page.

Defining the time slot

Fig. 25

Once the day of the week has been selected, the time slot scheduling page opens up.

- Turn the selector ⟨icon⟩ to change the "Start" time.
- Press the selector ⟨icon⟩ to confirm.

Fig. 26

- Turn the selector ⟨icon⟩ to change the temperature of the corresponding time slot. **You can select the set-point temperature by choosing between two values: comfort or reduced.**
- Press the selector ⟨icon⟩ to confirm.

Fig. 27

- Turn the selector ⟨icon⟩ to change the "End" time.
- Press the selector ⟨icon⟩ to confirm.

Up to 4 daily comfort time slots can be selected.
To return to one of the previous items, press the "Back" button ⟨icon⟩.
Press the selector ⟨icon⟩ to go to the next page.

Adding a time slot

Zone 1
Scenario Free Sunday

Add period Continue

20,0° 22,0° 21,0° 23,0°
0 2 4 6 8 10 12 14 16 18 20 22 24

Fig. 28

In this page you can add a slot to the daily time schedule. "Add period" can be used to return to the page where you can define the desired time slot. "Continue" can be used to select the days of the week in which to copy the defined daily schedule.

To return to one of the previous items, press the "Back" button ⤺.

Select "Continue" and press the selector 👆 to go to the next page.

Copying the days of the week

Do you want to copy this programming to other days of the week ?

M T W T F S S

Continue

20,0° 22,0° 21,0° 23,0°
0 2 4 6 8 10 12 14 16 18 20 22 24

Fig. 29

– Turn the selector 🔘 to scroll the days of the week.
– Press the selector 👆 to select the days in which to copy the time schedule. The selected days will be highlighted by a green border.
– To deselect a day, press the selector 👆 once again.
– Turn the selector 🔘 to navigate to Continue, then press the selector 👆 to confirm.

Copying zones

Do you want to copy this time program profile for other zones?
Living room Kitchen
Sleeping area Zone 6
Sitting room All zones
Bathroom Continue

20,0° 22,0° 21,0° 23,0°
0 2 4 6 8 10 12 14 16 18 20 22 24

Fig. 30

– Turn the selector 🔘 to scroll the zones.
– Press the selector 👆 to select the zones in which to copy the time schedule. The selected zones will be highlighted by a green border.
– To deselect a zone, press the selector 👆 once again.
– Turn the selector 🔘 to navigate to "Continue", then press the selector 👆 to confirm.
– The system will return to the page for selecting the set-point temperature.

Zone 1
Set comfort temperature 20,0°C
Set reduced temperature 16,0°C
Set time program >
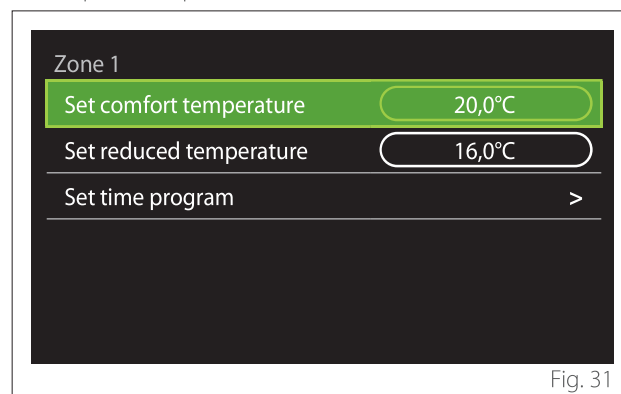
Fig. 31

3.2.2   Heating/Cooling time schedule - Multi-level

In the multi-level time scheduling, the sequence of operations is similar to the two-level process (refer to the paragraph "Heating/Cooling time scheduling - 2 levels"), except for the following steps:

– The page for setting the comfort and reduced temperatures will not be displayed.

– In the page for defining the time slot you can select a dedicated set-point value. The range is 10° - 30°C for each of the time slots created.

– Up to 12 daily time slots can be selected.

Defining the time slot

Fig. 32
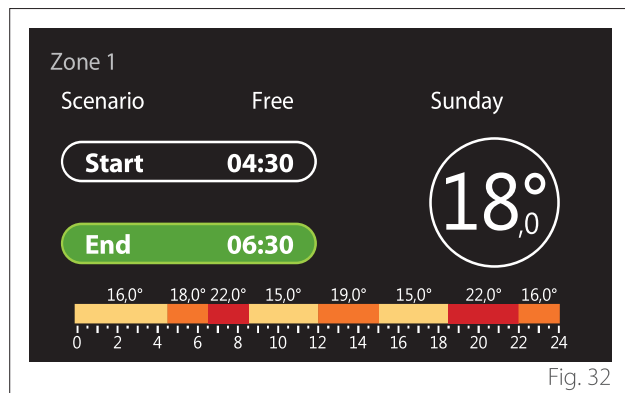
3.2.3   DHW time program

Defining the comfort and reduced set-point temperatures

Fig. 33
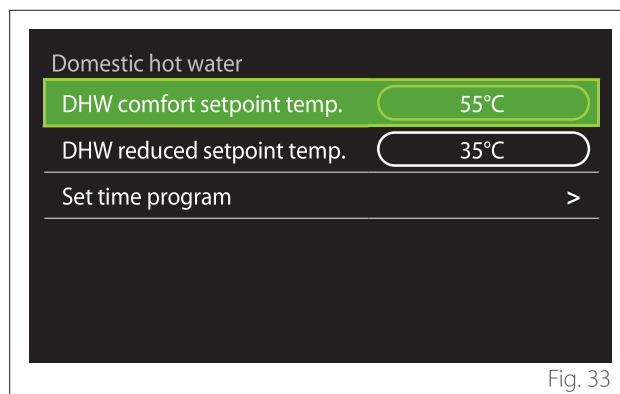
– Turn the selector to navigate to "DHW comfort setpoint temp." or "DHW reduced setpoint temp.".

– Press the selector to enter the edit mode. Turn the selector to define the temperature set-point.

– Press the selector to confirm.

– The "Set time program" allows the user to define the day of the week to be scheduled.

Selecting the type of time schedule: free or pre-set

Fig. 34
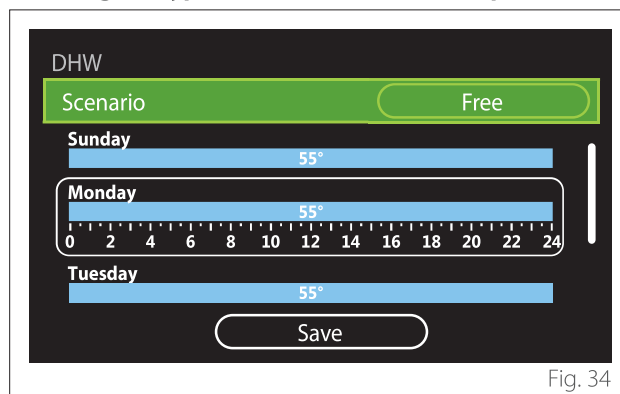
– Press the selector to enter the edit mode.

– Select "Free" to proceed with the creation of a customised weekly schedule, otherwise select one of the pre-set profiles:

  – "Family"
  – "No lunch"
  – "Midday"
  – "Always active"
  – "GREEN"

– Press the selector to confirm "Scenario".

– Turn the selector to move to the selection of the day of the week to be scheduled.

Selecting the day of the week
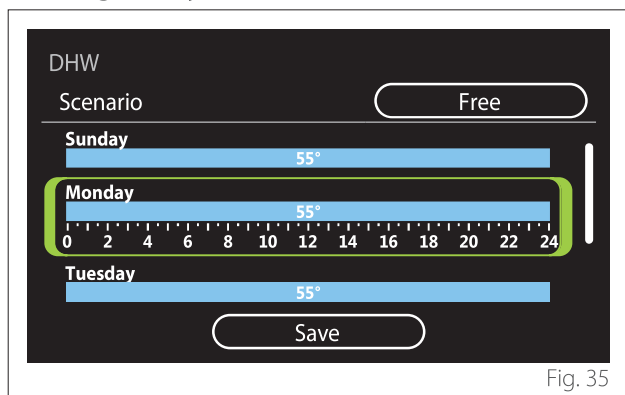
Fig. 35

– Turn the selector ⟳ to scroll the days of the week. A preview of the current time schedule will be displayed.

– Press the selector ⟳ to select the day.

– In this way you can define the time slot for the selected day.
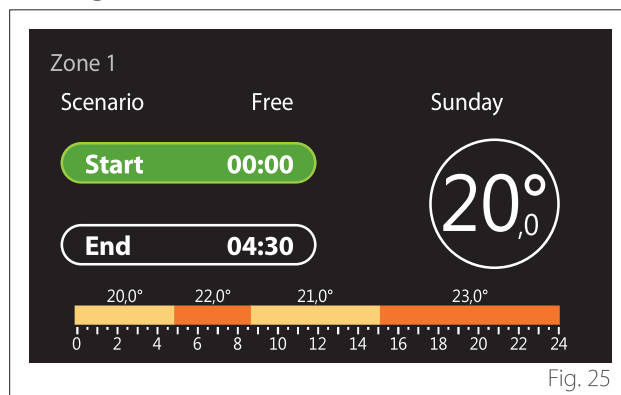
Defining the time slot
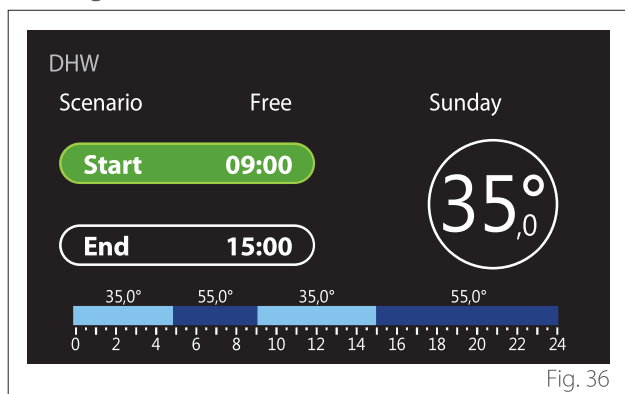
Fig. 36

Once the day of the week has been selected, the time slot scheduling page opens up.

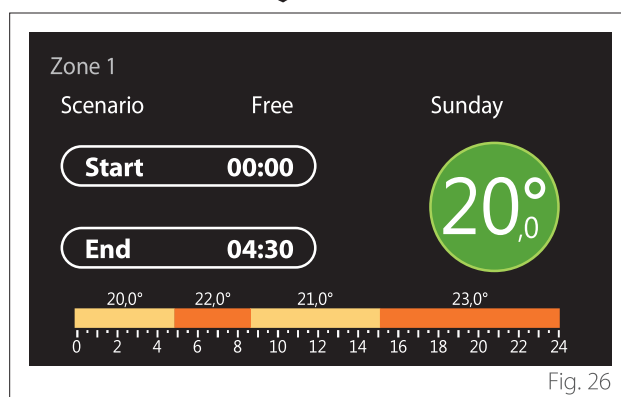– Turn the selector ⟳ to change the "Start" time.

– Press the selector ⟳ to confirm.
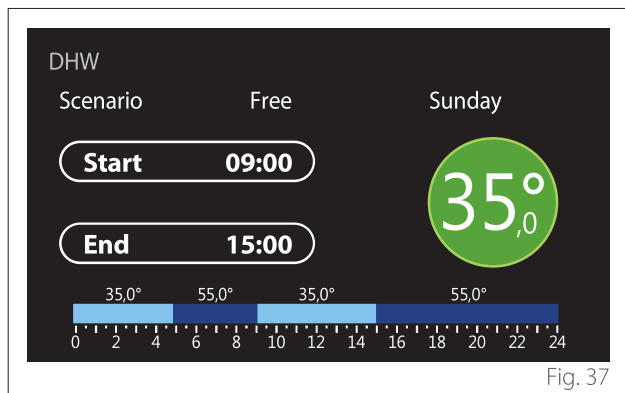
Fig. 37

– Turn the selector ⟳ to change the temperature of the corresponding time slot. **You can select the set-point temperature by choosing between two values: comfort or reduced.**

– Press the selector ⟳ to confirm.
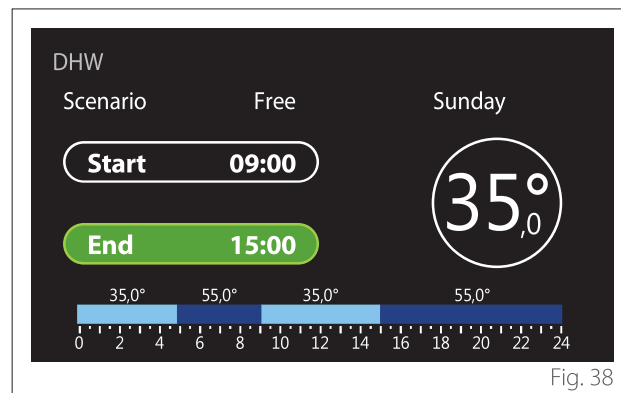
Fig. 38

– Turn the selector ⟳ to change the "End" time.

– Press the selector ⟳ to confirm.

Up to 4 daily comfort time slots can be selected.
To return to one of the previous items, press the "Back" button ↩.
Press the selector ⟳ to go to the next page.

Adding a time slot

Fig. 39

In this page you can add a slot to the daily time schedule.
"Add period" can be used to return to the page where you can define the desired time slot. "Continue" can be used to select the days of the week in which to copy the defined daily schedule.
To return to one of the previous items, press the "Back" button ↩.
Select "Continue" and press the selector ⟳ to go to the next page.
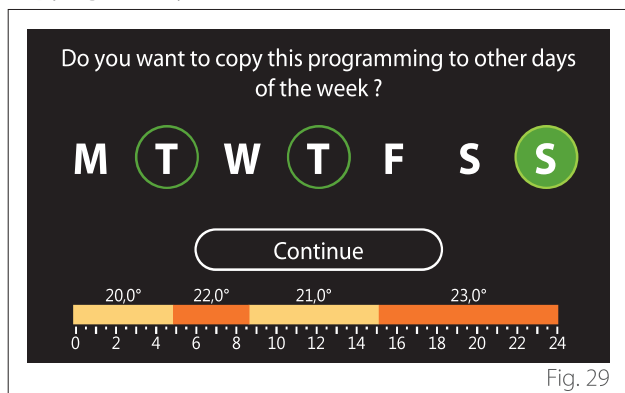
Copying the days of the week

Do you want to copy this programming to other days of the week ?

M T W T F S S

Continue

35,0°   55,0°   35,0°   55,0°

0 2 4 6 8 10 12 14 16 18 20 22 24
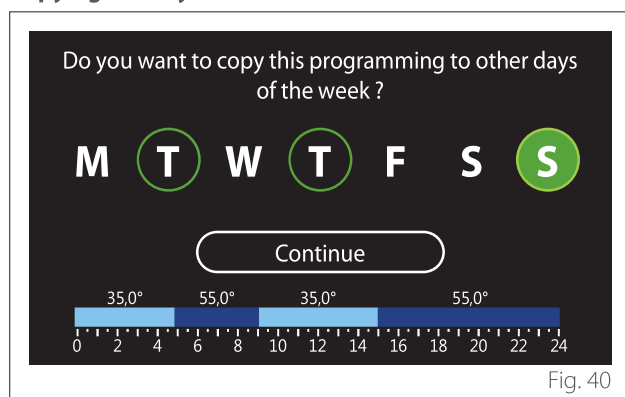
Fig. 40

– Turn the selector to scroll the days of the week.

– Press the selector to select the days in which to copy the time schedule. The selected days will be highlighted by a green border.

– To deselect a day, press the selector once again.

– Turn the selector to navigate to Continue, then press the selector to confirm.

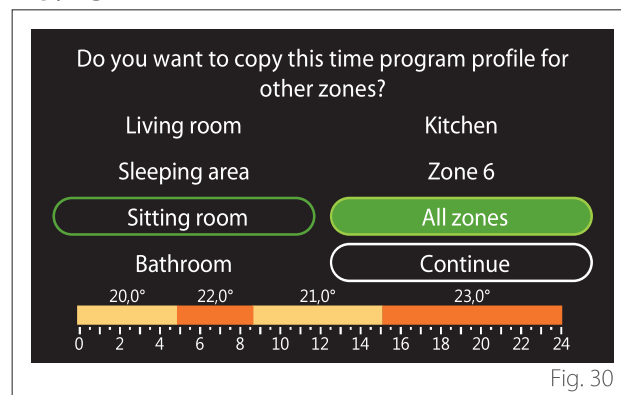### 3.2.4   Auxiliary time scheduling

The auxiliary time scheduling is used for the following functions which can be set from the menu:

– Applications with heat pump: DHW operating mode = "GREEN".

– Fresh water station: timer-operated recirculation pump function (Par. 10.2.1 - "DHW pump circulation type" = "Time Based").

The auxiliary time scheduling can be set in the same way as DHW time scheduling.
In the page for defining the time slot you cannot set the desired set-point, but you can enable/disable the function by setting the ON/OFF values.

Auxiliary

Scenario   Free   Monday

Start   24:00

End   24:00

OFF

OFF   ON   OFF   ON   OFF

0 2 4 6 8 10 12 14 16 18 20 22 24
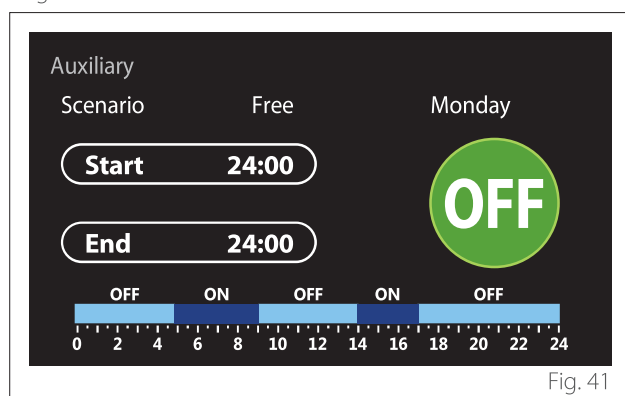
Fig. 41

3.2.5   Heating/cooling buffer time scheduling

The buffer time scheduling can be defined in the same way as the DHW time scheduling, for both the heating and cooling modes.
The buffer time scheduling is based on two temperature levels.

3.3   Consumptions graph

The "Consumptions graph" menu allows the user to view, by means of histograms, the estimate of the gas and/or power consumption of the system's generator in the following modes: heating, domestic hot water and cooling.
The main page can be accessed after reading the warning about the accuracy of the data shown in the charts.

Type   Gas [kWh]

Tot: 12068 kWh   ● CH   ● DHW   ● COOL

2900
2175
1450
725
kWh 0
G F M A M G L A S O N D

Time base   Running year
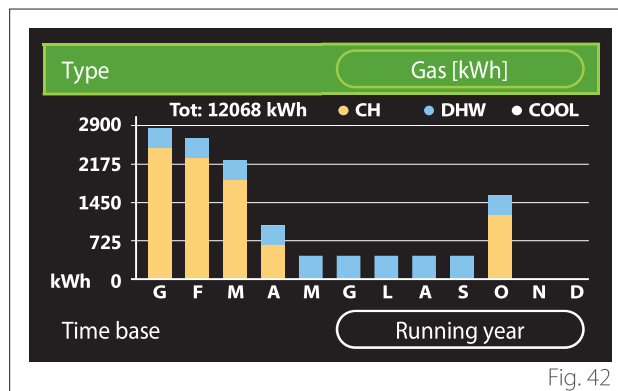
Fig. 42

In the "Type" field you can choose how to display consumption information (in terms of energy or money, by converting the values using the gas and electricity rates).
The units of measurement for energy and gas and electricity rates can be set from the menu: "System info" ⟶ "System Performance" ⟶ "Energy Consumption" ⟶ "Units of measure and costs".

In the "Time base" field you can select the time range for the consumption history chart:

– "Running month"
– "Running year"
– "Last year"

3.4 Holiday function

The "Holiday function" allows for:

– Deactivating the heating, cooling and domestic hot water modes during the holiday period.

– Setting the system to DHW and anti-frost protection mode until the set date.
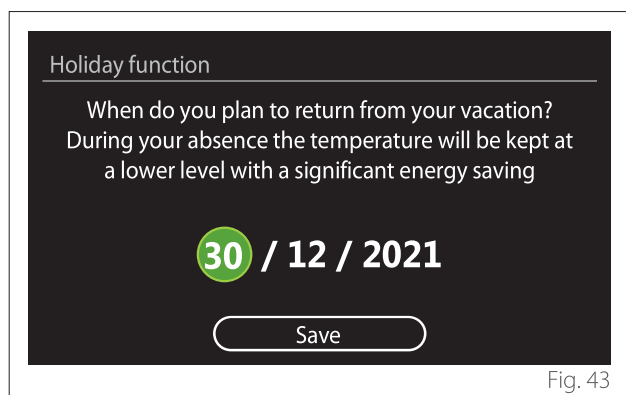
Fig. 43

– Turn the selector ⊙ to change the value of the selected field.

– Press the selector 🔍 to skip to the next item

– To change a previously set value, press the "Back" button ↩.
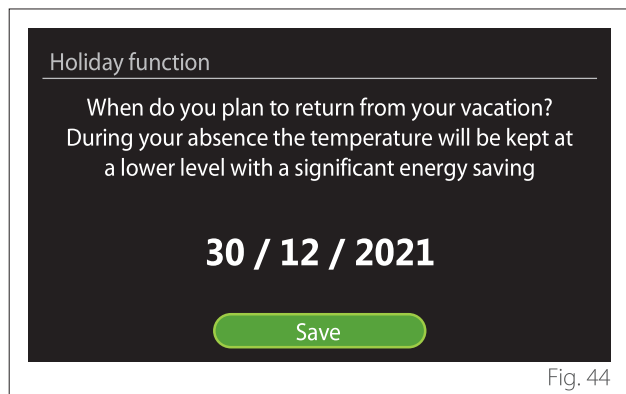
Fig. 44

Navigate to "Save" and press the selector 🔍.
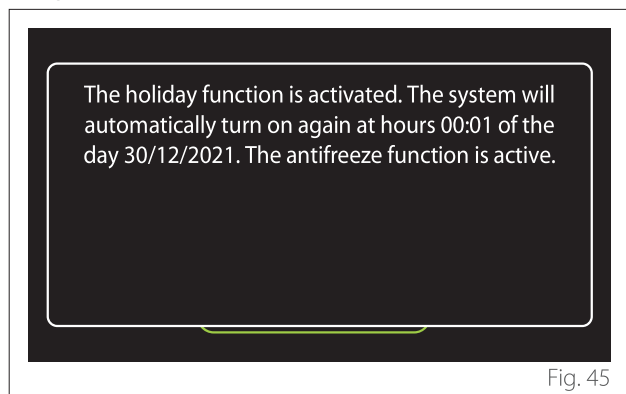
Fig. 45

A message will appear to confirm the settings.

3.5 Operation mode

Allows for selecting the system's operating mode:

– **"Summer":** domestic hot water production, space heating off.

– **"Winter":** domestic hot water production and space heating on.

– **"Heating only":** indirect cylinder heating off (where present).

– **"Cool mode and Domestic hot water":** domestic hot water production and cooling.

– **"Only Cool mode":** indirect cylinder heating off (where present).

– **"OFF":** system off, anti-frost function enabled.

3.6 DHW settings

The "DHW settings" function allows for selecting:

– The desired water temperature.

– The operating mode for domestic hot water production.

– The thermal sanitisation function for the DHW storage tank (if present).
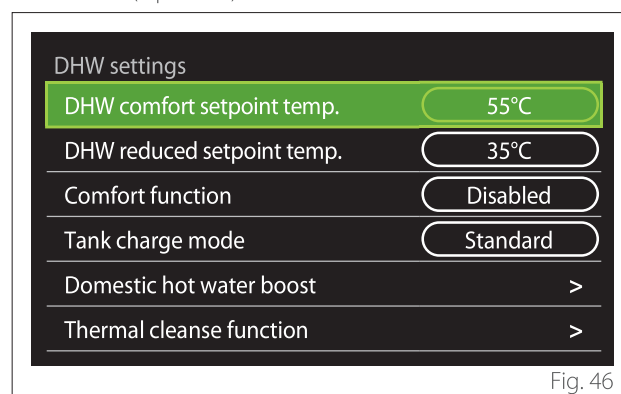
Fig. 46

– **"DHW comfort setpoint temp.":** setting of the temperature set-point for the comfort slot.

– **"DHW reduced setpoint temp.":** setting of the temperature set-point for the reduced-temperature slot.

– **"Comfort Function":** setting of the operating mode for domestic hot water production ("Disabled"/"Time Based"/"Always active").

– **"Tank charge mode":** setting of the cylinder filling mode in hybrid systems ("Standard"/"Fast").

– **"Domestic hot water boost":** fast filling of the cylinder (available for heating heat pumps and domestic hot water).

– **"Thermal cleanse function":** see next paragraph.

– **"DHW time program":** direct access to the DHW time scheduling menu.

3.6.1 Thermal cleanse function

Fig. 47
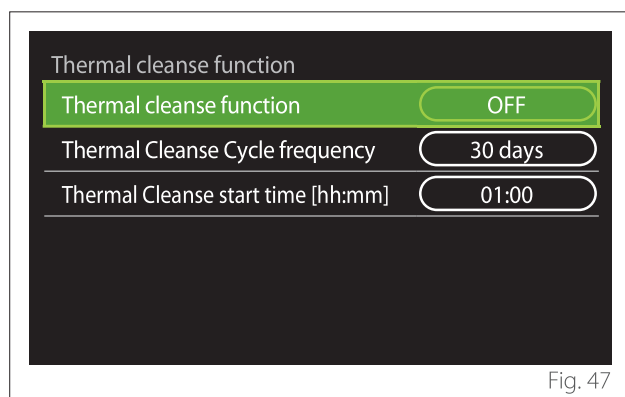
- – **"Thermal cleanse function":** enables/disables the thermal sanitisation of the DHW cylinder.
- – **"Thermal Cleanse Cycle frequency" (where available):** sets the frequency of the sanitisation cycle (24 hours - 30 days).
- – **"Thermal Cleanse start time [hh:mm]" (where available):** sets the start time for the thermal sanitisation cycle.

⚠ **If the thermal sanitisation cycle is not completed within the scheduled time, it will be repeated on the following day at the specified time.**

3.7 Connectivity

Fig. 48
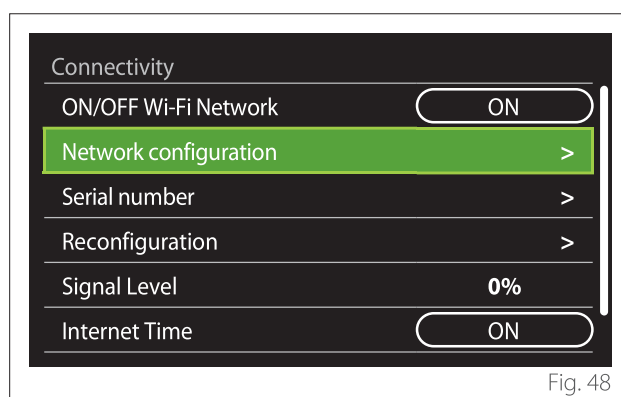
- – **"ON/OFF Wi-Fi Network":** Enables/disables the Wi-Fi module connected to the system
- – **"Network configuration":** Enables the configuration of the Wi-Fi module present in the system. Read the product instructions for further information.
- – **"Serial number":** Displays the serial number of the Wi-Fi device installed.
- – **"Reconfiguration":** Restores the factory settings of the Wi-Fi device.
- – **"Signal Level":** Displays the Wi-Fi signal strength on a scale from 0 to 100.
- – **"Internet Time":** Enables the acquisition of the system's time from the Internet
- – **"Internet weather":** Enables the acquisition of the outdoor temperature and the weather conditions from the Internet

3.8 System info

Fig. 49
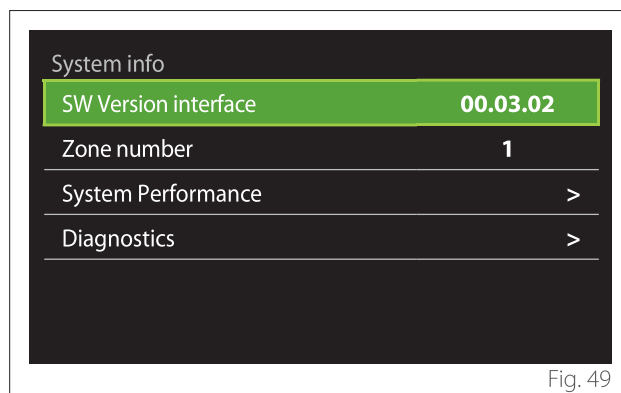
3.8.1 SW Version interface

Shows the device's software version.

3.8.2 Zone number

Shows the zone associated with the device.

3.8.3   System Performance

System Performance	
Energy metering	**>**
SCOP	**3,5**
SEER	**3,2**
CO2 saved	**100kg**
Showers n°	**5**
Report Reset	**>**

Fig. 50

ENERGY CONSUMPTION

Energy metering	
Consumptions graph	**>**
Consumption table	**>**
Production graph	**>**
Units of measure and costs	**>**

Fig. 51
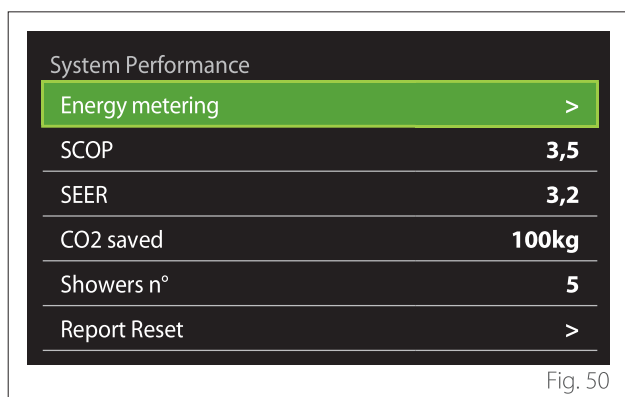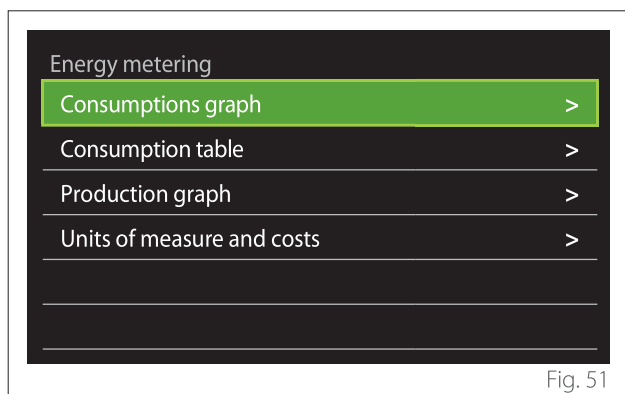
– **"Consumptions graph":** refer to the paragraph "Consumptions graph".

– **"Consumption table":** Shows the estimate in numerical format for consumption in heating, cooling and DHW modes. The estimate is calculated based on the selected measurement unit and on consumption information from the current or previous year.

Type	Gas [kWh]			
	🔥	🚿	❄	TOT
January	0	0	0	0
February	0	0	0	0
March	0	0	0	0
April	0	0	0	0
Time base	Running year			

Fig. 52
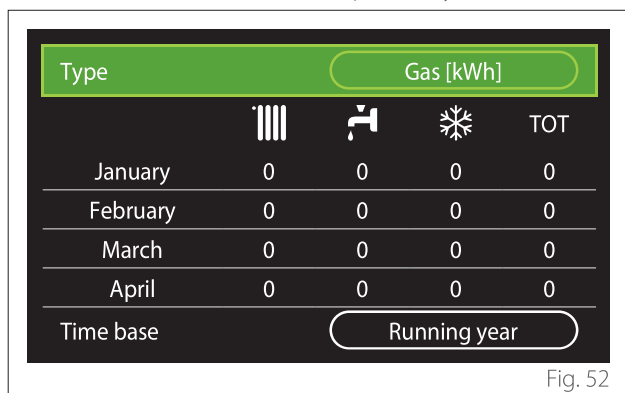
– **"Production graph":** shows through histograms the estimate of the thermal energy produced. The estimate is calculated according to the type of generator present in the system in the heating, DHW and cooling modes.

Fig. 53
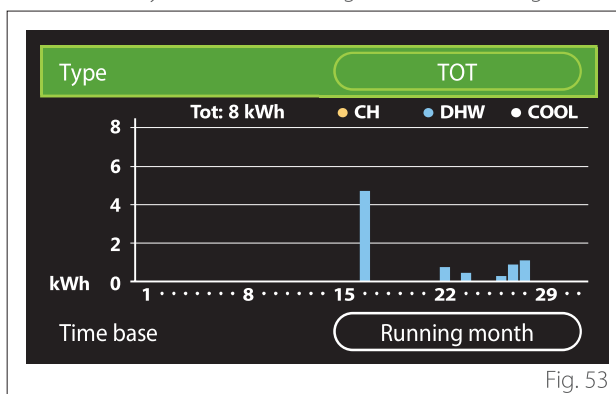
– **"Units of measure and costs":**

  – "Currency": the parameter sets the currency shown in the consumption charts.

  – "Gas Type": selects the type of gas used to calculate the gas consumption estimates.

  – "Gas units": selects the unit of measurement used for gas consumption estimates.

  – "Gas cost": sets the price for the unit of measurement used to calculate gas consumption estimates.

  – "Electric units": selects the unit of measurement for power consumption estimates.

  – "Electricity cost": sets the price for the unit of measurement used to calculate power consumption estimates.

Units of measure and costs	
Currency	**Euro (€)**
Gas Type	NG
Gas units	kWh
Gas cost	0 cent
Electric units	kWh
Electricity cost	0 cent

Fig. 54
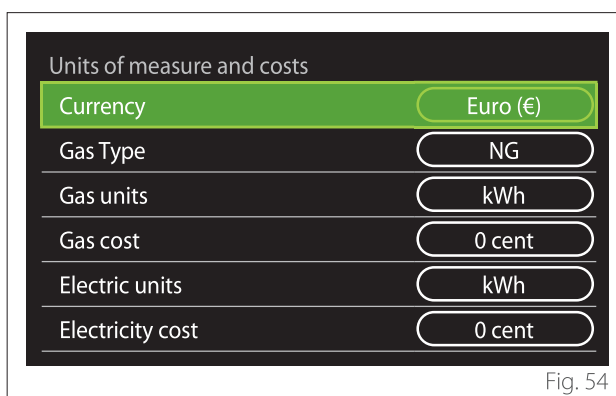
SCOP

Shows the estimate of the seasonal COP estimate of the heat pump (only for configured devices).

SEER

Shows the estimate of the seasonal EER estimate of the heat pump (only for configured devices).

CO2 SAVED

Shows the estimate of the kilograms of CO_2 saved with the thermal production of the solar heating system.

SHOWERS N°

Shows the estimate of remaining showers (if a solar heating controller or a DHW heat pump is installed).

REPORT RESET

Resets the data appearing in the system performance pages.

3.9 Diagnostics
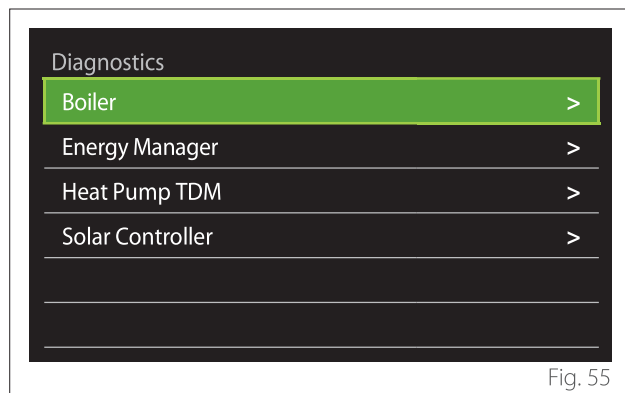
Fig. 55

The diagnostics page shows the main operating parameters of the devices present in the system.
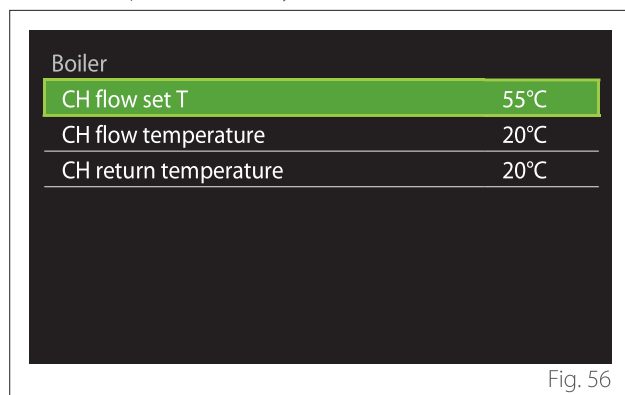
Fig. 56

3.10 Screen settings

3.10.1 Language
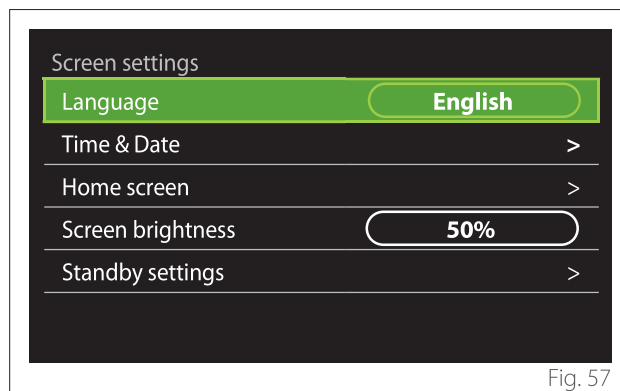
Fig. 57

– Turn the selector ⊙ to highlight the "Language" item
– Press the selector ⊙ to enter the edit mode.
– Turn the selector ⊙ to choose the desired language.
– Press the selector ⊙ to confirm.

3.10.2 Time & Date
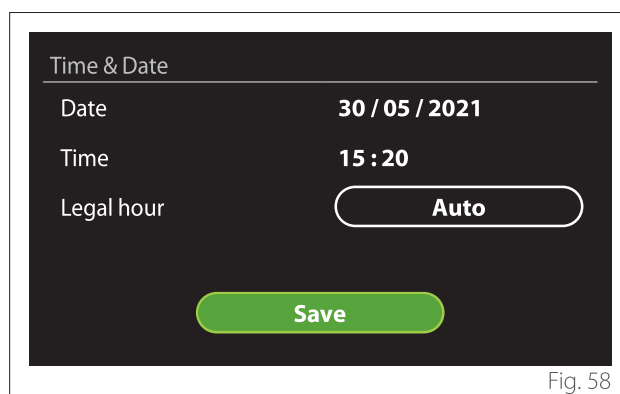
Fig. 58

– Turn the selector ⊙ to change the value of the selected field.
– Press the selector ⊙ to skip to the next item.
– To change a previously set value, press the "Back" button ↩.

3.10.3 Home screen

From this menu you can set the type of home page.

– Press the selector ⊙ to enter the edit mode.
– Turn the selector ⊙ to choose one of the available settings: "Complete", "Base", "Customizable" and "Hp Water Heater".

3.10.4   Screen brightness

From this menu you can change the brightness of the display.

- – Press the selector 🔍 to enter the edit mode.
- – Turn the selector ⟳ to adjust the brightness of the display when it is in active mode (from 10% to 100%).
- – Press the selector 🔍 to confirm.

3.10.5   Standby settings

Fig. 59
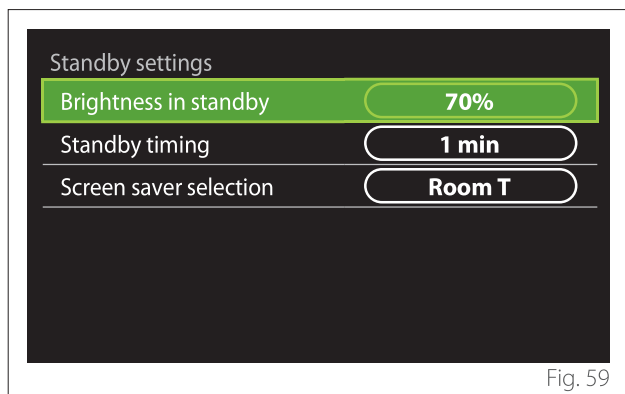
- – **"Brightness in standby":** allows to set the brightness of the display when the device is in stand-by mode (from 10% to 30%).
- – **"Standby timing":** allows to set the time interval (from 1 to 10 minutes) from the last operation made on the device, after which the screen enters stand-by mode and its brightness is reduced to the value set for the stand-by mode.
- – **"Screen saver selection":** allows to select the type of screen to be displayed in stand-by mode.

Fig. 60
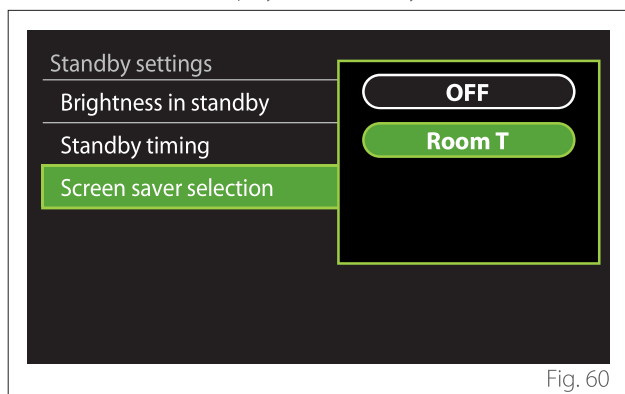
- – **"OFF":** displays the selected home page.
- – **"Room T":** displays the current room temperature.

3.11   Advanced settings

3.11.1   CH settings

Fig. 61
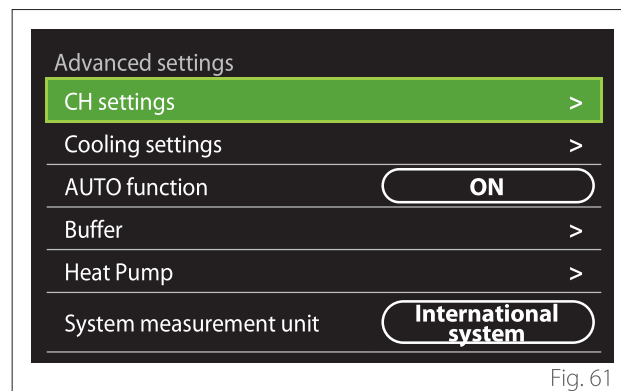
- – **"CH setpoint temperature":** in the menu you can set the water temperature set-point in heating mode for each hydraulic zone present in the system. The menu can be used to:
  - – adjust the temperature set-point if the automatic temperature control function ("AUTO function") is disabled.
  - – apply a correction to the temperature set-point using a slider, if the automatic temperature control function ("AUTO function") is active and the water temperature does not match the desired temperature.

Fig. 62
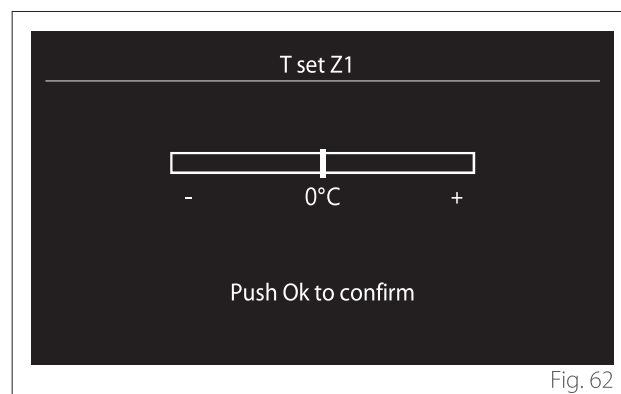
– **"Set curve slope":** if the automatic temperature control function ("AUTO function") is active, the slider can be used to change the slope of the climate curve. Consult the manual of the heat generator installed in the system for further information.

Zone 1 parameters

T set Z1   >

Set curve slope   >

Fig. 63

Set curve slope

–   1,5   +

Push Ok to confirm
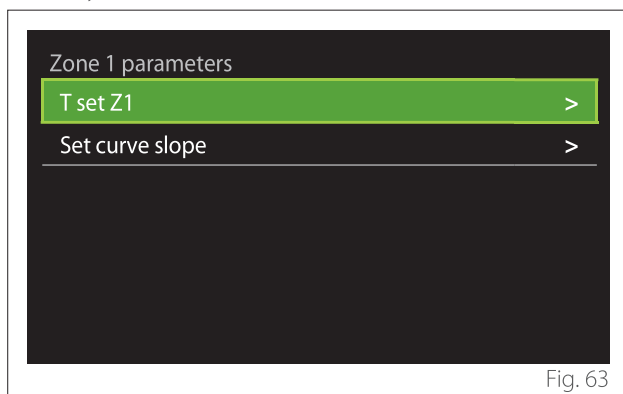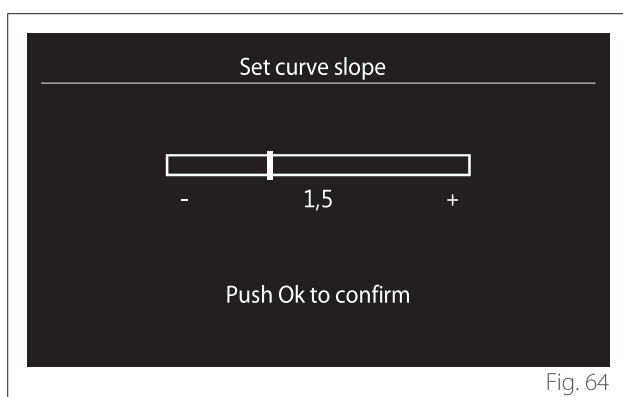
Fig. 64

– **"Automatic winter mode":** allows to adjust the heat request according to the outdoor temperature. In order to enable this function, an outdoor temperature sensor must be fitted in the system or, if available, the "Internet weather report" function must be active (refer to the "Connectivity" paragraph). The function can be activated for each zone of the system.

Zone 1 parameters

Automatic winter mode activation	OFF
Automatic winter mode threshold	20°C
Automatic winter mode delay time	300 min
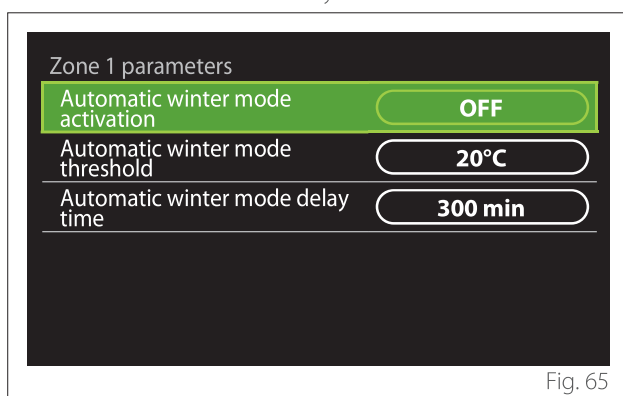
Fig. 65

– **"Automatic winter mode activation":** allows for activating the function.

– **"Automatic winter mode threshold":** allows for setting the outdoor temperature threshold above which the zone's heat request is inhibited.

– **"Automatic winter mode delay time":** the heat request is inhibited if the outdoor temperature stays above the threshold for a minimum time defined by the parameter.

3.11.2   Cooling settings

– **"Cooling setpoint temp":** in the menu you can set the water temperature set-point in cooling mode for each hydraulic zone present in the system. The menu can be used to:

  – Adjust the temperature set-point if the automatic temperature control function ("AUTO function") is disabled.

  – Apply a correction to the temperature set-point using a slider, if the "AUTO" function is active and the water temperature does not match the desired temperature.

3.11.3   AUTO function

This function calculates the water temperature set-point in heating and/or cooling mode for each zone according to the type of temperature control set (technical menu) and the temperature sensors (room temperature sensor and/or outdoor temperature sensor – if present).

3.11.4   Buffer tank
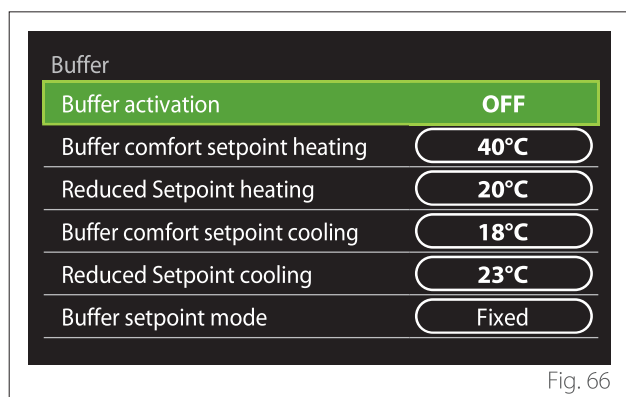
Fig. 66

This function is available only if the system is fitted with a technical water storage tank (buffer) for heating and/or cooling.

- **"Buffer activation":** allows to enable/disable the buffer charge.
- **"Buffer comfort setpoint heating":** sets the desired buffer charge temperature in heating mode for the comfort slot.
- **"Reduced Setpoint heating":** sets the desired buffer charge temperature in heating mode for the reduced slot.
- **"Buffer comfort setpoint cooling":** sets the desired buffer charge temperature in cooling mode for the comfort slot.
- **"Reduced Setpoint cooling":** sets the desired buffer charge temperature in cooling mode for the reduced slot.
- **"Buffer setpoint mode":** sets the buffer charge mode.
  - **"Fixed":** the buffer charge temperature is defined in the parameters shown above.
  - **"Variable":** the buffer charge temperature is calculated according to the automatic temperature control function (if active).

3.11.5   Heat Pump

This menu is available only if a heat pump with the heating/cooling functions is installed. For further information, see the product manual.
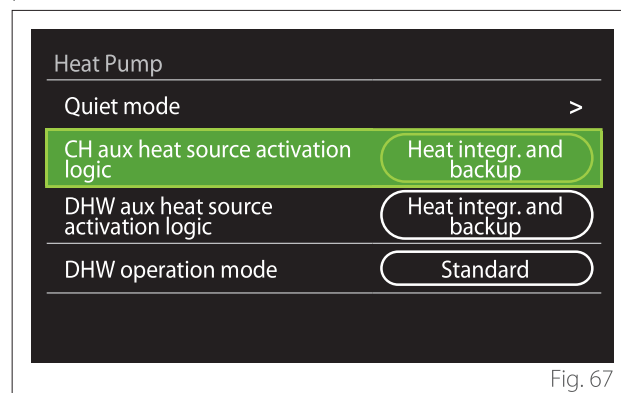
Fig. 67

- **"Quiet mode":** the following settings allow for reducing the noise level of the heat pump by limiting the compressor frequency.

⚠ **Activating this function may reduce the machine's performance.**

  - **"Quiet mode activation HHP":** enables/disables the silent mode.
  - **"Quiet mode start time HHP [hh:mm]":** sets the time for the machine to start working in silent mode.
  - **"Quiet mode end time HHP [hh:mm]":** sets the time for the machine to stop working in silent mode.
- **"CH aux heat source activation logic":** the parameter allows to choose when to activate the secondary heat source (heating elements, if enabled or present, or an auxiliary heat source) of the heat pump in heating mode.
  - In case of a heat pump malfunction and for heat production integration ("Heat integr. and backup"): the secondary heat source is activated to integrate heating/DHW production and in case of a heat pump malfunction.
  - Only in case of a heat pump malfunction ("HP failure backup"): the secondary heat source is activated only in case of a heat pump malfunction.
- **"DHW aux heat source activation logic":** the parameter allows to choose when to activate the secondary heat source (heating elements, if enabled or present, or an auxiliary heat source) of the heat pump in DHW mode.

– **"DHW operation mode":** the parameter sets the DHW production mode.

  – **"Standard":** domestic hot water is produced using both the heat pump and the secondary heating source for integration.

  – **"Green Mode":** the heating elements are excluded from the production of domestic hot water and are activated only in case of a heat pump malfunction. Domestic hot water production follows the auxiliary time scheduling.

  – **"HC - HP":** domestic hot water production is only allowed when the EDF signal is active and according to the cheapest electricity rate. To configure the EDF signal of the heat pump, see the product manual.

  – **"HC - HP 40":** domestic hot water production is only allowed when the EDF signal is active; when the signal is not active, the DHW cylinder is maintained at the minimum temperature of 40°C. To configure the EDF signal of the heat pump, see the product manual.

3.11.6   Hybrid

This menu is available only if a hybrid product is installed. For further information, see the product manual.
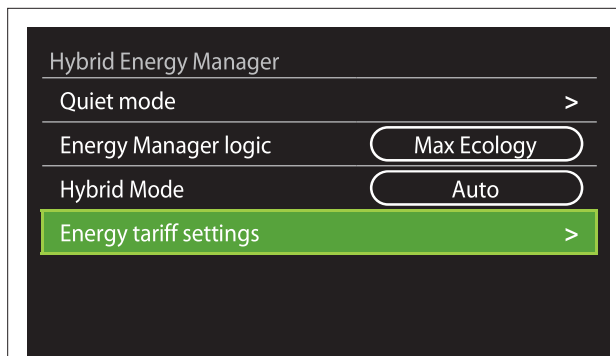
Fig. 68

– **"Quiet mode":** refer to the paragraph "Heat Pump".

– **"Energy Manager logic":** the parameter allows to select the operation of the hybrid system based on the "Max Saving" or "Max Ecology" values.

– **"Hybrid Mode":** the parameter allows to choose the heat generators to be enabled in the production of heat.

  – "Auto": both the heat pump and the boiler are used to produce heat according to the setting of the previous parameter.

  – "Only boiler": only the boiler is used for the production of heat.

  – "Only HP": only the heat pump is used for the production of heat.

– **"Energy tariff settings":** this menu allows you to set the price for gas and electricity, as well as a reduced electricity rate. The prices are expressed in cents.

3.11.7   Hp Water Heater

This menu is available only if a DHW heat pump is installed. For further information, see the product manual.

- **"Operation mode":** sets the DHW production mode.
- **"Quiet mode activation HPWH"** refer to the paragraph "Heat Pump". For DHW heat pumps you can only activate the function. You cannot set a start and end time.

Heat pump water heater	
Operation mode	Comfort
Quiet mode activation HPWH	OFF
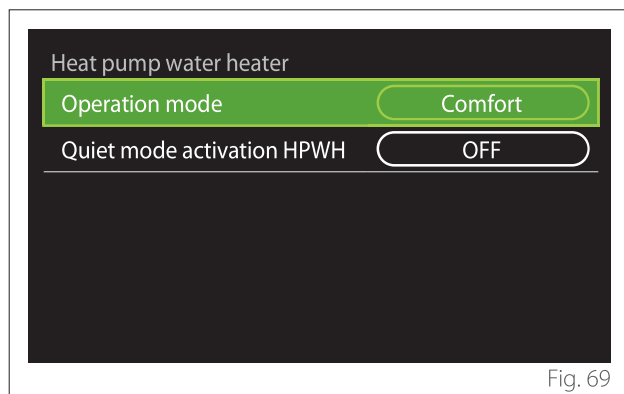
Fig. 69

"Operation mode":

- **"GREEN":** the heating elements are excluded from the production of domestic hot water and are activated only in case of a heat pump malfunction.
- **"Comfort":** domestic hot water is produced using both the heat pump and the heating elements.
- **"Fast":** domestic hot water is produced by using both the heat pump and the heating elements at the same time. The heating elements are switched on together with the heat pump to minimise the DHW storage tank charge time.
- **"I-memory":** an algorithm optimises domestic hot water production according to the user's habits.
- **"HC - HP":** the production of domestic hot water follows the settings of the EDF signal. To configure the EDF signal of the heat pump, see the product manual.

3.11.8   Photovoltaic integration

This menu is available for products that are configured for integration with a photovoltaic system (heating/cooling, hybrid, DHW heat pumps).

- **"Photovoltaic integration":** sets the use of the DHW storage tank heating element for supported heat pumps (see the product manual for further information).
  - "None"
  - "Photovoltaic integration": activates the heating element of the DHW storage tank (also simultaneously to heating or cooling) when additional electrical energy is available from the photovoltaic system.
- **"PV offset DHW setpoint temperature":** if a heating heat pump or a hybrid system is installed, the parameter sets the degrees to be added to the temperature set-point for DHW storage tank charge when additional electrical energy is available from the photovoltaic system.
- **"PV setpoint temperature":** if a DHW heat pump is installed, the parameter sets the temperature set-point for DHW storage tank charge when additional electrical energy is available from the photovoltaic system.

3.11.9   System measurement unit

This parameter sets the unit of measurement (international system or USA system)

Advanced settings	
Cooling settings	International system
AUTO function	USA system
System measurement un	
Time Program mode	
Room temperature corre	
Zones selection	
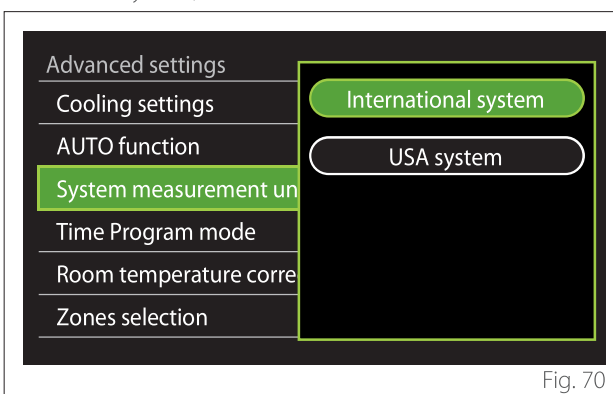
Fig. 70

3.11.10 Time Program service type set

Sets the time schedule mode used by the device for heating and cooling.

- **"Two levels setpoint":** the daily 2-level time scheduling allows for dividing the schedule into a maximum of 4 comfort slots and 4 reduced-temperature slots within the 24 hours of each day. It is possible to define a temperature set-point for the comfort slot and one for the reduced-temperature slot.

- **"Multilevel setpoint":** in daily multi-level time scheduling, available only on specially configured products, it is possible to define up to 12 daily slots, each of which can be associated with a specific set-point temperature.
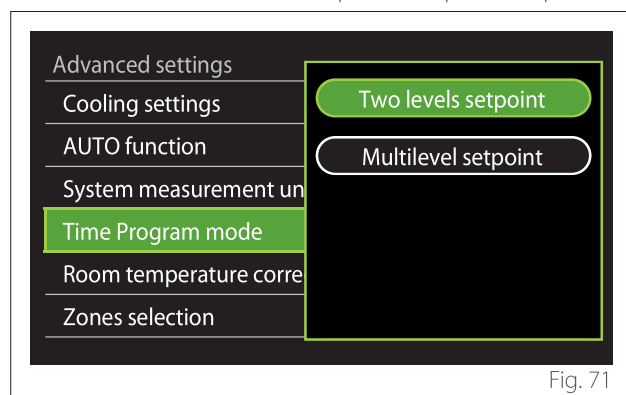
Fig. 71

3.11.11 Room Temp Correction

This parameter allows for correcting the room temperature measured by the device by ±5°C.

3.11.12 Select the zones to manage

In this page you can select the hydraulic zones to be displayed in the "Zones management" menu.
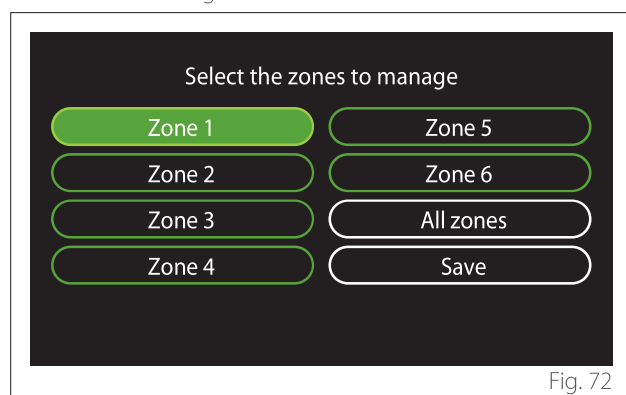
Fig. 72

3.12 Errors and diagnostic messages
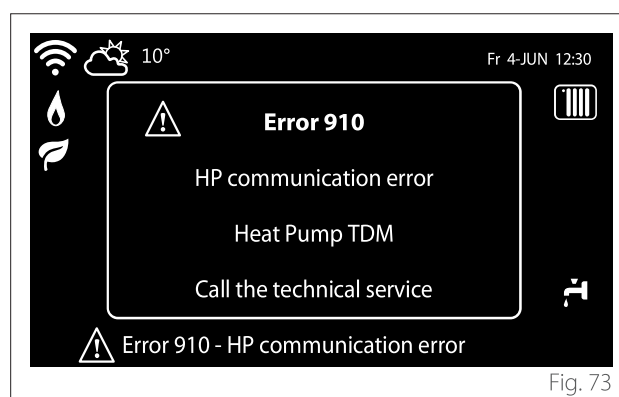
Fig. 73

Diagnostic events (errors, alert messages, etc.) are shown in a pop-up window in the home page.
The pop-up window shows the following information:

- Error code
- Error description
- Device/product that generated the error
- Any actions to be implemented for solving the problem

The pop-up window can be closed by pressing the Back button ⬑. The error notification will remain visible in the home page where the error icon ⚠, the error code and description are displayed.
The window with the detailed information will automatically pop up again after one minute. It can also be opened manually by pressing the Back button ⬑ again.

4. Commissioning

User information

Inform the user on how to operate the installed system.
In particular, hand this instruction manual to the users, informing them that is must be kept near the product at all times.
Inform potential users that the following actions must be carried out:

- Periodically check the system water pressure.
- Restore system pressure, by deaerating the system when necessary.
- Adjust the setting parameters and the adjustment devices to optimise operation and reduce the system's operating costs.
- Perform regular maintenance, as envisaged in the standards.

4.12.1 Filling the system

Check the water pressure on the pressure gauge regularly and make sure that the pressure is between 0.5 and 1.5 bar when the system is cold.
If the pressure is below the minimum value, it must be increased through the filling cock.
Close the cock once the average value of 1.2 bar has been reached.
The maximum pressure of the heating/cooling system is 3 bar.

> ⚠ **The installation, initial start up, and configuration must be carried out in accordance with the instructions, by a qualified technician only. The manufacturer declines all responsibility for damages caused to people, animals or possessions following incorrect installation of the appliance.**

> ⚠ **If frequent fillings (once a month or more frequently) are required for your system, this indicates a potential problem with the installation (leaks, expansion vessel problems). Contact your trusted installer to analyse and solve the problem quickly, and to prevent damage caused by corrosion of the components due to excessive water replacement in the system.**

4.1 Initial start-up

> ⚠ **To guarantee safety and correct operation of the system interface, it must be commissioned by a qualified technician in possession of the skills as required by law.**

4.1.1 Start-up procedure

- Insert the system interface on the connection slide pushing it gently downwards. After a brief initialisation, the device will be ready for being configured.
- The display screen shows "Select language". Select the desired language by rotating the selector.
- Press the selector 🗘.
- The display shows the "Date and Time". Turn the selector to select day, month and year. For each selection, always press the selector to confirm. Once the date has been set, the selection shifts to the time setting. Turn the selector to set the exact time, press the selector to confirm and move to the minute selection and setting. Press the selector 🗘 to confirm.
- Once the date is set, the selection moves to the daylight saving time setting. Turn the selector to select AUTO or MANUAL. If you want the system to automatically update the period when daylight saving time is in use, select AUTO.
- Press the selector 🗘.

NOTE:
The display is set by default with a multi-level set-point time schedule. If a message appears concerning the time schedule conflict:

- On the home page press the "Menu" button 📋 to access the user menu.
- Turn the selector 🗘 to select the "Advanced settings" menu, then press the selector 🗘.
- Turn the selector 🗘 to select the "Type of service of the schedule programme", then press the selector 🗘.
- Turn the selector 🗘 and select the same value (Two-Level Set-Point or Multi-Level Set-Point) present in the other User Interfaces (see technical parameter 0.4.3 on the boiler interface, if available) and press the selector 🗘.
- If there is still a conflict, repeat the procedure and use the selector to choose the two-level set-point, then press the selector 🗘.

NOTE:
Some parameters are protected with an access code (safety code) which protects the appliance's settings against unauthorised use.

4.2 Error list

The errors are displayed on the interface in the indoor unit (see paragraph "System interface SENSYS HD").

Indoor unit errors

Code	Description	Resolution
114	Outside temperature not available	Temperature control activation based on the external sensor External sensor not connected or damaged. Check the sensor's connection and replace it, if necessary.
730	Buffer high probe error	Buffer filling inhibited. Check the hydraulic diagram. Buffer sensor not connected or damaged. Check the sensor's connection and replace it, if necessary.
731	Buffer overtemperature	Buffer filling inhibited. Check the hydraulic diagram. Buffer sensor not connected or damaged. Check the sensor's connection and replace it, if necessary.
732	Buffer low probe error	Buffer filling inhibited. Check the hydraulic diagram. Buffer sensor not connected or damaged. Check the sensor's connection and replace it, if necessary.
902	System flow sensor damaged	Delivery sensor not connected or defective. Check the sensor's connection and replace it, if necessary.
923	Heating circuit pressure error	Check for any water leakages in the hydraulic circuit Faulty pressure switch Defective cabling of the pressure switch. Check the connection of the pressure switch and replace it, if necessary.
924	HP communication error	Check the cabling between the TDM board and the Energy Manager
927	AUX inputs correspondence error	Verify the configuration of parameters 1.1.3 and 1.1.4
928	Energy supply shutdown configuration error	Check the configuration of parameter 1.1.5
933	Flow sensor overtemperature	Check the flow in the primary circuit. Delivery sensor not connected or defective. Check the sensor's connection and replace it, if necessary.
934	DHW tank sensor damaged	Calorifier sensor not connected or defective. Check the sensor's connection and replace it, if necessary.
935	Tank overtemperature	Check whether the 3-way valve is locked in the DHW position. Check the connection of the calorifier's sensor and replace it, if necessary.

Code	Description	Resolution
936	Floor thermostat 1 error	Check the flow of the under-floor system. Check the connection of the thermostat on the IN-AUX2 STE terminal of the Energy Manager and/or STT of the TDM. If the thermostat of the under-floor system is not present, apply an electrical jumper to terminal IN-AUX2 STE of the Energy Manager and/or STT of the TDM.
937	No circulation error	Check that the main circuit has activated
938	Anode fault	Check the connection of the anode Check whether there is any water in the indirect cylinder Check the condition of the anode Check the configuration of parameter 1.2.6
940	Hydraulic scheme not defined	Hydraulic diagram not selected through parameter 1.1.0
955	Water flow check error	Check the connection of the flow and return temperature sensors
970	Aux. pump configuration mismatch	Check the configuration of parameter 1.2.5
2P2	Thermal cleanse not complete	Sanitisation temperature not reached in 6 h: Check the drawing of domestic hot water during the thermal sanitisation cycle Check the activation of the heating element
2P3	DHW setpoint not reached in boost	Domestic hot water set-point temperature not reached during the boost cycle Check the drawing of domestic hot water during the DHW boost cycle Check the activation of the heating element
2P4	Electr. heater thermos. (manual)	Check the activation of the main circulation pump Check the flow with the reading of the flow meter through parameter 13.9.3 Check the condition of the safety thermostat and of the cabling
2P5	Electr. heater thermostat (auto)	Check the activation of the main circulation pump Check the flow with the reading of the flow meter through parameter 13.9.3 Check the condition of the safety thermostat and of the cabling
2P7	Precirculation error	Check the connection of the flow meter Run an automatic deaeration cycle 1.12.0
2P8	Low pressure warning	Check for any water leakages in the hydraulic circuit Faulty pressure switch Defective cabling of the pressure switch. Check the connection of the pressure switch and replace it, if necessary.
2P9	SG ready input config. err.	Only one of the parameters 1.1.0 or 1.1.1 is set as an SG Ready input

Outdoor unit errors

Error	Description	NO RESET	RESET		
		Volatile	User reset	HP Power OFF	Service reset
1	TD sensor error	-	X	-	-
905	HP compressor mismatch error	-	-	X	-
906	HP fan mismatch error	-	-	X	-
907	HP 4-way valve mismatch error	-	-	X	-
908	Expansion valve mismatch error	-	-	X	-
909	HP zero fan speed	-	-	X	-
910	Inverter-TDM communication error	X	-	-	-
912	4-way valve error	-	-	-	X
913	LWT sensor error	X	-	-	-
914	TR sensor error	X	-	-	-
917	Freeze error	-	-	-	X
918	Pump down error	-	-	-	X
922	Freeze error	-	X	-	-
931	Inverter error	X	-	-	-
947	4-way valve error	-	X	-	-
956	HP compressor model mismatch	-	-	X	-
957	HP fan model mismatch	-	-	X	-
960	HP EWT sensor error	X	-	-	-
962	Defrost energy	X	-	-	-
968	ATGBUS TDM-EM communication error	X	-	-	-
989	Machine empty error	-	-	-	X
997	Compressor overcurrent	-	-	X	-
998	Compressor overcurrent	-	-	-	X
9E5	High-pressure pressure switch intervention	X	-	-	-
9E8	Low-pressure pressure switch error with compressor OFF	X	-	-	-
9E9	Klixon error with compressor OFF	X	-	-	-
9E18	ST1 safety thermostat error	X	-	-	-
9E21	Low refrigerant charge error	-	X	-	-
9E22	Machine empty error	-	-	-	X
9E24	EXV seized up error	-	X	-	-
9E25	EXV seized up error	-	-	-	X
9E28	High pressure protection	-	X	-	-
9E29	High pressure protection	-	-	-	X
9E31	Compressor thermostat protection	-	X	-	-
9E32	Compressor thermostat protection	-	-	-	X
9E34	Low-pressure protection	-	X	-	-
9E35	Low-pressure protection	-	-	-	X
9E36	Compressor phases current imbalance	-	X	-	-
9E37	Compressor phases current imbalance	-	-	-	X
9E38	Excessively steep compressor current variation	-	X	-	-
9E39	Excessively steep compressor current variation	-	-	-	X

Inverter error

Description	Code (for inverter errors falling within error code 931)	NIMBUS EXT R32	
		35 S - 50 S - 80 S	80 S-T
Inverter output current sensor error	1	x	x
DC bus condensers pre-charge error	2	x	
Inverter input voltage sensor error	3	x	
Inverter heat sink temperature sensor error	4	x	x
DSP&MCU communication error	5	x	
Inverter input AC overcurrent	6	x	x
Inverter PFC current sensor error	7		x
Inverter PFC temperature sensor error	8		x
Corrupt EEPRPOM	9		x
PFC HW overcurrent	10		x
PFC SW overcurrent	11		x
Inverter PFC overvoltage	12		x
A/D error	13		x
Addressing error	14		x
Compressor inverse rotation	15		x
No current variation on compressor phase	16		x
Misalignment between real and calculated speed	17	x	x

5. Service

5.1 Anomalies and solutions

In case of problems, run the following checks before contacting a Technical Assistance Service.

Anomalies	Possible causes	Solutions
Unsatisfactory cooling performances	The set temperature could be higher than the room temperature	Set a lower temperature
	The heat exchanger of the indoor or outdoor unit is dirty	Clean the heat exchanger (Service Centre)
	The air inlet or outlet of the outdoor unit is obstructed	Switch the unit off, eliminate the cause of the obstruction and switch the air conditioner on again
	Door and windows open	Close the doors and windows while using the unit
	Sunlight generates excessive heat	Draw the curtains and close the windows during the hottest hours of the day or when the sunlight is more intense
	Too many sources of heat in the room (people, computers, electronic devices, etc.)	Reduce the sources of heat
	Low refrigerant level due to leakages or extended use	Check that there are no leakages, reseal the system if necessary and top up the refrigerant (Service Centre)
The unit does not work	Power shortage	Wait for electricity to be restored
	The unit is switched off	Switch the appliance on
	The fuse has blown	Replace the fuse (Service Centre)
	The timer is active	Deactivate the timer
The unit starts or stops frequently	There is too much or too little refrigerant in the system	Check that there are no leakages and top up the refrigerant if necessary (Service Centre)
	Incompressible gas or humidity has entered the system.	Purge the system and recharge the refrigerant (Service Centre)
	The compressor is faulty	Replace the compressor (Service Centre)
	The voltage is too high or too low	Install a voltage regulator (Service Centre)
Unsatisfactory heating performances	The outdoor temperature is extremely low	Use an auxiliary heating appliance
	Cold air seeps in from doors and windows	Close the doors and windows while using the unit
	Low refrigerant level due to leakages or extended use	Check that there are no leakages, reseal the system if necessary and top up the refrigerant (Service Centre)

NOTE: if, after performing the checks and diagnostics procedures described above, the problem persists, switch the unit off immediately and contact a Technical Assistance Service.

5.2   Cleaning and inspecting the indoor unit

Only use a soft and dry cloth to clean the unit.
If the unit is very dirty, it is possible to use a cloth dampened with lukewarm water.
Check that the drainage pipe is laid according to the instructions. If not, water leakages may occur resulting in material damages and the risk of fire and electrocution.

5.3   Cleaning and inspecting the outdoor unit

Only use a soft and dry cloth to clean the unit.
If the unit is very dirty, it is possible to use a cloth dampened with lukewarm water.
If the evaporator **(1)** of the outdoor unit is clogged up, remove all leaves and debris, then clean off all dust with a water jet or some water. Repeat the same procedure with the front grille **(2)**.
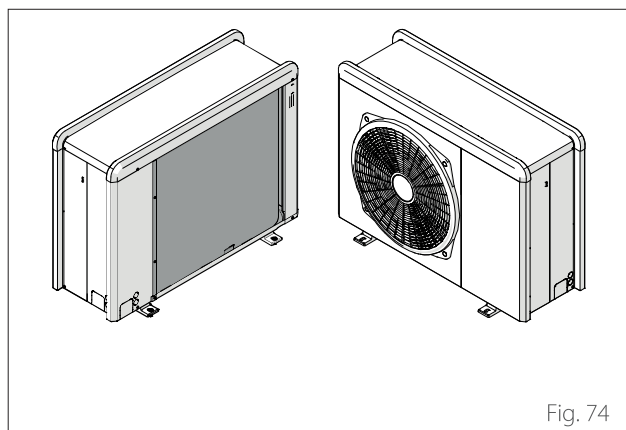

Fig. 74

5.4   Disposal

The manufacturer is registered with the national EEE Register, in conformity to the implementation of Directive 2012/19/EU, and of the relative national regulations in force concerning waste electrical and electronic equipment.
This directive recommends the correct disposal of waste electrical and electronic equipment.
Equipment bearing the crossed-out wheelie bin symbol must be disposed of at the end of its life and sorted to avoid detrimental effects on human health and on the environment.

Electrical and electronic equipment must be disposed of together with all its constituent parts.
To dispose of "domestic" electrical and electronic equipment, the manufacturer recommends contacting an authorised dealer or an authorised ecological facility.
The disposal of "professional" electrical and electronic equipment must be made by authorised personnel through the specially instituted local consortiums.
To this aim, we include below the definition of domestic WEEE and professional WEEE.

WEEE deriving from households: WEEE deriving from households and WEEE deriving from commercial, industrial, institutional and other sources, similar by nature and quantity, to that deriving from households. WEEE that could be used both by households and by other types of users are nonetheless regarded as WEEE coming from households;

Professional WEEE: all WEEE other than that coming from households as mentioned above.
This equipment may contain:

- Refrigerant gas that must be fully recovered by specialised personnel and accompanied by the necessary authorisations in special containers;

- Lubricant oil contained in compressors and in the refrigeration circuit that must be collected;

- Mixtures with anti-freeze liquids contained in the water supply distribution network, the contents of which must be appropriately collected;

- Mechanical and electrical parts that must be sorted and disposed of in an authorised manner.

When machine components are removed for being replaced for maintenance purposes or when the entire unit reaches the end of its life and must be removed from the installation, we recommend sorting the waste according to type and ensuring that it is disposed of by authorised personnel at the existing waste collection facilities.

Fig. 75