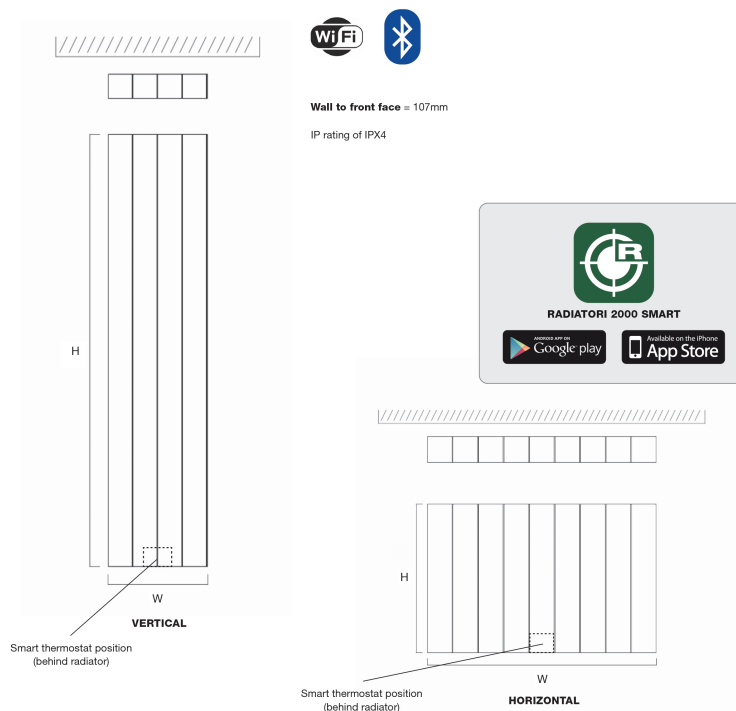# *Vela Electric Instructions*

Please unpack your delivery carefully and inspect the radiator and contents – any damages or shortages must be notified to your supplier within 3 days of delivery of your goods.

SPECIFICATIONS FOR VELA ELECTRIC RADIATOR

Wall to front face = 107mm

IP rating of IPX4

RADIATORI 2000 SMART

Smart thermostat position (behind radiator)

VERTICAL

Smart thermostat position (behind radiator)

HORIZONTAL

Power Supply:	230V 50Hz +/-10%
Power control type:	RELAY 10A, TRIAC 10A, TRIAC 4A
Max power:	2000W total (Relay + TRIAC 1 + TRIAC 2)
Insulation class:	Class II
Environment protection classification:	IPX4
Operating temperature:	0 – 50°C
Storage temperature:	-20 – 85°C
NTC sensor:	10KOhm @25°C
Connection type:	Screw header 2,5mm^2
Regulation type:	(Relay) Hysteresis +/- 0,5°C – (Triac) PID
Temperature settings range:	7– 31°C
User interface type:	Push-button, potentiometer
Visualization interface:	STN LCD display, viewing angle 12 o'clock, red back-light

INSTALLATION and FIXING

Wall Brackets – Offer up the radiator in the desired position, mark the bracket positions and fixing holes. The radiator should be placed a minimum of 10cm from the floor. Using the appropriate drill and fixings attach the brackets to the wall. After installing the plastic inserts into the hook part of the bracket the radiator can then be hung from the brackets

Smart
thermostat

TOTAL CONTROL FOR YOUR HEATING SYSTEM

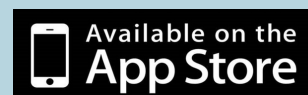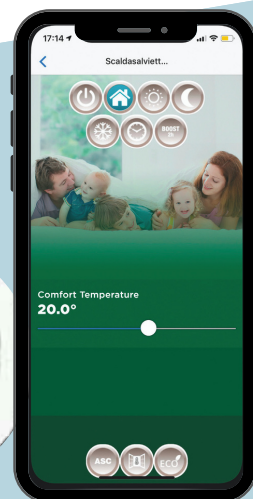**USER MANUAL FOR APP AND REMOTE CONTROL**

Wi Fi

ANDROID APP ON
Google play

Available on the
App Store

Fig. 6 - Termostato SMART / SMART thermostat / Thermostat SMART

Fig. 7 - Aggiungere il radiatore / Add the radiator / Ajouter le radiateur

a

b

c

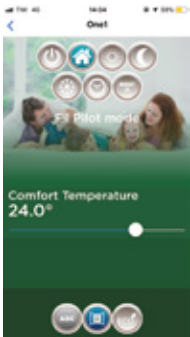Fig. 8 - Mode STAND BY

Fig. 9 - Mode FIL PILOT

Fig. 10 - Mode COMFORT

Fig. 11 - Mode NIGHT
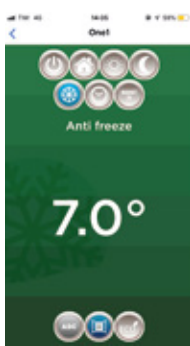

Fig. 12 - Antigelo/
Antifreeze/Antigel

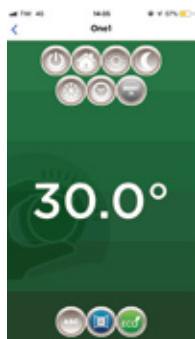Fig. 13 - Mode Programme

Fig. 14 - Boost 2H

Fig. 15 - Rilevatore di finestre aperte /
Open window detection /
Détecteur de fenêtre ouverte

Fig. 16 - Wi-Fi

a

b

c

Fig. 17- Telecomando remoto /
Remote control / Télécommande

SU RICHIESTA/ON REQUEST

[Fig. 6]

The thermostat has two buttons:
1) CONNECTION: to connect a smartphone or a remote control; [Fig. 6a]
2) STAND-BY (Stand by or comfort 20 ° C). [Fig. 6b]

OPERATING MODES: Stand-by, Fil Pilot, Comfort, Night, Antifreeze, Programmable Thermostat, BOOST 2H, ECO, detection of open windows, ASC.

LED: each function corresponds to a LED light of a different color on the electronics, as following:

OPERATING MODES	COLORS
STAND-BY	green
FIL-PILOT	flashing green
CONFORT	red
NIGHT	flashing blue
BOOST 2H	flashing red
ANTIFREEZE	flashing blue
CHRONO	flashing green (different speed)

The blue LED indicates Bluetooth data traffic, not Wifi.
Each time the thermostat receives a Bluetooth command, this
is signaled sial by the blue LED that gives an acoustic signal.

WARNING!
The thermostat receives the date and time from the mobile phone or the remote control with each Bluetooth connection and from the server on every Wi-Fi connection.

For an immediate update of date and time it is recommended to connect the thermostat once through Bluetooth.

RADIATORI 2000 SMART APP

The Radiatori 2000 smart thermostat communicates bidirectional with the free RADIATORI 2000 SMART app, available for smartphones and tablets compatible with systems iOS and Android.
The application connects to the thermostat via Bluetooth or via the module Wi-Fi with encrypted authentication to the home router for remote control.

CONNECTING THE THERMOSTAT TO THE APP

1) The first use of the application requires the creation of a account: only email address is required.
2) Press the Wi-Fi button on the thermostat. There will appear a blue flashing light;
3) Add the radiator with the + ADD ONE button on the screen of the smartphone. Each radiator will be inserted automatically with the name ONE. [Fig. 7]
4) Rename each radiator with the desired name by selecting it;
5) Once you have registered all the radiators in the house, you can start to control each of them by touching the name of the radiator to control.

FUNCTIONS

The following functions can only be managed via an application or the remote control. [Page 14]

1. STAND-BY [Fig. 8]

In STAND-BY mode, the radiator does not heat up.

2. MODE FIL PILOTE [Fig. 9]

FIL PILOT is a special communication protocol that allows the radiator to be managed by a special control unit. **NOTE: this connection is only possible for Class II models supplied without plug.** The modes are managed by the central, while the temperature setting is managed by the user on the chronothermostat.

6 types of command are recognized.

1) Comfort : set point = comfort mode temperature.

2) Night reduction : set point = comfort -3.5°C

3) ECO1 : set point = comfort -1°C

4) ECO2 : set point = comfort -2°C

5) Antifreeze: set point = 7°C

6) Stop: no temperature regulation, radiator off. Mode STAND-BY.

The reference temperatures are those defined in comfort mode.

3. MODE COMFORT [Fig. 10]

In Comfort mode, you can set the desired temperature with the app or the remote control. The radiator remains ON until the set temperature is reached. The Comfort program is indicated by the r**ed light**. The selected temperature is also used for the weekly program (par. 9) as a comfort level and in FIL PILOTE mode (par. 2) as a comfort temperature point.

4. NIGHT MODE [Fig. 11]

In Night mode, you can set the desired temperature with the app or the remote control. This temperature is independent from the comfort temperature. The NIGHT program is indicated by the **blue light**. The selected temperature is also used for the weekly program (par. 9) as night level temperature.

5. ANTIFREEZE (blue led) [Fig. 12]

In this operating mode, the temperature cannot be adjusted by the user, but is fixed at 7 ° C. The antifreeze mode is indicated by the **flashing blue** light. This mode prevents the ambient temperature from falling below 7 ° C.

6. MODE PROGRAM [Fig. 13]

Radiatori 2000 Smart is a 24/7 programmable thermostat.
In this operating mode, the thermostat regulates the temperature according to the daily program, using comfort temperature or night setback temperature programmed. The function is indicated by the **flashing green light**. The selected temperature is displayed on the screen of the smartphone.
To program the thermostat, go to paragraph 9.

7. BOOST 2H   [Fig. 14]

This mode can be used to heat the environment quickly. The device is delivered on full power for 2 hours with a temperature set at 30 ° C. BOOST 2H mode it is configured to stop automatically after a period of 2 hours and return to operating mode previously defined. If necessary, the user can return to other modes in any moment simply by selecting them.
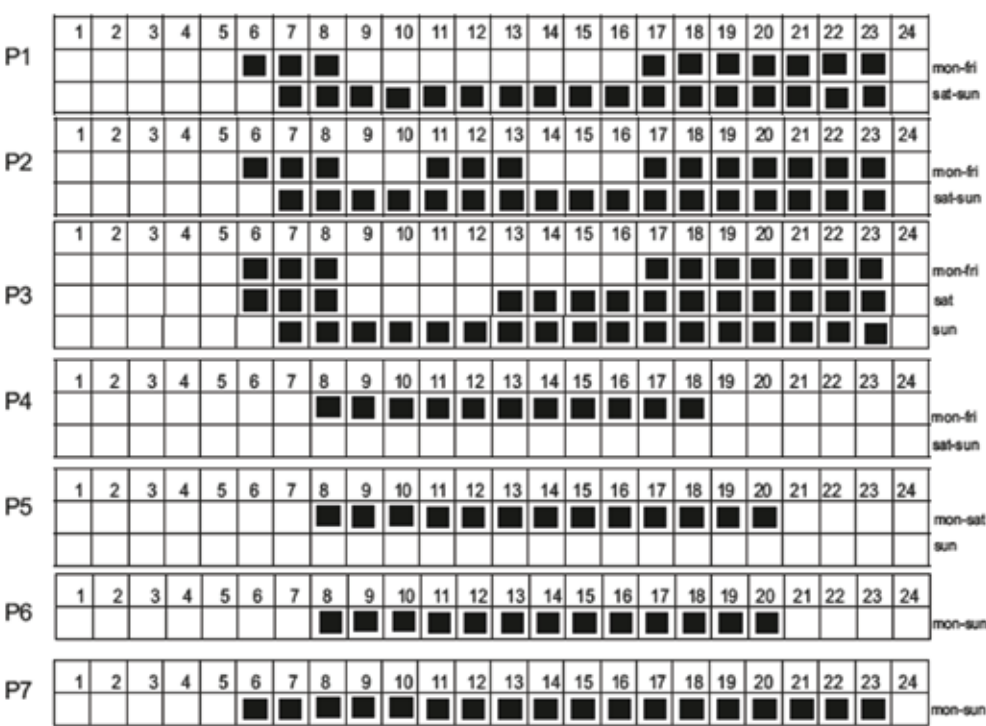
8. OPEN WINDOW DETECTION   [Fig. 15]

The function can detect the open window state. The function is activated when the temperature drops quickly, (when a window is open in the room). When the window open state is detected, the screen displays the window icon and the radiator goes to antifreeze at 7 ° C. The status automatically ends if the window closure is detected.

9. WEEKLY PROGRAM 24H/24 ET 7J/7

The thermostat has 7 preset programs and 2 user customizable programs.
To use the programmable mode, select the CHRONO icon.
Here below the diagrams of the 7 predefined programs. The black boxes correspond to the comfort temperature; the white boxes to the night reduction.

P1

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
					■	■	■									■	■	■	■	■	■	■	■	mon-fri
					■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	sat-sun

P2

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
					■	■	■			■	■	■				■	■	■	■	■	■	■		mon-fri
					■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	sat-sun

P3

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
					■	■	■									■	■	■	■	■	■	■		mon-fri
					■	■	■				■	■	■	■	■	■	■	■	■	■	■	■		sat
					■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	sun

P4

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
							■	■	■	■	■	■	■	■	■	■	■	■						mon-fri
																								sat-sun

P5

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
							■	■	■	■	■	■	■	■	■	■	■	■	■					mon-sat
																								sun

P6

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
							■	■	■	■	■	■	■	■	■	■	■	■	■	■				mon-sun

P7

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
					■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■		mon-sun

With programs P8 and P9, it is possible to define a personalized calendar for each day of the week. From day 1, select the desired sequence to choose, for every hour, to have the temperature "COMFORT" (full boxes) or "NIGHT" (empty boxes).
Repeat the same procedure for the remaining 6 days of the week.

WI-FI MODULE

To activate the Wi-Fi module and control the domestic radiators remotely, proceed as following:

1) Go to the Wi-Fi area of the application [Fig. 16a];
2) Select *ADD WI-FI* [Fig. 17b];
3) Select *ADD THERMOSTAT NOT YET CONNECTED TO THE HOME NETWORK* [Fig. 16c];
4) Activate the Wi-Fi of the smartphone / tablet;
5) Connect to the thermostat's Wi-Fi network;
6) The application will ask you to connect to the home network.
7) Enter the password for the home router. (**ATTENTION**: if you enter a password wrong pass, activate RESET procedure: press the connection button on the thermostat for 15 seconds.)
8) Select *ADD WI-FI* again [Fig. 16b];
9) Select *ADD THERMOSTAT ALREADY CONNECTED TO THE HOME NETWORK* [Fig. 16c];
10) At this point, scan the QR code provided with the thermostat packaging;
11) Rename the radiator as you prefer.

REMOTE CONTROL [Fig. 17]

As an **alternative to the application**, the electronics also communicate with a remote control which can be purchased on request.
The remote control has a wireless connection: it can be portable or attached to the wall near the radiator (**max. 4 meters**).

Using the remote control, it is possible to control the SMART thermostat with the same operating modes: Stand-by, Fil Pilot, Comfort, Night, Antifreeze, Thermostat Programmable, BOOST 2H, ECO, detection of open windows, ASC.

For more information and detailed instructions, see the website.
www.ridea.it
or write to
customerservice@radiatori2000.it

TROUBLESHOOTING

Problème	Cause possible	Solution
The radiator does not heat up	A low temperature is set, or is very close to the room temperature	Check operation of the radiator by adjusting comfort mode to a temperature of 25°C.
	The temperature sensor is covered	Check that the bottom of the radiator is not covered and is at least 20 cm off the ground.

PAIRING USING THE REMOTE CONTROL

The SMART thermostat is equipped with two buttons: the Stand-by button and the connection button.

Press the ON / Stand-by button to turn on the device or activate the "Stand-by" mode.

When the unit is ON, the setting mode and temperature are displayed.

FIRST USE AND PAIRING WITH THE REMOTE CONTROL
When no device is paired, the remote display will show the word "Conn" as long as at least one thermostat is paired.

CONNECTING THE FIRST DEVICE
While the word "Conn" is still on the screen, approach the stationary unit and press the Pairing button on the chronothermostat, then press the [PROG] button on the remote control. The search symbol appears on the screen until the thermostat is found, or 10 seconds elapse. If during this time the thermostat is not identified, repeat the operation bringing the two devices together and making sure that the steps are correctly followed.

CONNECTING ADDITIONAL DEVICES
STAND-BY ----> CHRONO: to make the association, you must be in Stand-by and press the Chrono button for 5 seconds. Select with + & - PAIR on the remote control screen, then press the PROG button. By following the previous steps, you access the " Conn " screen (see previous paragraph).

In this case, if you already have 8 units in memory, by pressing ON / OFF you can exit the "Conn" screen; if there are already 8 fixed units in the memory, you will be asked which one to delete and replace with the new unit (for the complete elimination of the selected thermostat, the new connection must be successful).

CHANGE THE THERMOSTAT TO MANAGE
The remote control manages only a thermostat at a time. To select another thermostat:

- From STAND-BY mode: press [Chrono] x 5 sec -----> Select SLCT with [+] & [-] and press [Prog] to confirm.
- From a different mode from Stand-by: [Chrono] x 5 sec ------> select the number of the device X with [+] & [-] ------> Press [Prog] to confirm.
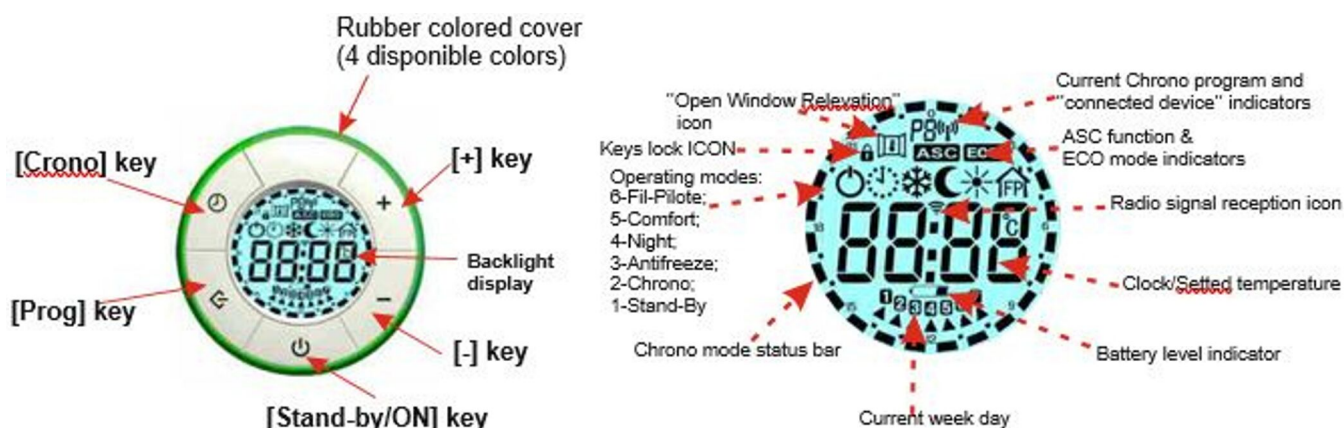
RESET
Delete all stored fixed units and reset the remote control to factory settings:
STAND-BY ----> CHRONO x 5 sec ----> select with + & - RSET on the screen ----- -> PROG.
The message RSET will flash on the screen. At this point, press again on the PROG key to confirm. Reset or press ON / OFF button (or wait) to cancel. The thermostat returns to wait for the first connection.

BATTERY ICON
When the batteries are low, the battery icon will light up. The remote control can still be used, but it is better to use new batteries. When the battery power is low, the word "BATT" will be displayed on the remote control and will stop working until the batteries are turned off or replaced.

Rubber colored cover (4 disponible colors)

[Crono] key

[+] key

Backlight display

[Prog] key

[-] key

[Stand-by/ON] key

"Open Window Relevation" icon

Keys lock ICON

Operating modes:
6-Fil-Pilote;
5-Comfort;
4-Night;
3-Antifreeze;
2-Chrono;
1-Stand-By

Chrono mode status bar

Current week day

Current Chrono program and "connected device" indicators

ASC function & ECO mode indicators

Radio signal reception icon

Clock/Setted temperature

Battery level indicator

SPECIFICATION OF FUNCTIONS
WITH THE REMOTE CONTROL

Please note: all of the following operations are related to the remote control
Press the ON / Stand-by button to turn on the device or activate the "Stand-by" mode. When the unit is active, the setting mode and temperature are displayed. During the "Stand-by" state, the display shows the On / Off symbol, the current time and the day of the week. NOTE: when the device goes into "Stand-by" mode, 2 beeps of 0.5 seconds are emitted. When the device is on, it emits two beeps lasting one second.

COMFORT/NIGHT
Two different temperature levels can be set:
"COMFORT" TEMPERATURE: It's the temperature used for Chrono, Fil Pilote and Comfort modes.

"NIGHT" TEMPERATURE: it's the temperature used for the Night, Chrono and Fil Pilote modes. The regulation of the desired temperature can be managed pressing on the keys [+] and [-].
The range of regulation of the temperature is between 7 ° C and 30 ° C.

IMPORTANT! The "Night" temperature is always lower than the "Comfort" temperature and priority is given to the "Comfort" temperature. For this reason, the "Night" temperature can be set in the range 7 ° C ÷ (selected comfort temperature), the "comfort" temperature can be set over the whole range: 7 to 30 ° C.

The "Comfort" mode allows you to maintain the set room temperature. To adjust this mode: Press the [Prog] key until the "Comfort" mode icon appears on the screen. Set the desired temperature with the [+] and [-] buttons.

In "Night" mode, a temperature lower than the "Comfort" temperature is set. It is recommended to use this mode at night or when the room is not used for 2 hours or more. Press the [Prog] key until the "Night" icon appears on the display. Set the desired temperature with the [+] and [-] buttons.

ANTIFREEZE
In "Antifreeze" mode, the temperature is set at 7 ° C. The device activates the heating element when the ambient temperature drops below 7 ° C. It is recommended to use this mode when the room is not used for several days. Press the [Prog] key until the "Antifreeze" icon appears on the display.

BOOST 2H
The "Boost 2h" mode allows you to quickly heat the room or speed up the drying of towels.

- Press the [Prog] key until the "2h" icon appears on the screen.

The appliance is switched on at maximum power for 2 hours, with a temperature set at 30 ° C. The "Boost 2h" mode is set to stop automatically after a period of 2 hours and return to the previously set operating mode. If necessary, the user can return to other modes at any time by simply pressing the [Prog] key.

FIL-PILOTE
It is possible to connect the thermostat to a Fil-Pilote control unit.

NOTE: this connection is only possible for Class II models supplied without plug.

MADE IN ITALY

a) Set the current day and time
- Activate the "Stand-by" mode and press the [Chrono] key for more than 3 seconds.
- The screen will display the words: "Time";
- Press the [Prog] key to enter the mode;
- Set the current year with the [+] and [-] keys;
- Press the [Prog] key again to confirm;
- Set the current month with the [+] and [-] keys;
- Press the [Prog] key again to confirm;
- Set the current day with the [+] and [-] keys;
- Press the [Prog] key again to confirm;
- The display now shows the current time to be confirmed;
- 'Hours': use the [+] and [-] keys to set the hour and confirm with the [Prog] key;
- 'Minutes': repeat the same procedure and confirm with the [Prog] key;
- Finally, the thermostat returns to "Stand-by" mode;

b) Set the program for Chrono mode:
- Access "Stand-by" mode and press the [Chrono] key for more than 3 seconds.
- At the top of the screen you will see the words: "Time".

c) To use a predefined mode or to use one of the two programmable modes (Pr8 and Pr9), press the [Stand-By / ON] key and exit the stand-by mode, press the [Prog] key until what the screen displays the symbol is displayed.

The program used is displayed in the upper part of the screen (from P1 to P9), the programs are selected by pressing the [Chrono] key, in the external part of the screen it is possible to see the command bars of the indicated program time.

The diagrams of the 7 predefined programs are shown below:

P1

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
					■	■	■									■	■	■	■	■	■	■		mon-fri
					■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■		sat-sun

P2

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
					■	■	■			■	■	■				■	■	■	■	■	■			mon-fri
					■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■		sat-sun

P3

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
					■	■	■									■	■	■	■	■	■	■		mon-fri
					■	■	■				■	■	■	■	■	■	■	■	■	■	■			sat
					■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■		sun

P4

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
							■	■	■	■	■	■	■	■	■	■								mon-fri
																								sat-sun

P5

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
							■	■	■	■	■	■	■	■	■	■	■	■	■					mon-sat
																								sun

P6

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
							■	■	■	■	■	■	■	■	■	■	■	■	■					mon-sun

P7

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
					■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■		mon-sun

- To set the programmable time sequence for "Chrono" mode, press the [+] key until the words Pr8 or Pr9 (Programming) appear on the screen.
- Press the [Prog] key to enter the mode.
- You can now set a timeline for each day of the week.
- From day 1, select the desired sequence with the [+] and [-] keys to select, for each hour, between the "comfort" temperature button (solid bar) [+] and the "Night temperature button "[-] (empty bar). Press [Prog] to confirm the setting of the first day, repeat the same procedure for the remaining 6 days of the week.

OPEN WINDOWS DETECTION

The device detects the presence of an open window to limit energy consumption.

To activate this mode, activate the Stand-by mode, press the [Chrono] key for more than 3 seconds, scroll through the modes with the [+] key and select FUNC with the [Prog] key. The window icon will flash in the top left of the screen, using the [+] key, select ON / OFF, visible in the center of the screen, and confirm with [Prog].

The icon will be active while the thermostat is operating; If the open window is detected, the icon will flash and the system will stop heating for a maximum of 30 minutes or until a temperature increase of at least 1.5 ° C.

ASC FUNCTION

This function optimizes the operating times of the appliance in order to limit consumption. By activating this mode, the appliance will record the time necessary to bring a specific room to the set temperature, adjusting its operation automatically; in this way, the thermostat could be activated after the set time if it is possible to reach the desired temperature in less time than that foreseen by the set operating time intervals.

Activate the Stand-by mode, press the CHRONO key for more than 5 seconds, scroll through the modes with the [+] key and select FUNC with the PROG key, press it until the icon appears at the top of the screen. Then select ON with the [+] key and press PROG again to confirm. After a few seconds, the remote control automatically returns to Stand-by mode.

ECO FUNCTION

This mode allows you to limit power consumption by lowering the set comfort temperature by 3 degrees. By activating this mode, the appliance operates while maintaining a temperature corresponding to: SET TEMPERATURE - 3 ° C.

Activate the Stand-by mode, press the CHRONO key for more than 5 seconds, scroll through the modes with the [+] key, select FUNC with the PROG key and press it until the icon appears; Select ON with the [+] key and press PROG again to confirm. After a few seconds, the remote control automatically returns to Stand-by mode.

KEYPAD LOCK

This function allows the user to lock the keypad to prevent accidental changes. All buttons on the remote control are locked. To activate the lock function, press PROG for 5 seconds. To deactivate the function, repeat the procedure.

IMPORTANT: THE REMOTE CONTROL AND THE APPLICATION ARE MUTUALLY EXCLUSIVE AND CANNOT BE SIMULTANEOUSLY CONNECTED TO THE SAME THERMOSTAT.

TERMS AND CONDITIONS

You must immediately remove all packaging, inspect the goods and notify us of any damage to the goods within 3 days of delivery. We shall have no obligation to replace or repair damaged goods in the event of failure by the Buyer to comply with this provision. Radiators which are off an unacceptable standard or are damaged must not be installed. If any items are installed it will be treated as being as accepted as received.

Damaged goods being returned will only be collected from your delivery address, unless otherwise agreed in writing. Any other goods, which we accept back, are to be returned by you to our place of business at your expense.

Items will be accepted as a return which have not been installed or damaged after delivery. We do not accept liability for any damages sustained after delivery. Goods should be returned in their original packaging, provided such packaging and goods are undamaged.

We may issue a credit note for goods which we accept as returned.

We may agree to provide you with replacement goods prior to collecting or receiving back the goods to be returned (whether faulty, damaged or otherwise) but only on the condition that: the replacement goods are paid for in full and we reserve the right to re-invoice you in the event that the returned goods are found to be in a worse condition than when they were originally received by you or where such goods have not been received back to us within 3 months of the replacement goods being received by yourselves. A re-stocking charge of 30% will be applied to all non-faulty stock items that wish to be returned. Special order and non-stock products cannot be cancelled. Where cancellation or alteration of orders is accepted by us, you may be required to pay a restocking charge, to cover administrative costs and collection costs (if applicable); such charges to be determined by us. If the goods we deliver are faulty or damaged, we will meet the cost of the return, if the fault is reported to us within 3 working days.

The goods will be deemed to have been accepted when they have been delivered and we may not accept claims for any visible defects found after installation.

We accept no liability for any cost incurred relating to the cost of installation.

We shall not be liable for any plumber's costs, decorator's costs, transport costs, late penalties, or any other costs, as a direct or indirect result of (i) any defect in the goods (including but not limited to any manufacturing faults, such as leaks, that become apparent on or after installation) or (ii) late delivery of the goods.

GUARANTEES AND LIABILITIES – we are not the manufacturer of this product we will take all reasonable endeavours to make over to you the benefit of any warranty or guarantee given by the manufacturers. The item must have been fitted in accordance with British and or European standards as well as these fitting instructions.

PLEASE NOTE: That in accordance with Part L1 2006 of the Building Regulations and BS7593:1992 code of practice for the treatment of hot water and central heating systems, we recommend flushing the heating system before installation of new radiators and then adding the correct quantity and type of inhibitor for use with the radiator and system to prevent corrosion. Damage caused to systems not protected by a suitable inhibitor will not be covered by the manufacturer warranty. It is the responsibility of the installer to ensure the correct use and suitability of the fixings provided. No liability for costs or damages arising from failure to do so can be accepted.