ESTD 1956

Conti

MONACO

NGX

TECHNICAL DOCUMENTATION

Edition 01/2026

index **Page**

1 SAFETY INSTRUCTION

1.1 WARNINGS

- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory, or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
- Children shall not play with the appliance.
- Cleaning and user maintenance shall not be made by children without supervision.
- Technical handling operations, such as installation, maintenance, or troubleshooting, must be carried out by qualified personnel or by a local dealer.
- The A-weighted sound pressure level is below 70 db.
- The appliance shall be connected to the water mains by the hose provided with the coffee machine, paying attention to any applicable national rules.
- For the installation instructions, check the section 4 of this manual.
- The appliance is not suitable for installation in an area where there is a water jet.
- The appliance must be placed in a horizontal position.
- The appliance is only to be installed in locations where its use and maintenance is restricted to trained personnel.
- For maintenance, check section 15.
- The appliance must not be cleaned by a water jet.
- To ensure the hygienic aspect follow the section 15 “Daily maintenance”.
- Devices for disconnection from the main supply, having a contact separation of at least 3mm in all poles, that provide full disconnection under overvoltage category III must be provided in the fixed wiring in accordance with the installation rules.
- If the supply cord is damaged, it must be replaced by manufacturer, its service agent, or similarly qualified persons to avoid a hazard.
- To prevent freezing, we recommend respecting the declare operating temperature: 5-32°C.
- The ambient humidity must not exceed 70 %
- The machine must be placed such as the cup warmer is located more than 1.5 meters from the ground.
- The machine must be connected to a supplying voltage:

  Suitable for the voltage and the power consumption of the machine

  Fitted with a residual current device (RCD), with a rated current not exceeding 30mA
- For the correct operation the minimum inlet water pressure should be 0,15 MPa and the maximum inlet water pressure should not exceed 0,6 MPa

1.2 DURING INSTALLATION

- The installation (electrical connections, water supply and drainage) must be carried out by a qualified technician approved by CONTI.
- The machine must be connected to a device conforming to the standards of the country where the machine is installed. Potential costs of equipment compliance are the only responsibility of the customer.
- For any technical intervention, the machines must always have the power disconnected from the mains. An effective earth connected to the terminal provided for this purpose on the device is mandatory
- A screw located under the bottom base machine, allow if necessary, to connect several machine on an equipotential way.

1.3 DURING THE USE

- When the machine is not operating, the water cut-off valve has to be closed and the electrical power supply cut.
- When the machine is not supervised it must be disconnected from the power and water supply.
- Never disconnect the earthing when the machine is connected to the power supply.
- Machines must always be disconnected from the main power, in case of technical interventions.
- **We guarantee our machines subject to a correctly sized water treatment is installed backward and adjusted according to the carbonate hardness of the water network.**

1.4 RULES RELATING TO THE ENVIRONMENT

- This device has been designed according to the European Directive No. 2002/95/EC. This refers to the restriction of certain hazardous substances in electrical and electronic equipment (ROHS)
- This device has been designed in compliance with the European Directive No. 2002/96/EC concerning waste electrical equipment (WEEE).

- This picture informs you that this device should not be discarded with household waste.
- At end of life, this product must be returned to a collection point or returned to an authorized dealer. By doing so, you will help to protect the environment and human health.

2 TECHNICAL DOCUMENTS

MACHINE TYPE	HEATING POWER (Watt)	INSTALLED POWER (Watt)	POWER USED (Amps).	
			230V	TRIPHASE 400V
NGX 2G triphasé	4200	4600	--	8 A / Ph--
NGX 3G triphasé	6000	6400	--	11 A / Ph--
NGX 2G monophase	3500	3900	18 A	

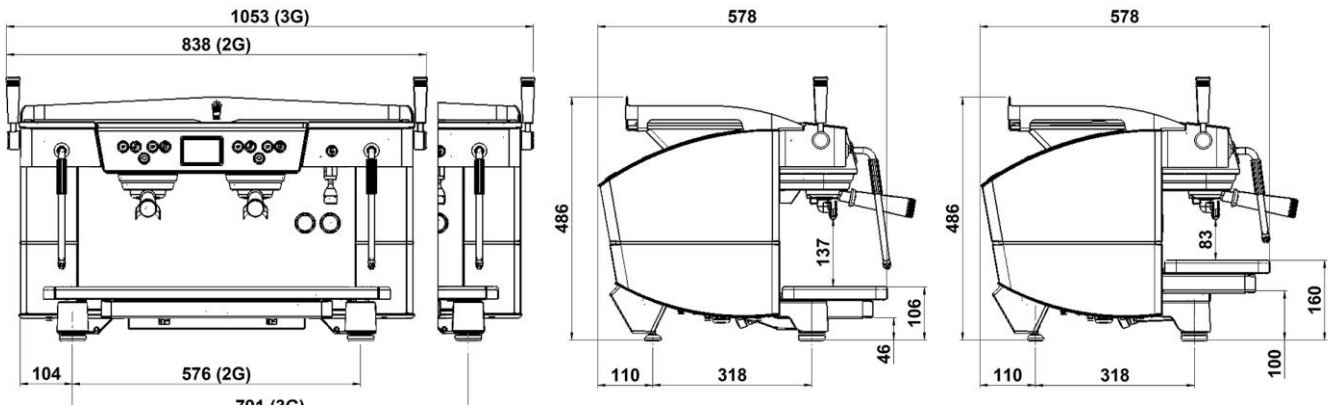
In option :

NGX 2G US (220V)	3800	3800	18 A	--

CAPACITY OF BOILER IN LITERS		
	2G	3G
TOTAL	12	18
VOLUME OF HOT WATER	9	14
VOLUME OF STEAM	3	4

	WEIGHT (Kg)	WEIGHT WHEN WORKING (Kg)
2G	75	81
3G	90	100

3 DIMENSIONS



4 INSTALLATION

4.1 IN CASE OF A STANDBY OF THE MACHINE (STANDBY = 2 MONTHS):

- The first thing to do is to test your machine in a lab.
- If the machine stops running for a long time, you could have scale in some places.
- More precisely in small area like the spray nozzle.

4.2 PROTECTIONS

- It is necessary to place before the machine:
    - A water shutoff valve.
    - An electrical protection standard, suitable for voltage and power consumption.

4.3 WATER SUPPLY

- Recommended operating pressure from 0,15 MPa to 0,6 MPa
- Water connection pin 3/8"
- The water supply pipes must resist to 145 Psi / 1 MPa

4.4 DRAIN

- Sans pression.
- **Spigot at the outlet of the machine and a pipe is supplied with the machine**
- Ensure a connection that causes no risk of fluid return, and ensure good drainage:
    - The drainpipe must be located lower than the machine.
    - Do not create a bend in the exhaust tube.

4.5 SUPPLYING VOLTAGE

- To be specify when ordering: 230V – 50/60Hz Monophase
- Otherwise, it's: 400V – 50/60Hz Trifase

4.6 WATER SOFTENERS

- When the mains water has a high hardness (>10°TH ou >4 °KH), it is recommended:
  - To use a water treatment
  - To regenerate regularly the filters.

- What is the **total Hardness of the water?**
  - This is the amount of calcium and magnesium ions in the water.
  - These ions are partly responsible for limestone formation.
  - It is measured with the test strip provided with the machine.
  - The unit of measurement is the ° French (° TH) or the ° German (° dH).

- What is the **Karbonat Hardness of the water?**
  - This is the amount of Carbonate Calcium ions and Carbonate Magnesium ions in the water.
  - These ions are completely responsible for limestone formation.
  - It is measured with chemical dropper testers.
  - The unit of measurement is ° Carbonate (°KH)

There are 2 types of water treatments:

- Salt water softeners
  - They treat the total water hardness (°TH)
  - By an exchange of sodium ions with calcium and magnesium ions.
  - They require periodic regeneration of the resins by the user.
  - To use when the water hardness is > à 10°TH or > 5 ° GH
- Resins filters :
  - They treat the Carbonat hardness water (°KH)
  - By fixing carbonate ions on the resins.
  - Often fitted with microfiltration and carbon filtration.
  - To use when the Carbonat Hardness is > à 6° KH
  - Highly recommended by the manufacturer:
    - The machines are equipped with suitable protection in accordance with flowrate and the water encountered.
    - The changing cartridges is carried out by the technical service, at intervals to be determined.

5 OPERATION

5.1 RECOMMANDATIONS

- Open the general water tap, if it is closed.
- Then open the water shutoff valve dedicated to the machine.
- Do not put the supplying voltage at this moment.
- Check the presence of water in the machine on the M2 pump pressure gauge. (between 2 and 6 Bars) (0.2 to 0.6 MPa)

5.2 INITIAL FILLING

- Ensure that steam taps operating levers 'V' are open.
- Put the ON/OFF switch to position 1 (power on).
- The display shows for 6 seconds:

- The light bar around the perimeter of the machine lights up.
- The boiler fills automatically, without heating.
- The LEDs on the keyboards perform a chaser.
- The display shows:

- The machine starts to heat, only when the level probe is reached by the water.
- The display shows:

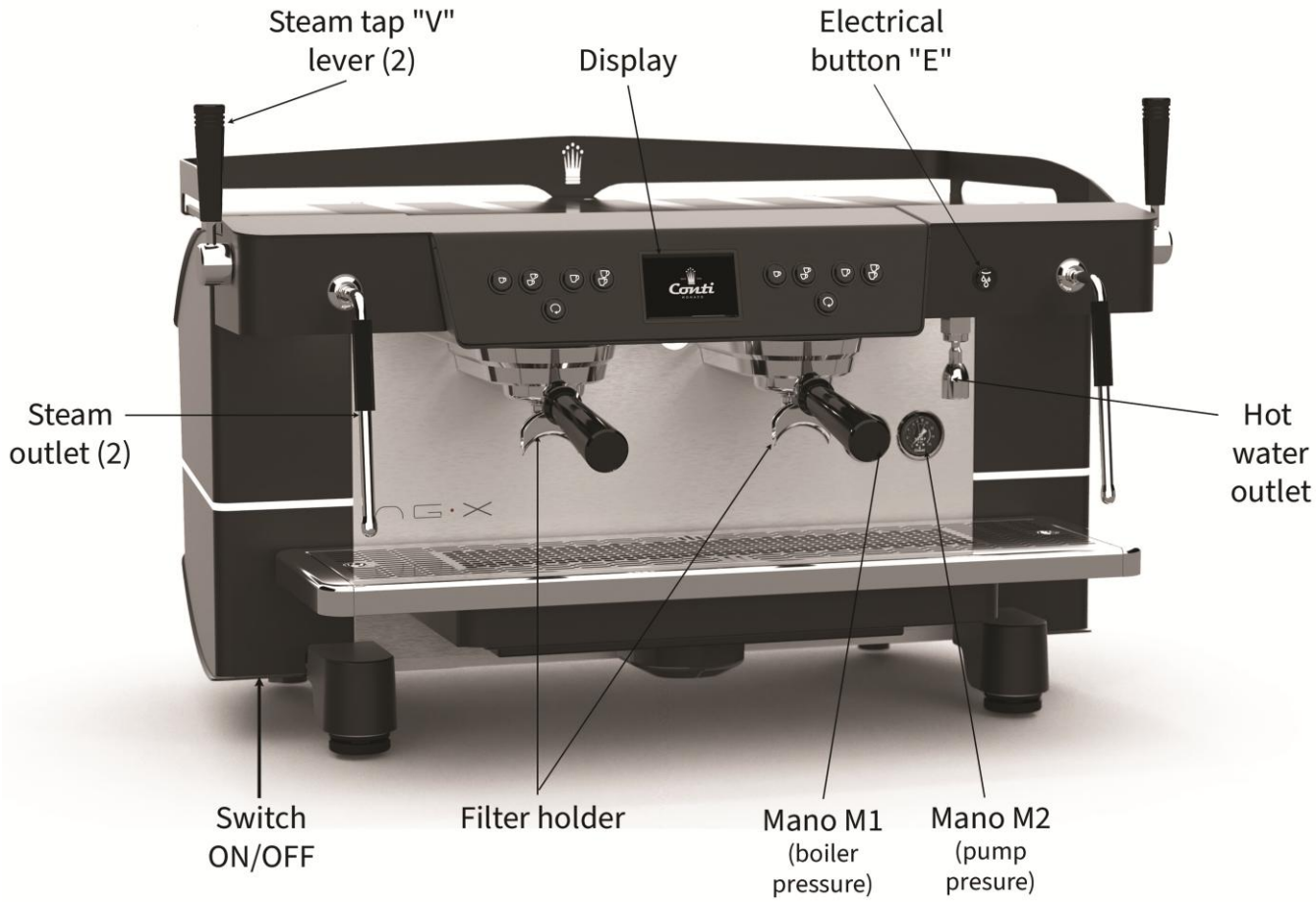
- Close the steam tap "V" and wait.

- After 30sec a screen saver function takes place
- The display shows:

during 38sec

followed by during 12 sec

- When the scrolling LEDs stops: The machine is ready to operate.
- Before the 1st use, purge 1L of water per group as well as the hot water.



5.3 FURTHER FILLINGS

- Further fillings will run automatically, according to the hot water needs.
- The water level in the boiler is controlled by the electronics, by the means of a level probe.

6 HOW TO USE THE MACHINE

6.1 OPERATING ELEMENTS

- **MANOMETER M1 : BOILER PRESSURE**

The "M1" pressure gauge indicates **the steam pressure** in the boiler.

Adjustment range: 0.8 Bars to 1.4 Bars (0.8 MPa to 0.14 MPa).
Factory setting: **1 Bar** (120 °C) (0.1 MPa)

This pressure fluctuates slightly around the setting value, thanks to a PID regulation that manages the heating and limits the current expenditure to its strict minimum

NOTE : A safety thermostat shuts off the heat in the event of an abnormal temperature increase.

- **MANOMETER M2 : PUMP PRESSURE**

The "M2" pressure gauge indicates the pressure in the coffee circuit, which corresponds to:

The pressure of the water network when the machine is idle: 2 to 6 Bar (0.2 MPa to 0.6 MPa)
The pressure of the pump when the machine is in action: **9 Bars**. (0.9 MPa)

A setting of **9 Bars** (0.9 MPa) guarantees the best conditions for extracting the aromas from the coffee.
A professional positive displacement pump guarantees this **constant pressure** during extraction.
It is equipped with a bypass system that allows self-regulation.
Thus, the simultaneous operation of all groups does not impact this setting.

- **TACTILE DISPLAY:**

A main touch display allows the user to interact with the machine:
Showing all informations during product manufacturing
Navigating into the technical menus to set up the machine

All information is displayed on the screen.

6.2 STEAM FUNCTION

Two steams tap levers « V » are provided to allows:

- The heating of liquids by spraying steam.
- The milk foam production to create Cappuccino or Macchiato.

Preparation advice:

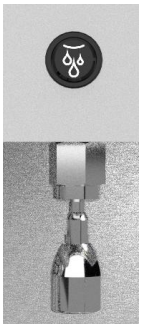
The liquid to be heated should preferably be placed in a fairly deep container.
The end of the steam wand should soak in the liquid but not touch the bottom of the container.
Systematically clean the stainless steel steam wand and the outlet nozzles with a damp cloth after each use and imperatively after heating the milk, removing all traces present.
The internal duct of the steam wand is flushed by a short upward pulse on the lever to release a jet of steam.
Steam can also be used for sterilization and glass chambering.

6.3 PREPARATION OF "HOT WATER / TEA" DOSES

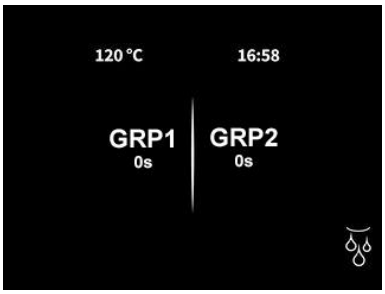
An electric "E" control is provided to allow the preparation of infusions, grogs, etc.

Simply press the "E" button provided

Hot water is dispensed through the outlet located under the electric control "E":

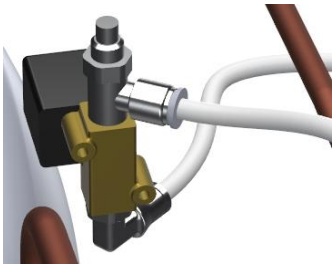


The display shows:



Mixer tap:

This "hot water" is tempered by a mixer tap system.
This adjustable device regulates the cold water supply and allows the adjustment of the hot water outlet temperature



Adjustment Range:	Completely open mixer tap:	Hot water outlet temperature = 70 °C
	Completely enclosed mixer tap:	Hot water outlet temperature = 98 °C

Be careful not to burn yourself with pressurized water splashes.

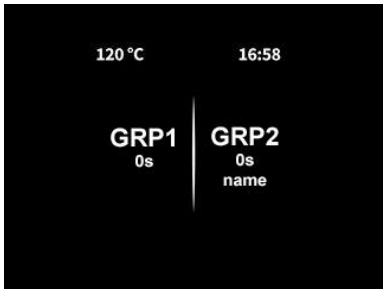
6.4 MAKING COFFEES BY PROGRAMMED DOSES

- Simply select one of the 4 keys of the chosen group available on the associated keyboard:

- The button for the selected dose remains lit. The other buttons in the group turn off.
- The water flows through the selected group until the programmed dose is obtained.

- *Note: The 5th key is a "Continue" key*
    - *It doesn't have any associated programming*
    - *It flows for 3 minutes*

- The display shows the name of the manufactured product and the extraction time for each group.



- The dose stop automatically when the scheduled dose is reached
- The extraction can be stopped at any time by pressing the product button again
- The extraction time shown on the display remain for 50 seconds then the “screen saver” function take place.

6.5 TIPS FOR USING FILTERS & FILTER HOLDERS

FILTER HOLDER:

Tighten the filter-holder to the point of contact with the seal, slightly extending over it.
This ensures that the water resistance is guaranteed.

Do not try to crush the gasket unnecessarily by tightening the portafilter to the end of your tightening possibilities, as this may damage the gasket or age it prematurely.

Never remove the filter-holder while the group is running.
The end of the extraction can be seen at the coffee outlet spouts: these should no longer leak.

To empty the filters of used coffee grounds, turn the filter-holder upside down and lightly tap the edge of a wooden box.
Never hit metal or hard bodies!

Always leave the filter-holders on the group emptied of the coffee grounds, to keep them at temperature.

In the event of a prolonged shutdown, remove the portafilter from the unit and eject the used grounds.
Dissolve a Conti detergent tablet (reference: 466662) in hot water, soak the filter holder and filter to ensure that the whole is kept clean.

FILTERS

The machine comes with two filter models: one cup (7 grams) and two cups (16 grams)
Each of the filters is associated with its respective filter-holder: 1-cup outlet or 2-cup outlet.

Filters must be kept very clean at all times:

- They should be cleaned at least once a day with hot water by removing them from the filter-holders.
- Take care to remove all residual traces of coffee.
- Make sure that the perforations in the bottom of the filter are clean.

7 "NORMAL" MODE AND "ECO MODE":

7.1 "NORMAL" MODE (READY-TO-USE MACHINE)

When the boiler has been filled and heated, the setting temperature is reached. The machine is at temperature and ready to use. It is in "Normal" mode

The display shows the homepage:

If the machine is not used for 50 seconds, the following 2 frames will scroll:

The machine remains ready to use, the home page returns as soon as you press the screen.

7.2 ECO MODE (MACHINE STANDBY)

In the evening or before a long period of inactivity, it is advisable to put the machine on standby.
The boiler is kept at a temperature of 60°C which allows to:

- *Extend the life of seals by limiting temperature variations.*
- *Save energy if the period goes beyond 4 hours of standby time.*
- *Have a rapid return to operating temperature.*

Standby mode is carried out by the **ECO mode** by pressing the **ECO** button on the home page:

Then, the display shows:

All the light bar around the machine switch OFF
All the keypad button switch OFF
The screen saver function is still operating during the ECO mode
To Exit **ECO Mode**, press again anywhere on the screen

8 DOSE PROGRAMMING

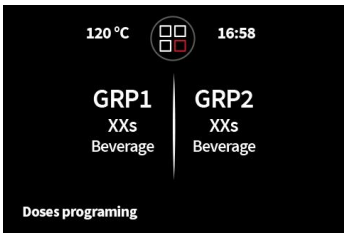
8.1 COFFEE DOSE PROGRAMMING:

2 ways of programming are possible to set the coffee dose.

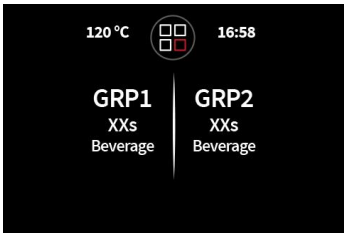
- From the 1st group (left group)
  - To automatically copy programming to other groups.
  - Each programmed key will have the same value on the other groups.
- From group n°2 or n°3 to program each group independently.
  - The program is specific to each group.
  - Whether groups need to have their own setting.

Methodology:

- Put the ground coffee (1 dose or 2 doses according to the programmed key), in the suitable filter holder.
- Press the key n°5 (CONTINUOUS) from the selected group for 5 seconds.
- The key n°5 are blinking
- Press the key to be programmed to start the flow
- The display show:



- and press again when water quantity is correct. The value is directly registered.
- Then, continue programming the next key within 30 seconds, and so on for the other keys.
- You can use any coffee button when the sentences “dose programing” disappears
- The display show:



Note: On the factory, each machine undergoes a test protocol on which a program has already been completed, according to the following settings:

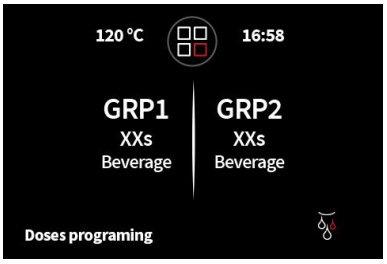
1 espresso = 2,5 cl / 2 espressos = 5 cl / 1 coffee = 4,5 cl / 2 coffee = 9 cl

8.2 HOT WATER DOSE PROGRAMMING:

CONTINUE **«Hot water» key**

Methodology:

- One programming dose is available:
- Press key n°5 (CONTINUOUS) from the 1st group for 5 seconds.
- The key n°5 are blinking
- Push **hot water key** to start the flow
- The display show:



- Push again when the water volume is correct.
- You can use **hot water key** when display turn back to normal mode (after 30sec).

Note: This is a timed dose.
The value that is stored is a time (sec)

9 TECHNICAL MENU PROGRAMMING:

The program is entered by pressing the "menu" icon on the home page:

To access the "menus" page:

9.1 CHOICE OF LANGUAGE:

Tapping on the icon  will take you to the language change page:

Possibility to choose 3 different languages: ENGLISH-FRENCH-ITALIAN
PORTUGUESE-SPANISH-GERMAN (under construction)

Just tap on the associated icon to change the language

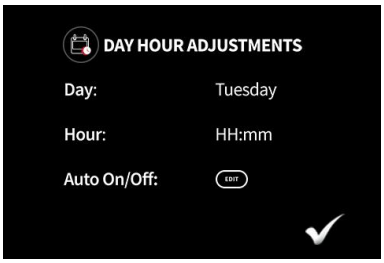
Pressing the "Enter" key will confirm and return to the top menu

9.2 SETTING THE CLOCK:

From the menu page:

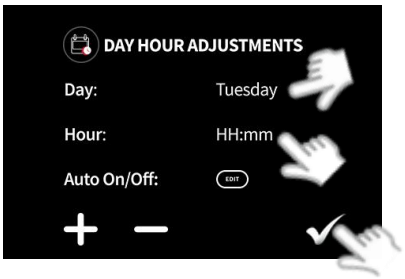
Tap the icon  to access the clock setting

The display shows the clock setting page:



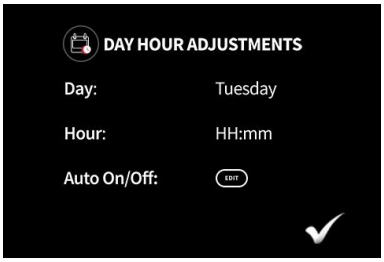
This menu allows you to set the day and time of the machine

Accessing the Day Setting: By pressing the day
Time Setting Access: By tapping the time



The value to be changed flashes.
To edit the content:
Just navigate with the "+/-" keys that appear on the screen.

Validation is done by pressing the "Enter" key
and the setting icons disappear:

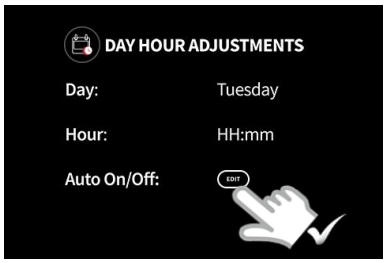


Proceed in the same way for the other parameters

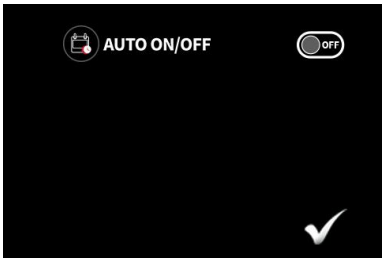
Field Values:
Day: day of the week (Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday)
HH: Current time (0 ... (23)
mm: Current Minutes(0 ... (59)

9.3 AUTOMATIC ON/OFF:

This device allows the automatic switching on and off of the machine for a time.
Through a sub-menu accessible from the previous "Clock" menu.
Press on the icon “EDIT” to access the submenu AUTO ON/OFF



The display show:



Press the OFF button to activate the function

The display show:

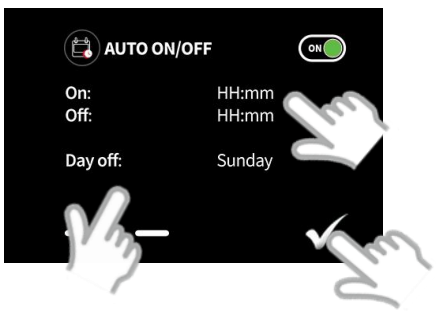
This page allows you to adjust the following 3 parameters:

On:	HH:mm	Time when the machine turns on automatically
Off:	HH:mm	Time when the machine automatically shuts off
Day off:	Sunday	Rest day (Day when the machine will not turn on)

We set a time ON and a time OFF valid for all the day of the week

To change the settings:

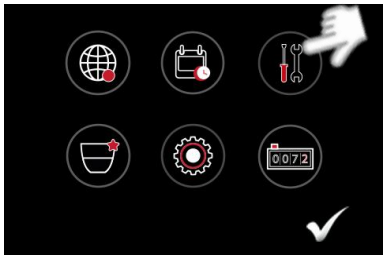
Press the value you want to change and it starts flashing
Change the value using the "+/-" icons that appear
Confirm the change by pressing the "Enter" icon



Re-press on icon “ENTER” to escape from the sub menu

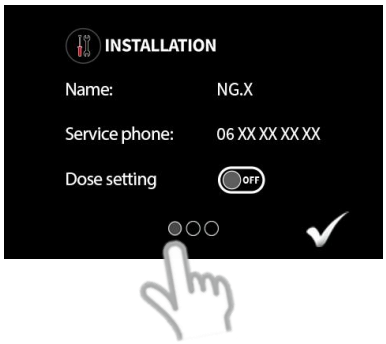
9.4 MENU INSTALLATION

From the menu page:

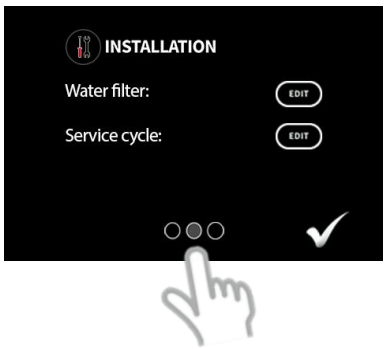


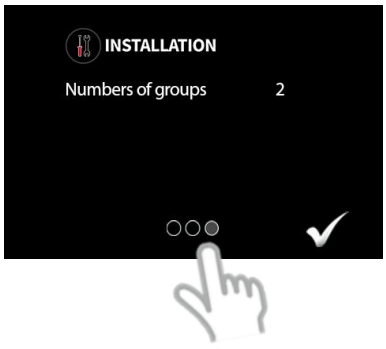
Tap the icon  to access the technical settings.

The display shows the Installation Menus on 3 pages:



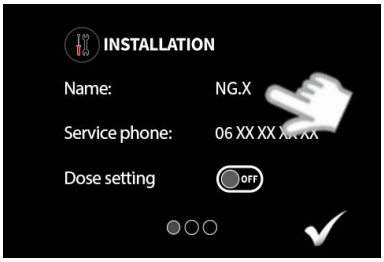
Tap the navigation tabs to move from one page to another



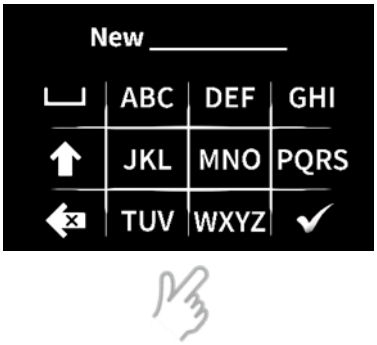


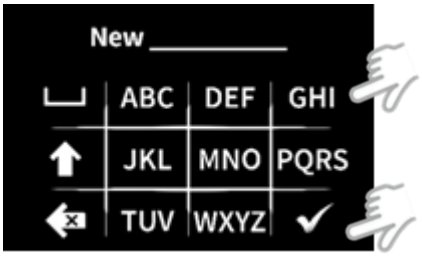
9.4.1 Entering the name to display

Allows you to set the name that appears in the center of the home page.
By default, the name is "NG.X". To change it, click on it:



And a keyboard appears:



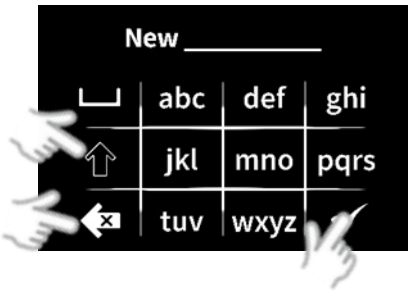


Press 3 or 4 times on the areas to choose the right letter

Enter to confirm and move on to the next fields.

Pressing the "Shift/Min" arrow
Allows you to toggle from lowercase to uppercase

Pressing the "back" arrow will cancel
The last field.

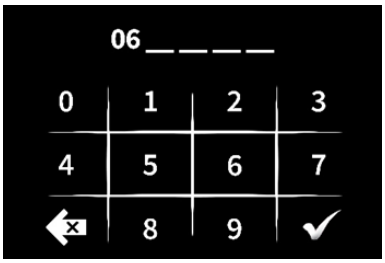


A press on "Enter" validates and returns to the previous screen

9.4.2 Entering the phone number of the technical service:

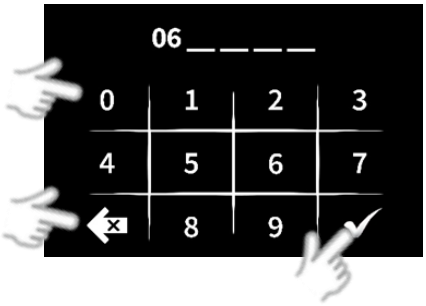
Allows you to set the phone number of the technical service to call in the event of an outage.
This number appears when reporting an outage on the screen.
By default, the number is not specified. Press 06 XX XX XX to change the value.

A numeric keypad appears:



Press the numbers to enter the phone number

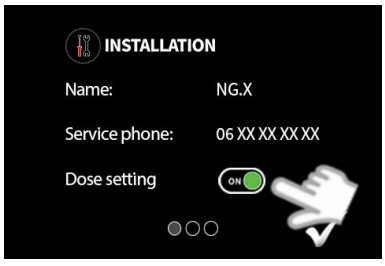
Press the return key to go back



A press on "Enter" validates and returns to the previous screen

9.4.3 Blocking Dose Programing:

This menu allows you to block access to dose adjustments.
This reduces the risk of dose inconsistent by restricting access.
By default, access to doses programing is not blocked:



Just press the "ON" icon
To disable dose programing access

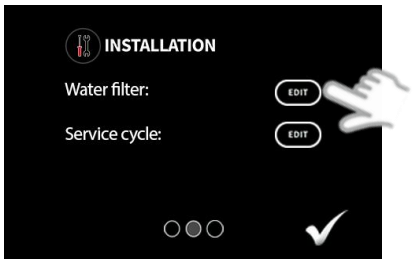
Pressing "Enter" will confirm and return to the previous page

9.4.4 Adjusting the amount of water treatment (liters)

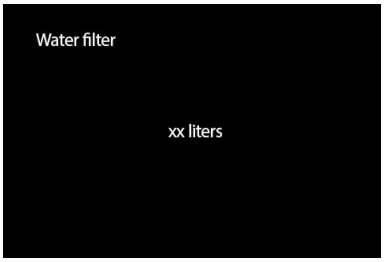
Allows to set the number of liters of water consumed before the filter is regenerated
The amount of water consumed includes:

- Water from the coffee passing through the groups
- The water that goes into the steam boiler.

To change it, just tap on the icon “EDIT” to enter on the sub menu

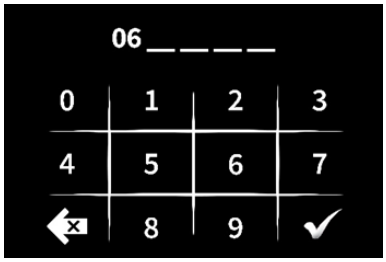


The display shows:



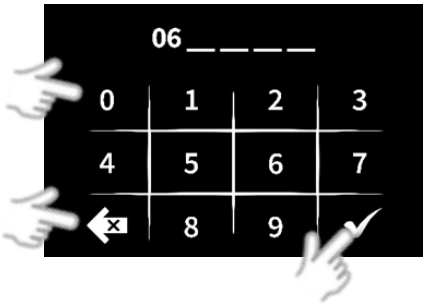
Press on the value to change it

A numeric keypad appears



Press on the numbers to enter the number of liters
(Value up to 9999 liters)

Press the return key to go back

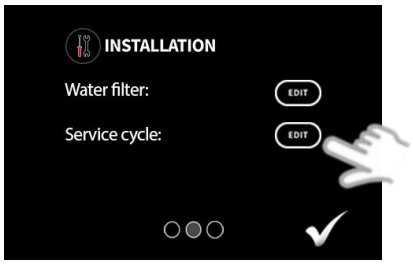


The last press on "Enter" validates and returns to the previous screen

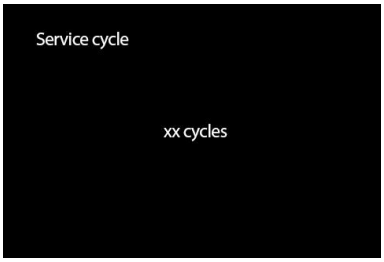
Note:
When the programmed water volume is reached, an alarm message appears (see chapter "Alarms")
To cancel this alarm, see the chapter "Resetting Alarms"

9.4.5 Setting the number of cycles before servicing:

Allows you to set the number of cycles (or coffees) that the machine must complete before preventive maintenance is required.
To change it, just tap on the icon “EDIT” to enter on the sub menu

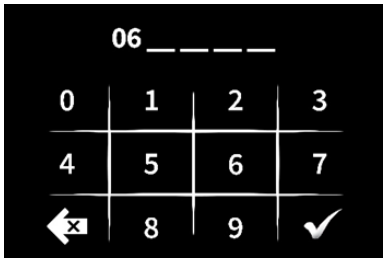


The display shows:



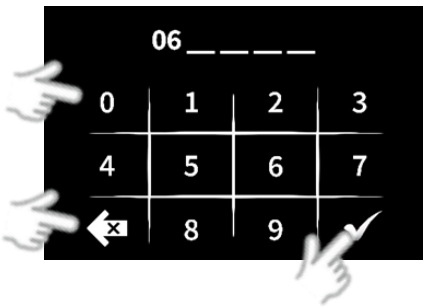
Press on the value to change it

A numeric keypad appears



Press on the numbers to enter the number of cycles
(Value up to 99999 cycles)

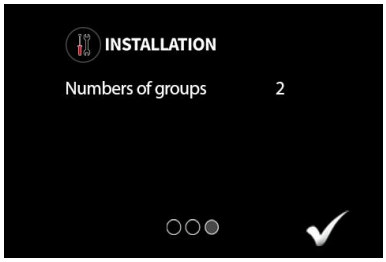
Press the return key to go back



The last press on "Enter" validates and returns to the previous screen

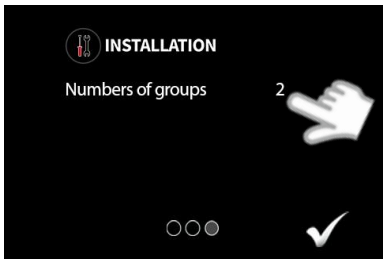
Note:
When the number of cycles is reached, an alarm message appears (see chapter "Alarms")
To log this alarm, see the chapter "Resetting Alarms"

9.4.6 Number of groups



This menu allows you to declare how many groups are on the machine
Mainly to displays the good dedicated shot timer screen

The display shows:



Press several time on the value to choose between 1, 2 or 3 group

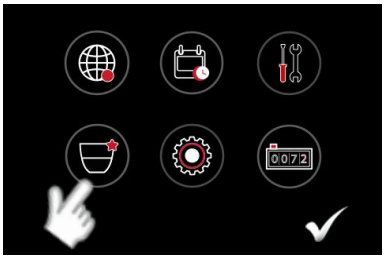
And then press  to validate.

9.4.7 Tea mode

To be define

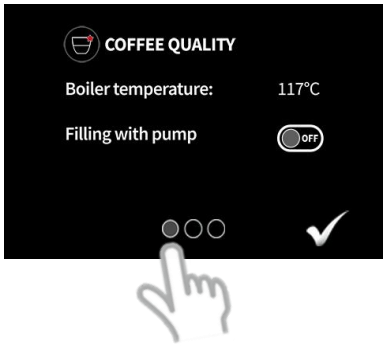
9.5 PRODUCT SETTING

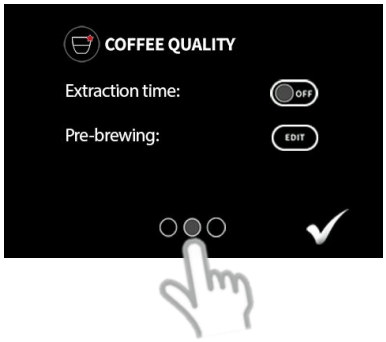
From the menu page:

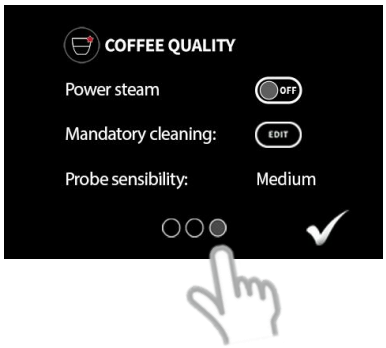


Tap on the icon  to access the technical settings.

The display shows the "COFFEE QUALITY" menus on 3 pages:







9.5.1 Temperature control Steam boiler

This menu allows you to set the control temperature of the steam boiler

The default value is 120°C.	Programmable from	80 to 125°C	(176°F ... 257°F)
	Resolution:	1°C	(1°F)

To change the temperature:

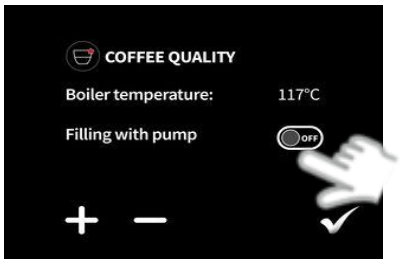
Press the value you want to change and it starts flashing
Change the value using the "+/-" icons that appear
Confirm the change by pressing the "Enter" icon

9.5.2 Boiler Filling Mode: With or Without Pump

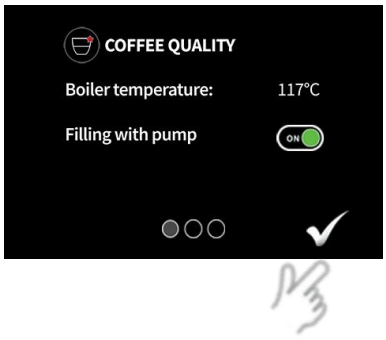
This menu allows you to set the method of filling the boiler

Without pump: recommended for operation on a water network
With pump: recommended for tank operation

By default, the filling mode is " Without pump":



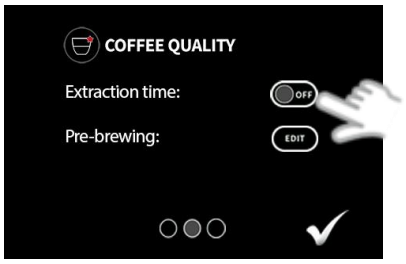
Just press the "Off" icon
To enable padding
"With pump"



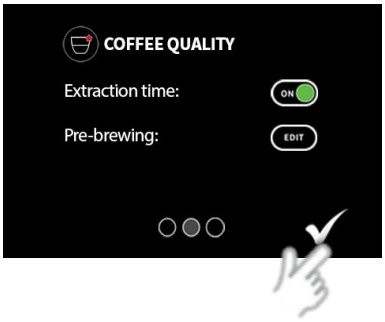
Pressing "Enter" will return you to the previous page

9.5.3 Display of extraction times

Allows you to choose **whether or not to display** extraction times during product making
By default, the extraction time display is set to **OFF**
To change this setting:

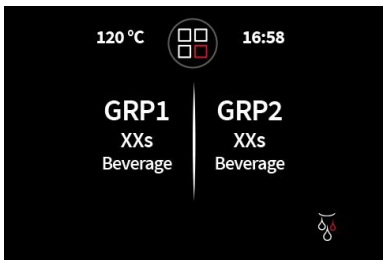


Simply press the "Off" icon to activate the display of extraction times



Pressing "Enter" will return you to the previous page

When the function is activated, the display shows the extraction time on the area dedicated to each group



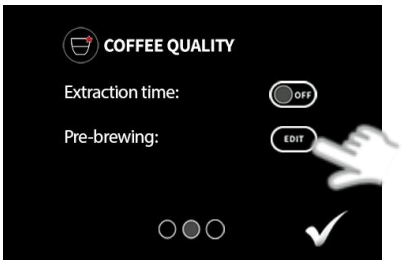
Note:
Time begins to pass from the beginning of the infusion and ends when the coffee solenoid valve is closed
Pre-infusion time is not counted.
This extraction time (max 99sec) remains displayed for 5 minutes after the product is finished

9.5.4 Pre brewing

Under construction

9.5.5 Activating Pre-brewing

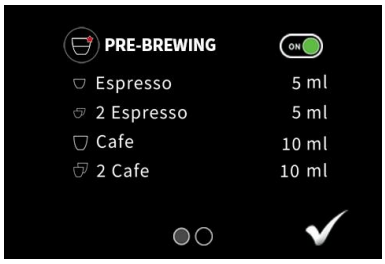
Allows you to activate and program the pre-infusion times for the 4 doses.
To access the "Pre-infusion" sub menu, press on the icon “EDIT”:



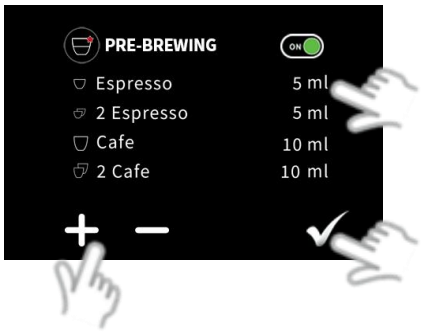
The display shows:

If the function is “OFF”, press on the icon to activate the function

The display shows:



The pre-brewing phase is to be programed in volume (ml)



To change the pre-brewing volume:

Press the value you want to change, the value will start flashing
Change the value using the "+/-" icons that appear
Validate the change by pressing the "enter" icon
The value no longer flashes. Repeat for other values

Then press on the icon to access to the 2nd page “infusion time”:

The display shows:

The infusion times phase is to be programed in seconds (s)

To change the infusion times:

Press the value you want to change, the value will start flashing
Change the value using the "+/-" icons that appear
Validate the change by pressing the "enter" icon
The value no longer flashes. Repeat for other values

Press the "ENTER" icon again to return to the previous screen

Note:
All groups have the same programming of the 4 pre-brewing times

9.5.6 Fonction « Power Steam »

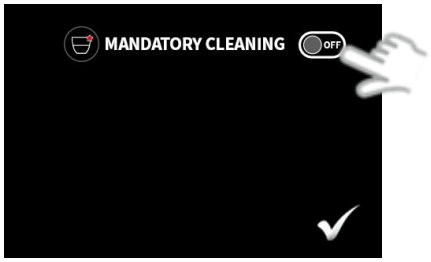
Not available

9.5.7 Mandatory cleaning

Allows you to schedule a mandatory cleaning request at a specific time.
Very useful feature to require one cleaning per day on all groups
If the user does not carry out this mandatory cleaning, **the machine will freeze**.

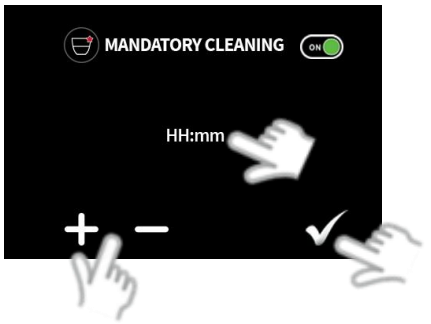
Press icon “EDIT” to enter on the sub menu

The display shows:



If the function is “OFF”, press on the icon to activate the function

The display shows:



The time setting is accessed:

Press the value you want to change, the value will start flashing
Change the value using the "+/-" icons that appear
Pres the “ENTER” icon to validate
The value “mm” is blinking, ready to be changed
Change the value using the “+/-“ icons that appear
Then press the “ENTER” icon to validate and turn bach to the previous page.

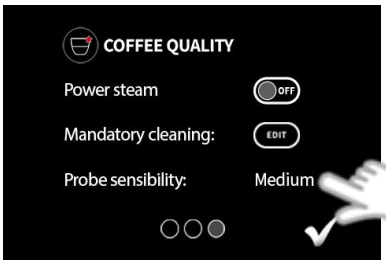
9.5.8 Level Probe Sensitivity

Allows you to adjust the sensitivity of the level probe.
This is useful if the water hardness of the mains is not within the recommended range.

Adjustable values:	LOW:	for poorly softened water (rather hard)
	MEDIUM:	for water with normal hardness (7°TH or 4°KH)
	HIGH:	for very pure water (e.g. mountain water)

By default the machine is on a **MEDIUM** setting

To change the value, simply press the "Medium" value several times



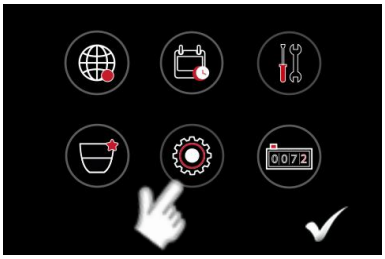
And the value passes:

from **Medium** to
High then **Low**
Then goes back to **Medium**

Pressing "Enter" validates the last value displayed and returns to the previous screen.

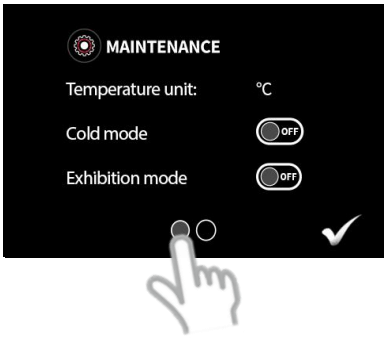
9.6 MENU MAINTENANCE

From the menu page:

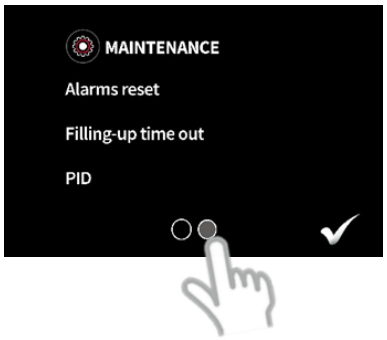


Tap the icon  to access other technical settings

The display show the "Maintenance" menus on 2 pages:



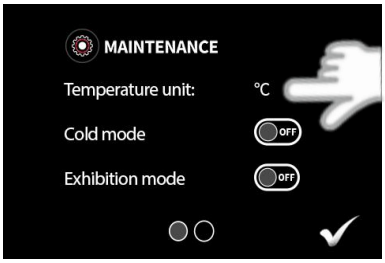
Tap the navigation tabs to move from one page to another



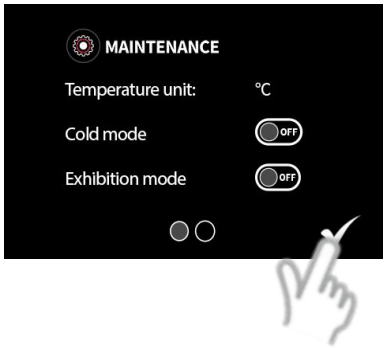
9.6.1 Change the Temperature Unit

Allows you to set the unit of measurement for all temperatures: °C (Celsius) or °F (Fahrenheit)

By default, the temperature unit is in °C
To change, simply press °C



Unit changes to °F



Press the "ENTER" icon again to return to the previous screen

Note:
When the unit is changed, all values are converted automatically

9.6.2 Cold Mode

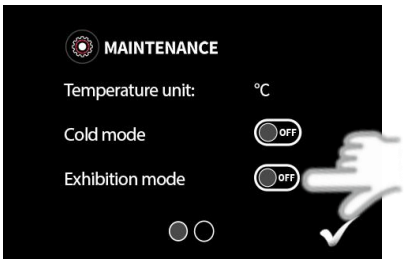
See Chapter "Troubleshooting Tool" / "Cold Machine Operation"

9.6.3 Exhibition Mode

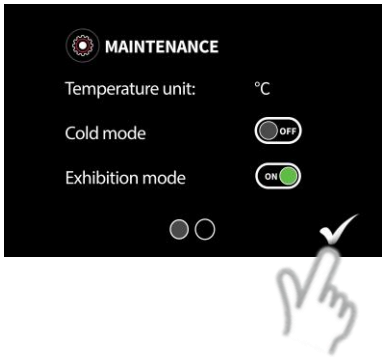
Keeps the machine fully turned on without being active:

- It doesn't fill the boiler
- It does not heat the boiler
- It does not respond to any button on the control panel
- **No alarm occurs**

By default, exhibition mode is disabled. To activate it, simply press "OFF"



Exhibition mode becomes active



Press the "ENTER" icon again to return to the previous screen

To turn off exhibition mode, do the same thing.

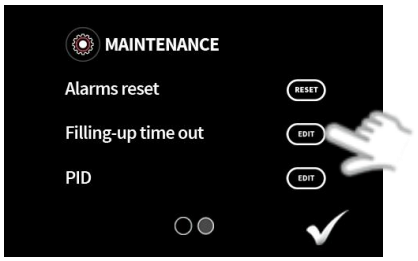
9.6.4 Alarm reset

See chapter "Alarm Reset"

9.6.5 Filling-up Time Out

Allows the machine to be given a maximum allowable time to fill the boiler.
After this time, the machine goes to safety and an alarm message appears on the display.
Time-Out is expressed in seconds

Access to the "Time Out Filling" menu from the 2nd page of the "Maintenance" menu:
Press icon “EDIT” to enter on the sub menu



The display shows:

The value you want to change, start flashing
Change the value using the "+/-" icons that appear

Press the "ENTER" icon again to validate and return to the previous screen

9.6.6 PID FUNCTION

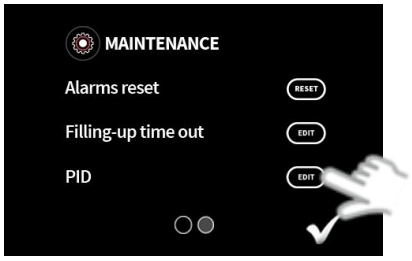
The PID optimizes the temperature stability in the steam boiler.
It is a ROBUST function that limits overtaking by a range between SPEED and PRECISION

Working Principle:
A measurement every 2 seconds of the actual temperature compared to the set temperature
A re-evaluation of the power to be supplied to the heating element between 0% and 100%
This revaluation weights the following elements by 3 coefficients Kp,Ki,Kd:

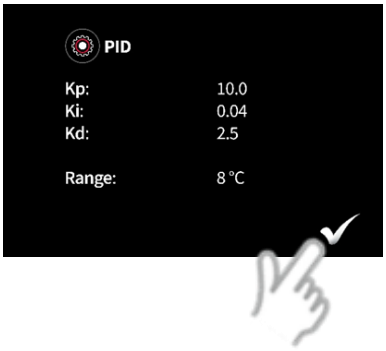
By Kp : Temperature
By Kd: The Rate of Temperature Change
By Ki: Average Temperature over the last 10 reviews

The reassessment is carried out within the range of 5°C around the set value.
Beyond that, the machine works at full power

PID settings can be viewed by tapping on the “EDIT” icon



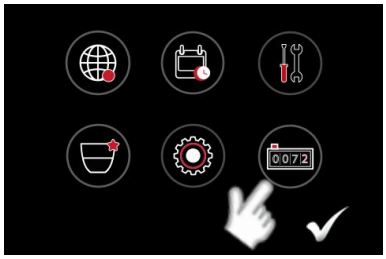
The display shows:



Settings are not editable (only the range value can be modified)
Press the "ENTER" icon to return to the previous screen

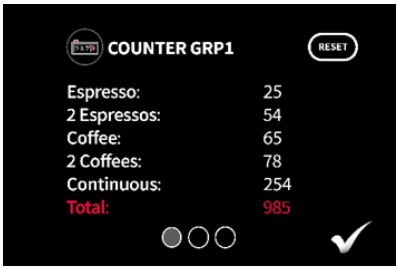
10 COFFEE COUNTERS

From the menu page:

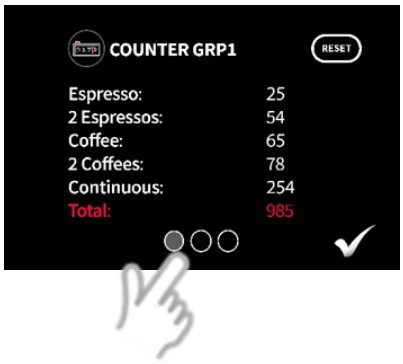


Tap on the icon  to access to the coffee counter

The counters are displayed group by group:



Tap the navigation bar
to switch between groups



Press Reset to set the counters in each group to 0
Each group resets independently

The total for each group is not resettable

Press "Enter" to return to the previous page

This menu allows you to know the number of products consumed in each group:

- Number of espresso (1 cup)
- Number of double espressos (2 cups)
- Number of coffee (1 cup)
- Number of double coffees (2 cups)

Note:

The maximum count is 65535 for each key. After that, the counter returns to 0.
A distribution is counted as soon as a key is pressed.
Pressing the "Double Espresso" or "Double Coffee" button counts as 2 products on the total

11 ALARM SIGNALING AND REMEDIES:

When an alarm is detected by the machine, a general icon appears on the screen:

To find out the nature of the alarm, simply **press on the icon**.
The explanatory messages will then appear:

11.1 FILLING-UP TIME-OUT:

This message indicates that the SN level sensor (steam boiler) has not been covered within the allowed time (240sec).

Possible reasons:
- Filling valve flow rate is too low or clogged
- The filling valve is not working.
- The SN probe is disconnected or full of scale
- The water inlet tap is closed.

After corrections, turn the machine off and on again by pressing the general electric On/Off button
If the machine restarts normally, the alarm will naturally disappear.

11.2 GRP X FLOWMETER ALARM

This message indicates that the electronic is not receiving information from the group X flowmeter.

Possible reasons:
- No water in the flowmeter
- Faulty wiring
- Faulty flowmeter
- Grind too fine
- The water inlet valve is turned off
- The shut-off valve on the unit is closed
- The inlet filters are clogged
- The sprinklers are clogged.

After corrections, turn the machine off and on again by pressing the general electric On/Off button
If the machine restarts normally, the alarm will naturally disappear.

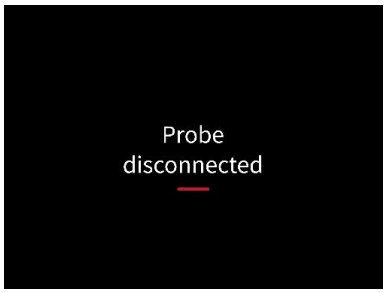
11.3 BOILER TEMPERATURE ALARM

This message indicates that the electronics have detected a temperature in the boiler > at 140 °C for more than 5 seconds
(The alarm naturally disappears when the temperature drops 2°C below the set point).

After corrections, turn the machine off and on again by pressing the general electric On/Off button
If the machine restarts normally, the alarm will naturally disappear.

Possible Reasons :
- Solid State Relay In-Circuit
- Faulty probe

11.4 TEMPERATURE SENSOR FAULTY BOILER SENSOR:



This message indicates that the electronics do not recognize the temperature sensor.

Possible reasons: The probe is disconnected or faulty.
The probe cable is faulty
A track is cut off at the electronic board
The connector is broken at the circuit board

After corrections, turn the machine off and on again by pressing the general electric On/Off button
If the machine restarts normally, the alarm will naturally disappear.

11.5 CLEANING REQUEST:

This request is related to the "Mandatory Cleaning" option enabled in the technical settings.
The user must initiate the cleanup procedure on each groups (one after the other).

If it only does this partially (1 group instead of 2 for example) or if it does not do it at all, the machine freezes and the message " **Attention clean groups** " will remain permanently displayed on the display.

This message will disappear when all groups have been cleaned.

After cleaning, the machine returns to the home page.

11.6 PLEASE CLEANING GRP X:

After making 250 distributions on a group, the display says: "Please clean GRP X".

The machine is still usable, but the message will not disappear until the requested cleaning has been completed.

To remove the alarm, simply start an automatic cleaning procedure (see dedicated chapter)
(Note: It is possible to start an automatic cleanup even if the display does not provide the request.)

11.7 WATER TREATMENT FILTER REGENERATION REQUEST:

When the programmed amount of water, compatible with the capacities of the water treatment system, has been consumed by the machine, the message " **Filter Regeneration** " is shown on the display.

This message prompts the user to regenerate the water softener or request replacement of the cartridge in their water treatment system, but does not prevent the products from being dispensed.

Once the softener has been regenerated or the cartridge replaced, the alarm message must be deleted.

See the next chapter "Resetting Alarms" to cancel the filter alarm.

11.8 MAINTENANCE ALARM

When the number of cycles programmed to activate a maintenance operation is reached, the message "Service Group" is displayed.

This message invites the user to contact the technical service to carry out the semi-annual preventive maintenance recommended by Conti

See the chapter "Preventive maintenance" for the content and intervals
See the next chapter " Resetting Alarms" to cancel the maintenance alarm

11.9 THE MACHINE THAT WON'T TURN ON:

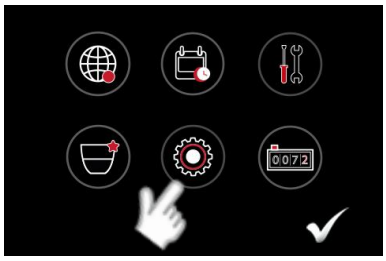
No on-screen display
The klixon has activated and/or the general relay is no longer powered.

Possible reasons:	The boiler was heated without water
	The general relay coil is out of service.
Solutions:	Disconnect the machine from the power supply
	Manually reset the klixon
	Check the boiler for water
	Restart the machine.

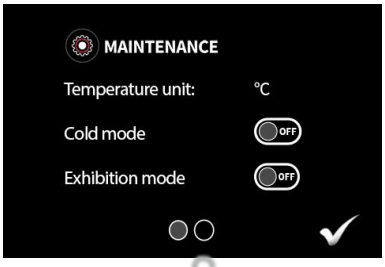
12 ALARM RESETTING PROCEDURES

12.1 RESETTING THE "SERVICE" COUNTERS

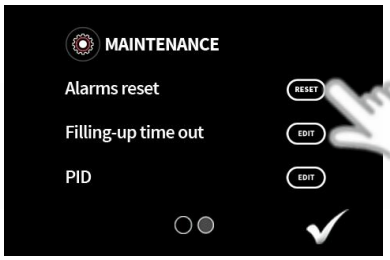
Once the maintenance is done, the message must be deleted.
The reset is done via the Maintenance menu:



Click on the icon  to go to the 1st "Maintenance" page

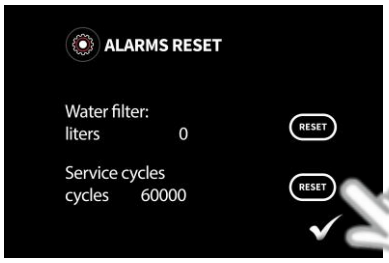


Tap the navigation tabs to move from one page to another

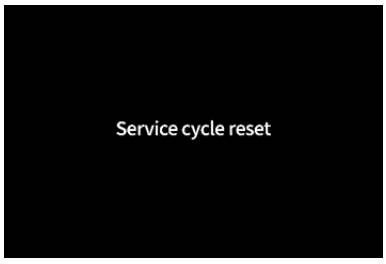


Then press the icon "Reset":

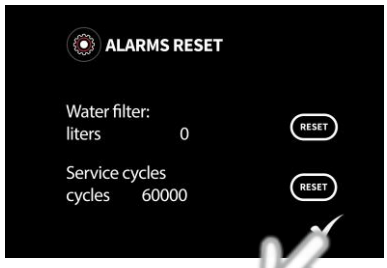
The following page appears:



The value shown is the number of cycle remaining before the alarm.
Press Reset next to "Service cycle" to cancel the maintenance alarm.
The reset is confirmed by the following display:



Then goes back to

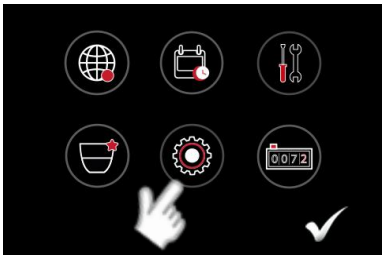


Press "ENTER" to return to the previous page:

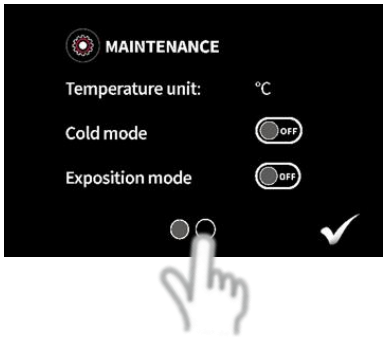
Cycle counter resumes at 0

12.2 RESETTING OF THE "WATER TREATMENT FILTER" COUNTERS

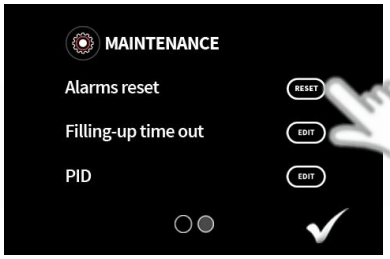
Once the filter is changed, the message must be deleted.
The reset is done via the Maintenance menu:



Click on the icon  to go to the 1st "Maintenance" page

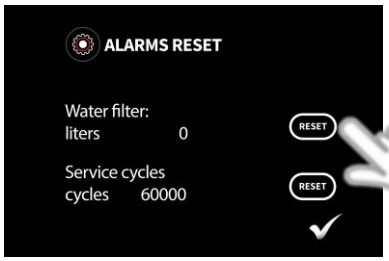


Tap the navigation tabs to move from one page to another

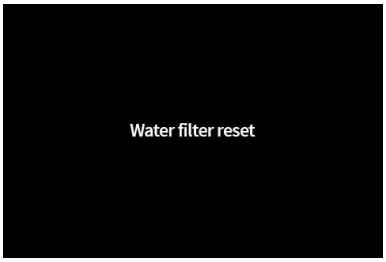


Then press the icon "Reset":

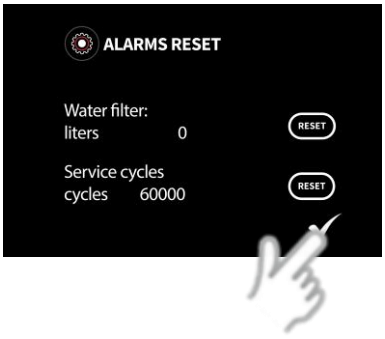
The following page appears:



The value shown is the quantity of water remaining before the alarm.
Press Reset next to cancel the “Water filter” “ Water filter alarm”
The reset is confirmed by the following display:



Then goes back to



Press "ENTER" to return to the previous page:

Water filter counter resumes at 0

13 TROUBLESHOOTING TOOLS

13.1 SHUT-OFF VALVE:

Shut-off valves below the basin are used to isolate each coffee circuit.

They are useful for isolating one group and leaving the machine running on the other groups.
For example, to "remove/replace" a defective part. (Flowmeter, valve, etc.)

13.2 DATA PRESET:

A full reset of the data can be attempted in the event of an unexplained malfunction of the machine.
This procedure results in the total loss of all data on the system.

Contact your agency for more information

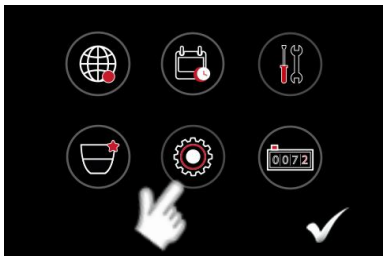
13.3 COLD MACHINE OPERATION:

A "COLD" mode is available on the machine. It allows the machine to be operated cold.
This is very useful for a technician who wants to intervene without the risk of getting burned.

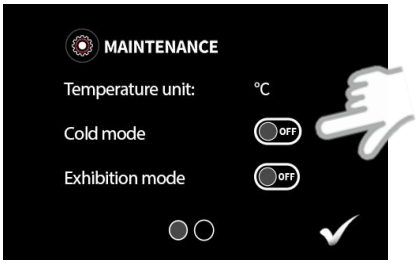
Putting the machine in "Cold" mode:

From the main page, enter the "menus" page by pressing on the associated icon:

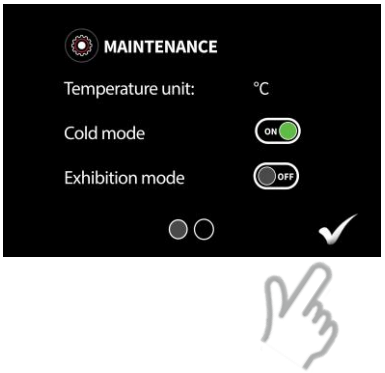
Then, on the "Menu" page,
tap on the icon associated
with the "maintenance" page



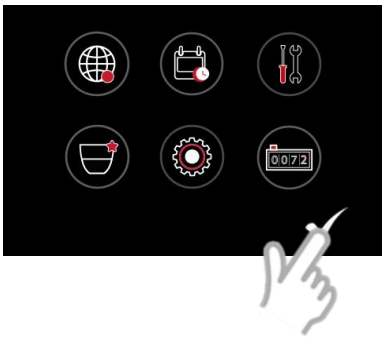
In the "maintenance" page, the cold mode is declared "OFF" by default.
Tap the associated "Off" icon to activate Cold Mode



Then confirm with "Enter"
To exit the program



The display returns to the "Menu" page.



The machine is in "Cold" mode.
It works normally
But she remains cold.

Do the same to disable Cold Mode

13.4 METHOD OF ADJUSTING COFFEE TEMPERATURE ON NGX MODEL

- NGX machine are adjusted in the factory, with a boiler temperature of 120°C (1MPa).
- The breaker is adjusted for a coffee temperature under spout of 87°C/89°C.
- Measured according to a standardized protocol of the manufacturer, this value is given as a reference.
- It can change according the following parameters:
    - Extreme ambiant conditions (15 ° C – 35°C)
    - An extraction time shorter or longer than the standard.
    - The volume of water in the cups

13.5 COFFEE TEMPERATURE ADJUSTMENT:

- Perform a series of 6 consecutive double coffees.
- On the last coffee: measure the coffee temperature under spout.
- Correct, if necessary, this value acting on the steam boiler temperature

Indication: 2°C on steam boiler ⇔ 1°C on coffee temperature under spout.

13.6 THERMOSIPHONIC BALANCE:

- When the coffee temperature under spout is established « in continuous », wait for 20 minutes for a thermosiphonic stabilization
- Check the coffee temperature under spout on a 1st coffee.

⇒ Correct, if necessary, this value with the breaker:

Procedure: Turn the screw  clockwise to decrease (↘) the coffee T°.

Turn the screw  anti-clockwise to increase (↗) the coffee T°.

Indication: ½ of a turn of breaker ⇔ 2°C on coffee T° under spout.

14 HOW TO MAKE THE PERFECT COFFEE

Obtaining a good cup of coffee is the result of certain conditions: the 5 golden rules of perfect espresso:
MIX / GRINDER / MACHINE / HAND / and MAINTENANCE.

14.1 THE MIX

The type of coffee is very important. It can be distinguished 2 mains qualities:

- ARABICA:
  It gives a fragrant taste, sweet, chocolaty, slightly acid,
  with a pleasant bitterness,
  the coffee colour is hazelnut cream
- ROBUSTA:
  It gives a less fragrant taste, rough, astringent and significantly more bitter,
  the caffeine content is about twice,
  the coffee colour is greyish brown.

The roaster has a great importance on the quality of each coffee (choice of grain, selection processes, roasting, packaging processes, ...).

14.2 THE GRINDER

The grinder and the grind adjustment are essential:

- The coffee grinder:
  Grinding capacity of the coffee beans must be commensurate with the needs of the user. Indeed, excessive use causes overheating of the mill wheels and thus a rapid realignment of the mill.
- The grind adjustment:
  Setting the mill to choose the fineness of the grind and the right dose required to achieve optimum coffee. The dose should be adjusted to 7 grams for a cup.
  Finesse should allow a flow time of coffee in the cup about 20 - 25 seconds.
  This time ensures the dissemination of flavors in the cup.

14.3 THE MACHINE

It must be well adjusted and kept very clean!

- Pump Pressure limited to 0,9 MPa.
- Water temperature out of the shower must be between 86 °C and 92 ° C
- Correct programming doses.
- Daily cleaning performed every evening.
- Ensure that the water treatment is operating well.
- Follow the maintenance recommendations.

14.4 THE HAND

Skill of the operator: He must of course control the above three factors, but also:

- He knows how to maintain coffee.
    - For example, a milling does not remain in the open air.
    - He knows that coffee bean loses 1% of its flavor by day ground coffee, it loses 45% day.
    - Therefore, he avoids grinding too much coffee at once, or keep in drawers.
- The filter-holder need to be warm, so it must be maintained on the group.
- The cups need to be warm, about 40 ° C. They are therefore placed on the cup warmer.
- He correctly damps the coffee in the filter-holder.
- He ensures proper regularity milling for constant quality coffees.

14.5 THE MAINTENANCE

This is the **necessary condition** for the success of a good coffee:

- Cleaning operation on the coffee groups at the end of each activity day
- Double impact :
    - Improve coffee quality by removing oxidized fats
    - Ensuring the smooth running of the coffee group.

- Scrupulous follow-up of **maintenance operations**:
    - Weekly
    - Semestrial
    - Annual
    - Biennials

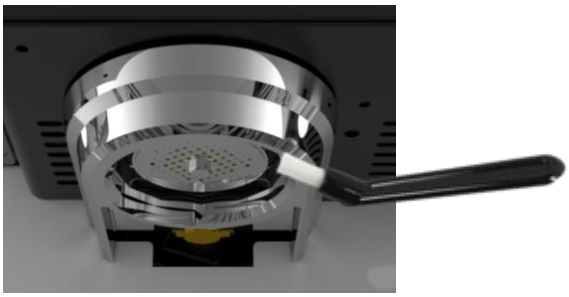
15 MAINTENANCE OF MACHINES

15.1 CLEANING COFFEE GROUPS

This process allows you to independently initiate a cleanup on each group

- Remove the filter holder from the group.

- Clean the filter holder gasket with the brush provided in the cleaning kit.



- At the same time, pressing a product button to make water flow from the group.
- Insert this filter (ref :016795) in a filter holder.
- Place the Conti detergent tablet reference 466662 in the blind filter

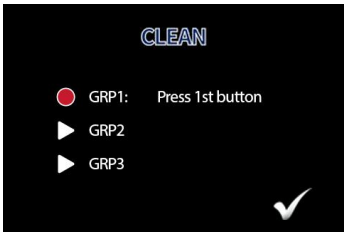
- Snap it onto the group

- From the home page, tap on the "Clean" icon to access the cleaning page

The display shows:

- Tap the icon associated with the group you want to clean to start cleaning it:

- The cleaning process cycle starts automatically with successive instructions.
- The display shows the progress of the process step by step :
    - Put blind filter holder and press 1st button



    - Cleaning

    - Waiting

- Remove blind filter and press 1st button

- Rinsing

- Put blind filter holder and press 1st button

- Remove the filter holder with its blind filter and remove the residue
- Replace the filter holder with its blind filter then press
- Cleaning

- When the cycle is complete, the cleaning page remains displayed.

- Waiting to start cleaning up other groups.

- To finish and return to the home page, simply press "Enter"

The display shows:

- The machine is back in operation.
- Remove the filter holder and run the groups for 5 seconds.

Note:

- The cycle can be interrupted by pressing any button in the group.
- However, cleaning phases are not carried out and this compromises their effectiveness.
- It is possible to start this process on all 3 groups at the same time, although it is advisable to do it on one group at a time.
- Cleaning up one group does not prevent making coffees on the other groups.

15.2 DAILY AND WEEKLY CLEANING

- **Il is practiced at the end of service** before the machine is stopped or put into "ECO" mode.
- Clean the hot water outlet and steam nozzles with a sponge:
  - Use a pin to unclog the holes in the diffuser of the steam lances.
  - Then purge by opening the faucet for a few seconds.

- Clean the basin and drainer grate by running them under water (out of the machine)

- **Initiate the procedure for cleaning coffee groups (previous chapter)**
  (It is advisable to clean the coffee groups "group by group")
- Brush the 1 cup and 2 cups filters in water with detergent:
  - In order to remove all traces of coffee and unclog holes
  - Never use a needle or flame.
- For health reasons, make sure to drink at least 2 litres of hot water per day.

15.3 HALF YEAR MAINTENANCE

- A kit n° 480330 adapted to these operations is available for sale.
- For each group:
  - Remove the hand shower, diffuser, and filter door gasket.
  - Scrub the filter gasket groove and injection point on the unit
  - Clean the 2 parts of the diffuser. Clear all holes with a needle.
  - Reassemble the 2 parts of the diffuser
  - Reassemble a new filter door gasket and a new hand shower.
- Disassemble and clean the level (scale) sensor.

15.4 ANNUAL MAINTENANCE

- A kit n° 480331, for the following operation is available for sale.

- Change the pump inlet filter (No. 411861)

- On the boiler:
    - Change vacuum valve (No. 408898)
    - Change the safety valve (No. 404326)

- On the inlet bloc valves:
    - Change the filter (No. 470199)
    - Replace the gasket (No. 219000 or 219101) of 2 non-return valves.
    - Remove and clean the gasket limiter 12 Bars (1,2 MPa)
    - Clean the nucleus of the solenoid inlet water boiler.

- On the coffee group
    - Change the O-ring nozzle (No. 403457) and the filter nozzle (No. 403458)
    - Change the 2 O-rings (No. 403457) of the braker.
    - Change the O-ring (No. 067100) on the breaker.
    - Clean the 3rd way and the nucleus of the solenoid coffee valve.

- On the electric tap part
    - Clean the nucleus of the solenoid "hot water" valve. (No. 4803741)
    - Clean the nucleus of the small solenoid "mixer» (No. 4114763)

- On the 2 steam taps:
    - Change the 2 O-rings (No. 403457)
    - Change the 1 gasket (No. 407502)

- On the 2 "steam" output and on the "hot water" output
    - Change the O-ring (No. 061200)
    - Change the O-ring (No. 055300)

15.5 “2 YEARS” MAINTENANCE

- A kit n° 480331, for the following operation is available for sale.

- Change the pump inlet filter (No. 411861)

- On the boiler:
    - Change vacuum valve (No. 408898)
    - Change the safety valve (No. 404326)

- On the inlet bloc valves:
    - Change the filter (No. 470199)
    - Replace the gasket (No. 219000 or 219101) of 2 non-return valves.
    - Remove and clean the gasket limiter 12 Bars (1,2 MPa)
    - Change the inlet boiler valve (No. 4701611) + 2 PTFE gasket (No. 407500)

- On the coffee group
    - **Remove all the parts and uncork all the holes in the group head.**
    - Change the O-ring nozzle (No. 403457) and the filter nozzle (No. 403458)
    - Change the 2 O-rings (No. 403457) of the braker.
    - Change the O-ring (No. 067100) on the breaker.
    - Change the solenoid coffee (No. 407329) + 2 PTFE gasket (No. 407500)

- On the electric tap part
    - Change the solenoid "hot water" (No. 4803471)
    - Change the mixer tap (No. 467077)
    - Change the small solenoid "mixer" (No. 4114763)
    - Change PTFE tube (No. 900406)

- On the 2 steam taps:
    - Change the 2 O-rings (No. 403457)
    - Change the 1 gasket (No. 407502)

- On the 2 "steam" output and on the "hot water" output
    - Change the O-ring (No. 061200)
    - Change the O-ring (No. 055300)
    - Change the washer (No. 401320)
    - Change the O-ring of steam nozzles (No. 055400)

- For versions TCI: in the mixer:
    - Change the O-ring (No. 087520)

- Change the silicone tubes evacuation 3-way valves cafes (No. 405621)

16 ELECTRONIC DIAGRAM STANDARD VERSION

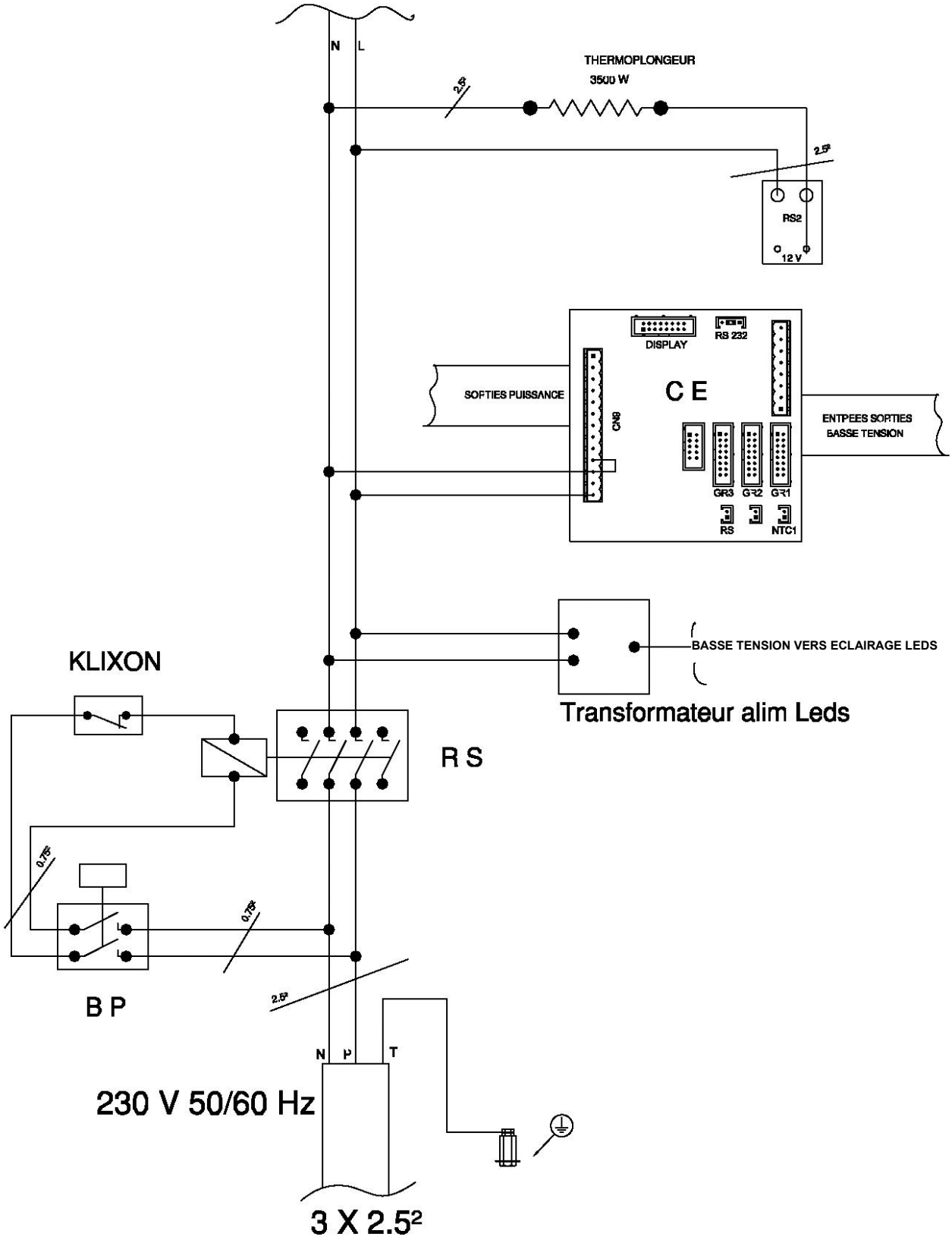
16.1 DESIGNATION OF USEFUL CODES

REF.	DESIGNATIONS
ON/ OFF	ON / OFF BUTTON
CE	ELECTRONIC CARD (MOTHER BOARD)
CV X	FLOWMETER
SONDE 1	TEMPERATURE PROBE FOR STEAM BOILER
SONDE 2	TEMPERATURE PROBE FOR STEAM CONTROL SYST
CN1 / CN2 / CN3	CONNEXION FOR CONTROL COFFEE BUTTONS GR X
EV EE	FILLING UP SOLENOID VALVE
EV GR X	COFFEE GROUP X SOLENOID VALVE
EV LV	STEAM CONTROL SYSTEM SOLENOID VALVE
MP	COMPLETE PUMP
EV THE	TEA SOLENOID VALVE (HOT WATER)
RC	HEATING ELEMENTS
RS X	STATES RELAYS 1/ 2 /3
SN	LEVEL SENSOR
KLIXON	KLIXON
BP	BUTTON ON/OFF
EV AIR	AIR SOLENOID VALVE
EV LAV	LAV SOLENOID VALVE

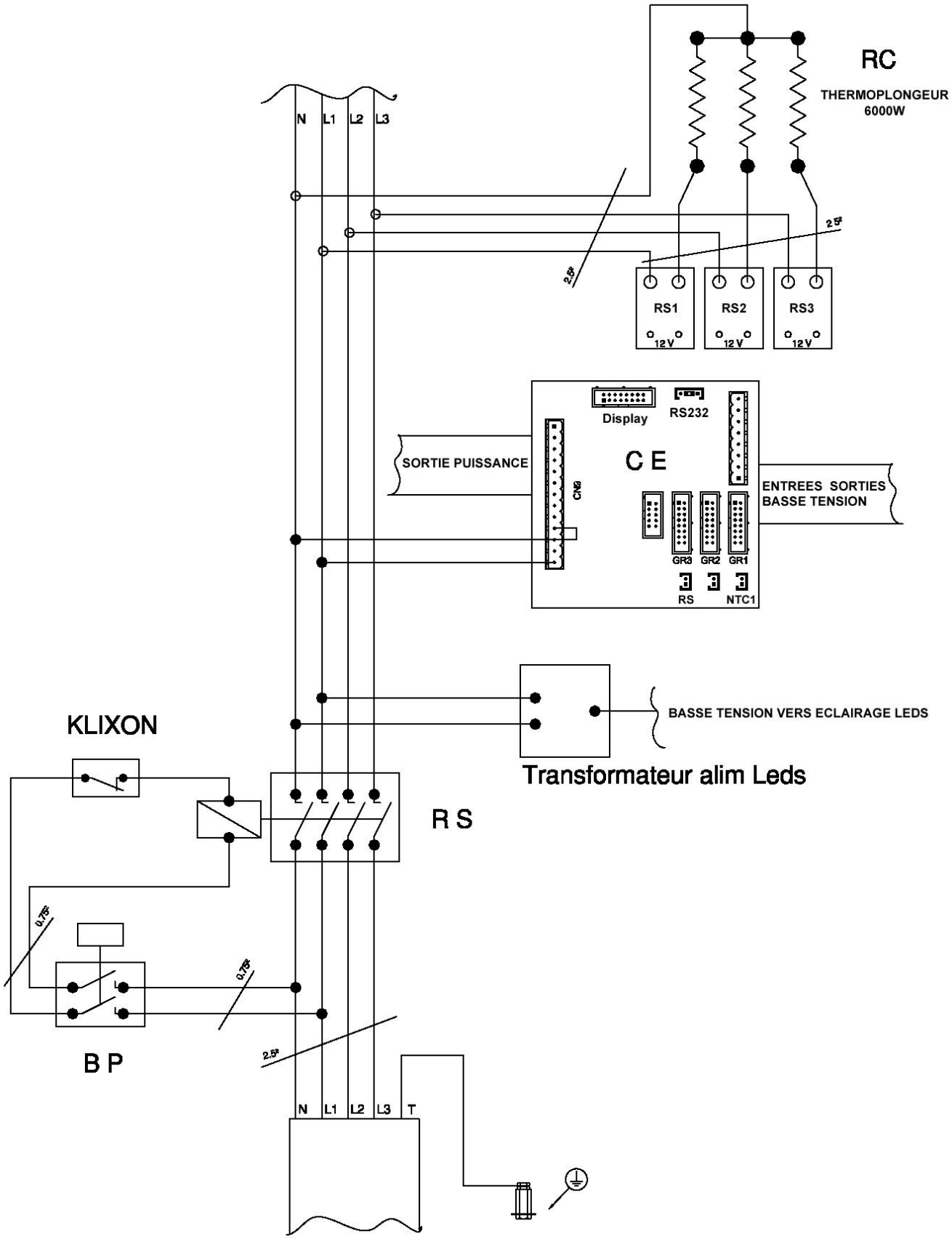
CODE COULEURS FILS
CABLE COLOUR CODE

1	marron	brown
2	rouge	red
3	orange	orange
4	jaune	yellow
5	vert	green
6	bleu	blue
7	violet	violet
8	gris	grey
9	blanc	white
0	noir	black

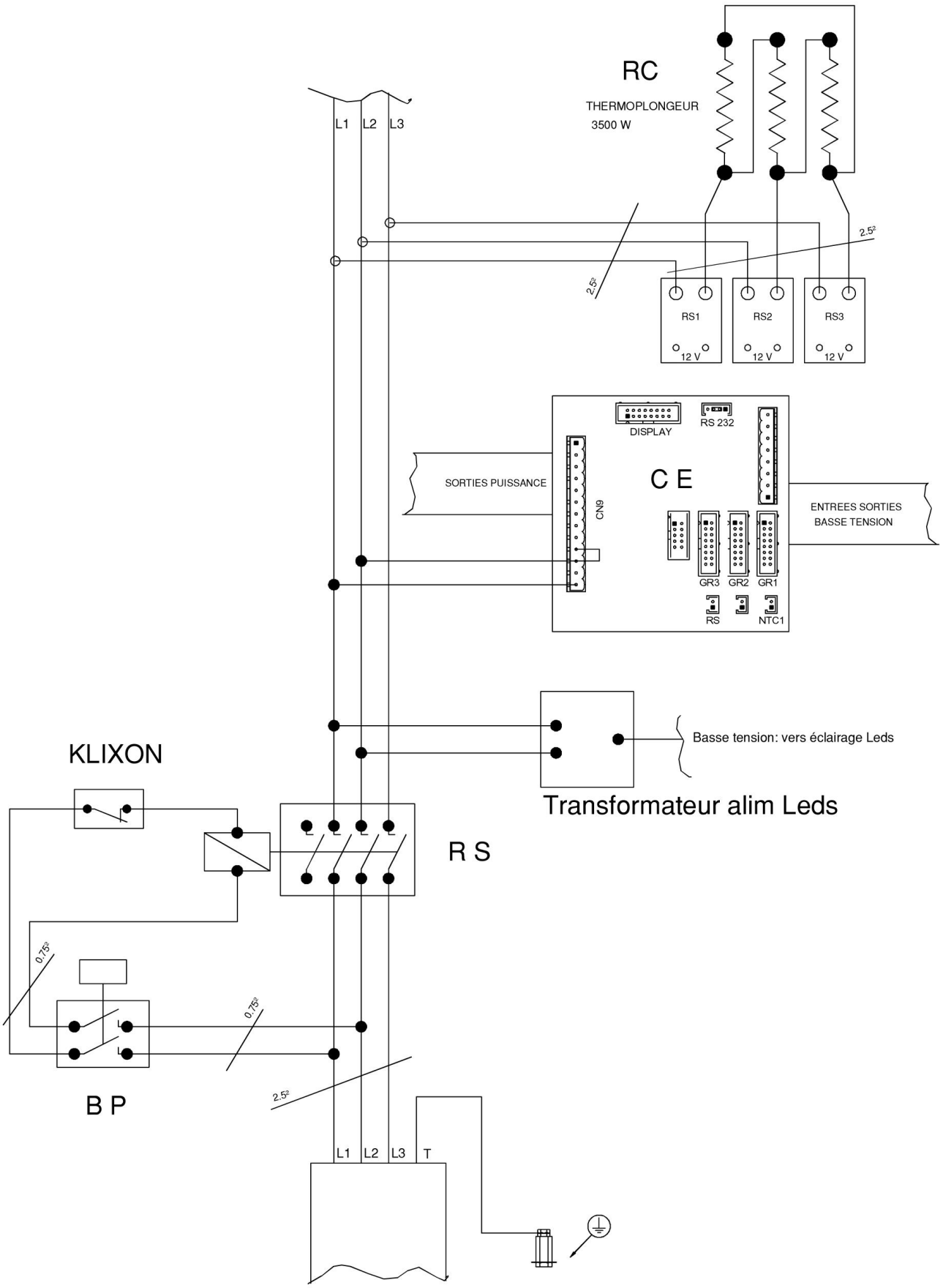
16.2 ELECTRICAL DIAGRAM OF THE 230V "1P+N" (3500W) HEATING CIRCUIT:



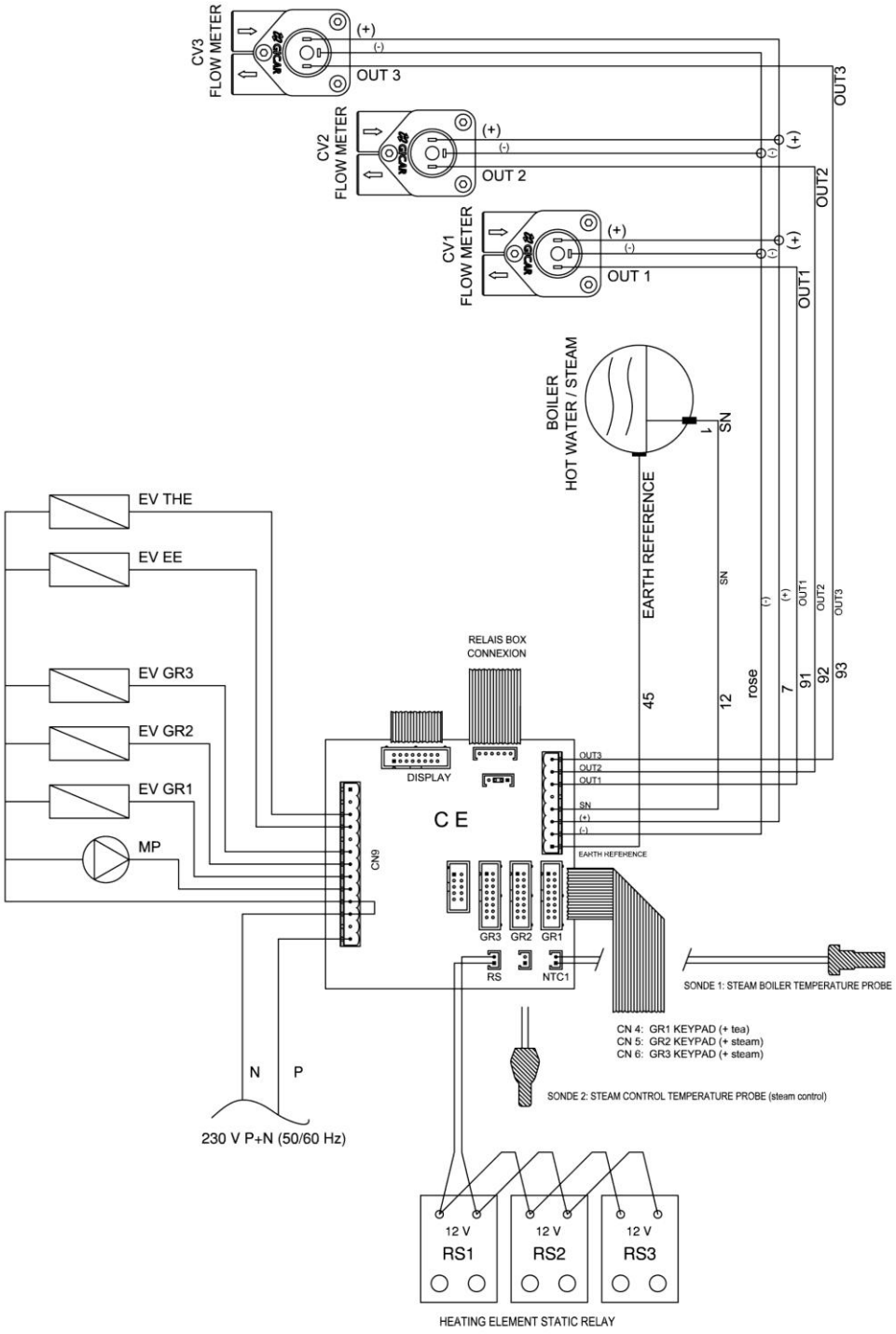
16.3 ELECTRICAL DIAGRAM OF THE 230/400V "3P+N" HEATING CIRCUIT (4200 W / 6000 W)



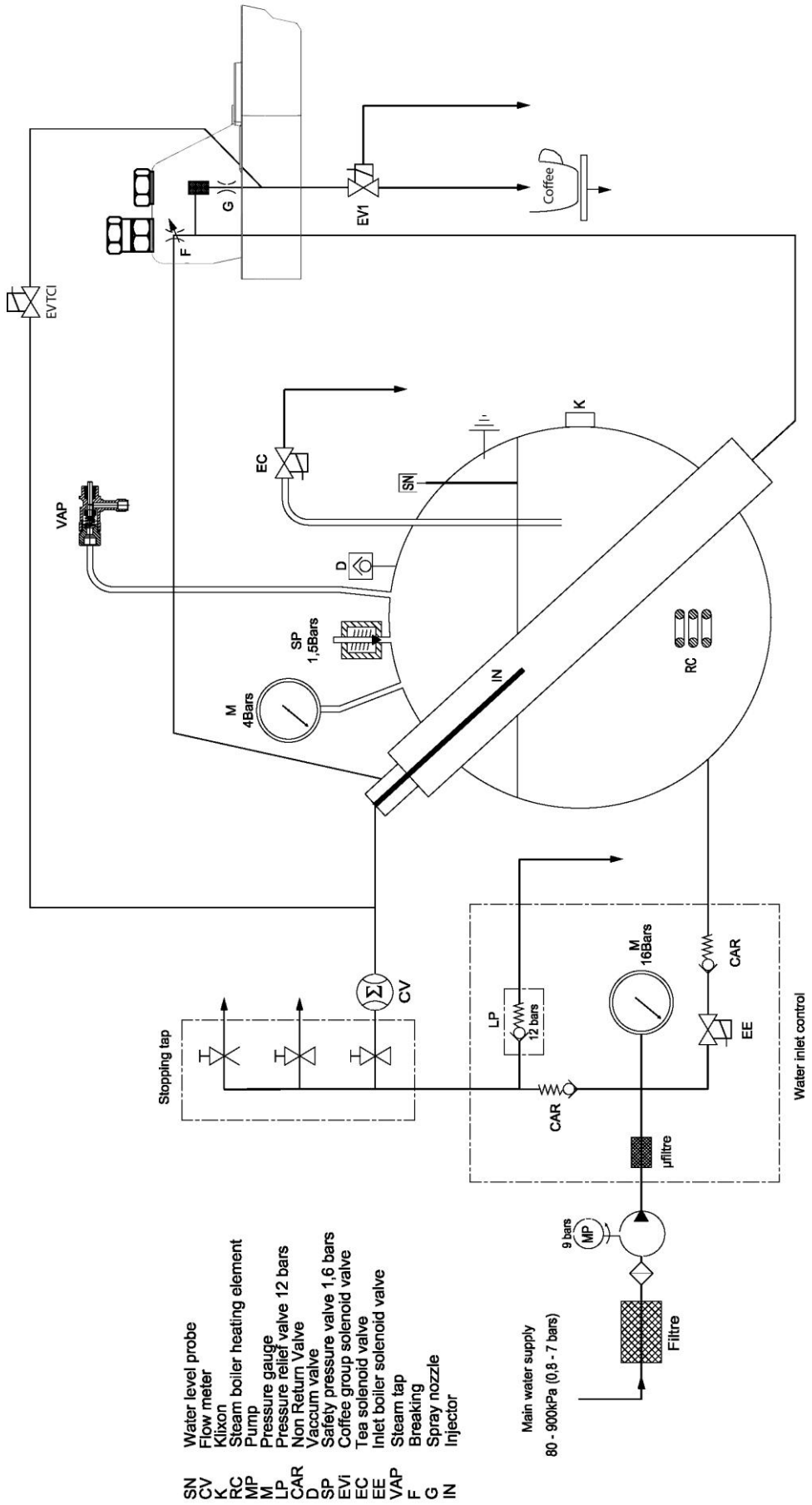
16.4 ELECTRICAL DIAGRAM OF THE 400V "3P" HEATING CIRCUIT (4200 W / 6000 W)



16.5 ELECTRICAL POWER CIRCUIT FOR NG-X:



17 HYDRAULIC SCHEMA



18 OPTION AVAILABLE

18.1 SOLO KIT

In case of insufficient pressure on the water system, or if the water supply is non-existent, you must use separate water tanks.

The machine must operates in SOLO mode:

- In the technical menu must be set filling "PUMP"
- The machine draws its water from the reservoir provided.

We propose for that a solo kit No. 411618 (order separately)

This kit consists of the following elements:

- 1 corrugated input to connect at the inlet of the machine
- 1 hose to connect to the corrugated input
- 1 "strainer + non return valve" to connect to the other side of the hose.

The role of the strainer is to ensure that the pump remains primed again.

ESTD 1956

Conti

MONACO

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