ELEKTRA®

ITALIAN ESPRESSO COFFEE MACHINES SINCE 1947

PROFESSIONAL ESPRESSO COFFEE MACHINES

INSTRUCTION MANUAL

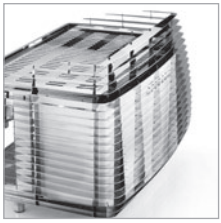
for

SIXTIES (S)

CLASSIC BARLUME (C)

BELLE EPOQUE (B)

2012-2016?



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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 basic model	(Without optionals)
- AC	= ALETTA + CHS	(Cup Heating System) model
- AM	=ALETTA + MFS	(Milk Frothing System) model
- AW	= ALETTA + WTS	(Water Treatment System) model
- S	=SIXTIES model	(Deliziosa and Compact)
- M	= MODERN and GOLD models	(Maxi and Extramaxi)
- C	= CLASSIC model	(Barlume 2-3 units)
- B	= BELLE EPOQUE model	(Vertical 2-3 units)

The manual contains all the instructions required for:
- OPERATOR (BARMAN)
- INSTALLATION / SERVICE TECHNICIAN

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-AC-AM-AW-S-M-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 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.
- do not allow the appliance to be used by persons (including children) with physical, sensory or mental impairments; likewise do not allow the machine to be used by persons who have no experience or knowledge of machine use unless they are assisted by another person who is responsible for their safety and supervision, who instructs or trains them to use the machine. Children must always be supervised by an adult in order to ensure they do not play with the appliance. ⚠

5 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.

6 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.

7 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.

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-M-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-AC-AM)
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.

3 DISPLAY OF FUNDAMENTAL PARAMETERS (AW)
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).
- Brewing pressure (with pump on).
- Volume of softened water still available before the next salt load.

4 COFFEE DISPENSING (A-AC-AM-AW-S-M-C-B)
Independent dispensing groups with predosed or manual selections.
Filterholders for one or two cups.

5 DISPENSING OF HOT WATER AND STEAM (A-AC-AM-AW-S-M-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-AC-AM-AW-S-M), 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 .

6 PREPARING THE MILK (AM)
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.

7 CONTROL OF WATER LEVEL IN THE BOILER (A-AC-AM-AW-S-M-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.

8 CONTROL OF WATER TEMPERATURE IN THE BOILER (A-AC-AM-AW-S-M-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.

9 STABILIZING THE BREWING TEMPERATURE (A-AC-AM-AW-S-M-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.

14 MEASURING THE BREWING PRESSURE (A-AC-AM-S-M-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 model, the gauge is fitted inside the machine.

15 MEASURING THE BREWING PRESSURE (AW)

Through the reading of the display, this enables the manual regulation of pump pressure during coffee dispensing.

16 MEASURING THE WATER SUPPLY PRESSURE (AW)

Enables automatic protection in the event of a water supply stoppage.

17 PROTECTION OF THE HEATING ELEMENTS (A-AC-AM-AW-S-M-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 1.5 o 4.12.

18 PROTECTION FROM OVERHEATING (A-AC-AM-AW-S-M-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-M-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 CUP HEATER TRAY (AC)

Model equipped with larger cup heater tray and electric heating with automatic temperature control. The heating can either be enabled or disabled.

21 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.

22 BODY LIGHTING (A-AC-AM-AW)

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.

23 USER ALERTS (S-M-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:

Group 1 Group 2 Group 3

Led all off:

Led of the long single coffee button of group 1 on with fixed light:

Led of the long single coffee button of group 1 flashing:

Led of the long single coffee button of group 1 slowly fading light:

Slow flashing led sequence:

Fast flashing led sequence:

24 MILK FROTHER ALERTS TO THE USER (AM)

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 25.
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:

25 USER ALERTS (A-AC-AM-AW)

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 23 and 24.

26 SOUND EMISSION (A-AC-AM-AW-S-M-C-B)

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

- Model Aletta (A-AC-AM-AW):
  Weighted sound emission level A: 80dB uncertainty 1dB

- Model Sixties (S):
  Weighted sound emission level A: 80dB uncertainty 1dB

- Model Modern e Gold (M):
  Weighted sound emission level A: 81dB uncertainty 1dB

- Model Classic (C):
  Weighted sound emission level A: 80dB uncertainty 1dB

- Model Belle Epoque (B):
  Weighted sound emission level A: 82dB uncertainty 1dB

D GENERAL ADJUSTMENTS

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

In order to program the coffee brewing doses switch the machine on by pressing the button marked with the symbol ⏻ keeping contemporaneusly 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, afterthat the coffee brewing doses programming is finished.
Using the button marked with the symbol ⏻, switch off and turn on the machine to get out of programming procedure.

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 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-AC-AM-AW-S-M-C-B)

The machine switches on by pressing the button marked with the symbol ⏻.
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:

"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-M-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-AC-AM-AW)

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-AC-AM-AW-S-M-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-AC-AM-AW-S-M-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-AC-AM-AW-S-M-C-B)

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

8 WARMING THE CUPS (S-M-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 (AC)

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-AC-AM-AW-S-M-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-AC-AM-AW-S-M-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 (AM)

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 (AM)

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-AC-AM-AW-S-M-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-AC-AM-AW-S-M-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-AC-AM-AW-S-M-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 (AM)

⚠ 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 (AM)

⚠ 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 (A-AC-AM-AW-S-M-C-B)

1) Replace the normal filter fitted on the filterholder with the blind filter (without holes) provided.
2) Place 1/2 teaspoon or a tablet of detergent for coffee in the blind filter and couple it to the group to be cleaned.
3) Start and then stop dispensing at intervals of 4-5 seconds for 5-6 times.
4) Rinse the blind filter and couple the filterholder to the group again.
5) Continue dispensing until the detergent is finished.
6) Make a coffee in order to eliminate any unpleasant tastes.

6 WEEKLY CLEANING OF THE FILTERS AND FILTERHOLDERS (A-AC-AM-AW-S-M-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.

7 WEEKLY CLEANING OF THE DRIP TRAY (A-AC-AM-AW-S-M-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 ⚠.

8 WEEKLY CLEANING OF THE BODY (A-AC-AM-AW-S-M-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.

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-AC-AM-AW-S-M-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-AC-AM-AW or S-M-C-B):

"BUFFER BATTERY ABOUT TO GO FLAT - REPLACE PROMPTLY"

Contact Technical Assistance.

2 STEAM DOES NOT COME OUT OF THE WANDS (A-AC-AM-AW-S-M-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-AC-AM-AW-S-M-C-B)

If the following alert appears (A-AC-AM-AW):

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

or the following (S-M-C-B):

the fault could be due to:

- Water supply stoppage (A-AC-AM-S-M-C-B): 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-AC-AM-AW-S-M-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-M-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-AC-AM-AW)

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 1.2, 4.7, 2, and "A - USE", paragraph 10).
Alternatively, there might be a fault due to:

- Water supply stoppage (A-AC-AM): 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-AC-AM-AW-S-M-C-B)

The possible causes of this are:

- Coffee ground too finely: adjust it.
- Water supply stoppage (A-AC-AM-S-M-C-B): restore it.
- Fault or obstruction to the passing of water through some parts of the machine: contact Technical Assistance.

8 A DISPENSING GROUP STARTS UP ON ITS OWN (M-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 (AW)

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-AC-AM-AW-S-M-C-B)

If the following alert appears (A-AC-AM-AW):

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

or the following (S-M-C-B):

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

⚠ The heating element safety device can be resetted through the Basic Programming (See chapter "C - ADJUSTMENTS", paragraphs 1.5 o 4.12), 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-AC-AM-AW-S-M-C-B)

If the following alert appears (A-AC-AM-AW):

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

or the following (S-M-C-B):

a major fault has occurred.
⚠ Switch off the machine and contact Technical Assistance ⚠.

12 ONE DISPENSING GROUP DOES NOT HEAT SUFFICIENTLY (A-AC-AM-AW-S-M-C-B)

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

- Gigleur 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-M-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-M-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 (AM)

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 (AM)

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 ⚠.

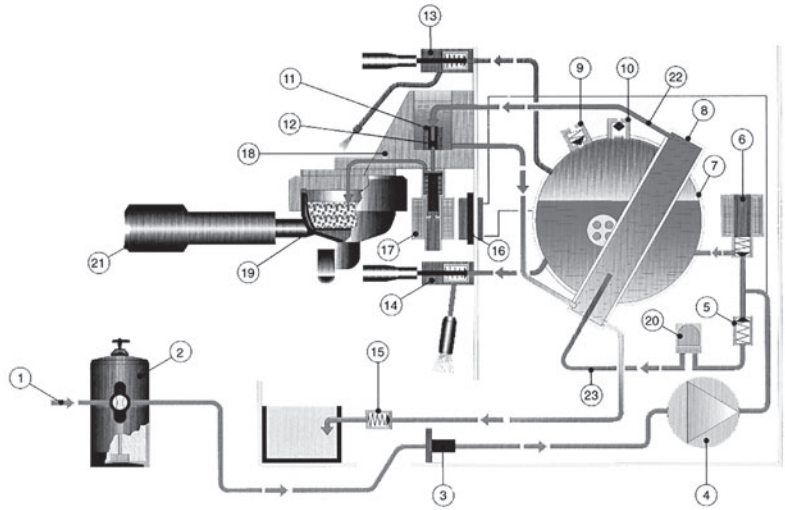
17 THE DRIP TRAY IS FULL AND OVERFLOWING WITH WATER (A-AC-AM-AW-S-M-C-B)

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.

HYDRAULIC SCHEME

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



C ADJUSTMENTS

1 BASIC PROGRAMMING (S-M-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".

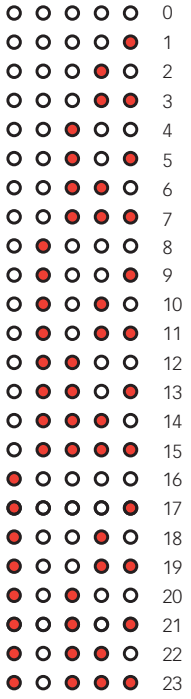
Carefully follow step by step the instructions given below, as they provide a complete guide to programming:

1.1 TIME SETTING (S-M-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):



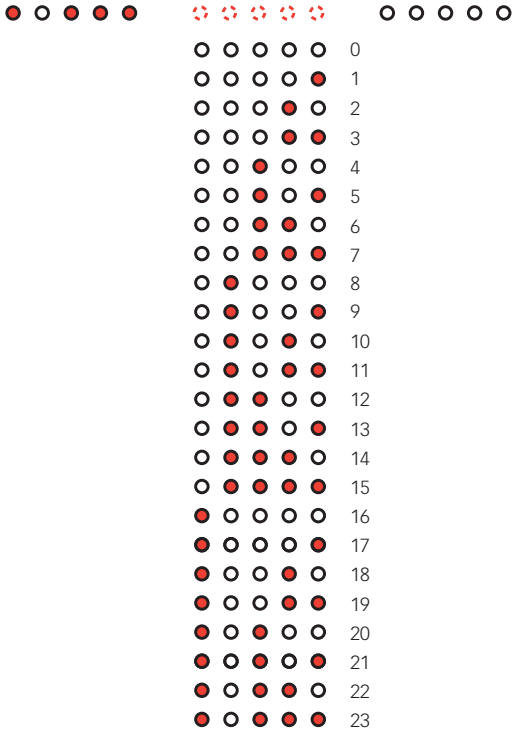
Select the time using the buttons "+"or "-" and then press the button "ENTER" to confirm.
This confirmation takes you automatically to the "night cycle programming" menu:
see paragraph 1.2.

1.2 NIGHT CYCLE PROGRAMMING (S-M-C-B)

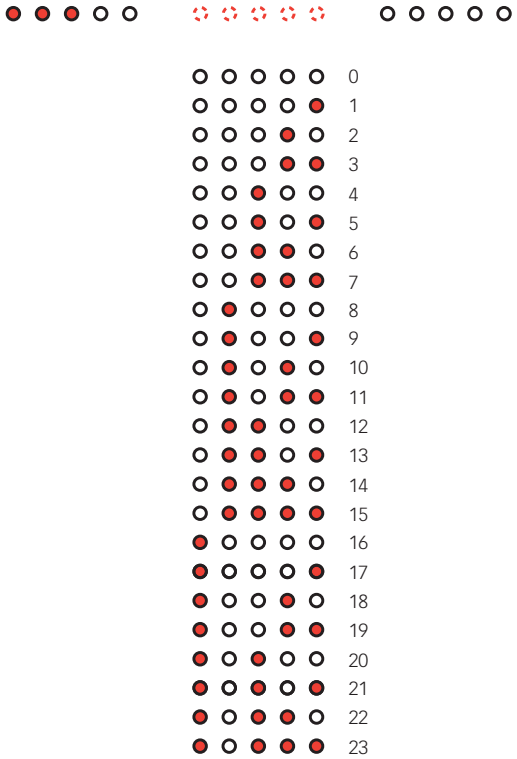
Through the setting of a time of day, the machine enters into a state of partial operation during which the temperature in the boiler is kept at a very low temperature (preheating temperature) and buttons with automatic dosing are not enabled.
Only the manual dosing buttons can be operated.
When this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



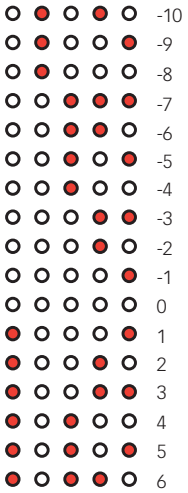
Select the required night cycle end time using the buttons "+" or "-" and then press the button "ENTER" to confirm.
This confirmation puts you automatically in the "brewing temperature setting" menu - see paragraph 1.3.

1.3 BREWING TEMPERATURE SETTING (S-M-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:



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-M-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 (A-AC-AM-AW)

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-AC-AM-AW)
- TIME AND DATE SETTING (A-AC-AM-AW)
- NIGHT CYCLE PROGRAMMING (A-AC-AM-AW)
- WATER SOFTENING PARAMETERS SETTING
  - Measured water hardness storing (AW)
  - Water softener type selection (AW)
- COFFEE BREWING PARAMETERS SETTING
  - Coffee brewing doses programming (A-AC-AM-AW)
  - Brewing temperature setting (A-AC-AM-AW)
- MILK PREPARATION PARAMETERS SETTING
  - Hot milk temperature setting (AM)
  - Frothy milk temperature setting (AM)
  - Amount of froth in milk setting (AM)
- WATER TREATMENT CIRCUIT RINSE (AW)
- CALLS AND ALARMS RESET
  - Heating element safety device reset (A-AC-AM-AW)
  - Scheduled maintenance alerts reset (A-AC-AM-AW)
  - Active carbon cartridge replacement alert reset (AW)
- PRODUCTION AND CONSUMPTIONS DISPLAY AND RESET
  - Coffee production display and reset (A-AC-AM-AW)
  - Water consumption display and reset (A-AC-AM-AW)

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-AC-AM-AW)

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-AC-AM-AW)

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-AC-AM-AW)

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 (AW)

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 (AW)

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 COFFEE BREWING DOSES PROGRAMMING (A-AC-AM-AW)

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

2.7 BREWING TEMPERATURE SETTING (A-AC-AM-AW)

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.

2.8 HOT MILK TEMPERATURE SETTING (AM)

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.

2.9 FROTHY MILK TEMPERATURE SETTING (AM)

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.

2.10 AMOUNT OF FROTH IN MILK SETTING (AM)

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%

2.11 WATER TREATMENT CIRCUIT RINSE (AW)

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.

2.12 HEATING ELEMENT SAFETY DEVICE RESET (A-AC-AM-AW)

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.

2.13 SCHEDULED MAINTENANCE ALERTS RESET (A-AC-AM-AW)

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.

2.14 ACTIVE CARBON CARTRIDGE REPLACEMENT ALERT RESET (AW)

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

2.15 COFFEE PRODUCTION DISPLAY AND RESET (A-AC-AM-AW)

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.

2.16 WATER CONSUMPTION DISPLAY AND RESET (A-AC-AM-AW)

The system records the following:
1) Volume of softened water consumed (AW)
2) 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-AC-AM-AW-S-M-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 (AW)

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-AC-AM-AW)

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 (AW version 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.

ELEKTRA®

ITALIAN ESPRESSO COFFEE MACHINES SINCE 1947

Zuccarini

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A.D.: Holbein & Partners - COD. 03976.035 - Edition: 23/04/12 - Tipografia Crivellari 1918