Temperature control unit

User manual

573918
573919

11/11-01 PC

legrand®

Contents

1. Introduction 5
- The Temperature Control Unit 6
- The navigation keypad 7
- The display 7

2. Operation 9
- Access the Control Unit menu 10
- The Mode menu 10
  - ✔ Select the Weekly mode 10
  - ✔ Select the Manual mode 11
  - ✔ Select the Scenarios mode 12
  - ✔ Select the Holiday mode 12
  - ✔ Select the Holidays mode 13
  - ✔ Select the OFF mode 14
  - ✔ Select Antifreeze or Heat protection 15
- The local probe 16

3. Information 17
- Diagnostic 18
- Check the mode of operation 19
- Check the temperature in the zones 20

4. Customisations 21
- Setting 22
  - ✔ Set the temperature levels 22
  - ✔ Set the mode of operation 23
  - ✔ Set the date and time 23
  - ✔ Enable/disable the remote control 24
  - ✔ Customise the User code 24
  - ✔ Adjust the display contrast 25
  - ✔ Contacts manag. 26

5. Programming 27
- The Programming menu 28
  - ✔ Weekly programming 28
  - ✔ Scenarios programming 34
  - ✔ Holiday programming 36

Introduction

- The Temperature Control Unit
- The navigation keypad
- The display

1 - Introduction

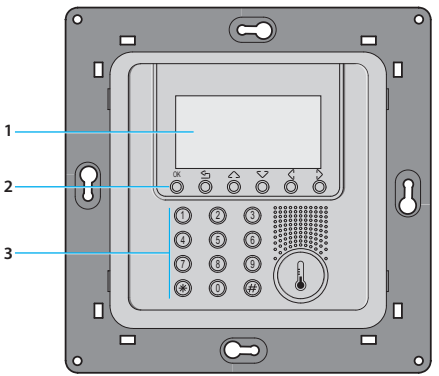
The comfort of a home is directly linked to the air quality and to being able to maintain an ideal temperature, whatever the weather outside.

With the In One by Legrand® temperature control function, whether it is snowing outside or the sun is shining, you are always the person who decides what climate to have in the home, setting the heating in winter and the cooling in summer as you want, with maximum flexibility: heating or cooling only the rooms you want and changing the temperature programming when you want.

Thanks to the Temperature Control Unit 573918/19, with management software with menus and graphic display, you can select the mode of operation (weekly – manual – scenarios ...), display the temperatures of the various rooms, modify or adjust the temperature at any time following daily rhythms or set it weekly, simply and safely.

Differentiating the temperature depending on the type of room, for example the night zone and the day zone, and the time of day, for example the hours of sleep and when the whole family is out, from those of the morning and the evening when everyone is at home, you can achieve a saving of 30% over traditional consumption.

The Temperature Control Unit

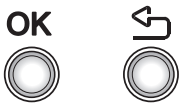


1 - Graphic display

2 - Navigation keypad

3 - Numeric keypad

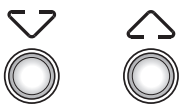
The navigation keypad



OK

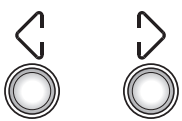
Key to confirm the selection displayed or the data entered

Key to cancel the selection and return to the previous page; keep pressed to quit the Main menu



Scroll keys

scroll the list of items in the menu

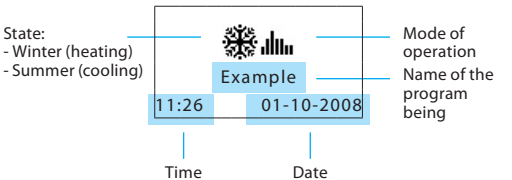


Selection keys

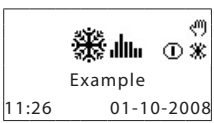
can select functions which in some menus appear in the last line

The display

During normal operation the display presents the following information:



Depending on the mode of operation set, the display shows the following icons:



One or more zones in OFF

One or more zones in MANUAL

One or more zones in ANTIFREEZE or HEAT PROTECTION

1 - Introduction

Mode of operation:

Weekly

Manual

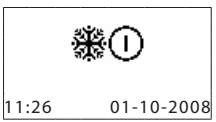
Scenarios

Holiday

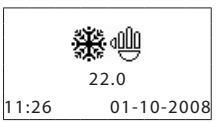
OFF

Antifreeze or Heatprotection

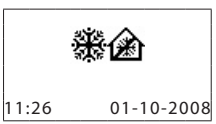
When the mode of operation is the same for ALL THE ZONES the display shows the following windows:



System OFF - all the zones in OFF

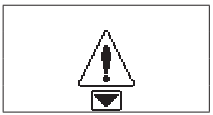


Manual - all the zones in manual



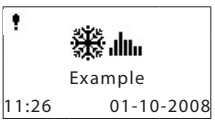
System in antifreeze - all the zones in antifreeze

If there is a fault an exclamation mark appears on the control unit display. Press any key to access the diagnostic menu for more information (see Diagnostic section).

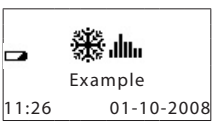


There is a problem on the system

If the problem persists the control unit will continue to signal by displaying an icon.



! the icon indicates an operation fault in one or more system zones.



Flat battery

Operation

- Access the Control Unit menu
- The Mode menu
  - ✔ Select the Weekly mode
  - ✔ Select the Manual mode
  - ✔ Select the Scenarios mode
  - ✔ Select the Holiday mode
  - ✔ Select the Holidays mode
  - ✔ Select the OFF mode
  - ✔ Select Antifreeze or Heat protection
- The local probe

Access the Control Unit menu

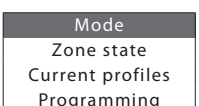
Access to the Main menu lets you perform all the configuration and checking operations described in this menu.

Press any key to access the Main menu

If enabled you will be asked for the base User code 00000

Use the ▽ △ keys to select the menu you want

Press OK to confirm and access the menu selected



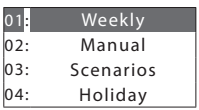
The Mode menu

The Mode menu lets you select the operation of your system, for example selecting one of the weekly programs you have set up or setting a fixed temperature for all the zones.

✔ Select the Weekly mode

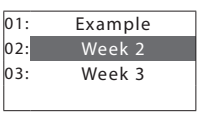
With the weekly mode your system works automatically following the programming set. You can choose from three programs which you can customise. Inside the programs the temperature can be differentiated over 24 hours and for each day of the week as you require.

In the Mode menu select **Weekly**



Press OK key to confirm

With the ▽ △ select a program

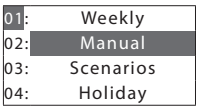


Confirm by pressing OK

✔ Select the Manual mode

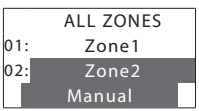
In Manual mode you can set a fixed temperature in the whole system or in the individual zones as you require.

In the Mode menu select **Manual**



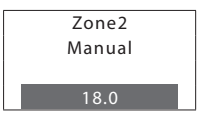
Press the OK to confirm

In manual mode the zones are marked by the highlighted number. You can select ALL THE ZONES or use the ▽ △ keys to select a single zone required (e.g. Zone2)



Confirm by pressing OK

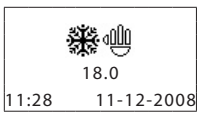
You will be asked to set a temperature; set it using the keypad or the ▽ △ keys



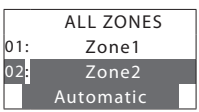
NEXT

*The display will show the **hand** signal to indicate that some zones are in manual*

On selecting ALL THE ZONES the window to the side appears on the display



To return the zone set in **Manual** to the previous condition select **Automatic** with the ◁ ▷ keys and confirm by pressing OK

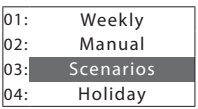


✔ Select the Scenarios mode

The Scenario mode lets you set different temperatures in various zones of the system with a single command. For example, if when cleaning you intend to open windows in some rooms you can set a lower temperature (or higher for cooling) to avoid wasting energy.

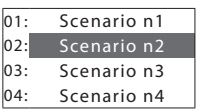
16 Winter scenarios and 16 Summer scenarios can be programmed.

In the Mode menu select **Scenarios**



Press the OK key to confirm

Select the Scenario required with ▽△ keys



Confirm by pressing OK

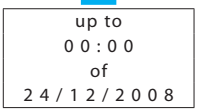
✔ Select the Holiday mode

The Holiday mode can select a particular daily profile for a set period. The program is run until the programmed date and time, after which the weekly program chosen will be reset.

In the Mode menu select **Holiday**

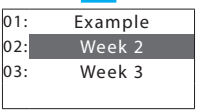
Press the OK key to confirm

Type the date and time using the number keys



Press the OK key to confirm

With the ▽△ keys select the weekly program to be reset at the end of the Holiday

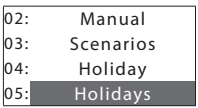


Confirm by pressing OK

✔ Select the Holidays mode

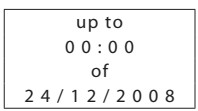
When you are away you can activate the Holidays mode, which lets you keep the system in Antifreeze or Heat protection until the date and time you set, after which the weekly program chosen will be reset.

In the Mode menu select **Holidays**



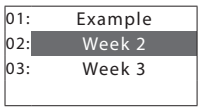
Press the OK key to confirm

Type the date and time using the number keys

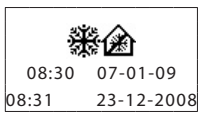


Confirm by pressing OK

With the ▽△ keys select the weekly program to be reset at the end of the Holidays period



Confirm by pressing OK



Once the days programmed has elapsed the Control unit automatically returns to the weekly mode programmed

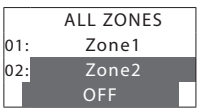
✔ Select the OFF mode

You can put all or some of the system zones in the OFF state, until one of the other modes is reset.

In the Mode menu select **OFF**

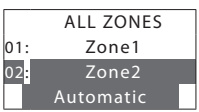
Press the OK key to confirm

You can select ALL THE ZONES or use the ▽ △ keys to select a single Zone (e.g. Zone2)



Confirm by pressing OK

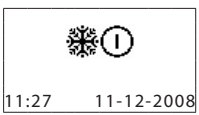
The OFF zone can be recognised by the highlighted number



NEXT

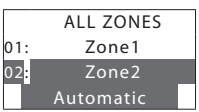
*The display will show the **OFF** signal to indicate that some zones are OFF*

On selecting ALL THE ZONES the window to the side appears on the display



To return the zone set in OFF to the previous condition select the zone required and confirm by pressing OK

To end the programming and return to the first window keep the ⮌ key pressed



✔ Select Antifreeze or Heat protection

You can decide to set one or more zones or the whole system in Antifreeze mode (or heat protection in summer).
In **Antifreeze** a minimum temperature of 7° is maintained.
In **Heat protection** a maximum temperature of 35° is maintained.

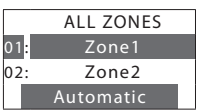
In the Mode menu select **Antifreeze** or **Heat protection** if in Summer

Press the OK key to confirm

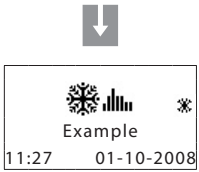
You can select ALL THE ZONES or use the ▽ △ keys to select a single Zone (e.g. Zone1)

Confirm by pressing OK

The zone in Antifreeze can be recognised by the highlighted number



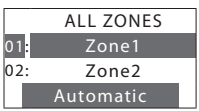
*The display will show the **Antifreeze** signal to indicate that some zones are in Antifreeze or Heat protection*



On selecting ALL THE ZONES the window to the side appears on the display

To return the zone set in Antifreeze to the previous condition select the zone required and confirm by pressing OK

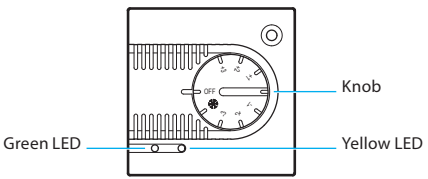
To end the programming and return to the first window keep the ⮌ key pressed



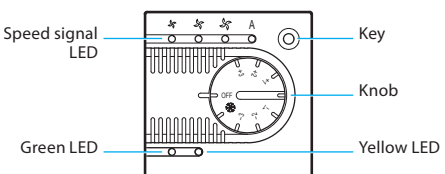
The local probe

Each zone of your system has a probe which can adjust the temperature locally, modifying the setting on the Control Unit.

In particular you can vary the temperature by ± 3°C, select antifreeze/ heat protection or switch the system off in the individual zone.



Fan-coil probe



Knob

- Can set the temperature manually from +3 to -3 degrees with respect to the Control Unit setting.
- Sets the Antifreeze/Heat protection mode for the zone.
  If the temperature control system is working as heating, turning the knob to this position sets the Antifreeze mode; if the system is working as cooling it sets the Heat protection mode.
  To return to normal operation turn the knob to one of the positions from +3 to -3.
- OFF Turning the knob to this position turns the zone OFF. To return to normal operation turn the knob to one of the positions from +3 to -3.

Green LED

- When it is shining steadily it indicates that the system is active.
- When it is flashing it indicates that the zone is in d or OFF mode.

Yellow LED

- When it is shining steadily it indicates that the system is working in the zone.
- When it is OFF it indicates that the system is not working in the zone.
- When it is flashing it signals a fault.

KEY (Fan-Coil probe)

- When it commands the Fan-Coil it can select the speed (MIN - MED - MAX - AUTO)

Information

- Diagnostic
- Check the mode of operation
- Check the temperature in the zones

Diagnostic

If there is a fault on the system, the display shows the **!** icon. In this case the Diagnostic menu gives you useful information to identify the problem.

In the Setup menu select **Diagnostic** with the ▽ △

Press the OK key to confirm

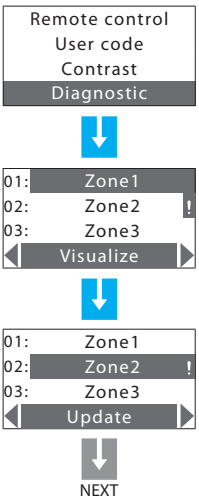
The list of zones appears on the display

If Climaveneta Chillers are detected during the diagnostic phase, **00 Chiller** will appear, thus making it possible to verify their status

Select the zone where a problem has occurred (marked by the **!** symbol) with the ▽ △ keys

With the ◁ ▷ keys select **Update**

Press the OK key to confirm



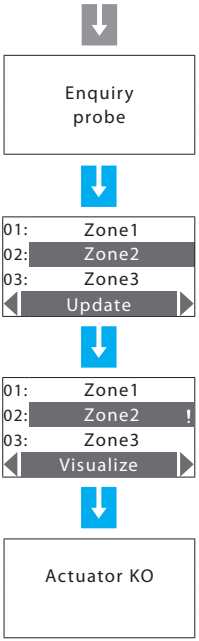
The Control unit checks the probe again

If the problem is solved the **!** symbol disappears

If the problem persists select the **Visualize** function with the ◁ ▷ keys

Press the OK key to confirm

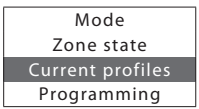
The display shows the cause of the fault



Check the mode of operation

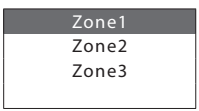
This menu lets you check the current mode of operation for each zone and for weekly operation it lets you find out the profile set.

In the Main menu select **Current profiles**



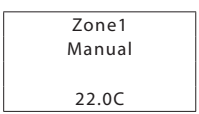
Press the OK key to confirm

Select the zone to consult with the ▽ △ keys (e.g.: Zone1)



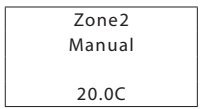
Confirm by pressing OK

The information on the mode of operation is displayed (see previous section)

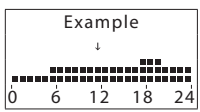


NEXT

Use the ▽ △ keys to select other zones (e.g.: Zone2)



If the zone selected is in Weekly mode, the window with the following indication is displayed: zone name, day, program name and heat profile

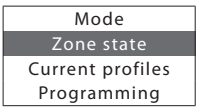


Keep the ⮌ key pressed to end the query and return to the first window

Check the temperature in the zones

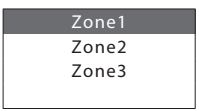
In this menu you can find out the measured temperature, the set temperature and the system state for each zone.

In the Main menu select **Zone state**



Press the OK key to confirm

Select the zone to consult with the ▽ △ keys (e.g.: Zone1)



Confirm by pressing OK

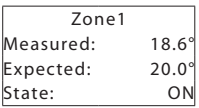
The Control unit checks the probe selected

NEXT

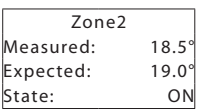
The display shows the following information on:

- Temperature measured in the zone
- Temperature set in the zone
- System state in the zone:
  ON = system ON
  OFF = system OFF

For a system with FAN-COIL the fan speed is given as well



Use the ▽ △ keys to select other zones (e.g.: Zone2)



or the ⮌ key pressed to return to the first window

Customisations

- Setting
  - ✔ Set the temperature levels
  - ✔ Set the mode of operation
  - ✔ Set the date and time
  - ✔ Enable/disable the remote control
  - ✔ Customise the User code
  - ✔ Adjust the display contrast
  - ✔ Probes
  - ✔ Contacts manag.

4 - Customisations

Setting

The Settings menu lets you customise some Control unit parameters or modes of operation, without affecting its correct working.

✔ Set the temperature levels

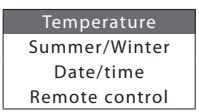
For each zone you can set the **Antifreeze** or **Heat protection** temperature T* and the temperature levels T1, T2 and T3 used in the weekly programs.

TEMPERATURE LEVEL SET	
T1	**18°C**
T2	**20°C**
T3	**22°C**
Antifreeze	**7,0°C**
Heatprotection	**35,0°C**

In the Main menu select **Setup**

Press the OK key to confirm

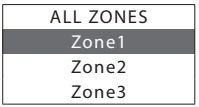
With the ▽ △ keys select **Temperature**



Confirm by pressing OK

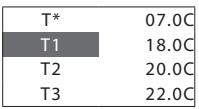
NEXT

You can select ALL THE ZONES or using the ▽ △ keys select a single zone (e.g. Zone1)



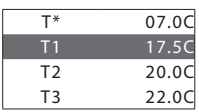
Press the OK key to confirm

With the ▽ △ keys select the temperature level (e.g.: T1)



Confirm by pressing OK

Type the temperature required using the ▽ △ keys or the number keypad



Confirm by pressing OK

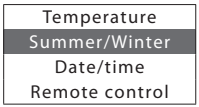
To end the programming and return to the first window keep the ⮌ key pressed

✔ Set the mode of operation

This operation sets the system mode of operation:

- **Summer** = cooling;
- **Winter** = heating.

In the Setup menu select **Summer/ Winter** with the ▽ △ keys



Press the OK key to confirm

The display shows the window indicating the mode of operation in use (Operation: Winter)

To change the system mode of operation press OK

To end the programming and return to the first window keep the ⮌ key pressed

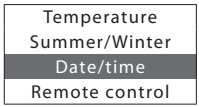
Before switching, perform all the necessary operations on the hydraulic system to ensure that it works correctly.

After the switching the system is set in Antifreeze/Heat protection mode.

✔ Set the date and time

For your system to work correctly the date and time set must be correct.

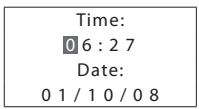
In the Setup menu select **Date/ Time** with the ▽ △ keys



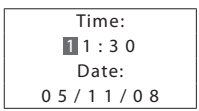
Press the OK key to confirm

Use the number keypad to enter the time and date:

- the ◁ ▷ keys let you change to the previous or next figure
- the ▽ △ keys let you change line, from time to date and vice versa



Confirm by pressing OK

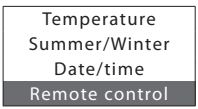


To end the programming and return to the first window keep the ⮌ key pressed

✔ Enable/disable the remote control

This setting lets you enable/disable your system's remote control. In particular you can use the remote control to find out the state of each zone and perform the main commands and changes of mode. For more information consult your installer.

In the Setup menu select **Remote control** with the ▽ △ keys

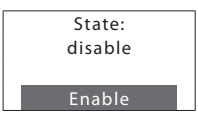


Press the OK key to confirm

The display shows the window indicating the current state (State: enabled)

To change the state press OK

To end the programming and return to the first window keep the ⮌ key pressed



The remote control base setting is enabled.

✔ Customise the User code

The Control unit is protected by a **user code** which prevents unauthorised people from accessing the Main menu.

The base code is **00000**, but you can replace it with any 5-figure number.

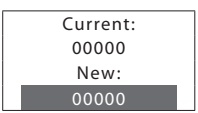
In the Setup menu select **User code** with the ▽ △ keys

Press the OK key to confirm

The display shows the window indicating the current state (State: enabled)

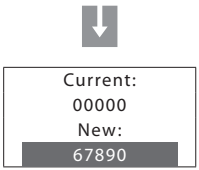
To change the state press OK

The display shows the window indicating the current code (00000)



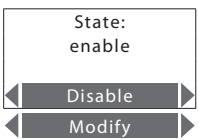
You can confirm the current code by pressing OK or

enter a new five figure code as you wish



Press the OK key to confirm

From now on you must type the new user code to access the Main menu



The following functions are available:

*– **Disable** - can disable the User code*

*– **Modify** - can modify the User code*

Use the ◁ ▷ keys to select the function required

To end the programming and return to the first window keep the ⮌ key pressed

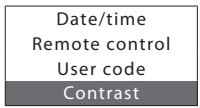
NEW USER CODE

We recommend you write the new User code in the boxes at the side

✔ Adjust the display contrast

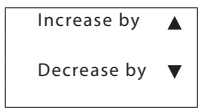
The contrast of the graphic display can be adjusted so that it is easy to read

In the Setup menu select **Contrast** with the ▽ △ keys



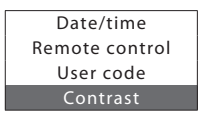
Press the OK key to confirm

Adjust the contrast with the ▽ △ keys so that it is easy to read



To confirm press OK

To end the programming and return to the first window keep the ⮌ key pressed



✔ Contacts manag.

The Unit is able to manage additional contacts which make it possible, for instance when opening the windows to air a room, to switch off the heating in that area so as to save energy. In this menu you can enable or disable this function.

Select **Contacts manag.** in the Setup menu using the ▽ △ keys

Press the OK key to confirm

A screen will be displayed showing the indication of the current status (Status: disabled)

Press OK to change the status

Hold down the ⮌ key to end programming and to return to the main screen

Programming

- The Programming menu
  - ✔ Weekly programming
  - ✔ Scenarios programming
  - ✔ Holiday programming

The Programming menu

Using the Programming menu you can customise the following modes of operation of your system:

- **Weekly**
  With the weekly mode your system works automatically following the programming set. You can choose from three programs which you can customise. Inside the programs the temperature can be differentiated over 24 hours and for each day of the week as you require.
  The **Example** program is preset but can be modified.
- **Scenarios**
  The Scenario mode lets you set different temperatures in various zones of the system with a single command. For example, if when cleaning you intend to open windows in some rooms you can set a lower temperature (or higher for cooling) to avoid wasting energy.
  16 Winter scenarios and 16 Summer scenarios can be programmed.
- **Holiday**
  The Holiday mode can select a particular daily profile for a set period. The program is run until the programmed date and time, after which the weekly program chosen will be reset.

✔ Weekly programming

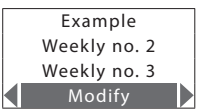
Up to 3 weekly programs can be created for each of the two functions (heating and cooling).

To select the weekly program to be customised:

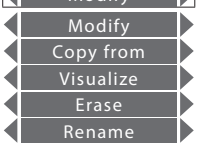
In Programming menu select ▽ △ **Weekly**

Press the OK key to confirm

Select ▽ △ the program to be modified



The following functions are available for the program selected:



Use the ◁ ▷ keys to select the function required

Modify a Weekly program

On selecting this function you can modify the weekly program selected, associating a daily profile to each zone.

Select ▽ △ the program to modify (e.g.: Winter week)

Select ◁ ▷ the **Modify** function

Press the OK key to confirm

Select ▽ △ the day (e.g.: Sunday)

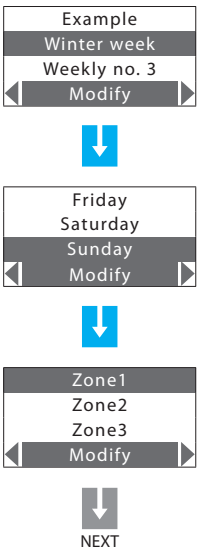
*The **Copy from** function can also be selected for the day selected*

Press the OK key to confirm

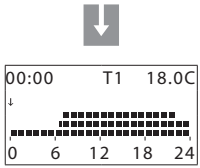
Select ▽ △ the zone (e.g.: Zone1)

*The **Copy from** and **Visualize** functions area also available for the zone selected*

Press the OK key to confirm



The profile displayed can now be modified using the navigation keys as shown in detail in the pages below

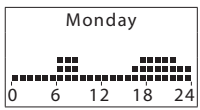


Presettings of the "Example" weekly program

***Note**: The "Example" program is preset but can be modified.*

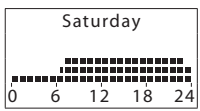
Monday – Friday

from 00:00 to 06:00 - 18°C (T1)
- from 06:00 to 09:00 - 22°C (T3)
- from 09:00 to 16:00 - 18°C (T1)
- from 16:00 to 17:00 - 20°C (T2)
- from 17:00 to 22:00 - 22°C (T3)
- from 22:00 to 24:00 - 20°C (T2)



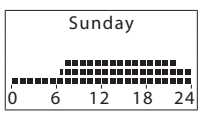
Saturday

- from 00:00 to 06:30 - 18°C (T1)
- from 06:30 to 07:00 - 20°C (T2)
- from 07:00 to 23:00 - 22°C (T3)
- from 23:00 to 24:00 - 20°C (T2)



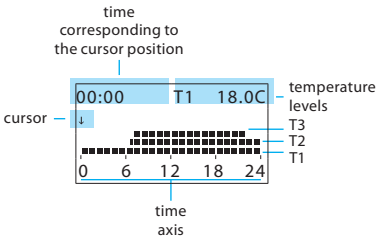
Sunday

- from 00:00 to 06:30 - 18°C (T1)
- from 06:30 to 07:00 - 20°C (T2)
- from 07:00 to 22:00 - 22°C (T3)
- from 22:00 to 24:00 - 20°C (T2)

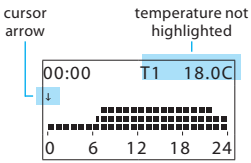


Modification tools

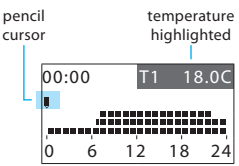
Information shown on the display:



SCROLL



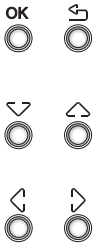
MODIFY



There are two modes of work:

- **Scroll** – Characterised by an arrow-shaped cursor, lets you, using the ◁ ▷ keys, move the cursor along the time axis without making any modification to the daily profile.
- **Modify** - Characterised by a "pencil"-shaped cursor, lets you, using the ◁ ▷ keys, move the cursor along the time axis to set the temperature level selected.

How to use the cursor keys:



OK – change from MODIFY mode to SCROLL; in SCROLL mode confirms quitting the Modify function

↩ – returns to the previous page without saving

Scroll keys – change from SCROLL mode to MODIFY; in the MODIFY mode scroll the three temperature levels

Selection keys – Move the cursor along the time axis

Create a new daily profile:

We recommend you follow the procedure described in this example step by step, as a useful instrument for becoming familiar with the Modify/Scroll mode of work and the use of the cursor keys.

Example: creation of a new temperature profile belonging to **Zone 1** of **Monday** for the weekly program **Week 2**, with the following time bands and temperature levels:

1 – from 00:00 to 06:00 - 18°C (T1)

2 – from 06:00 to 09:00 - 22°C (T3)

3 – from 09:00 to 16:30 - 20°C (T2)

4 – from 16:30 to 22:00 - 22°C (T3)

5 – from 22:00 to 24:00 - 20°C (T2)

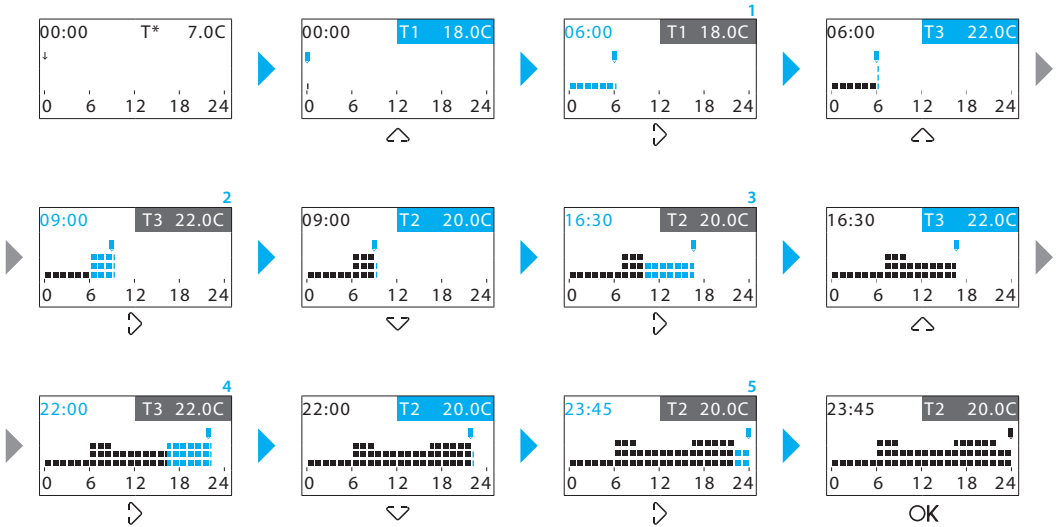
TEMPERATURE LEVEL SET	
T1	**18°C**
T2	**20°C**
T3	**22°C**
Antifreeze	**7,0°C**
Heatprotection	**35,0°C**

When the procedure has been performed, using the **Copy from** function (see page 34), you can:

- *copy **Zone1** to other zones;*
- *copy **Monday** to other days.*

5 - Programming

Procedure:

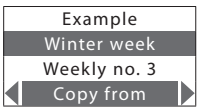


Copy a Weekly program

This function lets you copy a previously programmed weekly program into another. For example copy the **Example** program (preset in the factory) in Week no. 2.

Select ▽△ the program to be copied into (e.g.: Winter week)

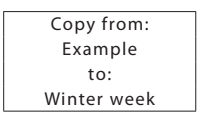
Select ◁ ▷ the **Copy from** function



Press the OK key to confirm

Select ▽△ the program to copy into (e.g.: Example)

Press the OK key to confirm

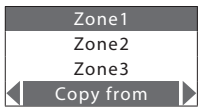


Copy a zone

This function lets you copy the daily profile programmed for one zone to another zone.

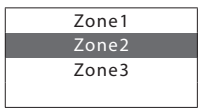
Select ▽△ the zone to copy into (e.g.: Zone1)

Select ◁ ▷ the **Copy from** function

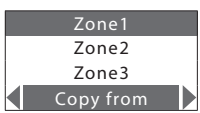


Press the OK key to confirm

Select ▽△ the zone to copy into (e.g.: Zone2)



Press the OK key to confirm



Copy a day

This function lets you copy a previously programmed daily profile to another day.

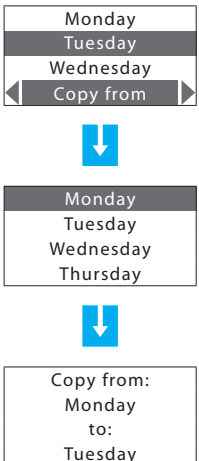
Select ▽△ the day to copy into (e.g.: Tuesday)

Select ◁ ▷ the **Copy from** function

Press the OK key to confirm

Select ▽△ the day to copy into (e.g.: Monday)

Press the OK key to confirm



✔ Scenarios programming

Can create 16 scenarios for Winter operation and 16 for Summer operation and for each of these set different temperatures in the various zones.

To select the scenario to customise:

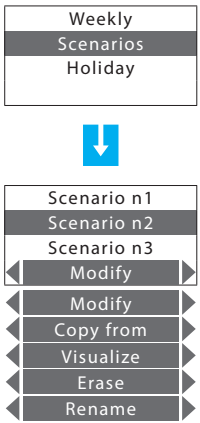
In the Programming menu select ▽△ **Scenarios**

Press the OK key to confirm

Select ▽△ the scenario you want to modify

The following functions are available for the scenario selected:

Use the ◁ ▷ keys to select the function required



Modify a Scenario

Selecting this function you can modify the selected scenario associating a temperature level to each zone.

Select ▽△ the scenario to be modified (e.g.: Night)

Select ◁ ▷ the **Modify** function

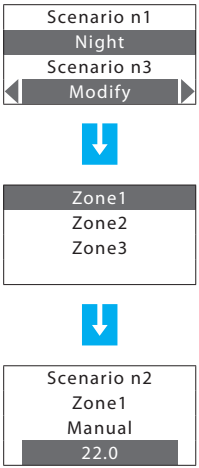
Press the OK key to confirm

Select ▽△ the zone (e.g.: Zone1)

Press the OK key to confirm

Set the zone temperature using the keypad or the ▽△ keys (± 0.5°C increment)

Press the OK key to confirm, the program returns to the previous page



Copy a Scenario

This function lets you copy one previously programmed scenario on another.

For example copy Scenario n1 on Night.

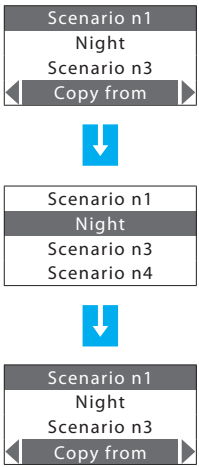
Select ▽△ the scenario to copy into (e.g.: Scenario n1)

Select ◁ ▷ the **Copy from** function

Press the OK key to confirm

Select ▽△ the scenario to copy (e.g.: Night)

Press the OK key to confirm



✔ Holiday programming

Can program a daily profile for each zone (as base the **Sunday** profile of the **Example** program is associated with each zone).

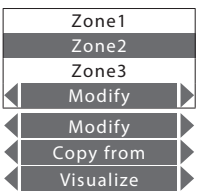
To select the Holiday program to customise

In the Programming menu select ▽△ **Holiday**

Press the OK key to confirm

Select ▽△ the zone

The following functions are available for the zone selected:



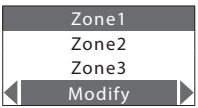
Use the ◁ ▷ keys to select the function required

Modify the Holiday program

On selecting this function you can modify the daily profile associated to each zone.

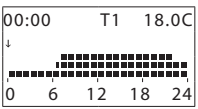
Select ▽△ the zone to modify (e.g.: Zone1)

Select ◁ ▷ the **Modify** function



Press the OK key to confirm

The profile displayed can now be modified using the navigation keys as shown in detail in the previous pages



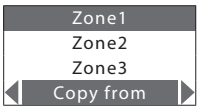
Copy a zone

This function lets you copy the daily profile programmed for one zone to another zone.

Select ▽△ the zone to copy into (e.g.: Zone1)

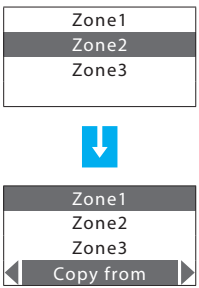
Select ◁ ▷ the **Copy from** function

Press the OK key to confirm



Select ▽△ the zone to copy (e.g.: Zone2)

Press the OK key to confirm



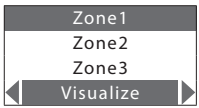
Display the Holiday program

This function lets you display the daily profile associated to each zone.

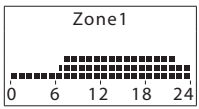
Select ▽△ the zone to display (e.g.: Zone1)

Select ◁ ▷ the **Visualize** function

Press the OK key to confirm



The display shows the profile programmed for the zone selected



Notes

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