

ORIGINAL OPERATING INSTRUCTIONS

Read carefully and retain for future reference



ELECTRIC RADIATOR

Type: ALEA

Models: ALEA1000; ALEA1500; ALEA2000

IMPORTANT WARNINGS

Dear Customer:

Thank you for your confidence in us by purchasing this radiator. These appliances are extremely safe, silent and easy to install.

They do not require special maintenance.

Before starting it for the first time, carefully read these instructions. Retain them for future references.

GENERAL SAFETY INSTRUCTIONS

- Please read carefully these instructions before starting the device for the first time. Keep these instructions, as well as the guarantee, your invoice and if possible, the complete packing with all the elements inside.
- 2. The guarantee will cease to be valid in the case of not following the recommendations of this manual.
- Before connecting the appliance, make sure the mains voltage is the 230 Volts, and correspond to the marked on the nameplate of the appliance.
- 4. Check that the power is sufficient to supply the appliances. The total draw of the radiators' currents must not exceed the capacity of the circuit breaker that protects them.
- 5. This radiator cannot be used in rooms with presence of gases or other flammable products (glues, etc...).
- WARNING: To prevent overheating, do not cover the device. Do not use the device to dry clothes.
- 7. Make sure the power cable or other objects do not come into contact with the radiator surface while in operation.
- 8. If the power cable becomes damaged it must be replaced by the manufacturer or a suitably qualified trades person. Failure to comply may danger your safety and voids your warranty.
- 9. Check the device and the supply cord regularly. Do not turn the device on if it is damaged.
- 10. PRECAUTION: Some parts of this product can reach very high temperatures and cause burns. Pay special attention when children or vulnerable people are around.
- 11. Do not place the device straight under a power socket.

- 12. Children under the age of three should not be allowed to touch or play with the radiator and should be supervised at all times.
- 13. This device can be used by children under 8 years of age, as well as by people with reduced physical, sensory or mental capabilities when suitably supervised and only when they have been provided the instructions regarding the use of the device and have understood the risks that could derive from it. Cleaning must only be carried out by an appropriate adult.
- 14. Children between3 and 8 years should not turn on or off the device, unless this is installed or placed in a normal position and that children are under proper supervision or have received instructions regarding the use of the device as security and they have perfectly understood the potential dangers. Children between 3 and 8 years old should not connect, adjust or clean the appliance or perform any maintenance measure.
- 15. <u>Warning:</u> Do not use this heater near baths, showers or swimming pools. It should not be possible to access the device's controls from the bath, shower or any other surface that is in contact with water.(Its use in zones 0 or 1 in bathrooms is totally prohibited: seek advice from a qualified electrician).
- 16. For greater safety, this appliance is provided with a device that interrupts its operation in the case of overheating.
- 17. Do not use accessories that have not been recommended by the manufacturer, as they could entail a potential risk to the user, and damage the device. <u>Use only original accessories</u>.
- 18. Keep all the packaging elements (plastic bags, cardboard and polyethylene)out of the reach of children, as they can cause potentially dangerous situations.
- 19. Use this device only for domestic / light commercial use and the tasks for which it has been designed. This device has not been designed for industrial use. It must not be used outdoors, in greenhouses or for animal husbandry. Keep it away from heat, direct sunlight, humidity and cutting tools. Do not under any circumstances immerse in water or use this device with wet hands. In the case of humidity or water in the device, immediately disconnect the power supply and do not touch the wet parts.
- 20. Do not attempt to service the device yourself. Contact a qualified technician.

- 21 To disconnect the radiator from the mains pull the plug, never of the supply cord.
- 22. Respect the "SPECIFIC SAFETY INSTRUCTIONS FOR THIS APPLIANCE" listed below

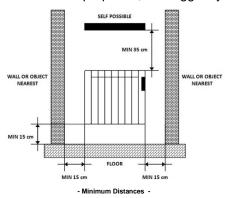
SPECIFIC SAFETY INSTRUCTIONS FOR THIS DEVICE

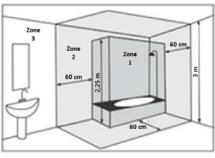
- The appliance must remain in a vertical position.
- Make sure the appliance is secured at all times. Please adhere to the installation distances indicated in this guide.
- Do not hang any object in front or on top of the device.
- Always ensure that the inlet and outlet air are not obstructed.
- Always install the device so that it cannot enter into contact with any combustible material such as curtains or towels (take into account the gusts of wind).
- To clean the device, consult the instructions in the "MAINTENANCE" section, because if water enters the air grilles it could seriously damage the device.
- Do not insert any object through the grille or inside the device.
- This radiator is designed to be connected by plug to the electric installation. Follow the instructions in "INSTALLATION".
- The guarantee will not apply if these instructions have not been observed.

INSTALLATION

- During the first use and for a few minutes, could occur smells and noise due to the dilatation of some internal parts. This is normal, so you must provide adequate ventilation. The smells are momentary and quickly will dissipate.
- For greater efficiency, make sure to calculate the power or the number of elements of the apparatus according to the surface of the room. We recommend contacting your dealer performing this calculation.
- Place the radiator in a well-levelled floor with no furniture and objects around.
- Avoid installing the appliance in corners.

- We advise against installing the appliance under the windows, because it is favoring the heat loss.
- The radiator must be away, at a minimum distanceof15cmfrom any combustible material, curtains, furniture, chairs, etc.(Fig. 1).
- Allow for a minimum distance of 1 m, from the front of the unit to any obstacles (furniture, walls, curtains, for example) that could hinder its operation.
- Also keep a minimum distance of 15 cm between the appliance and the side walls and any other obstacles (walls, for example) that may affect its function.
 Also keep a minimum distance of 35 cm on top the appliance free of obstacles and a minimum distance of 15 cm from the floor.
- WARNING: If this appliance is installed in a bathroom, it must be installed only within Zones 2 or Outside Zones (Zone3), according BS 7671 Requirements for Electrical Installations, Section 701. The installation of this appliance within Zones 0 or 1 of a bathroom is totally prohibited. The figure 2 bellow is only for information purposes, we suggest you contact a professional electrician.





Zone 1: Appliances supplied to Safety Extra Low Voltage (SELV).

Zone 2: Electrical Appliances Class II – IP X4

Zone 3: Electrical Appliances protected by RCD 30mA

Fig.1

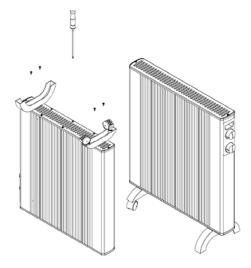
Fig.2

SPECIFIC APPLIANCE ASSEMBLY INSTRUCTIONS

- Unpack the appliance and check that neither the radiator nor the cable are damaged.
- Remove the brackets from the packaging.
- Place the radiator upside down on a carpet or other soft surface to avoid damaging the radiator paint layer.
- Remove the silver screws as indicated in the following figure.



• Position the two wheel supports as shown in the following figure:



• Never use the appliance without first installing the wheels.

ELECTRIC SUPPLY CONNECTION

This appliance is equipped with a supply cord **H05V2V2-F 2x1.0mm²** and bipolar plug without earthing.

Connect the plug to the base outlet.

Check the condition of your electrical installation and connection cables.

This appliance doesn't require earthing connection, due it has double electrical insulation.

Contact a licensed electrician for assistance.

TECHNICAL CHARACTERISTICS

Model	ALEA1000	ALEA1500	ALEA2000
Rated Voltage	230 V~	230 V~	230 V~
Rated Frequency	50 Hz	50 Hz	50 Hz
Rated Power Input	1000 W	1500 W	2000 W
Class of Protection	I	I	I
Degree of Protection IP	IP20	IP20	IP20
Dimensions (LxHxD) (mm)	409x634x220	539x634x220	669x634x220
Weight (kg)	4,2	5,1	6,00

DIGITAL PROGRAMMABLE THERMOSTAT

The radiator is equipped with a digital, programmable thermostat.

Operation Guide

1.- Presentation

The programmable electronic thermostat has been specially designed to regulate electric radiators screens.

It will become your best ally to optimize its energy consumption while increasing your comfort.



- Large screen with backlighting.
- Weekly Programming in Intervals of 30 min.
- Temporary override function.
- Wire Pilot Function with 6 orders. (Only France)
- Holiday or Reception Function.
- 1 Configuration Menu (User).
- Consumption Control Radiator.
- Open Windows Function.

1.1 Screen



- 1. "

 "Operation Mode. The active operation mode is displayed in the box.
- "B" Programme Number (P1 to P9), (U1 to U4) or System Settings Menu (01 to 11).
- "X" System Settings Menus.
- 4. "I" Keypad Lock Activated.
- **5.** "I" Room Temperature Indicator.
- **6.** Type of time display (12h AM/PM or 24h).
- **7.** Graphic view of the programme of the current day.
- **8.** Time, temperature and System Settings Menu setting area.
- 9. "Indicator of appliance in operation."
- **10.** "\(\text{M} \) Help pictogram to create programmes / Status of the programme in normal mode / Control Menu of the radiator's consumption.
- 11. """ Wire Pilot function indicator pictogram. (Only France)
- 12. Current day.
- **13.** "Temporary cancellation function activated, or "ITCS" if flashing.
- **14.** "III" Window Opening Function (see section 5, System Settings Menu 07).

1.2 Keypad



- Radiator Start / Stop Key (On / Off) " "
- Minus Key (-)
- Validation Key (OK)
- Plus Key (+)
- Right Navigation Key (►)

2.- First Use

This section will guide you when putting the device into operation for the first time.

NOTE: To restore the factory settings, consult section 5 "System Settings Menu".

2.1 Energy Supply

Your radiator can be Activated/Start (On mode) and Deactivated/Stop (Off mode) by pressing (On/Off).

Press the On / Off key Once: The appliance will emit two short beeps and the screen will turn off for a few seconds.

ATTENTION: In case the device's power disconnects, the memory of the settings recorded lasts for approximately one hour. After that time, we recommend you check the settings installed.

2.2 Setting the Time and Date

- First of all, move the cursor by pressing the right navigation key (▶) until the symbol with a watch "∑" is selected.
- Use the (-) and (+) keys to adjust the hours. When the correct time has been set press (OK) and proceed to set the minutes.
- When you have set the minutes press (\mathbf{OK}).
- Then adjust the Day ("1" Monday,..., "7" Sunday) and press (OK).
- When the Day of the Week has been set, set the Day of the Month (01 to 31) and press (OK).
- Then adjust the day Month (01,...,12) and press (OK).
- Finally, set the Year (2016,...,2020, etc.) y pulse (OK).

3. Operation Modes



Press ► to move along the display and select the different operation modes "

©P", selecting the one required and press (OK).

3.1 Timer Mode 🗵

The Timer mode "I" will allow setting a temperature for a specific amount of time. You can use this mode during a holiday period or to temporarily cancel a programme.

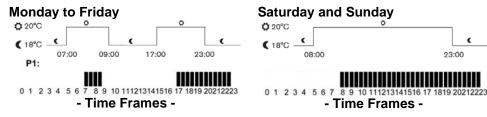
- First, you must set the duration with the keys (-) and (+), the time "H" up to 24 h. and the days in "d" onwards and confirm by pressing the (OK) key. The duration can be set anywhere from 1 hour up to 44 days.
- Then, set the temperature required with keys (-) and (+), and confirm with the (OK) key (Factory setting 21°C).
- The Timer symbol "" will flicker and you will see the hour/day number count down until the end of the period.

3.2 Manual Comfort Mode

The Manual Comfort mode "☑"enables setting a temperature that will be maintained throughout the day. The temperature will be set with the (-) & (+) keys. (Factory setting 21°C)

3.3 Automatic Mode Auto

By selecting the Automatic operation mode "Auto", the appliance will work with the preset programme "P1", as explained in the following image.



Nota.- If you need change the preset temperatures, do so in Comfort and ECO mode.



C = Comfort Temperature, space with bars, Ta that you want to achieve.

= Reduced Temperature, space without bars, T^a that you don't want to be reduced. If you want to modify, in a timely manner, the preset temperature during the current time slot, press the **(OK)** key and adjust with the keys **(-)** or **(+)** and displayed the symbol "\(\epsilon\)" which will keep the set temperature until end of the time slot.

3.4 ECO Mode

In **ECO** mode "**C**", the Reduced Temperature will be maintained throughout the day. You can set your own **ECO** temperature by pressing the **(-)** and **(+)** keys.

NOTE: The preset default reduced temperature is **18°C**.

3.5 Frost Protection Mode 🔀

Use this frost protection mode "", if you want to protect your property from possible freezing, for example, if you are leaving your property for a extended period during winter.

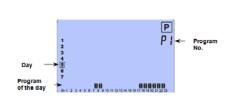
The preset minimum temperature is 5°C (default value). It can be set in System Settings menu section 5, number 05.

3.6 Program Mode P

Once you have selected the Program mode "P", you can choose between nine preset programs (P1 to P9). These are defined in the last pages of this manual. Select with the keys (-) and (+) and press (OK) to confirm.

The radiator will go straight into Automatic mode "Automatic mode and run the programme by you selected.

Factory Preset Programs (P1,..., P9)



- P1: Morning, Afternoon & Weekend
- P2: Morning, Noon, Evening & Weekend
- P3: Week & Weekend
- P4: Afternoon & Weekend
- P5: Morning & Afternoon (Bathroom)
- P6: Morning, Afternoon & Weekend
- P7: 7H 19H (Office)
- **P8**: 8H 19H & Saturday (Shop)
- **P9**: Weekend (Secondary House)

Remember:

= Comfort Temperature, space with bars, Ta that you want to achieve.

In Programme mode "P", after programme "P9", there are four programmes (U1 to U4). These are programmes that you can personalise according to your needs.

"USER" Programs from U1 to U4:



You can modify the programme according to your needs. You can also store up to 4 of your own programmes (**U1** to **U4**).

To modify a user program, press the (**OK**) key.

The following symbols will be shown when making your own programme:

Comfort Temperature 🌣 applied to the selected half-hour.

= Comfort Temperature, space with bars, Ta that you want to achieve.

Reduced Temperature **C** applied to the selected half-hour

How to edit a user programme:

- The programming is carried out in 30 minutes slots.

I = 30 minutes **II** = 1 hour

- The programme editing always starts on the first day of the week (01 = Monday).
- The (-) key activates a reduced temperature

 ✓ in the selected time slot.
- The (+) key activates a comfort temperature [‡] in the selected time slot.
- The (▶) key advances the selected time slot.
- The (OK) key confirms the programme you have entered for that day.

Note.- After confirming the seventh day, the system automatically returns to **AUTO** mode (see section 3.3).

Example of user programme editing screen:



Order for the interval selected

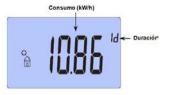
3.7 Consumption Control Mode Plus



Following Program Mode "₱" and after press (▶), find the Consumption Control Mode "₱" which enables you to check and control the consumption of your radiator.

<u>IMPORTANT</u>: The consumption control is only for checking the consumption of your radiator. Making alterations in this menu may inhibit the performance of your radiator. The thermostat calculates the constant consumption. Once you have checked your radiator consumption, if you have not carried out any actions, the thermostat screen automatically returns to AUTO mode.

You must consult the "SYSTEM SETTINGS MENU", section 08 to select the power input of your appliance.



- Press (**OK**), and after pressing (+) select the duration of measurement: "h" (one hour), "d" (one day), "d" (one week), "d" (30 consecutive days), this value corresponds to measure the consumption of your radiator.
- You can change the duration value by pressing (-) and (+).
- Consumption: Indicated in **kW/h**. Hundredths are shown for one hour and one day durations selected.

4. Specials Functions

4.1 Keypad Lock 1

Use this function to prevent any change in the thermostat setting. This is useful in areas such as children's' bedrooms or public areas.

- To lock the keypad of your radiator, light up the LCD screen by briefly pressing any key (OK), (►), (-) or (+). Once the LCD screen is lit briefly press (OK) + (►) buttons at the same time.
- The locking symbol "I" will then appear.
- Repeat the same procedure to unlock the keypad.

The keypad lock feature is available in all modes. The "Stop" mode will remain available even in automatic locking mode.

4.2 Window Opening Function III

This function enables the automatic detection of an open window when the radiator is working.



- While this function is activated (see "SYSTEM SETTINGS MENU" section 07), the icon [1] will appear in the left upper part of the screen.
- If the system detects a temperature drop of around 3° C, the heating will stop for approximately one hour. The \square icon will flicker, as well as the temperature measured by the system.

- Press any key to stop this function. The radiator will become operative again and the window detection will be reset.

5. System Settings Menu

Your thermostat has a Settings Menu. To access this menu, hold down the **(OK)** button for 5 seconds. The first menu screen looks like this:



Now you can select the setting you want to change by pressing the (\triangleright) button. Once selected the setting you wish to change, alter the value by pressing (-) or (+). Confirm your selection by press (OK) or (\triangleright) .

Exit the System settings menu by selecting the "End" option and pressing (OK).

No.	Preset Values and options
01	°C °F: Types of Degrees on Screen °C: Celsius Degrees °F: Fahrenheit Degrees
02	: Time selection 24H (24:00) 12H (12:00 AM (Antemeridian) / PM (Post meridian)
03	<i>ŪST</i> : Automatic summer⇔winter time change YES: The time will change automatically. NŪ: The time must be changed manually. * You must correctly set the date for this to work.
04	The calibration cannot be completed until the radiator has been in operation for a minimum of 1 day. Place a thermometer in the middle of the room at approximately 1.5 m from the ground. After one hour, take note of the temperature. When entering the calibration menu, the value measured by the radiator is shown. Now insert the value measured with your thermometer by means of keys (-) and (+), confirm your measurement with (OK) to save the value. Press (OK) again to view the difference added to the temperature value. * Important note: When calibrating the room temperature ONLY the radiators should be used for heating the room.

No.	Preset Values and options
05	F: Minimum Temperature: This menu allows setting the minimum temperature used for the "Frost Protection" mode. The default value of this setting is 5.0°C Use the keys (-) and (+) to change the value and confirm its setting by pressing (OK).
06	This feature allows the radiator to calculate the time required to meet the comfort temperature set within your programme. The radiator will calibrate itself and consider external factors such as the outside temperature and the time needed to change the room temperature. Every time you make a change to your programme the radiator will recalibrate to ensure you achieve the comfort temperature at the time you want it.
07	This function allows automatic detection of window opening (see section 4.2). NO: Deactivate the function. YES: Activate the function.
08	In this menu you can choose the value of the radiator's power to adjust the calculation of the appliance's consumption (see section 3.7) Default value: See your appliance's assigned power on the rear of your radiator (Example: 1,000 W).
09	CLR: Default setting Allows you to reset your thermostat to the default settings (time, programmes, etc.). Press (OK) for ten seconds * Warning: Before you use this function, make sure you have all the instructions necessary to start-up the thermostat.
10	VERS: Software version
11	END: Exiting the user menu Press (OK) to exit the menu and return to the main screen.

6. Troubleshooting

The appliance does not turn on.						
Supply	- Check the power supply					
	The appliance's screen shows the text "Err"					
	- The symbol "I"and the message "Err" are flickering. There					
Error message	is an error in the internal probe.					
	- Contact your installer or retailer.					
The device seems	to work correctly, although the heating doesn't work.					
	- Check the connections.					
Output	- Check the power supply of the heating element.					
-	- Contact your installer or retailer					
The device seems to work correctly, yet the temperature in the room does not						
coincide with the programme.						
	- Check the clock					
- Is the difference between the Comfort and						
Programme	temperature very significant?					
	- Are the programme sections too short (less than 2 hours)					
	- Check the wire pilot function (Only France)					

THERMAL SAFETY

In the case of overheating, a safety device automatically cuts the radiators operation. After cooling the radiator will automatically reset.

MAINTENANCE

Your radiator requires no regular maintenance, however, to ensure its good operation:

Always disconnect the device from the mains before performing any cleaning or maintenance operation.

Let it cool down before cleaning.

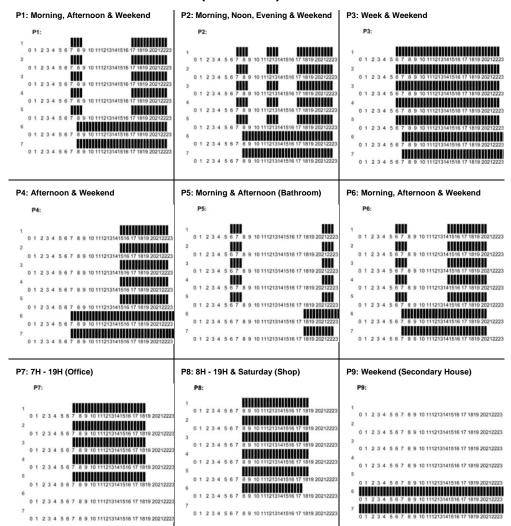
To avoid any risk of electrical shock, clean the unit with a soft, damp cloth to wipe the outside of the radiator and remove dust and dirt cloth.

Do not use detergent, solvent, abrasive products or any other chemical product to clean the radiator.

NEVER immerse the device in water or any other liquids.

You can use a vacuum or flexible brush to clean the air grilles. This maintenance must be carried out regularly to ensure optimum performance. Ensure the radiator is totally dry before turning it back on.

PRESET PROGRAMMES (P1 TO P9)



^{*} The sections indicate the comfort times.

EU Declaration of Conformity



Product:	ELECTRIC RADIATOR
Trademark:	KE HJM
Models:	ALEA1000; ALEA1500 & ALEA2000
Batch & Serial No.:	Mx YYDDD-XXX (1)
(1) Explanation of code "Lot & Serial No."	
Batch = Mx YYDDD; where: Mx = Assen 365)	nbly Line No. YY = year (15,16,1799) DDD = Correlative day (001,,
Serial No. = XXX (001,, 999)	

Nosotros / Nous / We / Nós:

HERMANOS JULIÁN M., S.L.

Head Office: Esposos Curie,44 / Factory: Gutenberg,91-93
Polígono Industrial "Los Villares" . 37184 Villares de la Reina . Salamanca . España
Tf.+34 923 222 277 +34 923 222 282 . Fax +34 923 223 397
http://www.calorhjm.es

Hereby declare, that the following equipment complies with all the essential requirements for health and safety of European Directives.

2014/30/EC EMC DIRECTIVE 2014/35/EC LV DIRECTIVE 2011/65/UE ROHS DIRECTIVE 2009/125/EC (ErP Directive)

With reference to the application of the followinf standards: / Em aplicação das sequintes normas:

2014/30/EC EMC DIRECTIVE	EN 55014-1:2006 +A1:2009 +A2:2011
	EN 61000-3-2:2014
	EN 61000-3-3:2013
	EN 55014-2:1997 +AC: 1997 +A1:2001 +A2:2008
	EN 61000-4-2:2009
	EN 61000-4-3:2006 +A1:2008 +A2:2010
	EN 61000-4-4:2012
	EN 61000-4-5:2006
	EN 61000-4-6:2013
	EN 61000-4-11:2004
2014/35/EC LV DIRECTIVE	EN 60335-2-30:2009 + CORR:2010 +A11:2012
	EN 60335-1:2012 +AC:2014 +A11:2014
	EN 62233:2008 +CORR:2008
2011/65/UE RoHS DIRECTIVE	EN 62321-1:2013
2009/125/EC (ErP Directive)	UE 2015/1188
(2005/32/EC)	

Model: ALEA						
Item	Symbol	Value	Unit	Item Unit		
Heat output 2000			Type of heat output/room temperature control (select one)			
Nominal heat output	P _{nom}	2	kW	single stage heat output and no room temperature control		
Maximum continuous heat output	P _{max,c}	2	kW	Two or more manual stages, no room temperature control		
Auxiliary electricity consumption				with mechanic thermostat room temperature control		
At nominal heat output	el _{max}	2	kW	with electronic room temperature NO control		
In standby mode	el _{SB}	0.0005	kW	electronic room temperature control plus day timer		

	t output 1500			electronic room temperature control plus week timer Other control option (multiple selection possible)
Nominal heat output	P _{nom}	1.5	kW	room temperature control, with presence detection
Maximum continuous heat output	P _{max,c}	1.5	kW	room temperature control, with open YES window detection
Auxiliary electricity consumption				with distance control option
At nominal heat output	el _{max}	1.5	kW	with adaptive start control
In standby mode	el _{SB}	0.0005	kW	with working time limitation
Heat output 1000				with black bulb sensor
Nominal heat output	P _{nom}	1	kW	

Maximum continuous heat output	P _{max,c}	1	kW		
Auxiliary electricity consumption					
At nominal heat output	el _{max}	1	kW		
In standby mode	el _{SB}	0.0005	kW		

The seasonal heating energy efficiency of this local space heater is:

$$\eta_s = \eta_{s,on} - 10\% + F(1) + F(2) + F(3) - F(4) - F(5)$$

$$\eta = 40 - 10\% + 0 + 6 + 0 - 0 - 0 = 36\%$$

RECYCLING (Disposal of the product at the end of its useful life)



According to European Directive **2012/19/UE**, on waste electrical and electronic equipment (WEEE), old electrical household appliances cannot be disposed of in the usual municipal containers; they have to be collected separately to optimise the recycling of the components and materials that comprise it, and reduce the impact on human health and the environment.

The crossed-out wheeled bin is marked on all Electrical and Electronic products, to remind the consumer of their obligation dispose of them separately.

The consumer must contact the local authority or the vendor to learn about the correct disposal of his/her old electrical household appliance.

In the case of scrapping the radiator, containing oil; should the provisions concerning the disposal of oil followed.

Made by



Head Office: Esposos Curie,44
Factory: Gutenberg,91-93
Polígono Industrial "Los Villares" .
37184 Villares de la Reina .
Salamanca . España
Tf.+34 923 222 277 +34 923 222 282 .
Fax +34 923 223 397
http://www.calorhjm.es
ESB-37295664