

ELEKTRA®

ITALIAN ESPRESSO COFFEE MACHINES SINCE 1947

GB

PROFESSIONAL ESPRESSO COFFEE MACHINES

INSTRUCTION MANUAL



the 1990s, the number of people in the UK who are employed in the public sector has increased by 1.5 million (1990–1999) (Department of Health 2000).

There is a growing emphasis on the importance of the public sector in the provision of health care services. The public sector is seen as the main provider of health care services, and it is expected that the public sector will continue to play a major role in the provision of health care services in the future. The public sector is also seen as the main provider of health care services for the most vulnerable members of the population, such as the elderly, the disabled, and the socially disadvantaged. The public sector is also seen as the main provider of health care services for the most complex and costly cases, such as those with mental health problems, chronic diseases, and complex medical conditions.

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GENERAL INSTRUCTIONS

**THESE INSTRUCTIONS ARE INTENDED FOR
BARMAN / ESPRESSO COFFEE MACHINE OPERATOR
AND
INSTALLATION / MAINTENANCE TECHNICIAN**

A INTRODUCTION

This manual applies to the entire range of professional coffee machines manufactured by ELEKTRA.

Each topic has been specifically treated in a separate paragraph for each model belonging to the range, indicating the title of the paragraph itself and the models to which it refers, using the letters shown below:

- A	= ALETTA model	(Aletta)
- S	= SIXTIES model	(Deliziosa and Compact)
- K	= KUP model	(KUP2 and KUP3)
- C	= CLASSIC model	(Barlume 2-3 units)
- B	= BELLE EPOQUE model	(Vertical 2-3 units)

Models ALETTA and KUP are equipped of the following accessories listed in this handbook with correspondent abbreviations:

- CHS	= Electrical cup heating
- BLS	= Body lighting
- MFS	= Automatic milk frothing
- WTS	= Automatic water treatment system

The manual is divided in three parts as displayed below:

GENERAL INSTRUCTIONS

These instructions are intended for
barman/espresso coffee machine operator
and
installation/maintenance technician

OPERATION INSTRUCTIONS

These instructions are intended for
barman/espresso coffee machine operator

TECHNICAL INSTRUCTIONS

These instructions are intended for espresso coffee machine
installation/maintenance technician

The instructions reported in this manual are also available
in pdf format on the website www.elektasrl.com

ATTENTION: USA - CANADA REQUIREMENTS

**These instructions include some particular specifications
for the US and Canadian markets.**

B GENERAL RECOMMENDATIONS AND SAFETY REGULATIONS

- 1 This booklet is an essential and integral part of the product and must be given to the user.
It contains basic safety instructions that must be followed for the installation, operation and maintenance of the appliance.
Save these instructions.
- 2 After having unpacked the appliance, make sure it is intact.
If in doubt, do not use the appliance and contact a qualified engineer.
The packing elements (plastic bags, polystyrene foam, nails, etc.) should not be left within reach of children since they are potential sources of danger.
- 3 ⚠ **The appliance should be installed by a qualified engineer according to the manufacturer's instructions and in compliance with current safety regulations.**
Incorrect installation could cause injury to persons or animals and damage to property, for which the manufacturer cannot be held liable.
The company Elektra declines any and all responsibility for tampering or interventions carried out by non authorized persons. Such intervention automatically renders the guarantee null and void ⚠.
The appliance must be installed only in places where its use and maintenance can be carried out by qualified personnel.
Before carrying out the electrical connection of the appliance, check that the mains electricity supply corresponds to the data given on the rating plate.
The rating plate is located on the front of the espresso coffee machine (A-S-K-C) or inside the cup heater tray (B).
The wiring diagram is given on an adhesive tag applied to the end of the power cable.

⚠ This appliance is only electrically safe when it has been connected to an efficient grounding system in compliance with current safety regulations ⚠.

Make sure that this fundamental safety requirement has been observed and if in doubt request a thorough check of the system by a qualified electrician.

The manufacturer cannot be held liable for any damage that may be caused by failure to ground the appliance.

If the appliance does not have power cable with plug, at installation the appliance should be connected to the electricity supply through a multipolar linked switch having a contact separation of at least 3 mm in all poles, in compliance with current safety regulations.

Check that the current carrying capacity of the system is adequate for the maximum rated output of the appliance (as indicated on the rating plate and, in particular, that the section of the cables is adequate for the power absorbed by the appliance.

Unwind the whole power supply cable to prevent dangerous overheating.

It is forbidden the use of adapters, multiple current taps or extension cables.

This appliance should not be installed in kitchens.

- 4 For the operations of connection to the water supply network, comply with the provisions in this manual.
- 5 This appliance should only be used for the purpose for which it was designed. Any other use is to be considered as unsuitable and therefore dangerous.

The manufacturer cannot be held liable for any damage or injury caused by improper, wrong or unreasonable use.

⚠ The use of the appliance entails compliance with the following fundamental rules:

- the appliance should be used in environments where the temperature does not fall below 5 °C or rise above 40 °C;
- do not obstruct the intake and outlet grilles. In particular do not cover the upper cup tray with a cloth or such like.
- the appliance has a water circuit containing water, which must not be allowed to freeze otherwise the appliance could be damaged;
- the appliance should not be cleaned using water jets or installed in a place where water jets could be used for cleaning;
- the appliance should be installed on the level - it must not slope - high enough in order to have the cup heater tray at more than 1.5 meter from the floor.
- do not touch the appliance when hands or feet are wet or damp;
- do not operate the appliance barefoot;
- do not tug the power supply cable;
- do not expose the appliance to the elements (rain, sun, etc.): it is not suitable for outdoor use;
- The equipment can be used by children aged 8+ and people with reduced physical, sensory or mental capabilities, or lack of experience or knowledge required, provided they are under supervision or after they have received the same instructions for a safe use of the equipment and for understanding the dangers inherent in it.
Children should not play with the equipment.
The cleaning and maintenance intended to be performed by the user, should not be performed by children without supervision ⚠.

- 6 Disconnect the appliance from the mains electricity supply before carrying out any maintenance, by switching off at the mains switch or disconnecting the plug from the socket.

Every time maintenance jobs are carried out on joints for connection to the water supply, you must strictly use new joints and the old joints must never be reused.

To clean the appliance, follow the instructions in this booklet.

- 7 In the event of failure or malfunctioning of the appliance, switch it off and under no circumstances try to repair it yourself.

Always request service by a qualified technician.

Any repair, electrical or mechanical adjustment should only be carried out at the factory or by an authorized service center using only original spare parts.


Failure to comply with these instructions could jeopardize the safety of the appliance.

The supply cable of this appliance should not be replaced by the user.

Should the cable be damaged, switch off the appliance and apply solely to a qualified electrician for replacement.

- 8 Should the machine be used no longer, it must be made inoperative by cutting the supply cable after having disconnected it from the electrical power supply.

Make sure that all those parts which could be possible sources of danger are made harmless.

- 9 Warning: hot surfaces .

C DESCRIPTION OF THE APPLIANCE

The main functions of the machine, and its relative parts, are described below, with a view to ensuring its maximum performance.

1 DISPLAY OF FUNDAMENTAL PARAMETERS (S-C-B)

The following operating parameters can be read on the dual pressure gauge:

- Boiler pressure.
- Water supply pressure (with pump off).
- Brewing pressure (with pump on).

2 DISPLAY OF FUNDAMENTAL PARAMETERS (A-K)

When "Enter" is pressed, the following operating parameters are displayed for a given time, one after the other:



- Boiler pressure.
- Set increase (or decrease) of brewing temperature.
- Water supply pressure (with pump off). (A-K with WTS)
- Brewing pressure (with pump on). (A-K with WTS)
- Volume of softened water still available before the next salt load. (A-K with WTS)



3 COFFEE DISPENSING (A-S-K-C-B)

Independent dispensing groups with predosed or manual selections.
Filterholders for one or two cups.

4 DISPENSING OF HOT WATER AND STEAM (A-S-K-C-B)

The machine has one or two steam valves and one hot water valve equipped with swivel wands which allows the use of large milk or water containers thus guaranteeing good general ergonomics.

Valves marked with the symbol  are operated by a joy-stick (A-S-K), with movement in any direction opening the valve. Valves marked with the symbol  are operated by a control knob (C-B), with anti-clockwise rotation opening the valve.

Steam valves are marked with the symbol , and hot water valves are marked with the symbol .

5 PREPARING THE MILK (A-K with MFS)

The system named MFS (Milk Frothing System) is an automatic milk frother that lets you prepare hot milk at a set temperature or hot frothy milk at a set temperature and set amount of froth.

It is composed of a special steam wand and two pushbuttons equipped with alert leds, one for each milk type preparation.

6 ELIMINATION OF CALCIUM AND MAGNESIUM SALTS FROM THE WATER (A-S-K-C-B)

This enables the elimination of scale deposits in the machine thanks to a water softener that softens the water, eliminating the calcium and magnesium salts contained in it. The water softener is not incorporated in the machine and has an independent manual or automatic function.

7 ELIMINATION OF CALCIUM AND MAGNESIUM SALTS FROM THE WATER (A-K with WTS)

This enables scale deposits to be removed from the machine. It consists of an ion exchange resin water softener, completely and automatically managed by the machine.

8 AUTOMATIC REGENERATION OF THE WATER SOFTENER RESINS (A-K with WTS)

When the resins in the water softener are used up, all the operator has to do, on receiving the automatic prompt from the machine, is to load the salt. During regeneration, the system automatically excludes the water treatment circuit from the machine water supply, allowing the machine to operate without it.

9 ELIMINATION OF CHLORINE AND ORGANIC COMPOUNDS FROM THE WATER (A-K with WTS)

Removes the bad taste and deposits caused by the Chlorine and eliminates bacteria, making the water purer.

It consists of a silver-loaded activated carbon cartridge fitted inside the machine, at the water supply inlet.

The system signals the exhaustion of the cartridge in relation to the volume of water that it has treated and excludes it automatically from the machine water supply circuit, allowing the machine to continue operating without it.

10 CONTROL OF WATER LEVEL IN THE BOILER (A-S-K-C-B)

This is done by means of a level probe which controls the water level in the boiler, topping it up automatically when required.

- 11 CONTROL OF WATER TEMPERATURE IN THE BOILER (A-S-K-C-B)**
Water temperature in the boiler is controlled by a sensor that switches the heating elements on and off. Consequently, it also controls the pressure in the boiler.
- 12 STABILIZING THE BREWING TEMPERATURE (A-S-K-C-B)**
Each dispensing group has a heating circuit for brewing water that functions with a heat exchanger.
This circuit ensures that the dispensing group remains at a constant and optimal temperature even when it is not being used thanks to the effect of the natural circulation of hot water flowing through the circuit itself.
- 13 MEASURING THE BREWING PRESSURE (A-S-K-C-B)**
This enables the manual regulation of pump pressure during coffee dispensing.
The pressure is displayed on the gauge clearly visible in the working area.
On the ALETTA and KUP models, the gauge is fitted inside the machine.
- 14 MEASURING THE BREWING PRESSURE (A-K with WTS)**
Through the reading of the display, this enables the manual regulation of pump pressure during coffee dispensing.
- 15 MEASURING THE WATER SUPPLY PRESSURE (A-K with WTS)**
Enables automatic protection in the event of a water supply stoppage.
- 16 PROTECTION OF THE HEATING ELEMENTS (K)**
It is formed by a thermostat with manual reset which regulates the power supply of the heating elements.
- 17 PROTECTION OF THE HEATING ELEMENTS (A-S-C-B)**
This consists of a safety level probe and, in succession, by a thermostat with manual reset that trigger the cutting off of power to the heating elements.
The first resetting takes place through Basic Programming.
See chapter "C - ADJUSTMENTS", paragraphs 1.4 o 2.11.

18 PROTECTION FROM OVERHEATING (A-S-K-C-B)

In each of following cases:

- Excessive duration of heating.
- Exceeding of maximum allowable temperature value, the heating elements are disabled and a major fault is reported.

19 UPPER CUP TRAY (S-C-B)

These models are equipped with cup heater trays with the capacity to contain a large number of cups on various levels and to keep them warm in order to guarantee an excellent cup of coffee.

The heat is generated by a natural flow of hot air from the inside of the machine.


20 UPPER HEATING CUP HOLDER (A-K with CHS)

Models with some big cup holders provided with electric heating with automatic temperature control.

The heating can either be enabled or disabled.

21 BODY LIGHTING (K with BLS)

Bodywork sides enlightened by multi-color led lights which enhance machine's appeal.

The lighting is turned on via the pushbutton marked with the symbol  and is thus independent from machine switch on.

By pressing the second button with a symbol  you can switch from a slow colors rotation to a fix color of your own choice.

22 BODY LIGHTING (C)

The machine is equipped with lighting on the sides and back of the body, which highlights its design features.

Turns on automatically when the machine is switched on.

23 BODY LIGHTING (A)

The machine is equipped with lighting on the sides and back of the body, which highlights its design features.

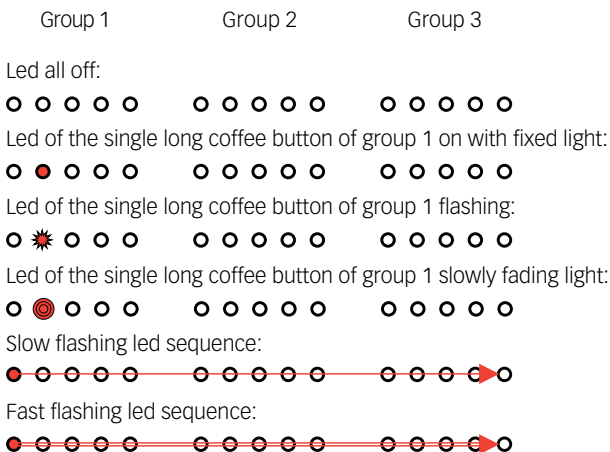
The lighting is turned on via the pushbutton marked with the symbol  and is thus independent from machine switch on.

24 USER ALERTS (S-C-B)



The machine can give the user a series of alerts through different LED light on/off combinations for each coffee dispensing button, on each of the two or three groups on the machine.

In model Deliziosa the leds of the second pushbutton are located directly on the electronic unit and can be seen when the upper grille and cup heater is removed.

Symbols are used in this manual to indicate these alerts as follows:



25 MILK FROTHER ALERTS TO THE USER (A-K with MFS)

The MFS milk frother provides the user with a series of alerts via different led lighting combinations on the two pushbuttons for hot milk , and frothy milk .

Some of these alerts are combined with corresponding messages on the display as shown in paragraph 26.

Symbols are used in this manual to indicate these alerts as follows:

Both leds off:



Frothy milk led on:



Both leds flashing:



Both leds slowly fading:



26 USER ALERTS (A-K)

The machine can give the user a series of alerts written in the selected language through an alphanumeric display arranged along two rows with sixteen characters each.

The writing may be fixed, scrolling or fixed but divided over two or more screen displays if very long: wait and read the complete written message to ensure you fully understand the alert.

Some of these messages are combined with corresponding led alerts as shown in paragraphs 24 and 25.

27 SOUND EMISSION (A-S-K-C-B)

The sound emission levels of each machine model are the following:

- Aletta model (A):
Weighted sound emission level A: 80dB uncertainty 1dB
- Sixties model (S):
Weighted sound emission level A: 80dB uncertainty 1dB
- KUP model (K):
Weighted sound emission level A: 80dB uncertainty 1dB
- Classic model (C):
Weighted sound emission level A: 80dB uncertainty 1dB
- Belle Epoque model (B):
Weighted sound emission level A: 82dB uncertainty 1dB

D GENERAL ADJUSTMENTS

1 COFFEE BREWING DOSES PROGRAMMING (S-C-B)

In order to program the coffee brewing doses switch the machine on by pressing the button marked with the symbol ① keeping contemporaneously pressed both the "double long coffee" button and the "manual coffee" button of group 1.

All the buttons are programmed making one or two sample coffees with the desired dose, as per following procedure:

1 - The group 1 selection is displayed as shown below:



2 - Press the "ENTER" key to display the group 1 single short coffee selection as shown below (pressing on the contrary the "+" key you select group 2 - see step 14; if the machine has only one group you will remain at step 1):



3 - Press the "ENTER" key to display the group 1 single short coffee sample request as shown below (pressing on the contrary the "+" key you select group 1 single long coffee - see step 5):



4 - Make a sample coffee by pressing the group 1 single short coffee button. Press the button again when the desired dose has been reached: the pushbutton led goes off, the dose is stored and you pass automatically to the group 1 single long coffee selection.

5 - The group 1 single long coffee selection is displayed as follows:



6 - Press the "ENTER" key to display the group 1 single long coffee sample request as shown below (pressing on the contrary the "+" key you select group 1 double short coffees - see step 8):



7 - Make a sample coffee by pressing the group 1 single long coffee button. Press the button again when the desired dose has been reached: the pushbutton led goes off, the dose is stored and you pass automatically to the group 1 double short coffees selection menu.

8 - The group 1 double short coffees selection is displayed as follows:



9 - Press the "ENTER" key to display the group 1 double short coffee samples request as shown below (pressing on the contrary the "+" key you select group 1 double long coffees - see step 11):



10 - Make two sample coffees by pressing the group 1 double short coffees button. Press the button again when the desired dose has been reached: the pushbutton led goes off, the dose is stored and you pass automatically to the group 1 double long coffees selection menu.

11 - The group 1 double long coffees selection is displayed as follows:



12 - Press the "ENTER" key to display the group 1 double long coffee samples request as shown below (pressing on the contrary the "+" key you select group 2 - see step 14):



13 - Make two sample coffees by pressing the group 1 double long coffees button. Press the button again when the desired dose has been reached: the pushbutton led goes off, the dose is stored and you pass automatically to the group 2 selection menu (if the machine has only one group you will go back to step 1).

14 - The group 2 selection is displayed as follows:




Now the programming procedure for groups 2 and 3 is the same of group 1, after that the coffee brewing doses programming is finished.

Using the button marked with the symbol ①, switch off and turn on the machine to get out of programming procedure.

2 GROUP 1 DOSES COPYING ON GROUP 2 AND GROUP 3 (S-C-B)

To have the same copy of coffee doses of group 1 on group 2 and 3, please switch on the machine by the ① button holding at the same time the "single short coffee" and "double long coffee" buttons from the group 1.

3 COFFEE DELIVERY STOP MANAGEMENT (S-C-B)

To activate or deactivate the option of manually stopping the dispensing of coffee selected by automatic doses, please switch on the machine pressing the  button holding at the same time the "single long coffee" and "manual coffee" buttons from the group 1.

4 GENERAL BASIC PROGRAMMING (A-K)

It allows to Adjustment and Maintain as explained below.

It also facilitates the providing of telephonic assistance.

 **General basic programming is intended for barman/espresso coffee machine operator and installation/maintenance technician .**

It is run by the "ENTER" button on the front panel and it activates a menu where following functions can be selected:

- COFFEE BREWING DOSES PROGRAMMING
- GROUP 1 DOSES COPYING ON GROUP 2 AND GROUP 3
- COFFEE DELIVERY STOP MANAGEMENT
- SEMIAUTOMATIC GROUPS CLEANING

- 1) Press twice in quick succession the "ENTER" button":
the machine automatically enters a state of partial operation suitable for programming.
- 2) The instructions for the using the main menu appear on the display:
after confirming by pressing "ENTER" on the control panel, press any of the coffee buttons marked with the "+" sign to scroll the menu to reach the desired topic.
- 3) Press the "ENTER" button to confirm the chosen option to scroll down the correspondent menu or to activate the desired function.
- 4) Upon completing programming or consultation of the various topics, to quit the programming options scroll the menu by the "+" button until the following signal is displayed:

TO QUIT PRESS "ENTER", TO REPEAT PRESS "+" .

then, press the "ENTER" button: the machine automatically resumes full operation.

In general, therefore, the "+" key is used to select the topics or information required and both "+" and "-" keys are used to change the parameters, but always with the possibility to restore the initial situation.

Data are only saved definitively on pressing "ENTER".

Carefully follow the instructions step by step as they appear on the display - they provide a complete guide to programming.

4.1 COFFEE BREWING DOSES PROGRAMMING (A-K)

Through the guided making of single and double sample coffees, the desired doses on each of the four automatic keys for each group may be stored.

4.2 GROUP 1 DOSES COPYING ON GROUP 2 AND GROUP 3 (A-K)

It allows to copy the coffee doses of group 1 on group 2 and 3 in order to make the programming of coffee doses of the whole machine faster.

4.3 COFFEE DELIVERY STOP MANAGEMENT (A-K)

It allows to activate or deactivate the option to manually stopping the coffee dispensing of the selected coffee with automatic doses.

4.4 SEMIAUTOMATIC GROUPS CLEANING (A-K)

It allows a weekly cleaning of the groups following a semi-automatic procedure guided by the machine through the displayed instructions.

E TYPE APPROVALS

1 EUROPEAN TYPE APPROVALS (A-S-K-C-B)

All models are in compliance with the applicable European Directives in force and, as such, they are marked with the symbol:



All products bearing this mark can be sold directly in all member states of the European Community.

To be entitled to apply the CE mark, the manufacturer must draw up a technical file which ELEKTRA will place at the disposal of its clientele for all the various kinds of technical controls.

The products are in compliance with the following Directives:

1992/59/CE	General safety
1997/23/CE	Pressure equipment - Module A
2002/95/CE	Restrictions on use of some dangerous material
2002/96/CE	Waste electric and electronic equipment
2004/108/CE	Electromagnetic compatibility
2006/42/CE	Machinery
2006/95/CE	Electrical safety



OPERATION INSTRUCTIONS

**THESE INSTRUCTIONS ARE INTENDED FOR
BARMAN / ESPRESSO COFFEE MACHINE OPERATOR**

A USE

ATTENTION: USA - CANADA REQUIREMENTS

The unit must be flushed after 12 hours of inactivity.

With reference to the hydraulic scheme enclosed on chapter "B - INSTALLATION", once the suitable boiler pressure for correct use of the appliance has been reached and before putting it into service, the machine must be flushed through as follows:

- 1) Let hot water flow from valve N°14 into a suitable container for 10 sec; repeat this procedure 5 times.
- 2) Let 1 liter of hot water flow from each delivery group N°18 through the filter N°19 located on the filterholder N°21.

1 SWITCHING ON (A-S-K-C-B)

The machine switches on by pressing the button marked with the symbol ①. When the machine is switched on, it automatically loads water into the boiler and, only when the boiler is full does it switch on the heating, so as not to damage the heating elements.

The two possible types of alert that are displayed are as follows (A-K or S-C-B):

"WAIT: MACHINE IS HEATING UP"



"MACHINE READY"



If it is the time of the night cycle, the alert is:

"MACHINE IN SLEEP MODE - NIGHT CYCLE"



2 USE OF THE WORKING AREAS (B)

With these models, it is possible to work with traditional espresso coffee cups of up to 2.76 inches in height (dispensing groups) and with containers of up to 4.92 inches in height (water and steam wands).

3 USE OF THE WORKING AREAS (S-C)

With these models, it is possible to work with cups or containers of up to 3.94 inches in height (dispensing groups) and with containers of up to 5.71 inches in height (water and steam wands).

Using raised work counters under the dispensing groups, it is possible to work with traditional espresso coffee cups of up to 2.76 inches in height.

4 USE OF THE WORKING AREAS (A-K)

The machine is divided into a coffee dispensing area on the right and a steam and hot water dispensing area on the left. It is thus possible to work with containers of up to 2.76 inches in height or up to 5.71 inches in height, depending on the heights of the work counters used (dispensing groups) and with containers of up to 5.91 inches in height (water and steam wands). Positioning the coffee grinder on the right of the machine speeds up the serving of coffees, given its proximity to the dispensing groups.

This subdivision ensures that two operators can use the machine at the same time, without obstructing one another – one serving teas and cappuccinos and the other serving coffees. Includes two independent grilles and a raised work counter for coffee area.

5 MANUAL DISPENSING OF COFFEE (A-S-K-C-B)

This allows coffees of different lengths to be dispensed each time by pressing the button marked “K” and repressing the same button when the desired dose has been dispensed. This function is enabled at all times, irrespective of the machine status - even in the case of a major fault - so as to enable washing or checks during repair operations.

The following alerts are displayed:

○ ○ ○ ○ ● ○ ○ ○ ○ ○ ○ ○ ○ ○ ○

(Group 1 manual dispensing of coffee in progress)

○ ○ ○ ○ ○ ○ ○ ○ ● ○ ○ ○ ○ ○

(Group 2 manual dispensing of coffee in progress)

○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ●

(Group 3 manual dispensing of coffee in progress)

6 COFFEE DISPENSING WITH AUTOMATIC DOSING (A-S-K-C-B)

Allows the dispensing of coffee in preset doses. This is carried out by pressing the buttons marked with the coffee symbol once only. Dispensing stops automatically once the preset dose has been dispensed. This function is only enabled when all the envisaged operating and protection conditions have been met and cannot normally be stopped manually.

Alerts are displayed as per following example:

○ ○ ○ ○ ○ ○ ○ ● ○ ○ ○ ○ ○ ○ ○ ○

(Group 2 dispensing of double short coffees in progress)

7 COFFEE DISPENSING WITH AUTOMATIC DOSING BUT WITH POSSIBILITY OF STOPPING IT MANUALLY (A-S-K-C-B)

Although not recommended, if necessary coffees can be dispensed with automatic dosing and with the possibility of stopping it manually.


See chapter D – GENERAL ADJUSTMENTS, paragraph 3.

8 WARMING THE CUPS (S-C-B)

Place the cups on the upper cup tray and remove them when they are needed, according to a rotation system that allows them sufficient time to heat.

⚠ Do not place cloths between the tray and the cups. Do not cover the cups with cloths or other materials ⚠.

9 WARMING THE CUPS (A-K with CHS)

Press the button marked with the symbol  located to the side of the main switch. The heating goes off, also automatically, when the temperature of the cup heating tray exceeds the maximum value set. It comes back on automatically when the temperature drops below the minimum value set.

10 MAKING THE COFFEE (A-S-K-C-B)

In order to obtain a good Italian-style espresso coffee, grinding is of fundamental importance. The espresso must be dispensed in approx. 25 seconds and must have, on average, a volume equivalent to approx. 25 cc (single short button).

If the grinding is too coarse, it will produce an overheated espresso with no froth.

If the grinding is too fine, it will produce an espresso with little froth.

Good quality coffee is obtained by using a fresh, evenly ground blend (only obtainable if the coffee grinder has sharp blades) used in the correct quantities (approx. 7 grams per dose).

It is important to have coffee been freshly ground because otherwise it rapidly loses its aroma and the fatty substances contained in it go rancid; it is therefore advisable to finish it before the end of the day and the closing of the bar.

Warm cups contribute considerably to maintaining the quality of the espresso.

- 1) Detach the filterholder from the dispensing group by turning it towards the left, and fill the filter with the dose of ground coffee.
- 2) Level it out and press it with the tamper.
Ensure that no grounds are left on the edges of the filter.
This will ensure a better seal and prolong the life of the filterholder gasket.
- 3) Attach the filterholder to the dispensing group, turning it firmly towards the right.
- 4) Place the cups underneath the spouts and start dispensing.
- 5) When dispensing is over, leave the filterholder attached to the group until further dispensing is required.
- 6) When a new coffee is required, discharge the coffee cake into the waste drawer without striking too hard so as not to damage the edge of the filter.

11 PREPARING FROTHY MILK WITH MANUAL STEAM VALVE (A-S-K-C-B)


In order to froth up the milk, which is essential for preparing cappuccino, half-fill a tall, narrow container with milk and proceed as follows:

- 1) Briefly open the steam valve so as to remove any water condensation that might have collected.
- 2) Place the container with the milk underneath the steam wand so that the spray nozzle touches the bottom. Open the steam valve and bring the milk to the desired temperature.
- 3) Lower the container so that the spray nozzle rises almost to the surface of the milk and, from this position, raise and lower the container repeatedly so that the spray nozzle enters and surfaces from the milk alternately.
Continue until the milk has frothed up.

To make the cappuccino add hot espresso coffee to the hot frothy milk.

12 PREPARING HOT MILK WITH AUTOMATIC MILK FROTHER (A-K with MFS)

Use a high and narrow stainless steel pitcher filled with the required amount of milk and proceed as follows:

- 1) Take the wand of the MFS milk frother forward, up to outer edge of the drip tray grille.
- 2) Place the wand into the pitcher filled with milk, let it return to its original operating position (it has elastic return) and leave the pitcher on the drip tray grille.
- 3) Press the pushbutton marked by the symbol , the following alert




is then displayed and the wand starts dispensing steam.

Steam stops dispensing automatically when the set temperature is reached.

13 PREPARING FROTHY MILK WITH AUTOMATIC MILK FROTHER (A-K with MFS)

Use a high and narrow stainless steel pitcher approx. half-filled with milk and proceed as follows:

- 1) Take the wand of the MFS milk frother forward, up to outer edge of the drip tray grille.
- 2) Place the wand into the pitcher filled with milk, let it return to its original operating position (it has elastic return) and leave the pitcher on the drip tray grille.
- 3) Press the pushbutton marked by the symbol , the following alert



is then displayed and the wand starts dispensing steam.

Steam stops dispensing automatically when the set temperature and amount of froth are reached.

14 MAKING TEA - CAMOMILE TEA ETC (A-S-K-C-B)

Draw hot water from the boiler using the water valve wand, then add the bag required to obtain the drink to be made.







B MAINTENANCE AND CLEANING

1 DAILY CLEANING OF DISPENSING GROUPS AND FILTERHOLDERS (A-S-K-C-B)


Each evening or at least once a day, clean the group shower and the filterholder gaskets with a cloth or a sponge. Rinse the filters and filterholders in boiling water in order to remove the fatty deposits of the coffee.

It is advisable to wash the inside of the filterholders and filters with a view to avoiding incrustations and coffee deposits which could fall off during coffee making, forming grounds in the cup.


2 DAILY CLEANING OF THE STEAM WANDS (A-S-K-C-B)

 The steam wands, used for heating drinks, must be cleaned immediately after use in order to safeguard against the formation of incrustations that could block the holes of the spray nozzle and also to ensure that the residue of previously heated drinks does not deteriorate, leading to the unhygienic formation of bacteria .

3 CLEANING THE AUTOMATIC MILK FROTHER WAND (A-K with MFS)

 We recommend to externally clean the MFS milk frother wand with a moist sponge immediately after every milk preparation cycle in order to prevent any residuals from decomposing and causing unhygienic bacteria growth.

To clean the inside of the wand instead proceed as follows:

- 1) Fill a stainless steel pitcher with cold water up to at least the same level as the milk residuals on the wand.
- 2) Take the wand of the milk frother forward, up to outer edge of the drip tray grille.
- 3) Place the wand into the water filled pitcher and let it return to its original operating position (it has elastic return) and leave the pitcher on the drip tray grille.
- 4) Simultaneously press the two pushbuttons marked with the symbols , for at least 2 seconds and the following two alerts will be displayed:

"MILK FROTHER WASH UNDER WAY"



the wand will begin to dispense steam and to heat the water until it boils, obtaining a complete disinfection of the wand.
Steam stops dispensing automatically.

In any event, based on some use parameters calculated by the system, the above cleaning procedure automatically becomes mandatory when both the following alerts are displayed:

"EXECUTE THE MILK FROTHER WASH"



In this case no milk preparation cycle will be possible until the cleaning has been carried out .

4 DAILY CLEANING OF THE MILK FROTHER SPRAY NOZZLE (A-K with MFS)

⚠ After the end of every work day manually unscrew the spray nozzle from the wand and clean it with boiling water taking care to thoroughly clean the four steam holes, using a needle or a paperclip. Do not use any twist drill or other tools to clean the holes ⚠.

5 WEEKLY CLEANING OF THE GROUPS (S-C-B)

You can clean the dispensing groups from coffee leftovers with an internal cleaning through a semi-automatic procedure guided by the machine.

That procedure is to be started only with hot machine ready to use, as follows:

- 1) Replace standard filters in the filter holder of all groups by the blind filters (not drilled provided).
- 2) Insert an ELEKTRA clearing tablet in each blind filter and hook the filter holder on all groups.
- 3) Switch off the machine by the ① button.
- 4) Switch on again the machine by the ① button by holding at the same time the "double short coffee" and "manual dispensing coffee" buttons of the dispensing group 1. The following symbols will be displayed:



- 5) Confirm by any of the 'double short coffee' buttons (ENTER): the cleaning starts on all the groups at the same time, running 10 dispensing loops of 20 seconds each one.

On completion of the cleaning the following symbols will be displayed:



- 6) Hook off all the filter holders and do not hook them again.
- 7) Confirm by pressing any of the 'double short coffee' buttons (ENTER): a rinsing step will get started on all the dispensing groups at the same time, divided into 30 seconds of dispensing, 30 seconds of stop and 30 second of dispensing. On rinse completion the machine will go back on normal functioning, ready to the use: remove the blind filters, place the standard filters back and hook the filter holders on all the dispensing groups.

6 WEEKLY CLEANING OF THE GROUPS (A-K)



See chapter "D - GENERAL ADJUSTMENTS" paragraph 4 and chapter "B - MAINTENANCE AND CLEANING" paragraph 5.

7 WEEKLY CLEANING OF THE FILTERS AND FILTERHOLDERS (A-S-K-C-B)

- 1) Place three teaspoons of detergent for coffee machines and approx. one litre of boiling water in a heat-resistant container.
- 2) Immerse the filters and filterholders in the solution prepared and allow them to soak for about 20/30 minutes (do not fully immerse filterholders with briarwood handles: the water and detergent solution would damage the handles).
- 3) Rinse thoroughly under running water.

8 WEEKLY CLEANING OF THE DRIP TRAY (A-S-K-C-B)

At least once a week remove the lower cup grille, remove the drip tray and clean it.

 Check and clean the drain box too, removing any dregs with the aid of a teaspoon, and then rinse it .

9 WEEKLY CLEANING OF THE BODY (A-S-K-C-B)

Simply use a damp (non abrasive) cloth.

Do not use alcohol or solvents to clean written or painted parts as this could damage them.


10 REGENERATION OF THE WATER SOFTENER RESINS (A-K with WTS)

 When the following alert appears on the display:

"LOAD SALT AND PRESS ENTER-MACHINE ON"

proceed as follows:

- 1) Open the water softener cap.
- 2) Pour the amount of common coarse salt indicated on the packet label into the water softener, i.e.:

- 8 - litre water softener	1,0 kg
- 12 - litre water softener	1,5 kg
- 16 - litre water softener	2,0 kg
- 3) Close the softener cap after ensuring that it is full to the brim with water and that no salt residue has been left on the edges of the cap seal.
- 4) Press "ENTER" to confirm salt loading .

If it is difficult to open the cap or if salt loading is erroneously confirmed prior to being effectively loaded, consult chapter "C - TROUBLESHOOTING", paragraphs 20 and 19.

C TROUBLESHOOTING

⚠ If problems arise with the appliance, consult the following guide and try to resolve them by implementing the suggestions provided.

If the problems persist, contact Technical Assistance.

Do not carry out repairs directly on the appliance ⚠.

The company Elektra declines any and all responsibility for tampering or interventions carried out by non authorized persons. Such intervention automatically renders the guarantee null and void.

The guide also contains problems that must be resolved directly by the Technical Assistance Service but which are explained to facilitate comprehension and repair operations.

1 **WARNING: BUFFER BATTERY ABOUT TO GO FLAT (A-S-K-C-B)**

The electronic control unit is equipped with a buffer battery that ensures the storing of the time and date.

The system continually controls the efficiency of the battery, warning in advance when it is about to go flat and advising its replacement.

The two possible types of alert that are displayed are as follows (A-K or S-C-B):

"BUFFER BATTERY ABOUT TO GO FLAT - REPLACE PROMPTLY"



Contact Technical Assistance.

2 **STEAM DOES NOT COME OUT OF THE WAND WHEN THE MACHINE IS HOT (A-S-K-C-B)**

This problem normally arises after the machine has been switched on from cold and is due to the sticking of the vacuum break valve of the boiler; this does not negatively affect the use of the machine, in fact:

- After venting all the air through a steam valve, wait until the machine heats up normally and use it.

In the meantime, contact Technical Assistance.

3 **WARNING: WATER LEVEL CONTROL SYSTEM FAULT (A-S-K-C-B)**

If the following alert appears (A-K):

"WATER LEVEL CONTROL SYSTEM FAULT - MACHINE OFF - REPAIR"

or the following (S-C-B):



the fault could be due to:

- Water supply stoppage (except for A-K models with WTS): restore it.
- Fault in the boiler water inlet solenoid valve or obstruction to the passing of water through some parts of the machine.
- Electrically isolating incrustations on the level probe or an interruption in its electrical connection that prevents the presence of water in the boiler from being detected: contact Technical Assistance.

4 **WATER COMES OUT OF THE STEAM WAND (A-S-K-C-B)**

This means that the boiler is completely full of water instead of containing a certain quantity of steam.

The possible causes of this are:

- Fault in the boiler water inlet solenoid valve.
- Electrically isolating incrustation on the level probe or interruption in its electrical connection.

 **Switch off the machine, turn off the water supply and contact Technical Assistance** .

5 **FLASHING OF THE PUSHBUTTON LED DURING DISPENSING (S-C-B)**

If, after dispensing selected with an automatic button, e.g. group 1 single short coffee, the following alert is displayed:



this means that the machine is not detecting the passing of the water.

The possible causes of this are:

- Coffee ground too finely: adjust it.
- Water supply stoppage: restore it.
- Fault or obstruction to the passing of water through some parts of the machine: contact Technical Assistance.

6 WARNING OF NOT SATISFACTORY BREWING AND FLASHING OF THE DISPENSING PUSHBUTTON LED (A-K)

If, after dispensing selected with an automatic button, e.g. group 1 single short coffee, both the following alerts are displayed:

"BREWING NOT SATISFACTORY - CHECK COFFEE TAMPING OR DOSING OR GRINDING"



the coffee may not have been made according to Italian espresso standards, and therefore adjustments in tamping, dosing or grinding of the coffee powder are required. Perhaps even adjustments to temperature or brewing pressure are required (also consult chapters "C - ADJUSTMENTS", paragraphs 1.3, 2.6, 3, and "A - USE", paragraph 10).

Alternatively, there might be a fault due to:

- Water supply stoppage (except for A-K models with WTS): restore it.
- Fault or obstruction to the passing of water through some parts of the machine: contact Technical Assistance.

7 WATER DOES NOT COME OUT OF A DISPENSING GROUP WHEN THE MANUAL BUTTON IS USED (A-S-K-C-B)

The possible causes of this are:

- Coffee ground too finely: adjust it.
- Water supply stoppage (except for A-K models with WTS): restore it.
- Fault or obstruction to the passing of water through some parts of the machine: contact Technical Assistance.

8 ONE DISPENSING GROUP STARTS UP ON ITS OWN (B)

The membrane pushbutton panel has a damaged key or water has entered it.

- Identify the faulty key and, by switching it off and on repeatedly, try to disable it and do not use it any more.
- Make the water inside the membrane evaporate by drying it with a hair dryer.

In the meantime, contact Technical Assistance.

9 WARNING: INADEQUATE WATER SUPPLY PRESSURE (A-K with WTS)

If the following alert appears on the display:

"INADEQUATE WATER SUPPLY PRESSURE - MACHINE OFF",

the machine has suspended all of its functions in order to prevent damage to the pump and other parts.

The possible causes of this are:

- Inadequate water supply pressure: restore it; the machine will resume operation automatically.
- The water supply pressure is satisfactory but there is a fault in the water treatment hydraulic circuit: ⚠ switch off the machine and contact Technical Assistance ⚠.

10 **WARNING: NO WATER IN THE BOILER (A-S-C-B)**

If the following alert appears (A):

"NO WATER IN THE BOILER - MACHINE OFF - REPAIR FAULT AND RESET HEATING ELEMENT SAFETY DEVICE WITH PROGRAMMING KEY"

or the following (S-C-B):



Due to the (even temporary) lack of water in the boiler the heating element safety device may have been deactivated.

⚠ The heating element safety device can be resetted through the Basic Programming (See chapter "C - ADJUSTMENTS", paragraphs 1.4 or 2.11), after the reason for the lack of water in the boiler has been eliminated or repaired ⚠.
Contact Technical Assistance.

11 **WARNING: BREWING WATER TEMPERATURE CONTROL SYSTEM FAULT (A-S-K-C-B)**

If the following alert appears (A-K):

"BREWING WATER TEMPERATURE CONTROL SYSTEM FAULT - MACHINE OFF - REPAIR"

or the following (S-C-B):



a major fault has occurred.

⚠ Switch off the machine and contact Technical Assistance ⚠.

12 **ONE DISPENSING GROUP DOES NOT HEAT SUFFICIENTLY (A-S-K-C-B)**

There is an obstruction to the passage of the brewing water, i.e.:

- Gicleur protection filter clogged.
- Group natural heating circuit clogged with scale deposits.

Contact Technical Assistance.

13 **THE GAUGE SHOWS A BOILER PRESSURE NOT BETWEEN 0.6 AND 1.6 BAR (S-C-B)**

Unless this value exceeds 0.18 MPa (1.8 bar), in which case switch off the machine and contact Technical Assistance, this is a fault that does not negatively affect the use of the machine.

The most likely cause is related to calibration problems with the pressure gauge.
Contact Technical Assistance.

14 THE GAUGE SHOWS A BREWING PRESSURE NOT BETWEEN 8 AND 9 BAR (S-C-B)

Unless this value exceeds 1.2 MPa (12 Bar), in which case switch off the machine and contact Technical Assistance, this is a fault that does not negatively affect the use of the machine.

The most likely causes are that the pump is out of calibration or worn.
Contact Technical Assistance.

15 WARNING: MILK FROTHER FAULT (A-K with MFS)



If both the following alerts are displayed:

“MILK FROTHER FAULT - MACHINE ON - REPAIR”





this is a fault that does not negatively affect the use of other functions of the machine.
The possible causes are:

- If the MFS milk frother has dispensed steam during the cycle, this means there is a fault in the temperature control system: contact Technical Assistance.
- If the MFS milk frother has not dispensed steam during the cycle, this means there is a fault in the steam discharge solenoid valve: contact Technical Assistance, or that the wand spray nozzle holes are clogged: manually unscrew the spray nozzle and clean it with boiling water taking care to thoroughly clean the four steam holes, using a needle or a paperclip.

 Do not use any twist drill or other tools to clean the holes .

16 THE MILK FROTHER DOES NOT FROTH THE MILK (A-K with MFS)

If at the end of the frothy milk dispensing cycle the milk is only warm but not frothy (with no froth) it indicates that the holes of the spray nozzle of the wand are clogged: manually unscrew the spray nozzle from the wand and clean it with boiling water taking care to thoroughly clean the four steam holes, using a needle or a paperclip.

 Do not use any twist drill or other tools to clean the holes .

17 CHANGING THE ACTIVATED CARBON CARTRIDGE (A-K with WTS)

 When the following alert appears on the display:

“EXHAUSTED ACTIVE CARBON CARTRIDGE - MACHINE ON - REPLACE IMMEDIATELY AND THEN RESET THIS ALERT USING THE PROGRAMMING KEY”

contact Technical Assistance .

18 WARNING: WATER TREATMENT SYSTEM FAULT (A-K with WTS)

If the following alert appears on the display:

“WATER TREATMENT SYSTEM FAULT - MACHINE ON - REPAIR”,

this is a fault that does not negatively affect the use of the machine.

To dispel all doubts regarding the actual presence of a fault as opposed to the existence of other anomalous situations not connected to the machine, it is advisable to run the following procedure:

- 1) Switch the machine off and then on again: the following alert will appear on the display:

“WATER TREATMENT CIRCUIT RINSE UNDER WAY - DURATION 60 MINUTES - MACHINE ON”

wait, while continuing to operate the machine.

- 2) Once the rinsing cycle has been completed, the following alert will appear on the display:

“LOAD SALT AND PRESS ENTER - MACHINE ON”:

follow these instructions because the machine wants to regenerate the resins in order to repeat the various controls.

If the fault alert reappears, contact Technical Assistance.

The aim of this automatic procedure is also to protect the machine from using salty regeneration water due to a fault.

If the machine is switched off (e.g. for repairs) while this alarm is still in course, when it is then switched on again, before using the water from the softening circuit, it automatically runs a complete rinsing cycle on the circuit, after which it carries out another regeneration, continuously monitoring the suitability both of the fresh water and of the salt solution used for washing the resins.

19 NO SALT LOADING (A-K with WTS)

If "ENTER" is erroneously pressed before the salt is loaded in the water softener, do not try to open the water softener. Proceed as follows:

- 1) Wait, while continuing to operate the machine: after approx. one hour, the following alert will be displayed:

"WATER TREATMENT SYSTEM FAULT - MACHINE ON - REPAIR",

as the machine expects it to be utilized correctly and when it detects the absence of salt in the resin washing water, it diagnoses a fault.

- 2) Switch the machine off and then on again: the following alert will appear on the display:

"WATER TREATMENT CIRCUIT RINSE UNDER WAY - DURATION 60 MINUTES - MACHINE ON".

Wait, while continuing to operate the machine.

- 3) Once the rinsing cycle has been completed, the following alert will appear on the display:

"LOAD SALT AND PRESS ENTER - MACHINE ON":

at this stage, you have returned to the initial point of departure.

It will therefore be possible to carry out salt loading and confirmation of the same correctly.

20 THE WATER SOFTENER AND ACTIVATED CARBON CARTRIDGE CAPS DO NOT OPEN (A-K with WTS)

This problem may arise both during installation and during use when the machine requests salt loading or the changing of the activated carbon cartridge.

It can be due to a water treatment circuit malfunction.

Proceed as follows:

- 1) Switch the machine off and then on again.
- 2) Wait for the load salt or change cartridge alert to be displayed again, then try once more to open the caps and carry out what is requested by the alert.

This malfunction does not affect use of the machine.

In the meantime contact Technical Assistance.

If this procedure is insufficient, this problem may not be due to a fault, but to the fact that the machine was previously switched on or used without the water softener and the active carbon cartridge being completely topped up with water, in order to avoid the presence of pressurized air in the hydraulic circuit.

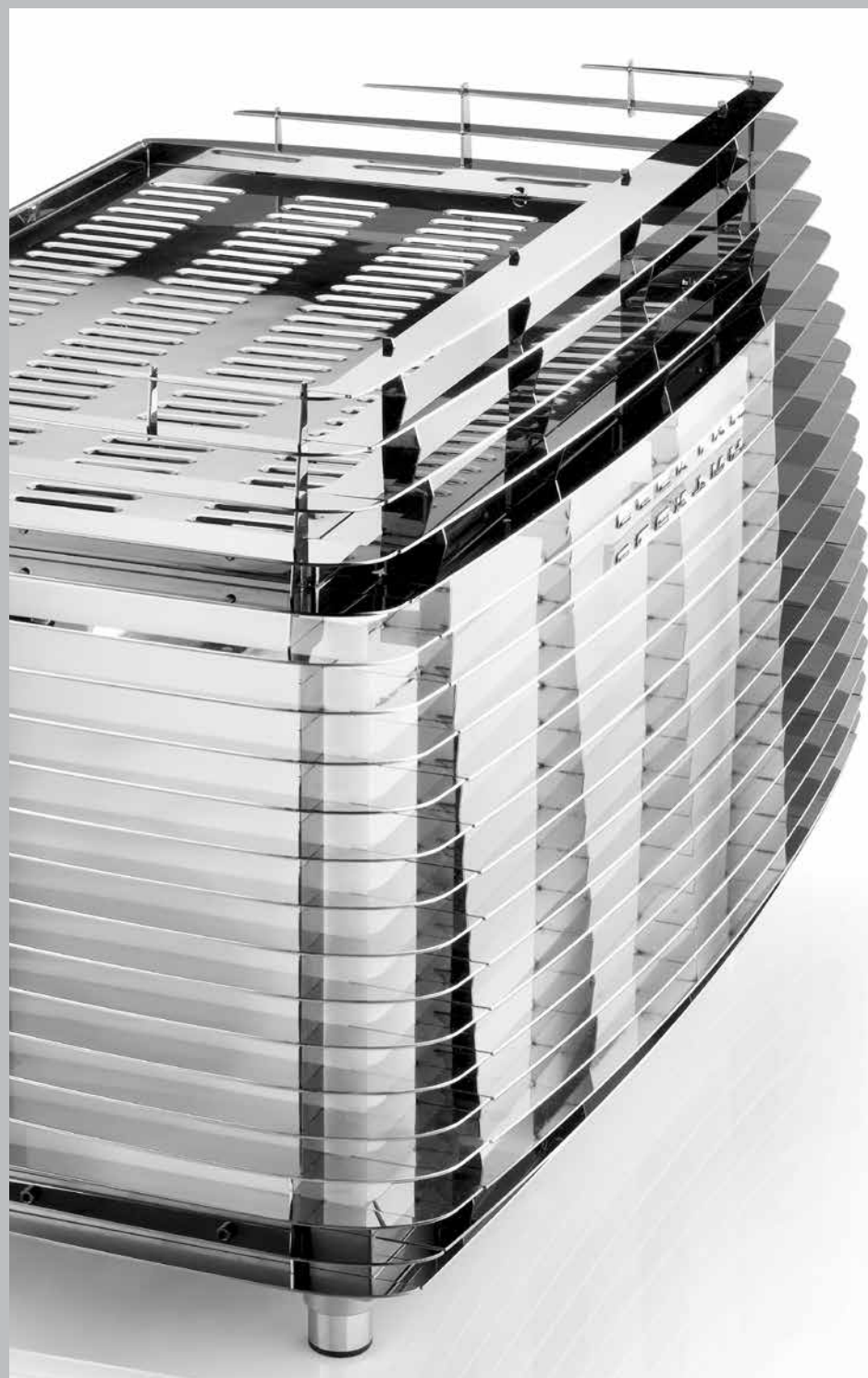
In this case, carry out the following procedure:

- 1) Switch off the machine.
- 2) Close the water supply.
- 3) Loosen the fitting on the water softener flexible connecting pipe marked "1" until internal pressure has been totally blown off.
- 4) Close the fitting.
- 5) Open the softener cap, top up with water and reclose.
- 6) Open the activated carbon cap, top up with water and reclose.
- 7) Open the water supply again.
- 8) Switch the machine back on again.

21 THE DRIP TRAY IS FULL AND OVERFLOWING WITH WATER (A-S-K-C-B)



- 1) Clean the drain box and use a metal wire to free the drain pipe of residue.
- 2) Eliminate any sagging or strangling of the flexible drain pipe, ensuring that it is always angled downwards in a straight and even manner.
- 3) If the above-mentioned causes are not responsible for the fault, this means that there is a blockage in the drain pipes external to the machine: contact a plumber.

Also consult chapter "B - INSTALLATION", paragraphs 7 and 8.



D DISPOSAL OF THE APPLIANCE

The European Directive 2002/96/EC (WEEE) covering the disposal of electric and electronic equipment dictates that such equipment must not be disposed of through normal solid urban waste channels.

 When such equipment has reached the end of its useful life, the user is bound take to deliver it to authorized segregated waste collection centres or return it to the dealer on purchasing a new equivalent type of appliance, on a one-to-one ratio .

For further information on segregated waste collection centres, contact a dealer or the appropriate public authorities.

Effective segregated waste collection designed to subject the disposed equipment to environmentally compatible recycling, processing and disposal processes contributes to the avoidance of negative effects on the environment and on health, and enables the re-use of the materials of which the appliance is composed.

Improper disposal of the product by the user is punishable according to the penalties laid down in the legislation in force.

The crossed-out wheelie bin symbol indicates that the product must be handled as described above.



TECNICAL INSTRUCTIONS

**THESE INSTRUCTIONS ARE INTENDED FOR
ESPRESSO COFFEE MACHINE
INSTALLATION / MAINTENANCE TECHNICIAN**

A UNPACKING

Packaging is carried out with the aim of protecting the machine from damage during transportation.

The packaging materials used are recyclable. They are, therefore, chosen according to environmental protection criteria and ease of disposal, the latter process being geared at further integration in productive cycle materials.

Thanks to this mechanism, not only is the volume of waste reduced but a more rational use of non renewable resources is also ensured.

- 1) Cut the strap that keeps the box closed.
- 2) Open the top of the box and remove the shock-proof panels inside, remove the accessories contained inside them and take out the present manual, keeping these articles to hand for the later phases of use of the appliance.
- 3) ⚠ Remove the nylon bag covering the upper part of the machine and put it in a safe place out of the reach of children ⚠.
- 4) Drive the box up out leaving the machine on the pallet.
- 5) Remove any other packaging materials and protections attached to the machine.
- 6) ⚠ Hand the packaging materials over to an authorized enterprise for disposal and recycling ⚠.

B INSTALLATION

ATTENTION: USA - CANADA REQUIREMENTS

- **The equipment is to be installed with adequate backflow protection to comply with applicable federal, state and local codes.**
- **Water and waste piping and connections shall comply with the International Plumbing Code 2003, International Code Council (ICC) or to the Uniform Plumbing Code 2003, International Association of Plumbing and Mechanical Officials (IAPMO).**

1 ADJUSTING THE FEET (A-K)

Place the machine on the work counter and ensure that it is level, by adjusting the length of the feet.

Turn the chrome-plated foot counter-clockwise, when viewed from underneath, to lengthen it and clockwise to shorten it. There are no screws or nuts to be loosened or tightened.

2 WATER CONNECTIONS (A-S-K-C-B, no A-K with WTS)

The water is fed thanks to a connection with the drinkable water supply at a minimum pressure of 0.15 MPa (1.5 bar) and a maximum pressure of 0.6 MPa (6 bar).

Should the water supply pressure exceed 0.6 MPa (6 bar), install a pressure reducer upline of the coffee machine / water softener system.

An external check-valve may be required to meet local regulations.

The machine has a flexible steel-braided connection pipe with a 3/8 female connection, approx. 1.7 metres in length.

- 1) Connect the flexible pipe to the coupling located on the bottom of the machine.
- 2) If the machine is being installed without a water softener (not recommended unless a centralized water softening system has been installed) connect the flexible pipe to the water supply.

3 WATER CONNECTIONS (A-K with WTS)

The water is fed thanks to a connection with the drinkable water supply at a minimum pressure of 0.15 MPa (1.5 bar) and a maximum pressure of 0.6 MPa (6 bar).

Should the mains pressure exceed 0.6 MPa (6 bar), install a pressure reducer upline of the coffee machine / water softener system.

An external check-valve may be required to meet local regulations.

The machine has three flexible connecting pipes with 3/8 female connections, approx. 1.7 metres in length.

- 1) Connect each flexible pipe to the couplings located on the bottom of the machine. The three couplings are marked "1", "2" and "W".
 - 2) Flush the water supply to ensure that it is clean and after couple to it the flexible pipe coming from the "W" coupling.
- Do not open the water supply.

4 WATER SOFTENER CONNECTION (A-S-K-C-B, no A-K with WTS)

If the standard water softener with completely manual valves is to be used, follow the instructions below.

If semiautomatic or automatic water softeners are to be used, follow the specific instructions provided in the handbooks accompanying the water softeners themselves. The water softener has a flexible steel-braided connecting pipe with 3/8 female connections, approx. 0.7 metres in length, and a semitransparent pipe approx. 0.7 metres in length.

- 1) Flush the water supply to ensure that it is clean.
Couple the 0.7 metre long flexible pipe to the water softener inlet (upper valve) and the water supply.
- 2) Ensure that the valve levers are in the vertical position.
- 3) Allow at least 10 litres of water to flow through the water softener by turning on the water supply, turning the upper valve lever counter-clockwise and the lower valve lever slightly counter-clockwise.
- 4) Only reclose the lower valve, by turning it to the vertical position, when the water is clear and colourless.
- 5) Connect the 1.7 metre long flexible pipe, previously hooked up to the machine, to the lower valve of the water softener.
- 6) Cut the semitransparent pipe into two pieces, one 0.4 metres long and the other 1.3 metres long.
- 7) Connect the shorter piece to the pipe-end fitting of the upper valve.
- 8) Connect the longer piece, rolled up, to the pipe-end fitting of the lower valve, after ensuring that the gicleur is well-tightened to the fitting itself.
- 9) Turn the lower valve lever counter-clockwise so as to feed the machine.

5 WATER SOFTENER CONNECTION (A-K with WTS)

⚠ The machine must only be used with the three types of special water softener supplied by ELEKTRA, i.e.:

- 8-litre ELEKTRA water softener
- 12-litre ELEKTRA water softener
- 16-litre ELEKTRA water softener

No other type or brand of water softener may be used with this model ⚠.

- 1) Connect the flexible pipe connected to coupling "1" on the machine to the corresponding coupling "1" on the water softener.
- 2) Connect the flexible pipe connected to coupling "2" on the machine to the corresponding coupling "2" on the water softener.

Do not open the water supply.

6 CONNECTION WITHOUT WATER SOFTENER (A-K with WTS)

Although not recommended, the machine can be used without water softener if necessary.

7 DRAIN CONNECTION (A-S-K-C)

The machine has two rubber connecting pipes, one of 20 mm in external diameter and the other of 18 mm in external diameter, both approx. 1.5 metres in length. This flexible pipes must be made to flow into a fixed drain manifold with a minimum internal diameter of 50 mm located underneath the machine work counter.

The space created by difference in diameter of the two pipes inserted into the drain manifold must be left free for the venting of air during the discharging of the water.

- 1) Hook up the rubber pipe of 20 mm in diameter between the pipe fitting on the plastic drain box installed at the bottom of the machine to the drain manifold located underneath the counter, ensuring that it does not sag and that it is not strangled.
- 2) Hook up the rubber pipe of 18 mm in diameter between the metal pipe fitting on the bottom of the machine to the drain manifold located underneath the counter, ensuring that this too does not sag and that it is not strangled.

8 DRAIN CONNECTION (B)

The machine has a rubber connecting pipe of 20 mm in external diameter approx. 1.5 metres in length.

This flexible pipe must be made to flow into a fixed drain manifold with a minimum internal diameter of 35 mm located underneath the machine work counter.

The space created by difference in diameter of the two pipes inserted one into the other must be left free for the venting of air during the discharging of the water.

- 1) Hook up the rubber pipe between the metal pipe fitting installed at the bottom of the machine to the drain manifold located underneath the counter, ensuring that it does not sag and that it is not strangled.

9 ELECTRICAL CONNECTIONS (A-S-K-C-B)

The machine is equipped with a connecting power cable, approx. 2 metres in length, with 5 wires of the following colours:

- Green/Yellow:	Ground
- Blue:	Neutral
- Brown:	Phase 1
- Black:	Phase 2
- Grey:	Phase 3

 **The wires should be connected only to a terminal board on the electric switchboard** .

The wiring diagram is shown on an adhesive tag applied to the end of the power cable. Electrical power specifications are given on a plate applied to the front of the machine (A-S-K-C) or to the inside of the upper cup tray (B).

The connection may be made without any modification being required to the machine, either to a single-phase 230VAC power supply or to a triple phase 400VAC N3 power supply, as follows:

9.1 SINGLE-PHASE 230VAC CONNECTION

Hook up the Ground and Neutral wires to the two respective terminals on the electric switchboard.

Join up the three wires of phases 1, 2 and 3 themselves and connect them to the single terminal of the phase present in the electric switchboard.

9.2 THREE-PHASE 400VAC N3 CONNECTION

Hook up the Ground and Neutral wires to the two respective terminals on the electric switchboard.


Connect each of the three wires of phases 1, 2 and 3 to the respective terminals of the phases present in the electric switchboard.


10 FILLING THE HYDRAULIC CIRCUITS (A-K-S-C-B, no A-K with WTS)

- 1) Ensure that the water supply is turned on.
- 2) Switch on the machine.

11 FILLING THE HYDRAULIC CIRCUITS (A-K with WTS)

Before switching on the machine, fill the water treatment hydraulic circuit.

 Proceed as follows:

- 1) Open the water softener cap.
- 2) Open the activated carbon cap and take the cartridge out.
- 3) Top up with water the cartridge container until the water softener has filled up completely and starts overflowing.
- 4) Close the water softener cap.
- 5) Put the activated carbon cartridge in, top up with water to the brim and reclose.
- 6) Turn on the water supply .

Now the machine is ready to be switched on and adjusted.

If there are problems in opening the two caps, consult chapter "C - TROUBLESHOOTING", paragraph 20.

12 FLUSHING THE MACHINE (S)

ATTENTION: USA - CANADA REQUIREMENTS

With reference to the hydraulic scheme given below, the technician in charge of installing the appliance should carry out the following operations before going to install the equipment at the customer's:

A) FLUSHING THE DELIVERY GROUP

- 1) Switch the machine on and make sure that it is up to pressure.
- 2) Let 5 liters of hot water flow from each delivery group N°18 through the filter N°19 located on the filter holder N°21.

B) FLUSHING THE BOILER

- 1) Switch the machine on and make sure that it is up to pressure.
- 2) Switch the machine off.
- 3) Connect a rubber drainage hose to hot water tap N°14
- 4) Open hot water tap N°14 until the boiler is completely drained of water (time required: 2 minutes):

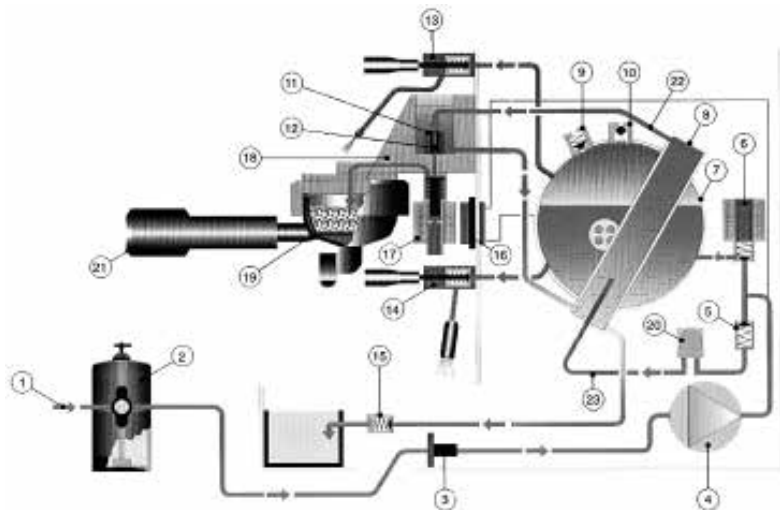
Note: it is the boiler pressure that makes the water drain off.

C) FLUSHING THE HEAT EXCHANGERS

- 1) Remove the upper cup tray.
- 2) Remove the pipe N°23 and the injector of heat exchanger N°8.
- 3) Remove the upper cap of the heat exchanger N°8.
- 4) Wait until the heat exchanger is completely empty.
- 5) Re-connect the pipes to heat exchanger.
- 6) Reassemble the upper cup tray.

HYDRAULIC SCHEME

- | | |
|--------------------------|--------------------------|
| 1 WATER SUPPLY | 13 STEAM VALVE |
| 2 WATER SOFTENER | 14 HOT WATER VALVE |
| 3 ENTRY WATER CONNECTION | 15 EXPANSION VALVE |
| 4 MOTOR / PUMP | 16 GAUGE |
| 5 ONE WAY VALVE | 17 GROUP SOLENOID VALVE |
| 6 INLET SOL. VALVE | 18 COFFEE DELIVERY GROUP |
| 7 BOILER | 19 FILTER |
| 8 HEAT EXCHANGER | 20 WATER FLOW METER |
| 9 SAFETY VALVE | 21 FILTERHOLDER |
| 10 VACUUM BRAKE VALVE | 22 HOT WATER |
| 11 FILTER | 23 COLD WATER |
| 12 OREFICE | |



C ADJUSTMENTS

1 BASIC PROGRAMMING BY THE MAINTENANCE TECHNICIAN (S-C-B)

This enables the implementation of some of the Adjustment and Maintenance functions listed below.

It also facilitates the providing of telephonic assistance.

⚠ **Basic Programming is the exclusive responsibility of the installer/service technician** ⚠. It is carried out with the key provided, which enables you to use the following menu of led codes:

Time setting:



Night cycle programming:



Brewing temperature setting:



Heating element safety device reset:



- 1) Insert the key in the lock on the control panel, gently press and turn it clockwise: the machine automatically enters a state of partial operation suitable for programming.
- 2) Press any of the coffee buttons marked with the "+" sign to scroll the menu to find the required topic.
- 3) Press "ENTER", which is the double short coffee button (central) marked by the ☉ symbol on each pushbutton panel, to confirm the choice of topic and access further instructions. To change numerical values press the "+" and "-" keys to increase or decrease respectively. Then save the data by pressing "ENTER".
- 4) Upon completing programming or consultation of the various topics, turn the key counter-clockwise and remove it from the lock: the machine automatically resumes full operation.

In general, therefore, the "+" key is used to select the topics or information required and both "+" and "-" keys are used to change the parameters, but always with the possibility to restore the initial situation.

Data are only saved definitively on pressing "ENTER".

Carefully follow step by step the instructions given below, as they provide a complete guide to programming:

1.1 TIME SETTING (S-C-B)

This function lets you set the current time, which is needed to manage the night cycle correctly.

- Insert and turn the key to access the following time setting menu:



- Press the "ENTER" key to display the current time as shown below (pressing on the contrary the "+" key you move on to the "night cycle programming" menu - see paragraph 1.2):



0	0	0	0	0	0
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
5	0	0	0	0	0
6	0	0	0	0	0
7	0	0	0	0	0
8	0	0	0	0	0
9	0	0	0	0	0
10	0	0	0	0	0
11	0	0	0	0	0
12	0	0	0	0	0
13	0	0	0	0	0
14	0	0	0	0	0
15	0	0	0	0	0
16	0	0	0	0	0
17	0	0	0	0	0
18	0	0	0	0	0
19	0	0	0	0	0
20	0	0	0	0	0
21	0	0	0	0	0
22	0	0	0	0	0
23	0	0	0	0	0

Select the time using the buttons "+" or "-" and then press the button "ENTER" to confirm. This confirmation takes you automatically to the "night cycle programming" menu: see paragraph 1.2.

1.2 NIGHT CYCLE PROGRAMMING (S-C-B)

Through the setting of a time of day, the machine enters into a state of partial operation during which the temperature in the boiler is kept at a very low temperature (preheating temperature) and buttons with automatic dosing are not enabled.

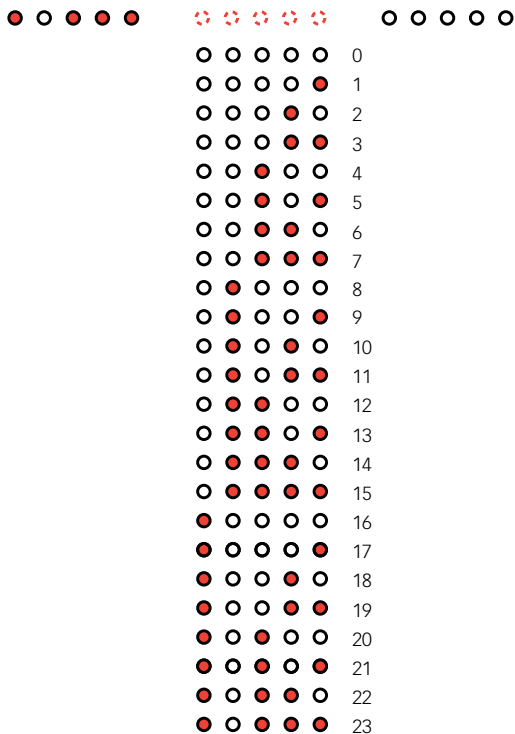
Only the manual dosing buttons can be operated.

When this period of time has elapsed, the machine resumes normal operation.

- Insert and turn the key
- Press the "+" key once to access the "night cycle programming" menu as shown below (pressing again the "+" key you move on to the "coffee brewing doses programming" menu - see paragraph 1.3):



- Press the "ENTER" key to display the night cycle start time as shown below:



Select the required night cycle start time using the buttons “+” or “-” and then press the button “ENTER” to confirm.

This confirmation puts you automatically in the night cycle end time, displayed as follows:

● ● ● ○ ○ ✖ ✖ ✖ ✖ ✖ ○ ○ ○ ○ ○

○	○	○	○	○	0
○	○	○	○	●	1
○	○	○	●	○	2
○	○	○	●	●	3
○	○	●	○	○	4
○	○	●	○	●	5
○	○	●	●	○	6
○	○	●	●	●	7
○	●	○	○	○	8
○	○	●	○	●	9
○	●	○	●	○	10
○	●	○	●	●	11
○	●	●	○	○	12
○	●	●	○	●	13
○	●	●	●	○	14
○	●	●	●	●	15
●	○	○	○	○	16
●	○	○	○	●	17
●	○	○	●	○	18
●	○	○	●	●	19
●	○	●	○	○	20
●	○	●	○	●	21
●	○	○	●	○	22
●	○	●	●	●	23

Select the required night cycle end time using the buttons “+” or “-” and then press the button “ENTER” to confirm.

This confirmation puts you automatically in the “brewing temperature setting” menu - see paragraph 1.3.

1.3 BREWING TEMPERATURE SETTING (S-C-B)

This allows the brewing temperature to be varied according user requirements, the blend being used or environmental conditions, with a view to obtaining the best "quality in the cup".

This is done by setting the required increase (or decrease) of the temperature in relation to the standard brewing temperature, measured in centigrade degrees (°C).

The standard brewing temperature is that programmed by the manufacturer and is the same for all produced pieces of this model.

- Insert and turn the key.
- Press the "+" key three times to access the following "brewing temperature setting" menu (or press the "+" key to move on to the "heating element safety device reset" menu - see paragraph 1.4):

● ● ● ☀ ● ○ ○ ○ ○ ○ ○ ○ ○ ○ ○

- Press the "ENTER" key to display the increase/decrease of standard brewing temperature in °C as follows:

● ● ● ○ ● ☼ ☼ ☼ ☼ ☼ ○ ○ ○ ○ ○

○ ● ○ ● ○	-10
○ ● ○ ○ ●	-9
○ ● ○ ○ ○	-8
○ ○ ● ● ●	-7
○ ○ ● ● ○	-6
○ ○ ● ● ●	-5
○ ○ ● ○ ○	-4
○ ○ ○ ● ●	-3
○ ○ ○ ● ○	-2
○ ○ ○ ○ ●	-1
○ ○ ○ ○ ○	0
● ○ ○ ○ ●	1
● ○ ○ ● ●	2
● ○ ○ ○ ●	3
● ○ ● ○ ○	4
● ○ ● ○ ●	5
● ○ ● ○ ○	6

Select the required increase (or decrease) using the buttons "+" or "-" and then press the button "ENTER" to confirm.

This confirmation puts you automatically in the "heating element safety device reset" menu - see paragraph 1.4.

1.4 HEATING ELEMENT SAFETY DEVICE RESET (S-C-B)

This function lets you reset the heating element safety device that may have been disactivated due to the (even temporary) lack of water in the boiler.

Reset the safety device after the reason for the lack of water in the boiler has been eliminated or repaired.

- Insert and turn the key.
- Press the "+" key four times to access the following "heating element safety device reset" menu (pressing again the "+" key you return to the "time setting" menu - see paragraph 1.1):



- Press the button "ENTER" to display one of the following alerts:

Heating element safety device on (machine in operation):



Heating element safety device off:



In this case, after having repaired the fault, press "ENTER" to reset. This confirmation puts you automatically back in the "time setting" menu: see paragraph 1.1.

2 BASIC PROGRAMMING BY THE MAINTENANCE TECHNICIAN (A-K)

This enables the implementation of the Adjustment, Maintenance and Data Management functions listed below.

It also facilitates the providing of telephonic assistance.

⚠ **Basic Programming is the exclusive responsibility of the installer/service technician or of the owner of the business.** ⚠

It is carried out with the key provided, which enables you to use a display menu that includes such functions per general issues, as follows:

- LANGUAGE SELECTION (A-K)
 - TIME AND DATE SETTING (A-K)
 - NIGHT CYCLE PROGRAMMING (A-K)
 - WATER SOFTENING PARAMETERS SETTING (A-K with WTS)
 - Measured water hardness storing
 - Water softener type selection
 - COFFEE BREWING PARAMETERS SETTING (A-K)
 - Brewing temperature setting
 - MILK PREPARATION PARAMETERS SETTING (A-K with MFS)
 - Hot milk temperature setting
 - Frothy milk temperature setting
 - Amount of froth in milk setting
 - WATER TREATMENT CIRCUIT RINSE (A-K with WTS)
 - CALLS AND ALARMS RESET
 - Heating element safety device reset (A)
 - Scheduled maintenance alerts reset (A-K)
 - Active carbon cartridge replacement alert reset (A-K with WTS)
 - PRODUCTION AND CONSUMPTIONS DISPLAY AND RESET (A-K)
 - Coffee production display and reset
 - Water consumption display and reset
- 1) Insert the key in the lock on the control panel, gently press and turn it clockwise: the machine automatically enters a state of partial operation suitable for programming.
 - 2) The instructions for the using the main menu appear on the display: after confirming by pressing "ENTER" on the control panel, press any of the coffee buttons marked with the "+" sign to scroll the menu to reach the desired topic.
 - 3) Press "ENTER" to confirm the choice of the topic and access the sub-menu for the function concerned. To change numerical values press the "+" and "-" keys to increase or decrease respectively. Then save the data by pressing "ENTER".
 - 4) Upon completing programming or consultation of the various topics, turn the key counter-clockwise and remove it from the lock: the machine automatically resumes full operation.

In general, therefore, the "+" key is used to select the topics or information required and both "+" and "-" keys are used to change the parameters, but always with the possibility to restore the initial situation. Data are only saved definitively on pressing "ENTER".

Carefully follow the instructions step by step as they appear on the display - they provide a complete guide to programming.

2.1 LANGUAGE SELECTION (A-K)

This allows the conversion of all the communications made by the machine into Italian or English or French or Spanish or German.

2.2 TIME AND DATE SETTING (A-K)

This is used to set the minutes, hours, days, months and year for correct night cycle management and dating of statistical data.

2.3 NIGHT CYCLE PROGRAMMING (A-K)

Through the setting of a time of day, the machine enters into a state of partial operation during which the temperature in the boiler is kept at a very low temperature (preheating temperature) and buttons with automatic dosing are not enabled. Only the manual dosing buttons can be operated. When this period of time has elapsed, the machine resumes normal operation.

2.4 MEASURED WATER HARDNESS STORING (A-K with WTS)

Together with the storing of the type of water softener, this allows the machine to automatically calculate the volume of softened water available before saturation of the softener resins and, consequently, to start the automatic regeneration process. Measure the hardness of the water supply using the ELEKTRA kit provided, expressed in French degrees (°F), and store it.

2.5 WATER SOFTENER TYPE SELECTION (A-K with WTS)

This allows the machine to automatically calculate the volume of softened water available in combination with water supply hardness. Store the type of installed water softener.

2.6 BREWING TEMPERATURE SETTING (A-K)

This allows the brewing temperature to be varied according user requirements, the blend being used or environmental conditions, with a view to obtaining the best "quality in the cup".

This is done by setting the required increase (or decrease) of the temperature in relation to the standard brewing temperature, measured in centigrade degrees (°C).

The standard brewing temperature is that programmed by the manufacturer and is the same for all produced pieces of this model.

After varying the brewing temperature, make at least three espresso coffees per dispensing group to enable the new temperature to stabilize itself.

2.7 HOT MILK TEMPERATURE SETTING (A-K with MFS)

It lets you vary the hot milk temperature in function to the user's needs, in the MFS system.

This is done by setting the required increase (or decrease) of the temperature in relation to the standard hot milk temperature, measured in centigrade degrees (°C).

The standard hot milk temperature is that programmed by the manufacturer and is the same for all produced pieces of this model: the value is 60°C.

2.8 FROTHY MILK TEMPERATURE SETTING (A-K with MFS)

It lets you vary the frothy milk temperature in function to the user's needs, in the MFS system.

This is done by setting the required increase (or decrease) of the temperature in relation to the standard frothy milk temperature, measured in centigrade degrees (°C).

The standard frothy milk temperature is that programmed by the manufacturer and is the same for all produced pieces of this model: the value is 60°C.

2.9 AMOUNT OF FROTH IN MILK SETTING (A-K with MFS)

It lets you vary the amount of froth in the milk in function to the user's needs, in the MFS system

Carried out by setting the required amount of froth increase (or decrease), expressed as level "+1", "+2" (o "-1", "-2"), compared to the standard amount of froth expressed as level "0".

The standard amount of froth is that programmed by the manufacturer and is the same for all produced pieces of this model.

The levels correspond to approx. the following increase percentages of the volume of milk initially used:

- 2	+37%
- 1	+50%
0	+67%
+1	+73%
+2	+83%

2.10 WATER TREATMENT CIRCUIT RINSE (A-K with WTS)

This allows rinsing of the water softener circuit and the activated carbon cartridge to be carried out after repairs or salt loading errors, by automatically excluding it from the machine water supply, enabling the machine to continue operating.

2.11 HEATING ELEMENT SAFETY DEVICE RESET (A)

This function lets you reset the heating element safety device that may have been deactivated due to the (even temporary) lack of water in the boiler.

Reset the safety device after the reason for the lack of water in the boiler has been eliminated or repaired.

2.12 SCHEDULED MAINTENANCE ALERTS RESET (A-K)

If a scheduled maintenance programme has been activated (see paragraph 5 "SPECIAL PROGRAMMING"), this function lets you reset the maintenance alert once the espresso coffee machine has been serviced.

The alert can be reset by entering the reset code known to the technician.

2.13 ACTIVE CARBON CARTRIDGE REPLACEMENT ALERT RESET (A-K with WTS)

This function resets the active carbon cartridge replacement alert once the cartridge has been replaced.

2.14 COFFEE PRODUCTION DISPLAY AND RESET (A-K)

The system records the number of cups of coffee dispensed by each button for each group. Each dispensing activated by double buttons corresponds to two cups of coffee.

These data can be zero-set by entering the Reset Code known to the technician.

2.15 WATER CONSUMPTION DISPLAY AND RESET (A-K)

The system records the following:

Volume of softened water consumed (A-K with WTS)

Volume of non-softened water consumed

These data can be zero-set by entering the Reset Code known to the technician.

3 BREWING PRESSURE ADJUSTING (A-S-K-C-B)

With a view to obtaining the best "quality in the cup", brewing pressure may be adjusted. Recommended pressure is between 0.8 MPa (8 bar) and 0.9 MPa (9 bar).

4 BREWING WATER SALINITY ADJUSTING (A-K with WTS)

With a view to obtaining the best "quality in the cup", the taste of the brewing water may be varied by adjusting its salts concentration.

5 SPECIAL PROGRAMMING (A-K)

This allows the personalization of certain machine functions according to important servicing, marketing or individual end Customer requirements

Special Programming is the exclusive responsibility of the dealer's specialized technician who will have been specifically trained by ELEKTRA to do so.

Special Programming should be carried out on the dealer's premises prior to installation.

It is carried out via PC by connecting a special cable to the machine's electronic control unit and the ELEKTRA program.

These functions are as follows:

- Setting of preventive maintenance program.
- Activation of start of dispensing only upon reaching the ideal brewing temperature.
- Activation of brewing suitability control according to Italian espresso standards.
- Activation of a maximum time between one regeneration and another (A-K with WTS only).
- Personalization of maximum coffee dispensing time.
- Personalization of the maximum heating element "on" time.
- Personalization of the reset code for the scheduled maintenance call, coffee production and water consumption.
- Saving and printing of all machine configuration data.
- Saving and printing of all machine cumulative historical data.

C r e m a C a f f è

ELEKTRA
B a r i l u m e

D MAINTAINANCE OF WATER SOFTENER

1 CLEANING THE WATER SOFTENER (A-K-S-C-B, no A-K with WTS)

- 1) Periodically clean the gicleur fitted on the lower water softener valve by unscrewing it and ensuring that the water hole is not clogged.
- 2) Refit it on the valve and tighten it.

2 ⚠ REGENERATION OF THE WATER SOFTENER RESINS ⚠ (A-K-S-C-B, no A-K with WTS)

After the water softener resins have removed a given quantity of calcium and magnesium salts from the water (water hardness) they rapidly become saturated, losing their softening capacity. This capacity is completely restored through regeneration, which is carried out by washing in a salt and water solution.

The efficiency of the water softener will guarantee constantly good coffee quality as well as the high performance and long life of the machine. Maintenance is also reduced as scale deposits are not allowed to form in the hot water hydraulic circuit.

Regeneration must be carried out at a maximum frequency of once a week, depending on the following parameters:

- Size of the water softener
- Hardness of the water
- Water consumption

If the size of the water softener is increased, regeneration may be done less frequently.

The opposite is the case if the other two parameters increase. As a general reference, with an 8 litre water softener and a water consumption of approx. 25 litres per day, with a water hardness of 30° French degrees, regeneration may be carried out once every 4 weeks.

If, on the other hand, the hardness of the water were 60° French degrees, it would have to be carried out once every 2 weeks.

If a standard water softener with completely manual valves is installed, follow the instructions below.

If semiautomatic or automatic water softeners are installed, follow the specific instructions provided in the handbooks accompanying the water softeners themselves.

- 1) Switch off the machine.
- 2) Turn off the water supply.
- 3) Vent the softener's internal pressure by turning the upper valve lever clockwise: water will flow out of the semitransparent flexible pipe.
- 4) Close the discharge by returning the upper valve lever to the vertical position.
- 5) Open the softener upper cap.
- 6) Pour the following amount of common coarse salt into the softener:

- 8-litre softener	1,0 kg
- 12-litre softener	1,5 kg
- 16-litre softener	2,0 kg

- 7) Close the softener cap after ensuring that it is full to the brim with water and that no salt residue has been left on the edges of the cap seal.
- 8) Turn the upper valve lever totally counter-clockwise.
- 9) Unroll the semitransparent pipe of the lower valve and allow its contents to flow into a general drain or a bucket.
- 10) Turn the lower valve lever totally clockwise.
- 11) Turn the water supply on: the washing of the resins with the salt solution has begun, and the liquid will be discharged through the semitransparent pipe.
- 12) Continue the resin washing process for an hour. Then ensure that the liquid flowing out of the semitransparent pipe attached to the lower valve is fresh water (i.e. not salt water).
- 13) Turn the lower valve lever totally counter-clockwise and roll up the semitransparent pipe, detaching it from the discharge outlet.
- 14) Switch on the machine: the regeneration process has been completed.

E L E K T R A[®]
ITALIAN ESPRESSO COFFEE MACHINES SINCE 1947

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