

**INSTRUCTION  
AND OPERATION  
MANUAL**

ESPRESSO COFFEE MACHINE

**IBERITAL**  
*Junior*

SERIE: 2 GROUPS



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#### 3.- PRODUCT CERTIFICATIONS

**IMPORTANT: READ CAREFULLY THE CONTENTS OF THIS MANUAL AS IT CONTAINS IMPORTANT SAFETY INFORMATION REGARDING THE INSTALLATION, USE AND MAINTENANCE OF THE APPLIANCE.**

Read this manual before turning on the machine.

- 1) Keep this manual in a safe place for any eventual future consultation.
- 2) After unpacking, check that the machine is complete in all its parts.

*The packaging (plastic bags, carton packing, nails, etc) must not be left within reach of children as they are potentially dangerous items.*

- 3) Before connecting the machine make sure that the values rated on the data plate (20) (located at the left side) correspond to those of the mains supply.

The installation of the appliance must respect the local safety standards in force and must be carried out, following the manufacturer's instructions, by technically qualified persons authorized by IBERITAL DE RECAMBIOS, S.A.

The manufacturer accepts no responsibility for situations caused by or arising from the incorrect installation of this appliance.

The safety of the machine can only be assured when it is correctly grounded to an efficient earth connection, which has been carried out in conformity with the local safety standards and regulations in force.

It is important that this fundamental safety measures must be verified, in case of doubt have the system checked by a technically qualified person.

The manufacturer accepts no liability for damage caused by an incorrect or missing earth connection.

Check that the current carrying capacity of the system is sufficient to cover the needs of the maximum power consumption of the appliance, which is indicated in the data plate. In case of doubt contact a technically qualified person who should also check that the cross section of the cables used in the system are suitable to the maximum power consumption of the appliance.

The use of multiple adapters, patch cords and extensions are inadvisable.

Should the situation occur where the use of the above mentioned items is unavoidable then only use single or multiple adapters and extensions which conform to the local safety standards and regulations in force and take care not to exceed the maximum current carrying capacity marked on the simple adaptors and extensions and maximum power consumption marked on the multiple adapters.

- 4) This appliance must be used exclusively for the purpose for which it has been made; this means for making coffee and supplying hot water and steam for making hot drinks. Any other use is to be considered improper and therefore dangerous.

The manufacturer accepts no liability for damage caused by or situations arising from the improper use of the appliance.

- 5) When using this machine there are several fundamental rules that must be observed such as:
- never touch the machine when you have wet or damp hands or feet.
  - never use the machine with bare feet
  - do not install the machine in places where cleaning is carried out using water jets.
  - never pull or jerk the power cable when removing it from the main socket.
  - do not allow the machine to be exposed to atmospheric agents (rain, sand, ice, etc.)
  - do not leave the machine in places where the temperature is below 0 °C without first having emptied the boiler and the hydraulic piping of water.
  - do not allow the machine to be used by children, incapable persons, or any body who have not read this manual.
  - never remove the cover of your machine for repairing or pushing the reset safety switch. Only Official technicians are authorized by the manufacturer to remove the cover and reset the machine.
- 6) Before carrying out any maintenance operations make sure that the machine is disconnected at the mains either by tripping the circuit breaker.
- 7) For all cleaning operations follow the indications laid out in this manual.
- 8) In case any anomalies or irregular running, switch off the machine to attempt personal maintenance operations. Contact a technically qualified person authorized by IBERITAL.

Any eventual repair work should be carried out by the manufacturer or by an authorized after sales service center using original spare parts.

If the above is not respected the safety of the machine could be dangerous.

The connection to the mains must be carried out using a circuit breaker that conform to the local safety standards and regulations in force.

- 9) During the installation the machine must be provided with a suitable automatic circuit breaker which leaves a gap equal to or greater than 3 mm between its contacts.
- 10) In order to avoid dangerous overheating make sure that the power cord is completely extended throughout its length.
- 11) The power cable must not be replaced by the user, if damage to the cable is noticed, disconnect the machine from the mains and contact a technically qualified person authorized by IBERITAL.
- 12) Whenever the machine is not to be used for extended periods make sure it is disconnected from the mains.

In order to guarantee the continued efficiency of the machine and its correct functioning it is indispensable that the manufacturer's instructions be followed and the periodic maintenance be carried out by professionally qualified person.

In particular it is recommended that the safety devices of the machine be periodically checked.

Do not allow naked hands or other parts of the body to come close to the coffee dispensing spout or the hot water or steam jets.

The water and steam escaping from the jets is extremely hot and cause burns.

The water jets, steam jets and the filter bowl are extremely hot during normal working conditions. They must therefore be used with care and only gripped by the handles.

Make sure that the coffee cups are free of water before placing them on the cup warning shelf.

Only crockery which is specific to this machine should be placed on the cup warning shelf. In case of doubt, contact your sales center.

The placing of any other objects is therefore to be considered improper and dangerous.

**TECHNICAL SPECIFICATIONS:**

- \* Electronic volume counter dosage (four different doses + Continuous).
- \* Automatic water filled up of the boiler.
- \* Motor and rotary pump pressure.
- \* Manometer for the boiler pressure and pump pressure.
- \* Electronic temperature control of the heating element.
- \* Two steams outlet pipes in stainless steel.
- \* One hot water outlet pipe.
- \* Heating element 3000 W / 4000 W.
- \* Easy location of the boiler drained-out cap.

<b>DIMENSIONS</b>			
<b>Models</b>	Wide	High	Long
2 Groups	475 mm	460 mm	690 mm
2 Groups compact	475 mm	460 mm	534 mm

*Important: Specifications are subject to change without notice. Contact the nearest IBERITAL representative for any question related to the new specifications.*

## 1.- INSTRUCTIONS FOR THE USER (TURN ON)

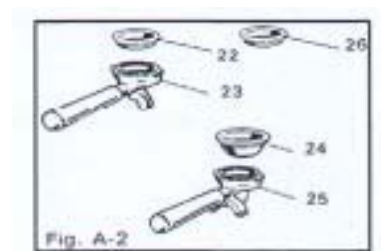
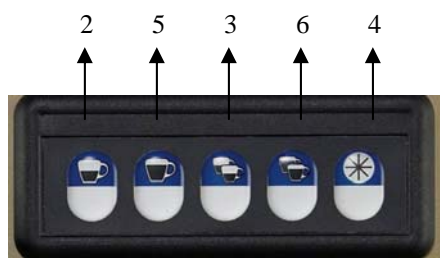
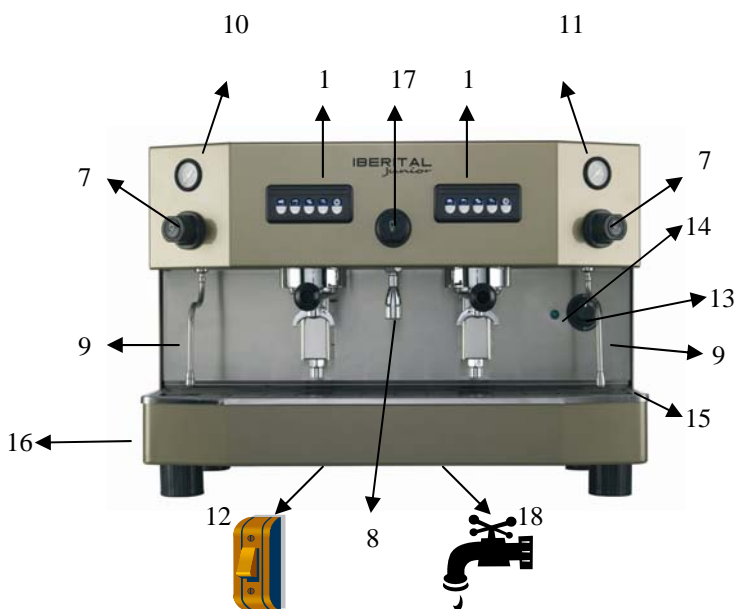
### 1.1.- DESCRIPTION

1) Coffee feed control buttons	13) Three way power switch: OFF 1= (ON) (Automatic water fill-up ON) 2= Control (heating element ON).
2) Feed button, one espresso coffee	14) ON/OFF red light
3) Feed button, two espresso coffees	15) Drip tray
4) Non-stop coffee feed button	16) Data plate
5) Feed button, one large coffee	17) Hot water valve control
6) Feed button, two large coffees	18) Water stopcock (Not included. Must be installed by an official city plumber).
7) Steam valve control	22) Filter one coffee
8) Hot water jet	23) Filter holder, one coffee
9) Steam jet	24) Filter two coffees
10) Pump pressure gauge	25) Filter holder, two coffees
11) Boiler pressure gauge	26) Cleaning filter (blind)
12) Mains switch (Non included. Must be installed by an official city technician).	

### IBERITAL junior

Electronic

Semiautomatic



1.2.-

## **PREPARATION - TURN ON**

- a) Turn on the water stopcock (18) at the mains.
- b) Switch on the power at the mains (12).
- c) Turn the switch (13) to the position 1 and wait for the automatic water level control to finish filling up the boiler.

Only for 3 groups espresso machine: In case the automatic fill up control would stop and the lights of the push buttons would flicker, turn the switch (13) off and immediately turn the switch (13) on to the position 1 another time, and wait for the automatic water control to finish filling up the boiler.

- d) Turn the switch (13) to the position 2.

Wait for the operating pressure, indicated on the pressure gauge (11) (0,8-1bar).

The machine is heated by electricity.

## **1.3.- PROGRAMING THE DOSE**

### **I. TOUCH PATH PERFORMANCE**



**1 SHORT COFFEE (ESPRESSO)**



**1 LONG COFFEE**



**2 SHORT COFFEES**



**2 LONG COFFEES**



**CONTINUOUS**

**Important:** The two touch path have electric signal with any of the two positions (1 and 2) of the On-Off switch.

In the position 1, the automatic fill up is working, but the touch path cannot make any coffee (erogation).

In the position 2, it is possible to do coffees (erogations). But it is recommended to begin doing coffees (erogations) when the machine is warm.

## II. ADJUSTING THE TOUCH PATH DOSING.

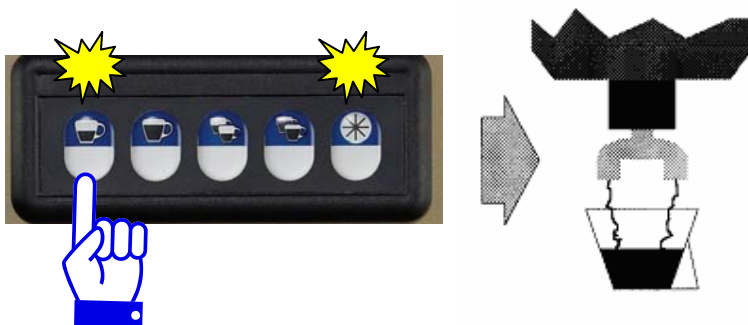
Press the continuous button of the right hand group (group 1) during 5 seconds and the continuous LED will light on.



In this moment, the adjustment process of the 4 selections can begin:

Press **1 short coffee** button, and when you will have the dosing desired press another time the **1 short coffee** button. Now, you can continue with all the other selections. At the end, you have to wait until the continuous LED will go out.

After this process, all the group are programmed automatically.



In the selections already adjusted, when you are programming any other selections, the LEDs are gone out. At any time, you can adjust another time one selection already adjusted.



If during the adjustment of a dosing any of the LEDs are winking, the adjustment will not be memorized. Please check the volumetric counter, in case there would be any dust from the water supply.

### **III. ADJUSTMENT OF THE ELECTRONIC PRE-INFUSION**

The pre-infusion can be enable and disable, as follows:

To enable this function:

- 1) Turn Off (position 0) the On-Off switch
- 2) Press the 1 short coffee (espresso) button of the left group (group 1) and at the same time turn On the On-Off switch (to position 1 or 2).
- 3) The 1 short coffee (espresso) LED will light
- 4) Stop pressing the 1 short coffee (espresso) button
- 5) Turn Off (position 0) the On-Off switch
- 6) Finally, turn On the On-Off switch to the position 2 (normal working).

To disable this function:

- 1) Turn Off (position 0) the On-Off switch
- 2) Press the 1 long coffee button and at the same time turn On the On-Off switch (to position 1 or 2)
- 3) The 1 long coffee LED will light
- 4) Stop pressing the 1 long coffee button
- 5) Turn Off (position 0) the On-Off switch
- 6) Finally, turn On the On-Off switch to the position 2 (normal working)

### **IV. ALARM-WARNING SIGNALS**

- ***Boiler fill up exceeding time***

The probe warning signal starts after 1 minute without being in contact with water. The alarm signal is: winking all the touch path LEDs.

This alarm is due to a leak of water in the machine or the touch path is not sending any signal to the auto fill up system.

Important: when you are doing the water fill up of the boiler process for the first time and this alarm appears. Then, turn the On-Off switch Off (position 0) and following turn the On-Off switch On (position 1) another time. (The fill up process takes more than 1 minute).



- Failure in the volumetric counter (5 seconds)

The LED of the erogation being used (1 short coffee, 2 long coffee ...) is winking due to some failure in the volumetric counter. At the same time, this erogation does not stop.

- ***Failure in the volumetric counter (erogation)***

This alarm appears when the erogation time is too long. At the same time, this problem appears when the coffee is ground too fine or too many grams.

#### **1.4.- HOT WATER OUTPUT**

Place a cup or other receptacle under the hot water jet (8). Turn on the control (17) to start the hot water feed, release this button to stop it.

#### **1.5.- STEAM OUTPUT**

Point the steam jet (9) towards the drip tray (15).

Turn on the control (7), to discharge the condensation, until steam escapes from the opening.

Place the steam jet (9) into the recipient containing the liquid which is to be heated. Turn off the control (7) to release the steam. To obtain a frothy cappuccino keep the jet level with the top of the cold milk, this will create froth.

When the liquid has reached the desired temperature, stop the steam feed by turning the control (8) on the contrary.

Slide the recipient out from under the steam jet (9). Point the stream jet (9) towards the drip tray (15).

Briefly turn the control (7) to the right, to discharge any residue which has remained in the steam jet (9). Clean the outside of the steam jet (9) with a damp clothe or sponge.

#### **1.6.- DAILY CLEANING OPERATIONS**

##### **Cleaning the spray filters**

Every evening or at least once a day it is necessary to carry out the following:

Rinse the filters and filter bowls in hot water every evening or at least once during the day. Further still allow them to soak overnight in water which is initially hot in order to dissolve the fat deposited by the coffee.

Clean the spray jets and gaskets of the lower feed unit as follows:

- press the coffee feed button.
- place the filter holder (23) or (25), fitted with the cleaning blind filter (26), into the feed unit.
- Grip the filter holder at the end of the handle; rotate the filter holder to and through in order to allow the hot water to have a rinse effect on the unit.
- Clean the gasket of the lower feed unit group using a soft cloth or a sponge.
- Clean the steam jets and cappuccinatore using URNEX milk frothier and steam jets cleaner.

### **Cleaning the groups**

- a) Substitute the normal filter (22) or (24) with the cleaning filter (blind) (26).
- b) Place a couple of spoonfuls of detergent (bags of 20 gr. - Code 3852 URNEX – NSF approved) into the cleaning filter (blind) (26).
- c) Place the filter holder into the feed unit.
- d) Switch on the unit and leave it working for several seconds (15-20").
- e) Stop the unit by pressing the feed button a second time; during the decompression of the unit the hot water and detergent will clean the feed group.
- f) Repeat point (e) several times.
- g) Rinse the unit and without the filter holder into the feed unit push any feed button to clean any residual detergent.

### **Cleaning the outer shell of the machine**

The external paneling of the machine should be cleaned with hot (not boiling) soapy water and then rinsed thoroughly, using a soft cloth or a sponge. Do not use abrasive substances as these could scratch the surface of the panels.

### **1.7.- WATER SOFTENER**

The water softener eliminates calcium from the water therefore preventing the build up of inlays. The water softener degenerates through use and must be regenerated. Regeneration is the procedure which returns them to the original state. The presence of inlays in the boiler, through lack of regeneration, will nullify all guarantees in force. (Water softener is not included).

## 2.- INSTRUCTIONS FOR THE TECHNICIAN

**CAUTION: When the cover of the machine is removed in order to repair or push the reset button, remember to seal another time the two side panels with NSF silicone.**

### 2.1.- DESCRIPTION OF THE INTERNAL COMPONENTS

- 29) Pump
- 30) Boiler  
2 groups 10,5 liters
- 31) Spring loaded safety valve
- 32) Pressure eliminating valve (Empty valve)
- 33) Boiler heating elements
- 34) Pressure switch
- 35) Expansion valve
- 61) Thermostat for the electronic temperature control of the heating element: this thermostat is to control the temperature inside the boiler. When this temperature is over the correct level the machine turns off (stop). In order to turn on the machine push the reset button located in this thermostat (right side of the machine).
- 62) Boiler water level probe

### 2.2.- WATER CONNECTION

**IMPORTANT: This Equipment is to be installed to comply with the applicable Federal, State or Local Plumbing codes having jurisdiction.**

### 2.3.- ELECTRICAL CONNECTION

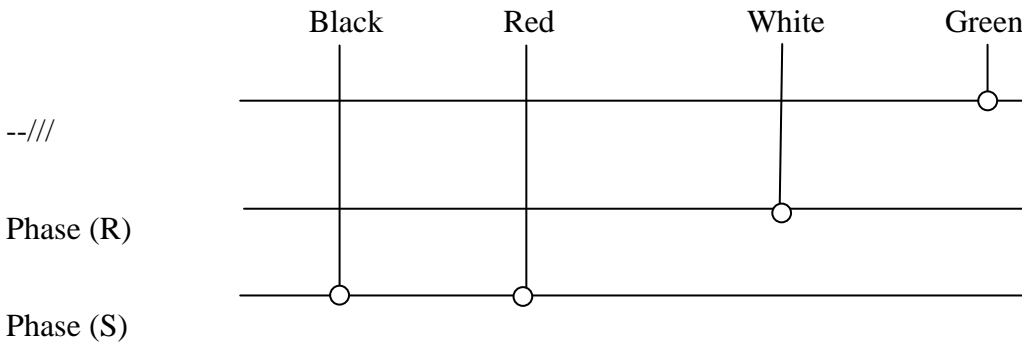
**IMPORTANT: This equipment is to be permanently cord connected.**

The machine is fitted with heating and other electric elements of either 110V, 220V or 240V depending on the version. A circuit breaker, with an adequately rated fuse, must be fitted between the appliance and the mains. The maximum power consumption is indicated on the data plate (17).

The green wire must be connected to an efficient grounding installation.

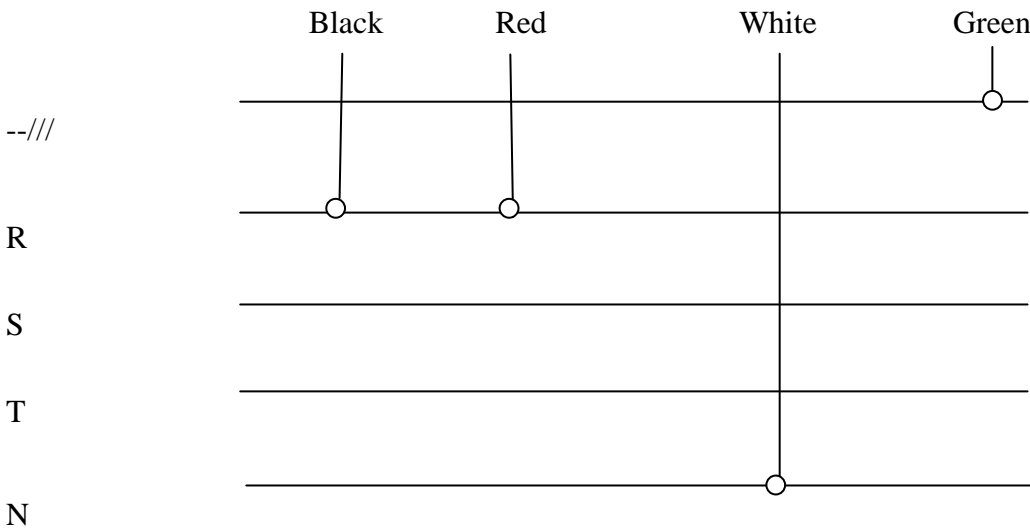
**220V-240V SINGLE PHASE.**

The machine can be connected in single phase, in this case the black wire should be joined together with the red wire and then connected to phase. The white wire must be connected to other phase. Green wire to ground.



**380V THREE PHASE WITH NEUTRAL (TWO AND THREE GROUPS MACHINES)**

The machine can be connected in three phases 380V with neutral. In this case the black wire and the Red wire must be connected to one of the three phases, and the White wire to the neutral wire. The green conductor/wire must be connected to ground.



## **2.4.- FEED UNIT GROUP.**

44) Gasket

46) Spray head

47) Water drainage system

49) Solenoid valve

The feed unit consists of a hot press brass block in which the infusion chamber has been set.

Pressing the coffee feed button turns on the pump (29) and activates the solenoid valve (49).

## **2.5.- BOILER**

50) Feed unit

52) Injector

53) Heat exchanger

This boiler is made of copper and is intersected by a heat exchanger (53) which is connected to the feed unit (50).

During the feed cycle cold water is sent into the exchanger through the use of a pump and injector (52). Between the heat exchanger (53) and the feed unit (50) a thermo siphon circulation is established, through the difference in temperature and the density of water which maintains the unit and the correct temperature needed for making the coffee.

A thermostat (61) controls the temperature of the heating element inside the boiler, in order not to pass over the correct rate. In this case the machine turns off. To be turned on press the reset button located on the thermostat.

<b>GROUPS</b>	<b>HEATING ELEMENT</b>
<b>2</b>	<b>3000 W / 4000 W</b>

### **2.5.1.- SPRING LOADED SAFETY VALVE**

In the case of anomalies in the heating control pressure system the spring loaded safety valve (31), located on the boiler guarantees the integrity of the boiler by releasing the excess pressure when the boiler reaches 1.8 bar.

The safety valves are manufactured under strict conditions and respect severe technical criteria, they are sealed after testing in the factory.

### **2.5.2.- PRESSURE ELIMINATING VALVE (empty valve)**

This valve (32), which is located on the boiler, prevents depressurization inside the boiler therefore avoiding the risk of liquids being sucked back through the steam jet.

### **2.5.3.- OPTICAL LEVEL CONTROL AND AUTOMATIC WATER LEVEL DEVICE**

48) Solenoid valve

A probe (62) (consisting of a stainless steel rod which is in contact with the water inside the boiler) positioned the water level in the optical level device (11). The probe is connected to the electronic control (CPU)(1) signaling a low water level in the boiler. Then, the CPU switches on the pump (29) and activates the solenoid valve, therefore allowing passing water until the correct water level in the boiler has been reached.

### **2.5.4.- VALVE UNIT**

35) Expansion valve (set to open at approx. 12 bar  $\pm$ 1)

## **2.6.- MOTOR PUMP**

59) Lock nut

60) Setting screw

Power consumption: 250W. The motor pump turns on when the coffee feed button is pressed, increasing the pressure to the 8/9 bar required for making the coffee.

The motor pump is also controlled by the level device for the automatic fill-up of the boiler.

To regulate the pressure of the motor pump proceed as follows: release the lock nut (59) which fastens the setting screw (60), loosen the screw (60) to reduce the pressure or tighten to increase the pressure. After having finished tighten the lock nut (59).

### **Product certifications.**

The product conforms the following Standards:

UL 197 Standard. (Safety for Commercial Electric Cooking Appliances)  
CAN/CSA C22.2 NO. 109 (Commercial Cooking Appliances)  
NSF4 (Standard for Commercial Cooking & Hot Storage Equipment)

Directive 89/336/EEC. (Electromagnetic Compatibility).  
Directive 73/23/EEC and 93/68/EEC. (Electric Safety).

Under demand, IBERITAL DE RECAMBIOS, S.A. may supply equipments conforming other standards.

***CAUTION: Changes or modifications to the equipment not expressly approved by IBERITAL DE RECAMBIOS, S.A., could result in violation of the product certifications.***

### **Product marks.**

Accordingly with the certifications, products may carry the following marks:



## Declaración de conformidad CE

CE Declaration of conformity  
Ref.: V703-54

IBERITAL DE RECAMBIOS, S.A.  
C/Agricultura, 21 Nave 12  
08980 SANT FELIU DE LL.  
BARCELONA

Con la presente declaramos que las máquinas de preparación de café con las marcas comerciales y los tipos indicados a continuación, son conformes con las Directivas CE que les son de aplicación, de acuerdo con las Normas Europeas que se relacionan.

We hereby declare that the coffee machines, with the trademarks and types listed below, conform with the applicable CE Directive, according to the European Standards listed.

Esta declaración quedará sin efecto en caso de que se realice cualquier tipo de modificación del aparato que no haya sido explícitamente autorizada por la empresa.  
This declaration shall not apply to machines modified without IBERITAL approval.

Marcas comerciales:

*Trademarks:* "IBERITAL JUNIOR"

Tipos de máquina:

*Machine type:*

**"ELECTRÓNICA" Modelo 2 grupos.**  
**"ELECTRONIC" Models with 2 groups.**  
**"SEMIAUTOMÁTICA" Modelo 2 grupos.**  
**"SEMIAUTOMATIC" Models with 2 groups**

Directivas aplicables:

*Applicable Directives:*

**Directiva de Seguridad en las Máquinas.**

EC Machinery Directive.

**89/392/CEE**

**Directiva de Baja Tensión.**

EC Low Voltage Directive.

**73/23/CEE**

**Directiva de Compatibilidad Electromagnética.**

EC Electromagnetic Compatibility Directive.

**89/336/CEE**

Normas armonizadas

Aplicadas:

*Applied harmonized*

*Standards:*

UNE EN 292-1, UNE EN 292-2  
UNE EN 60335-1, UNE EN 60335-2-75/63335-2-15  
UNE EN 50081-1, UNE EN 50082-1

Fecha (Date): 30/11/2006

Firmado por (Signed): Sr. Blai Farré Llord

Cargo (Position): Director Técnico