

## THERMAL RADIATORS



( (

RKS4Hi	RKS4L
RKS6Hi	RKS6L
RKS8Hi	RKS8L
RKS10Hi	RKS10L
RKS12Hi	RKS12L
RKS14Hi	RKS14L

## INSTALLATION INSTRUCTIONS AND USER GUIDE

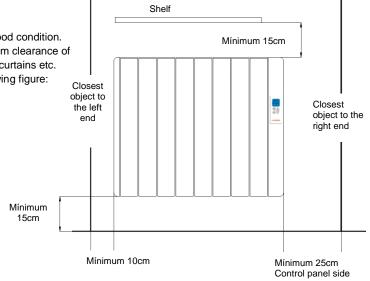
## 1. - WARNING Please read these instructions before installing or using this appliance for the first time.

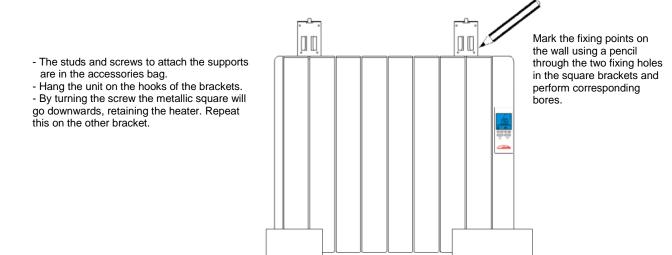
- The warranty of the heater will not cover any damage caused by non observance of any of these instructions.
- · This guide must be kept and given to any new owner.
- Any reinstallation should be carried out by trained personnel.
- · The use of these heaters is forbidden in any area where there is a presence of gases, explosives or inflammable objects.
- DO NOT USE THIS HEATER TO DRY CLOTHES.
- · The surfaces of this heater can be hot, so children should not be left unsupervised in the vicinity of the heater.
- Neither the connecting cable nor any other object must come into contact with the hot unit.
- Please check that the voltage in the rating label fits the power supply.
- Do not cover this heater at any time.
- The air outlet at the top of the thermal radiator and the air inlet at the bottom are provided to ensure the most efficient operation of the appliance. They also protect the heater from overheating; therefore, it is essential that at no time are they covered.
- This heater should be switched off at the isolating switch before any repair work is carried out.
- The thermal radiator should not be installed just below an electrical socket.
- The appliance must be installed in such a way that it is impossible for anyone using a bath or shower, to touch the controls.
- . The installation must be carried out in accordance with the current electrical regulations in your country.
- The heater is fitted with a flexible cable size 3 x 1.00 mm² for electrical connection. It may be used to connect the heater to the fixed wiring of the premised through a suitable connection box positioned adjacent to the heater.
- The supply circuit to the heater must incorporate a double pole isolating switch having a contact separation of at least 3 mm.
- If the flexible power cable for this unit is damaged, it may only be replaced by a repair workshop recognised by the manufacturer, as special tools are necessary.
- All models are supplied with an electrical interrupt cut-out. This will switch off the heater if, for any reason, it overheats. Should the cut-out operate, turn the heater off and remove the cause for the overheating. The cut-out will be reset automatically.
- The presence of air particles of smoke, dust and other pollutants could, in time, discolour the walls and surfaces around the heater.

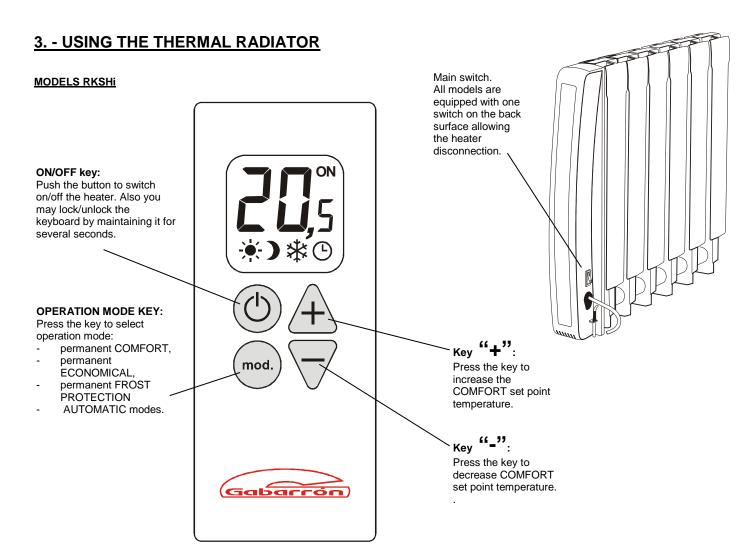
## 2. - INSTALLATION INSTRUCTIONS

- Open the package and check that it is the correct model and it is in good condition.
- To obtain optimum performances it is necessary to maintain a minimum clearance of
- 15 cm between the radiator and any inflammable material as furniture, curtains etc.
- The rest of clearances required to maintain are indicated on the following figure:

Position and fix the brackets at the correct distance from the floor. It is possible to use the radiator as measuring unit by positioning it on two polyester package elements and placing two supports above as indicated on the figure:







LCD DISPLAY: LCD display shows the information related to the heater operation.



Example of the heater permanent COMFORT mode, Set point temperature is 20.5°C, showing ON output condition.

The heater is OFF.

### ADJUSTMENT OF THE SET POINT TEMPERATURE

COMFORT set point temperature may be adjusted from 7°C to 30°C in 0.5°C steps.

Pressing the keys "+" or "-" the set point temperature is increased/reduced respectively. After three seconds if no other key is pushed the selected value is stored in memory.

The set point temperature in ECONOMIC mode is the COMFORT setting temperature reduced by 3.5°C.

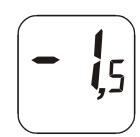
The setting temperature in FROST-PROTECTION mode is  $7^{\circ}\text{C}$  and it is constant.

### **CORRECTION OF TEMPERATURE MEASURES**

If there is a difference between temperature values on an external thermometer and the temperature displayed by the unit, it is possible to change the sensor settings in order to balance the difference (-5°C to +5°C, in 0.5°C steps).

In order to make changes hold the "mod." key for more than five seconds and after that with buttons "+"

or "increase or decrease the correction to 0.5°C respectively. Press the "mod." key to store the correction in memory and proceed with the next setting.



#### **BLUE BACKLIGHT**

Pressing any key the display will illuminate with a soft blue color. After certain time if no other keys are pushed the display backlight will turn off. It is also possible to adjust the display backlight time.

Hold the "mod." key during five seconds. After the correction, (if required) of the thermostat (see previous paragraph), a value from 0 to 90 seconds will be displayed. It may be modified in 15 seconds steps by "+" and "—" keys. If 0 value is selected, the display backlight will be off permanently. To store, press the "mod." key.

#### **OPERATION MODES**

By the "mod." key different functions or operation modes may be selected.



PERMANENT COMFORT mode.

Push the key "+" or "—" if it is required to modify comfort set point temperature.



PERMANENT ECONOMICAL mode. The set point temperature is reduced by 3.5°C.



PERMANENT FROST-PROTECTION mode. The set point temperature is 7°C and it is constant.



AUTOMATIC mode. In this mode programs from the input command cable (pilot wire) are performed.

#### **KEYBOARD LOCK**

In every operation mode it is possible to lock the keyboard by holding the "ON/OFF" key for more than 7 seconds

When the keyboard is locked, if any button is pressed, the display will show "LO" message and the unit will not respond.

To unlock the keyboard press the "ON/OFF" button for more than 7 seconds.





#### OPERATION WITH A PILOT WIRE PROGRAMMER.

It is possible to control the heater operation from a remote pilot wire programmer in AUTOMATIC mode. Pilot wire programmer orders for OFF and FROST PROTECTION are prior and independent from the operation mode selected in the heater.

### OPERATION WITH A PROGRAMMER WITH POWER LINE CARRIER OR A LOAD-CONTROLER WITH POWER LINE CARRIER.

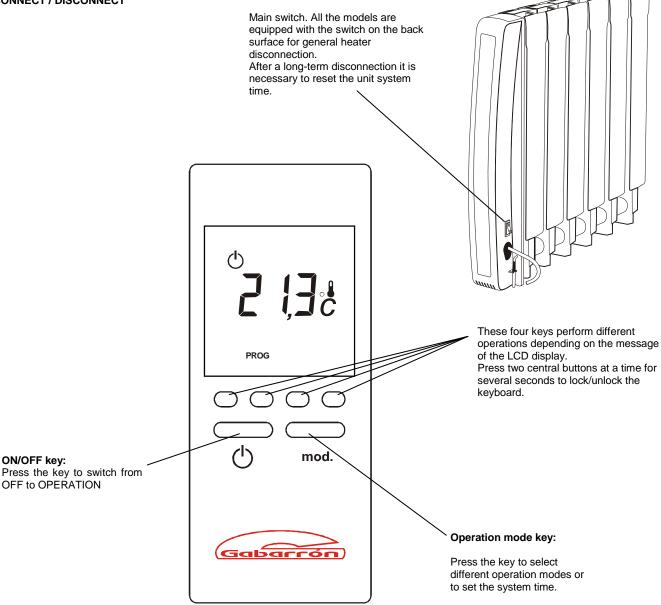
In AUTOMATIC mode, it is possible to control the heater operation from a programmer with PLC (Power Line Carrier) or from a load-controler with PLC.

TO ASSOCIATE the heater, switch the PLC programmer or the PLC load-controller to the "association" mode (see corresponding manual). Press the "mod." button for more than five seconds and after that press the "mod." button twice, the display will show "CP", Keep the "mod." button pressed. The message "CP" will start blinking. Release the "mod." button and press it again. The display will show "En". To store, press the "mod."key.

TO DISASSOCIATE the heater press the "mod." button for more than five seconds and after that press the "mod." button twice, the display will show "CP". Keep the "mod." button pressed for 60 seconds until the display will show "An". To store, press the "mod."key.

### **MODELS RKSL**

## **CONNECT / DISCONNECT**

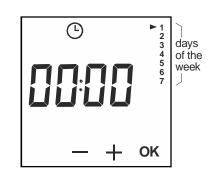


## **Time Settings**

To perform correct programming it is necessary to set the system time.

To set the system time the unit should be in OFF position, with a symbol on the display.

Press the "mod." key. Week days indication will start blinking.



With "+" or "-" keys select present day and press "OK" to store. Proceed to time settings.

Set the hour with "+" or "-" keys and press "OK" to store. Repeat the operation to set minutes.



Press the "ON/OFF" key to exit.

#### ON/OFF

The heater may operate only in one of two conditions; ON or OFF.

## OFF:



When the unit is in OFF, symbol is displayed together with premises temperature value.



To switch on the unit to ON mode press the key:

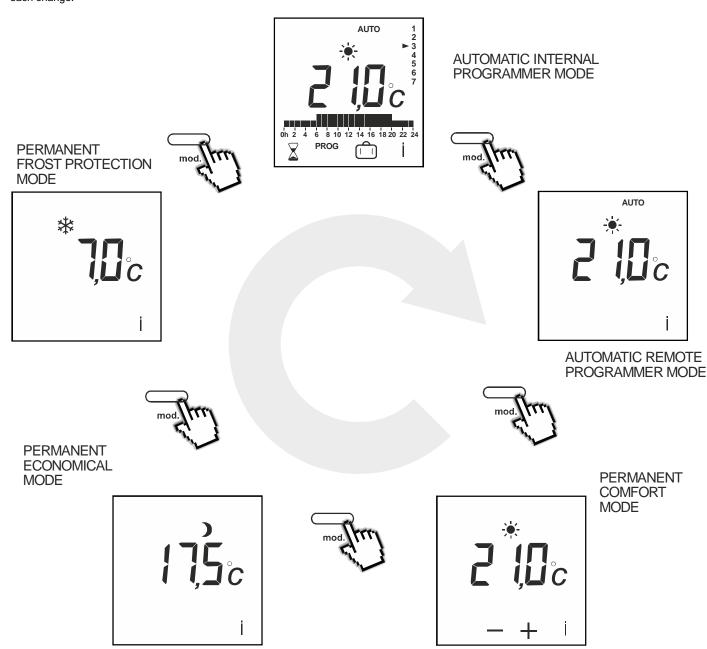
Last operation mode before the unit had been switched off will be displayed. Press the same key to switch off the unit and pass to OFF.

Apply preferably this form to switch off the unit instead of the main switch in order to avoid setting the system time constantly.



## ON:

Different operation modes may be applied. To switch from one mode to another press the "mod." key after no less than two seconds between each change.



#### PERMANENT COMFORT MODE

In permanent comfort mode the unit maintains constantly the set point temperature. It is possible to modify COMFORT set point temperature in  $0.5^{\circ}$ C steps by pressing the

Temperature range is from 5 to 30°C.

When the heater consumes power, ON message is displayed.

Pressing the "i" will momentarily display the premises temperature.



#### PERMANENT ECONOMICAL MODE

In economical mode the unit maintains all the time the ECONOMICAL set point temperature.

Originally the economical set point temperature is the comfort set point temperature reduced by 3.5°C.

See menu 1 of CONFIGURATION paragraph to modify the reduction or even to select economic set point temperature.

Pressing the " $\mathbf{i}$ " key displays momentarily the premises temperature.



#### PERMANENT FROST PROTECTION MODE

In permanent frost protection mode the unit will operate when the premises temperature decreases lower than  $7^{\circ}\text{C}$ .

In this mode pressing the "i" key displays momentarily the premises temperature.

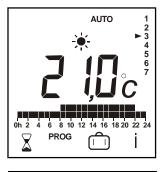


### **AUTOMATIC INTERNAL PROGRAMMER MODE**

In this mode the unit performs commands of the internal programmer.

#### **Programming**

By default the program "Comfort fro 8h to 22h is applied for all days of the week.



To modify the program press the "PROG" key in this mode or in OFF mode.

Select the temperature level for the first time interval of the day 1 by pressing one of the following keys:

Pressina 🕌

displays two segments indicating COMFORT temperature.

Dreccina

display one segment indicating ECONOMICAL temperature.

Pressing

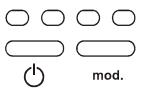
does not display any segment, indicating FROST PROTECTION temperature.

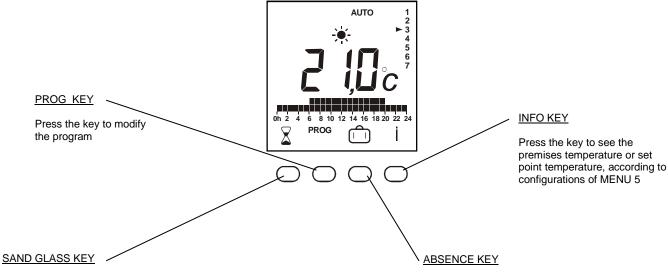
After programming all 24 intervals for the DAY 1, press "OK" to pass to the DAY 2 of the week and repeat the procedure.

Fast Programming

To copy the complete program from one day to another hold the "OK" key for 3 seconds.







Press the key to adjust the specified temperature for certain determined time.

By keys "+" or "—" adjust the set point temperature and store by pressing the "OK".

Adjust the time required by keys "+" or "—" and press "OK" to store.



Press the key to switch on the Frost Protection mode from 1 day to 365 days.

Adjust the amount of absence days by keys "+"

or "—", and store with OK key.

To disconnect the absence mode press again the " $\mathbf{OK}$ " key.



To go back to the previous settings press again the "OK" key.

## **AUTOMATIC REMOTE PROGRAMMER MODE**

In this mode the unit follows commands from the remote control desk or remote programmer. If there aren't any, the unit operates in permanent COMFORT mode.



## KEYBOARD LOCK

En every operation mode it is possible to lock the keyboard pressing central "+" and "-" keys for several seconds.

With the keyboard locked pressing any key displays **bloc** message and the unit will not respond, With the keyboard locked the unit may receive commands from the IR remote control.

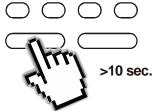
To unlock the keyboard press simultaneously central keys "+" and "-" for several seconds.

#### **CONFIGURATION**

It is possible to configure various parameters of the unit.

In OFF mode press for 10 seconds "ON/OFF" key to enter the first configuration menu. It is necessary to pass through five menus to exit the configuration. The Menu number is displayed above in the right part of the display.



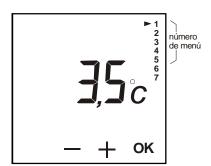


### Menu 1: Adjusting the ECO set point temperature.

By default the Economic set point temperature value is equal to comfort temperature value reduced by  $3,5^{\circ}$ C.

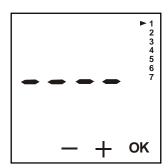
The reduction value may be modified from 0 a 10°C in 0,5°C steps.

For this purpose modify the value with the keys "+"/"—" and press "OK" to store and pass to the next setting.



ECO set point temperature value may be stored independently from the CONFORT temperature value.

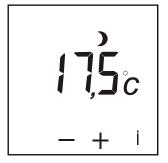
To authorize ECO value modification press and hold the "+"key until it displays the message "---- and store pressing "OK".



In such a way when selecting the permanent economical mode it

will be possible to assign any temperature with "+" or "—" key displayed at selection of permanent economical mode.

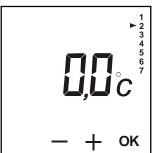
Selection range will start from 4.5°C to the comfort set point temperature.



### Menu 2: Correction of temperature measures.

If there is a difference between an external thermometer indication and the temperature displayed by the unit, in menu 2 it is possible to influence on the sensor in order to balance the difference. (-5°C to +5°C,) in 0,1°C steps.

To modify press the keys "+" or "-", after press the "OK" key and proceed with the next setting.



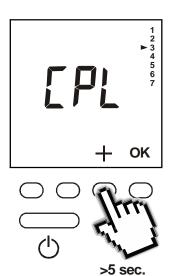
### Menu 3: Configuration of CPL

This menu allows associating the unit to the remote CPL programmer connected to the same power grid.

In menu 3 press the "+" for 5 seconds. CPL message will start blinking.

Switch the CPL programmer, remote control desk to the "association" mode (see corresponding manual). Press shortly the "+" key. "EnrE" message displays on the screen and then "CPL" message confirming the association.

Press "OK" key to proceed with the following setting.



#### Menu 4: Backlight time settings

Adjustable backlight is available from 0 to 225 seconds in 15 seconds steps (90 seconds by default).

To modify press "+" or "-", keys, then press the "OK" to store and proceed with the next setting.



## Menu 5: Selection of temperature display in AUTO operation mode.

- 1 = Permanent display of the premises temperature.
- 0 = Permanent display of the set point temperature.

To modify press "+" or "-", keys, then press the "OK" to store and exit the configuration mode.



## 4. - CLEANING AND MAINTENANCE

The radiators do not precise any special maintenance providing thermal comfort during large periods. Clean dust with a dry, soft cloth only when the unit is disconnected and cold.

Do not use solvents or abrasive products for cleaning.

After the heating season disconnect the radiator with the switch located on the back surface of the radiator.

This thermal radiator has been manufactured under an assured quality system using environment friendly processes.

Please take the heaters to a clean point once their useful life is finished, in order to recycle their materials in the right way.

## **5. - TROUBLESHOOTING**

- The thermal radiator does not heat. Check the heater or the air inlets are not covered.

- The room does not reach the required temperature. Check the selected temperature is in accordance with the desired temperature. Maybe the room needs more heating power.

- "-9.9°C" ó "99.9°C" message is Sensor wrong connection. Contact the after sale service. displayed

- "d2" or "d3" message is displayed Sensor wrong connection. Contact the after sale service .

-"dEF" message is displayed CPL connection trouble. Contact the after sale service.

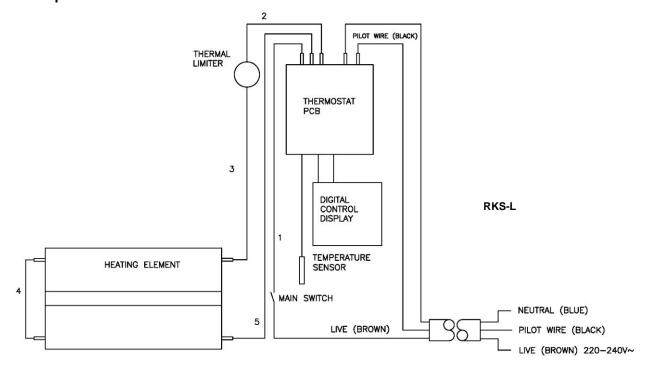
- Time settings are lost There was electric supply shortage or the unit had been disconnected by the main switch

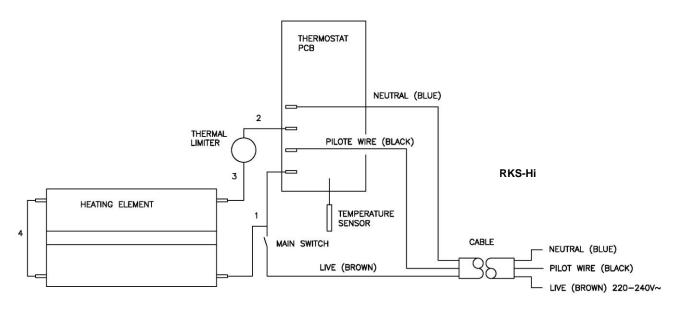
- The keyboard does not respond

If the DIOC message is displayed, the thermal radiator keyboard is locked. Hold two central keys for several seconds to unlock the keyboard.

# **SPECIFICATIONS**

Model	RKS4Hi	RKS6Hi	RKS8Hi	RKS10Hi	RKS12Hi	RKS14Hi	RKS4L	RKS6L	RKS8L	RKS10L	RKS12L	RKS14L
ELEMENTS	4	6	8	10	12	14	4	6	8	10	12	14
LENGTH (cm)	41.5	57.5	73.5	89.5	105.5	121.5	41.5	57.5	73.5	89.5	105.5	121.5
WIDTH(cm)	10 PLUS 2.5 cm separation from the wall											
HEIGHT (cm)	58											
WEIGHT	9kg	13kg	17kg	21kg	25kg	29kg	9kg	13kg	17kg	21kg	25kg	29kg
POWER	500W	750W	1000W	1250W	1600W	2000W	500W	750W	1000W	1250W	1600W	2000W
ISOLATION	CLASS II											
VOLTAGE	220-240V~											





Connect the black wire marked "Fil Pilote" to the signal wire when available. Do not connect this wire to any EARTH lead.

Connect "L" and "N" wires to a fix wall socket or to an appropriate plug WITHOUT EARTH.



GB:

WARNING: In order to avoid overheating do not cover the heater.

GB

The symbol on the product or in its packaging indicates that this product may not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. For more detailed information about recycling of this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product. These instructions are only valid in the EU member states.



www.elnur.es by ELNUR s.a. Pol. Ind. "El Nogal" c/ Villa Esther, 11 28110, ALGETE - Madrid



As a part of the policy of continuous product improvement Elnur S.A reserves the right to alter specifications without notice.

@2012 Cod. 46100301 rev.3