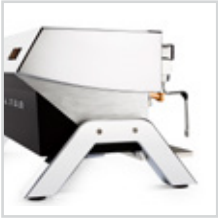
INSTRUCTION MANUAL

PROFESSIONAL ESPRESSO COFFEE MACHINE

INDIE

GB



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GENERAL INSTRUCTIONS

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

A INTRODUCTION

This manual is intended for the professional INDIE espresso coffee machine manufactured by ELEKTRA.

This model is equipped with the following accessorie listed in this handbook with correspondent abbreviations:
- MFS = Automatic milk frothing
for which one must consult the relevant manual.

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.elektrasrl.com

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.
The appliance cannot be installed at an altitude higher than 2000 metres.
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 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 and in conformity with rule AS/NZS 3000.
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 USER-MACHINE INTERFACE

Each dispensing group is fitted with an intelligent touch-screen allowing simple and immediate communication between the user and the machine.
Communication occurs through the following icons, which constitute the switches, the pusbuttons, the signalings, the displays and alarms necessary for the operation and control of the appliance.

SWITCHES

Off On

IG42
Body lighting switch

Off On

IG43
Body lighting colors rotation switch

Off On

IC1
Dispensing group heating switch

Off On

IG1
Upper cup holder heating switch

PUSHBUTTONS

off on executed

IC37
Purge of dispensing group pushbutton

IC4
Single short coffee dispensing pushbutton

IC5
Single long coffee dispensing pushbutton

IC6
Double short coffees dispensing pushbutton

IC7
Double long coffees dispensing pushbutton

IC8
Manual coffees dispensing pushbutton

IG16
Time and date setting pushbutton

IG17
Night cycle setting pushbutton

PUSHBUTTONS

IC40
Dispensing group parameters setting pushbutton

IG21
Hot water dose setting pushbutton

IC43
Production or Competition mode selection button

Spento

Acceso

IC46
Production mode settings button

Spento

Acceso

IC49
Competition mode settings button

IG2
Data recording pushbutton

IG31
Return to operating display pushbutton

IG32
Return to menù pushbutton

PUSHBUTTONS

Spento

Acceso

IC31
Dispensing group wash pushbutton

Spento

Acceso

IC34
Dispensing group rinse pushbutton

SIGNALINGS

UC55
Dispensing group heating up signaling

UG3
Machine heating up signaling

UG4
Machine in night cycle signaling

UG15
Not serious alarm signaling

UC73
Signaling “Production” mode

UC76
Signaling “Competition” mode

SIGNALINGS

UC64
Dispensing group end wash signaling

DISPLAYS

UG6
Boiler pressure display

UG5
Water supply pressure display

UG7
Brewing water pressure display

UG33
Night cycle start time display

UG34
Night cycle end time display

UC79
Coffee dosage display

UC82
Infusion time display

UC72
Temperature values display

US18
Hot water measurement display

ALARMS

UC58
Dispensing group temperature control fault alarm

UC61
Brewing not satisfactory alarm

UG8
Buffer battery discharged alarm

UG9
Water supply low pressure alarm

UG10
Boiler water level control fault alarm

UG11
Boiler temperature control fault alarm

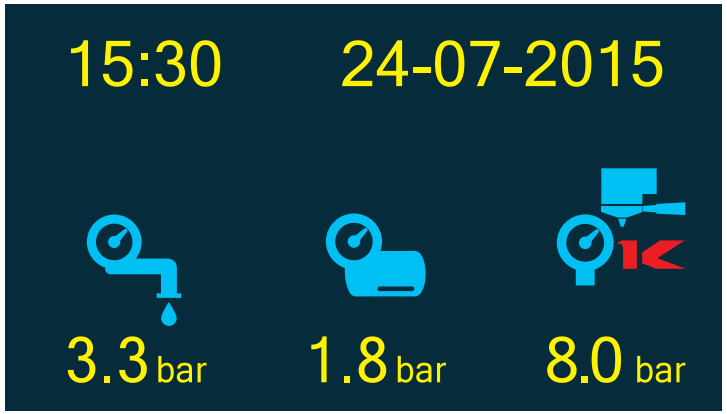
UG41
Electronic control fault alarm

These icons are managed via 10 main screens and 8 programming screens selectable by horizontal scrolling. These screens allow the main macro-functions of the equipment to be managed, as follows:

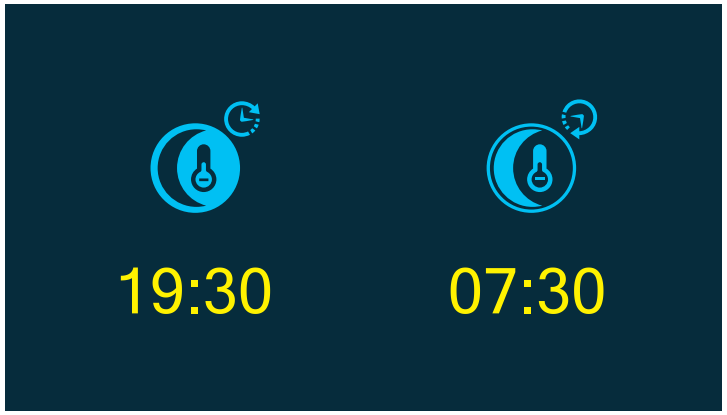
V1 - Operational screen for switching-on coffee dispensing, serious alarms and signalings

V2 - Screen for non-serious alarms

V3 - First operating parameters display screen

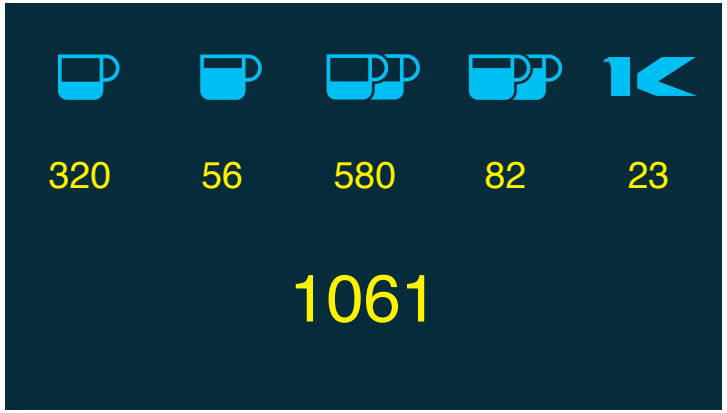


V4 - Second operating parameters display screen



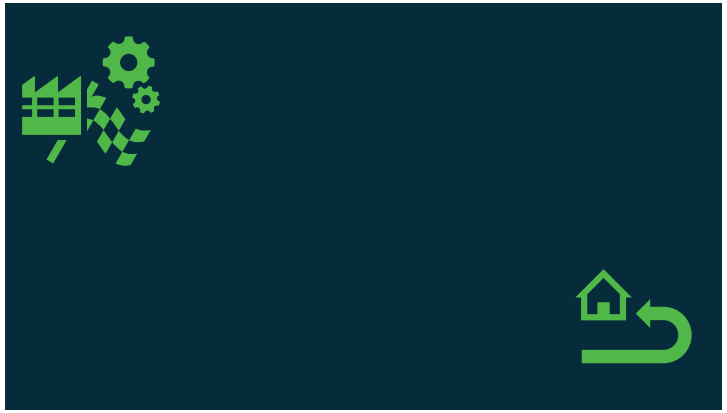
V5 - Third operating parameters display screen

V6 - Fourth operating parameters display screen

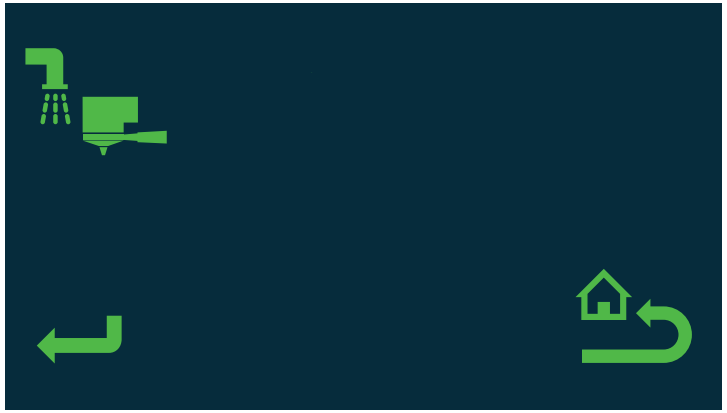


V7 - First functional parameter selection screen to be set

V8 - Second functional parameter selection screen to be set



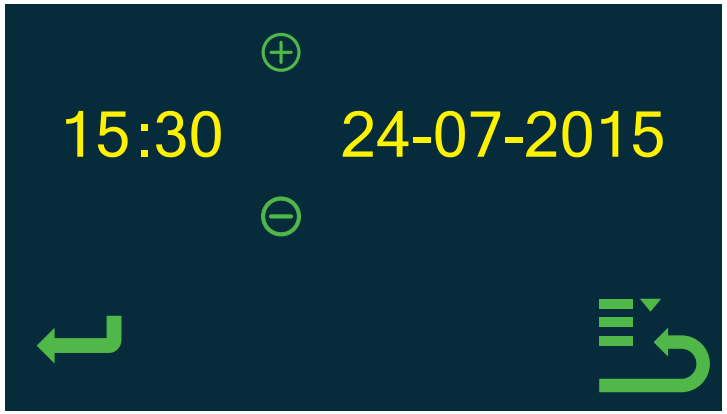
V9/1 - First operating maintenance controls screen



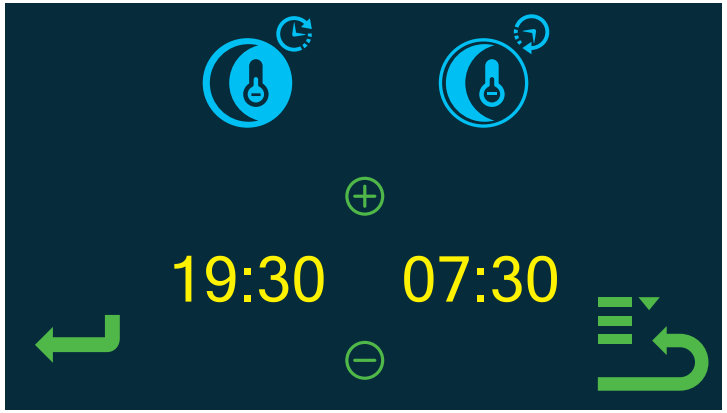
V9/2 - Second operating maintenance controls screen

V10 - Technician controls access screen

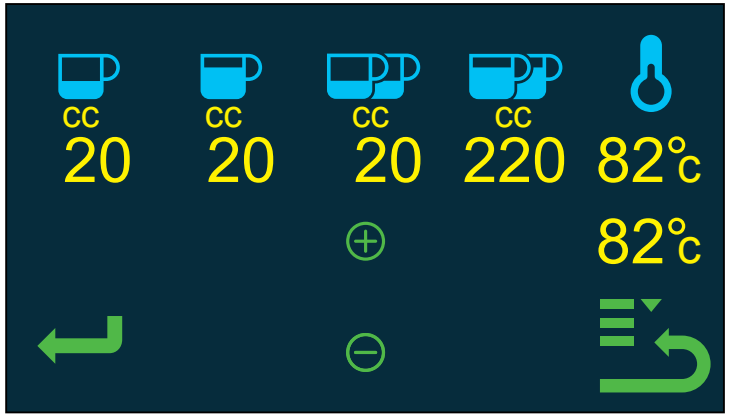
VP1 - Time and date settings screen



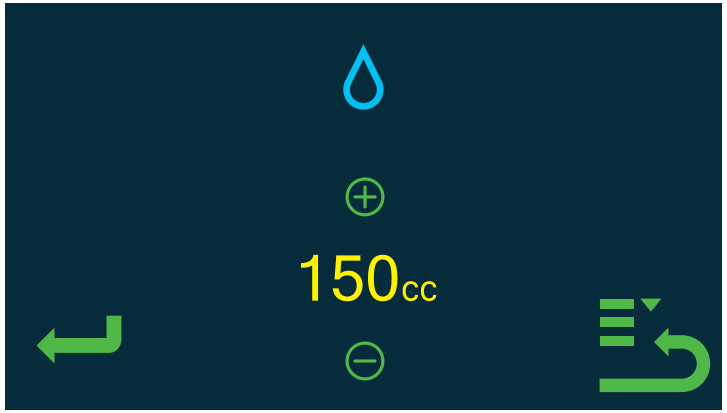
VP2 - Night-time cycle settings screen



VP3 - Coffee temperature and dosage settings sreeen



VP7 - Hot water volume settings screen



VP8 - Production or Competition mode settings screen

The touch-screens of the central and right dispensing groups have only screens V1, V6, V7, V8, V9, V10, VP3 e VP8 relating to their functions and not to those of the entire appliance.

2 COFFEE DISPENSING

The machine is fitted with dispensing groups that can be turned on and used individually.
The groups are characterised by low thermal inertia, are self-heating, with highly accurate dynamic infusion water temperature control.
Each group is also fitted with an infusion water pre-heater in order to minimise the thermal gradient necessary to maintain the desired temperature and also to minimise reaction times to any temperature adjustment.
This mode allows to settle the infusion water temperature in real-time during the coffee extraction, in a range of values between 70°C to 95°C.
It is in fact possible to set the operating temperature of each group head independently, according to 2 different modes: Production or Competition.

2.1 PRODUCTION OPERATING MODE

This mode, by means of the presetting of the extraction temperature and the coffee volume, allows a fully automatic and repetitive production, characterized by execution speed and consistency of the beverage.

2.2 COMPETITION OPERATING MODE

This mode allows the realization in real time, ie during the same delivery, of a curve of the extraction temperature as a function of the elapsed time or the quantity dispensed, leaving room for creativity and experience of the Barista to obtain the best possible result with his coffee.

3 STEAM DISPENSING

The machine is equipped with one or two steam dispensers with semi-automatic control and graduated flow regulator.
The steam is produced by a dedicated boiler, of a capacity of 12 L for 2 group models and 16 L for 3 group models.The steam flow can be adjusted in real time during delivery, with pressure values between 0.8 and 1.8 bar. Maximum production of milk heated between 5°C and 65°C: 30 Lts/hour per steam wand.
Dispensers are fitted with equipped with swivel wands which allows the use of large milk or water containers thus guaranteeing good general ergonomics.
The steam wands are thermally insulated in such a way that they can be operated easily without causing burns.

4 HOT WATER DISPENSING

The machine is fitted with an automatic hot water dispenser, which can be controlled according to predetermined configurable values.
Values: from 300cc to 1500cc.
Water temperature: 70/80°C.
The dispenser is fitted with a heat exchanger that heats the water taking it directly from the water supply.

5 CONTROL OF WATER LEVEL IN THE BOILER

This is done by means of a level probe and electrovalves that load the water into the boiler, topping it up automatically when required.

6 CONTROL OF WATER TEMPERATURE IN THE BOILER

Water temperature in the boiler is controlled by a sensor that switches the heating elements through a remotely controlled power switch.
Consequently, it also controls the pressure in the boiler, kept constantly at 1.8 bar.

7 CONTROL OF BREWING WATER TEMPERATURE

Each group head is fitted with an instantaneous heat exchanger circuit and heating resistance of the infusion water, which reaches the dispenser group pre-heated at a temperature of around 70°C.
A sensor measures the temperature of the quantity of water to be dispensed, immediately before its entrance in the filter containing the coffee.
Such system, together with the low inertia and high thermal insulation design features, allows the brewing water temperature to be maintained equal to the value set in real time with high precision and high physical variation speed.

8 CONTROL OF COFFEES DOSAGE

Each group head is fitted with a flow rate sensor, or a volumetric dosage device.
It measures the volume of water being fed through the group, to ensure that the final volume of coffee in the cup corresponds to the value programmed by the user.
At the end, the final volume of coffee in the cup, in cubic centimetres (millilitres), corresponds to its weight in grams, since the specific weight of the extract being almost the same of the water.
To achieve this result, the device control system takes account of the quantity of water necessary to wet the coffee puck, quantity that does not reach the cup during the extraction, and adds it to the programmed quantity.
The quantity of water necessary to wet the coffee puck is presetted at the factory, with the quantity of ground coffee as 6/8 grams for singles and 12/16 grams for doubles.
The dispensing capacity corresponding to these parameters is around 1 cc/second, ie obtained by grinding granulometry required for the Italian espresso.
When using different quantities of coffee or different grinding granulometry, kindly contact Technical Support. This system is not requiring complex and unreliable technologies such as Gravimetric technology, while still allowing a very high precision in determining the so-called Brew Ratio but with very low production times, for example, is not requiring the filterholder weighing before and after loading the coffee.

9 MEASURING THE BREWING PRESSURE

The device is fitted with a pressure sensor that measures the pressure delivered by the pump during brewing
The reading of the screen V3 value, enables the technician to set manually the water pump pressure while is making a coffee.

10 MEASURING THE WATER SUPPLY PRESSURE

The same sensor, referred to in the previous paragraph, measure when the water pump is stopped, the water supply pressure with which the apparatus is fed. Value displayed on the same V3 screen.
Enables automatic protection in the event of a water supply stoppage., by halting the machine.

11 PROTECTION OF THE HEATING ELEMENTS

The three boiler resistance values, 1170 W each for the 2 group model and 1830 W each for the 3 group model, and the resistances of each dispensing group, each of 800 W, are protected from overheating.
Such protection is made by means of a thermostat for the boiler and of a thermostat for each group, all with manual reloading, which control the cutting off of power to the heating elements.
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 on screen V1.

12 WARMING THE CUPS

The equipment is fitted with a heated cup tray that allows the cups to be kept hot for a good final result of the infusion.
The heating is obtained by a series of heating plates, each fitted with 60W resistance, which self-stabilises the temperature.
Three plates for the 2 group model, four plates for the 3 group model.

13 LIGHTING OF THE WORK COUNTER

The machine is fitted with neutral white light lighting of the cup tray during dispensing.
It allows a clear and correct view of the result in the cup by assessing the colour of the extract.
It is made with a high power spot LED positioned above each group.

14 BODY LIGHTING

The machine is equipped with multi-color led lights of the posterior side (opposite side with respect to the work side) of the body, which highlights its design features and visibility.
The colours can vary continuously or a fixed colour can be selected at will.

15 SOUND EMISSION

Weighted sound emission level A: 80dB uncertainty 1dB.

E TYPE APPROVALS

1 EUROPEAN TYPE APPROVALS

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

All products bearing this mark can to 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:

2001/95/EC	General safety
2004/1935/EC	Materials and objects in contact with food (MOCA)
2006/42/EC	Machinery
2011/65/EC	Restrictions on use of some dangerous material (ROHS)
2012/19/EU	Waste electric and electronic equipment (RAEE)
2014/30/EC	Electromagnetic compatibility
2014/35/EC	Electrical safety
2014/68/EU	Pressure equipment (PED)

OPERATION INSTRUCTIONS

THESE INSTRUCTIONS ARE INTENDED FOR BARMAN / ESPRESSO COFFEE MACHINE OPERATOR

A USE

1 SWITCHING ON THE APPLIANCE

The machine switches on by the switch marked with the symbol ⏻ placed under the machine itself.
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 following signaling is visualised on screen V1:

When the boiler is pressurised, signaling disappears.
At this point, it is possible switching on the dispensing groups.

2 SWITCHING ON THE LIGHTING

The lighting is switched on through marked with the symbol:

on screen V1.

By the pushbutton marked by the symbol:

of the same screen, you can switch from a slow colors rotation to a fix color of your own choice, of the lighting of the posterior side of the bodywork.

3 SWITCHING ON THE CUP HEATER

Press the switch marked with the symbol:

on screen V1.

4 SWITCHING ON THE DISPENSING GROUPS

Once the boiler is hot, appears on screen 1 of each dispensing group, the switch marked by symbol:

Once the group is activated, the group starts reaching the previously set temperature and signaling marked by symbol:

appears on the same screen.
When the group is hot, warning disappears.
At this point it possible dispense the coffees.

5 NIGHT CYCLE

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 (40°C).
In this state buttons with automatic dosing are not enabled, only the manual dosing buttons can be operated.

The following signaling is visualised in screen 1 during the night cycle:

When this period of time has elapsed, the machine resumes normal operation.
See the following paragraphs..
Such cycle, as it does not cool down the machine completely, allows less limestone deposits to accumulate in its hydraulic components and to save energy.

6 OPERATING PARAMETERS DISPLAY

By swiping the left group touch-screen horizontally to the left, screen V3 is visualised, which displays the following operation parameters:

- Time and date

- Water supply pressure

- Boiler pressure

- Brewing water pressure

Infusion pressure is correctly visualised by setting up the pump by the pushbutton marked by the **K** symbol present in the signaling itself.

From here, performing an upward swipe motion, screen V4 is visualised, specifying the following operation parameters:

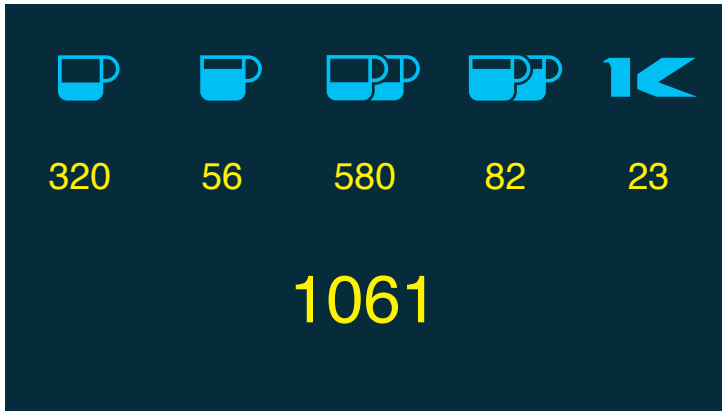
- Night cycle start time

- Night cycle end time

Performing another upward swipe motion, screen V5 is visualised, specifying the following operation parameters:

- Hot water measurement

Performing a final scroll vertically upwards, even on the center and right groups will see the screen V6, which indicates the number of each type of coffee provided by that specific dispensing group and the relative total:



7 OPERATING PARAMETERS SETTINGS SELECTION

From the V3 screen, scrolling horizontally to the left on the touch-screen of the left group, V7 screen appears that allows you to select the setting of the operating parameters by means of the following buttons that open the corresponding programming screens:

- Time and date setting

- Night cycle setting

- Dispensing group parameters setting

(also on the centre and right groups), in PRODUCTION mode only

- Hot water dose setting

From here, by scrolling upwards until screen V8 is displayed, which allows you to set the machine's operating mode using the following button:

- Setting Production or Competition mode

(on the centre and right group heads also)

With the button marked by symbol:

is possible to save the set value

With pushbutton:

it is possible to go back to screen V8.

With pushbutton:

it is possible to go back to the main screen V1.

8 OPERATING PARAMETERS SETTING

8.1 SETTING TIME AND DATE

Screen VP1 allows you to set the current time and date using the plus ⊕ and minus ⊖ icons and, confirming this by using the enter button

8.2 SETTING NIGHT-TIME CYCLE

Screen VP2 allows you to set the start and end time of the night-time cycle, in sequence, using the plus ⊕ and minus ⊖ icons and, set this value by using the enter button

8.3 "PRODUCTION" OR "COMPETITION" MODE SETTING

Screen VP8 allows you to set one of the two possible machine operating modes during coffee extraction, "Production" or "Competition" mode.

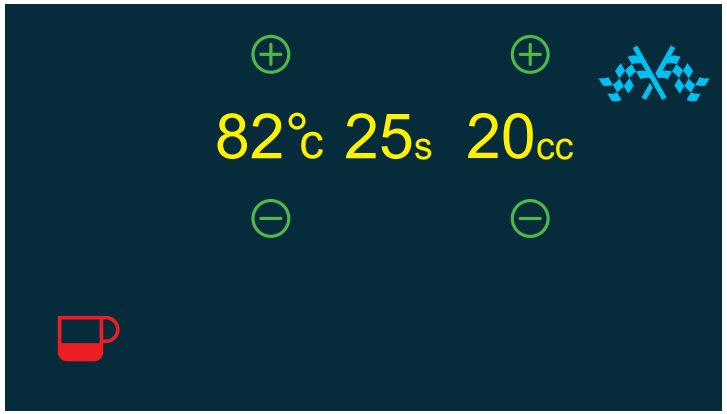
"Production" mode is indicated on the upper right corner of the touch-screen by the symbol

"Competition" mode by the symbol

In "Production" mode, during extraction appears screen V1/9:

It provides a dynamic display of extraction time spent and the quantity of coffee delivered into the cup.
In this mode, it is not possible to make any changes to the extraction, temperature and coffee parameters during extraction.

In “Competition” mode, during extraction appears screen V1/8:



it provides a dynamic display of extraction temperature, time spent and quantity of coffee delivered into the cup.
During extraction It is possible to adjust in real-time the extraction temperature and coffee dosage.

8.4 “PRODUCTION” – COFFEE DOSAGE SETTING

Screen VP3 allows you to set, in sequence, the coffee dosage of each of the four buttons

on screen 1, by the plus ⊕ and minus ⊖ icons, and set the value using the enter button

8.5 PRODUCTION – COFFEE TEMPERATURE SETTING

Screen VP3 also allows you to set the coffee extraction temperature. It also displays the instantaneous temperature value, comparable to the set value.

8.6 “COMPETITION” – COFFEE DOSAGE SETTING

In real time, during dispensing, by acting on the plus ⊕ and minus ⊖ icons on the V1/8 screen, it is possible to vary the final dosage of the running coffee.

8.7 “COMPETITION” – COFFEE TEMPERATURE SETTING

In real time, while dispensing, acting on the plus ⊕ and minus ⊖ icons on the V1/8 screen, it is possible to change the infusion water temperature to create a personalized extraction curve at will.

8.8 HOT WATER DOSAGE SETTING

The VP7 screen allows you to set the hot water dosage, extracted from the appropriate dispenser marked by the symbol

using the plus ⊕ and minus ⊖ icons and to record the setting using the enter button

9 USE OF THE WORKING AREAS

The machine is divided into a central area of coffee dispensing, a steam and hot water dispensing area on the left and steam dispensing area on the right.
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).
Includes one independent grilles and a two raised work counter for coffee area.

10 PURGE

Before dispensing a coffee, you can clean the dispensing group, purifying it from the residues of exhausted coffee of the previous coffe dispensing.
Remove the filter holder and press the pushbutton:

starts an automatic hot water dispensing lasting a few seconds, which carries out the washing of the group.
Once the purge is executed, the button changes from green to yellow

to indicate that the operation has already been performed.

11 MANUAL DISPENSING OF COFFEE

This allows coffees of different lengths to be dispensed each time by pressing the pushbutton marked with symbol:

placed on screen V1, and repressing the same button when the desired dose has been dispensed. In the “Competition” mode only during dispensing, screen V1 displays the live values for infusion temperature.
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

12 COFFEE DISPENSING WITH AUTOMATIC DOSING

Allows the dispensing of coffee in preset brewing temperature and preset doses..
It is performed with the pushbuttons marked by symbols:

placed on screen V1, pressing 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 can normally be stopped manually pressing the same button again.

During dispensing, the time elapsed from the beginning of dispensing is displayed.
The final value of the time taken, together with the temperature and volume values, is visualized for 10 seconds after the end of the dispensing.

The value of the time taken, together with the one of the final coffee volume, allows to assess whether the grinding grade of the powder used is correct.
See the paragraph 13 MAKING THE COFFEE.

13 MAKING THE COFFEE

Factors of basic importance to make good quality coffee are:
- Use of recently ground fresh coffee, because it rapidly loses its aroma and the fats contained turn rancid.
- Grinding of uniform size, which can be obtained only with good quality and well maintained coffee grinders. The uniform size of the powder ensures a complete extraction and a good reproducibility of the result in the cup.
- Use of properly warmed cups, which contribute considerably to preserving the cream of the infusion.

With the exception of the above-illustrated factors, there are many recipes to obtain many different types of infusions, based first of all on the type of coffee bean used, both for the production of mixes and as single-origin coffee.
The fundamental parameters are:
- Type of coffee bean used
- Grinding grade
- Quantity of powder used
- Infusion water temperature
- Infusion pressure
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.
The quantity of ground coffee must be of around 7 grams.
Infusion temperature varies between 80°C and 95°C depending on the type of coffee used.
Infusion pressure between 8 and 9 bar.

1) Detach the filterholder from the dispensing group by turning it towards the left,
2) Discharge the coffee cake into the waste drawer without striking too hard so as not to damage the edge of the filter.
3) Perform the group purge by pressing the button

4) Fill the filter with the dose of ground coffee.
5) Level it out and press it with the tamper.
   Ensure that no grounds are left on the edges of the filter.
6) Attach the filterholder to the dispensing group, turning it firmly towards the right.
7) Place the cups underneath the spouts and start dispensing.

14 PREPARING FROTHY MILK

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) Activate briefly the steam dispenser by pressing the button marked by the symbol 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, then regulate the steam dispenser again. Adjust the optimal flow with the numbered wheel and 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, and then regulate the steam dispenser again to interrupt the dispensing of steam.
To make the cappuccino add hot espresso coffee to the hot frothy milk.

15 MAKING TEA - CAMOMILE TEA ETC

Put the container under the hot water nozzle and activate the hot water dispenser by pressing the button marked with the symbol .
Once the set hot water volume is reached, the dispensing interrupts automatically.
At this point, use the hot water to make the drink of choice.

B MAINTENANCE AND CLEANING

1 DAILY CLEANING OF DISPENSING GROUPS AND FILTERHOLDERS

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

⚠ 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 ⚠.
Externally clean with a moist sponge, the steam nozzle immediately after every milk preparation cycle. 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) Place the wand into the water filled pitcher.
3) Activate the steam dispenser by pressing the button marked by symbol until the water boils, obtaining a complete disinfection of the wand.

3 WEEKLY CLEANING OF THE GROUPS

⚠ At least weekly, it is necessary 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 and for each group, as follows:

1) Substitute the standard filter mounted on the filter holder of the group with the blind (non perforated) filter.
2) Insert an ELEKTRA clearing tablet in the blind filter and hook the filter holder on the group.
3) Press the pushbutton:

on the screen V9/1, displayed by swiping horizontally towards the left on the touch-screen, then confirm by pressing the button.

The cleaning starts on the group, running 10 dispensing loops of 20 seconds each one.

At the end of washing cycle, the V9/2 screen displays:

and the dispensing group rinse button:

4) Hook off all the filter holder and do not reconnect it.
5) Press the button:

a rinsing step will get started on the dispensing group, divided into 30 seconds of dispensing, 30 seconds of stop and 30 second of dispensing.
On rinse completion the dispensing group will go back on normal functioning, ready to the use: remove the blind filter, place the standard filter back and hook the filter holder on the dispensing group.

4 WEEKLY CLEANING OF THE FILTERS AND FILTERHOLDERS

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 wood handles: the water and detergent solution would damage the handles).
3) Rinse thoroughly under running water.

5 WEEKLY CLEANING OF THE LOWER DRIP TRAY

At least once a week remove the lower cup grille, remove the lower 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 ⚠.

6 WEEKLY CLEANING OF THE BODY

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 DISPENSING GROUP TEMPERATURE CONTROL FAULT ALARM

If on the main screen V1 the following alarm appears:

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

2 BREWING NOT SATISFACTORY ALARM

If, after dispensing selected with an automatic pushbutton, for example

the following alarm is displayed:

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 (see also chapter "A - USE", paragraph 8 and "C - SETTINGS", paragraph 1).
As an alternative, there could be a fault or obstruction to the passage of water in some element: contact Technical Assistance.

3 ALARM: BUFFER BATTERY ABOUT TO GO FLAT

The electronic control unit of general operation with a buffer battery that ensures the storing of the time and date.
The system continually controls the efficiency of the battery, alarm in advance when it is about to go flat and advising its replacement.
The warning occurs through the generic icon:

on the main screen V1.

By swiping the left group touch-screen horizontally towards the left, screen V2 is displayed, with icon:

Contact Technical Assistance.

4 INADEQUATE WATER SUPPLY PRESSURE ALARM

If on the main screen V1 the following alert appears:

the machine has suspended all of its functions in order to prevent damage to the pump and other parts. This occurs when Inadequate water supply pressure: restore it; the machine will resume operation automatically.

5 BOILER WATER LEVEL CONTROL ALARM, FAULT

If on the main screen V1 the following alert appears:

a major fault has occurred.
The fault could be due to:
- 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:

⚠ Switch off the machine and contact Technical Assistance ⚠.

6 BOILER TEMPERATURE CONTROL ALARM, FAULT

If on the main screen V1 the following alert appears:

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

7 ELECTRONIC CONTROL ALARM FAULT

If on the main screen V1 the following alert appears:

It is in the presence of a serious fault in the electronic control system of the appliance or to the electrical wiring system.
⚠ Switch off the machine and contact Technical Assistance ⚠.

8 THE MACHINE DOES NOT PRODUCE STEAM AND DOES NOT HEAT UP THE WATER

Due to the (even temporary) lack of water in the boiler the heating element safety device may have been disactivated of the boiler.
⚠ The heating element safety device can be manually reactivated, after the reason for the lack of water in the boiler has been eliminated or repaired ⚠.
Contact Technical Assistance.

9 STEAM DOES NOT COME OUT OF THE WAND WHEN THE MACHINE IS HOT

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 activating a dispenser steam wait until the machine heats up normally and use it.

In the meantime, contact Technical Assistance.

10 WATER COMES OUT OF THE STEAM WAND

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 ⚠.

11 WATER DOES NOT COME OUT OF A DISPENSING GROUP

The possible causes of this are:

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

12 ONE DISPENSING GROUP DOES NOT HEAT SUFFICIENTLY

It is possible that, following a fault in the group temperature sensor and its subsequent overheating, the resistance protection device of the group might have become deactivated.

⚠ The resistance protection device must be manually reactivated only after having removed the cause of the fault ⚠.

Contact Technical Assistance.

13 BREWING PRESSURE NOT BETWEEN 8 AND 9 BAR

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.

14 THE DRIP TRAY IS FULL AND OVERFLOWING WITH WATER

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”, paragraph 3.

D DISPOSAL OF THE APPLIANCE

The European Directive 2012/19/EU (RAEE) 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.

TECNICHAL 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

1 ADJUSTING THE FEET

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

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).
Furthermore, this connection must be carried out in compliance with local regulations.
Hardness of the water not above 20°F.
Were the hardness higher than the above value, install a water softener between the water network and the machine.
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) Connect this flexible tube to the water softener, if present, or directly to the water network (water mains).

3 DRAIN CONNECTION

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.

4 ELECTRICAL CONNECTION

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.
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:

4.1 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 themshelves and connect them to the single terminal of the phase present in the electric switchboard.

4.2 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.

5 FILLING THE HYDRAULIC CIRCUITS

1) Ensure that the water supply is turned on.
2) Switch on the machine.
3) Activate the manual dispensing of each group by pressing the button marked by the symbol

on screen V1, until complete elimination
of the air contained in the water circuits and regular outflow of water.

C ADJUSTMENTS

1 BREWING PRESSURE ADJUSTING

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).

Unmount the lower steel panel (lower front pane) in frontal position on the machine's work side, unscrewing the five screws that fix it in place.
Behind it lies the pump with its pressure regulator, which can be adjusted with a screwdriver.
Screen V3 of the left group's touch-screen specifies the infusion pressure with icon:

Dispense a coffee by pressing the button of manual brewing, marked by the **K** symbol, placed on the same icon and proceed to adjusting the pressure.

D MAINTENANCE

1 ACCESS TO MAINTENANCE CONTROLS

By sliding horizontally to the left of the touch screen of each group, from the V9 screen we access to the V10 screen, necessary for accessing to the maintenance commands.
These commands are reserved to the Technician only.
The technician will perform on this screen a graphic password known to him and will have access to the following:

- Special machine operating parameters.
- Characteristics of the machine, so you know the upgrade level and the correct spare parts.
- Commands to set up the equipment suitably in such a way can be compatible to service to be performed (on the left group only).
- Data reset commands.

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