

Congratulations,

By purchasing the **APPRIA II** you have made an excellent choice.

The purchase of a professional espresso coffee-maker involves various elements of selection: the name of the manufacturing firm, the machine's specific functions, its technical reliability, the option of immediate and suitable servicing, its price. You certainly evaluated all these factors and then made your choice: the **APPRIA II** model.

We think you have made the best choice and after every coffee and cappuccino you will be able to assess this.

You will see how practical, convenient and efficient working with **APPRIA II** is.

If this is the first time you have bought a **Nuova Simonelli** coffee machine, welcome to high quality coffee-making; if you are already a customer of ours, we feel flattered by the trust you have shown us.

Thanks of the preference.

With best wishes,

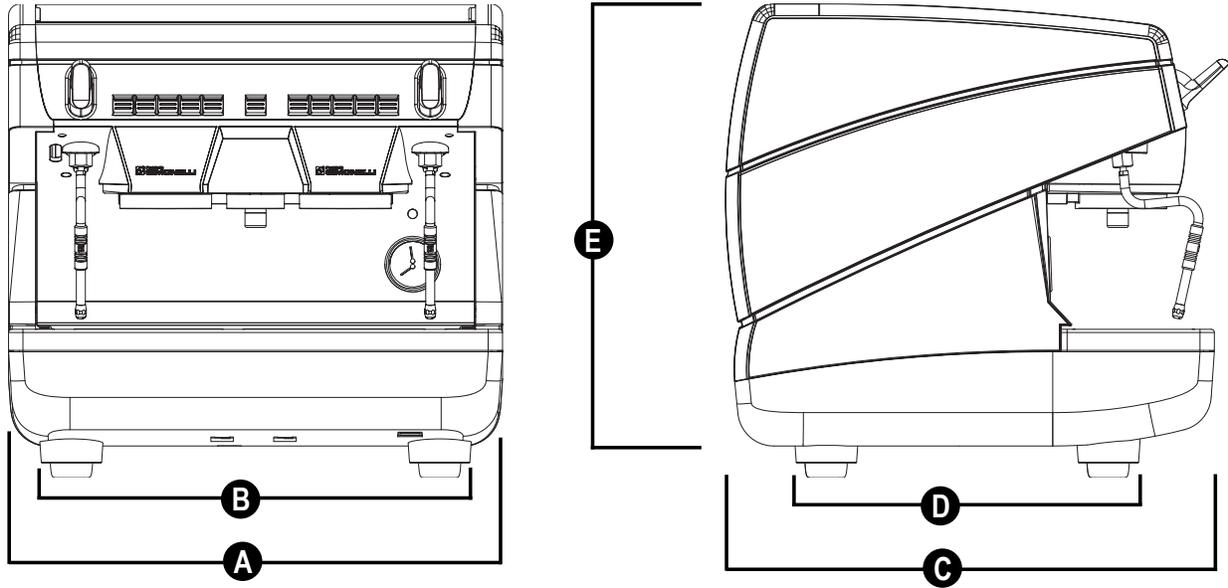
**Nuova Simonelli S.p.a.**



# APPRIA II

## COMPACT

# TECHNICAL CHARACTERISTICS



	220 V		110 V	
<b>NET WEIGHT</b>	45 kg	99 lb	45 kg	99 lb
<b>GROS WEIGHT</b>	54 kg	119 lb	54 kg	119 lb
<b>POWER</b>	2800 W	2800 W	1500/2200 W	1500/2200 W
<b>DIMENSIONS</b>	<b>A</b> 550 mm	<b>A</b> 21.6"	<b>A</b> 550 mm	<b>A</b> 21.6"
	<b>B</b> 460 mm	<b>B</b> 18"	<b>B</b> 460 mm	<b>B</b> 18"
	<b>C</b> 545 mm	<b>C</b> 21.45"	<b>C</b> 545 mm	<b>C</b> 21.45"
	<b>D</b> 360 mm	<b>D</b> 14.17"	<b>D</b> 370 mm	<b>D</b> 14.17"
	<b>E</b> 530 mm	<b>E</b> 20.86"	<b>E</b> 530 mm	<b>E</b> 20.86"

# APPIA II

## COMPACT

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# 1. DESCRIPTION

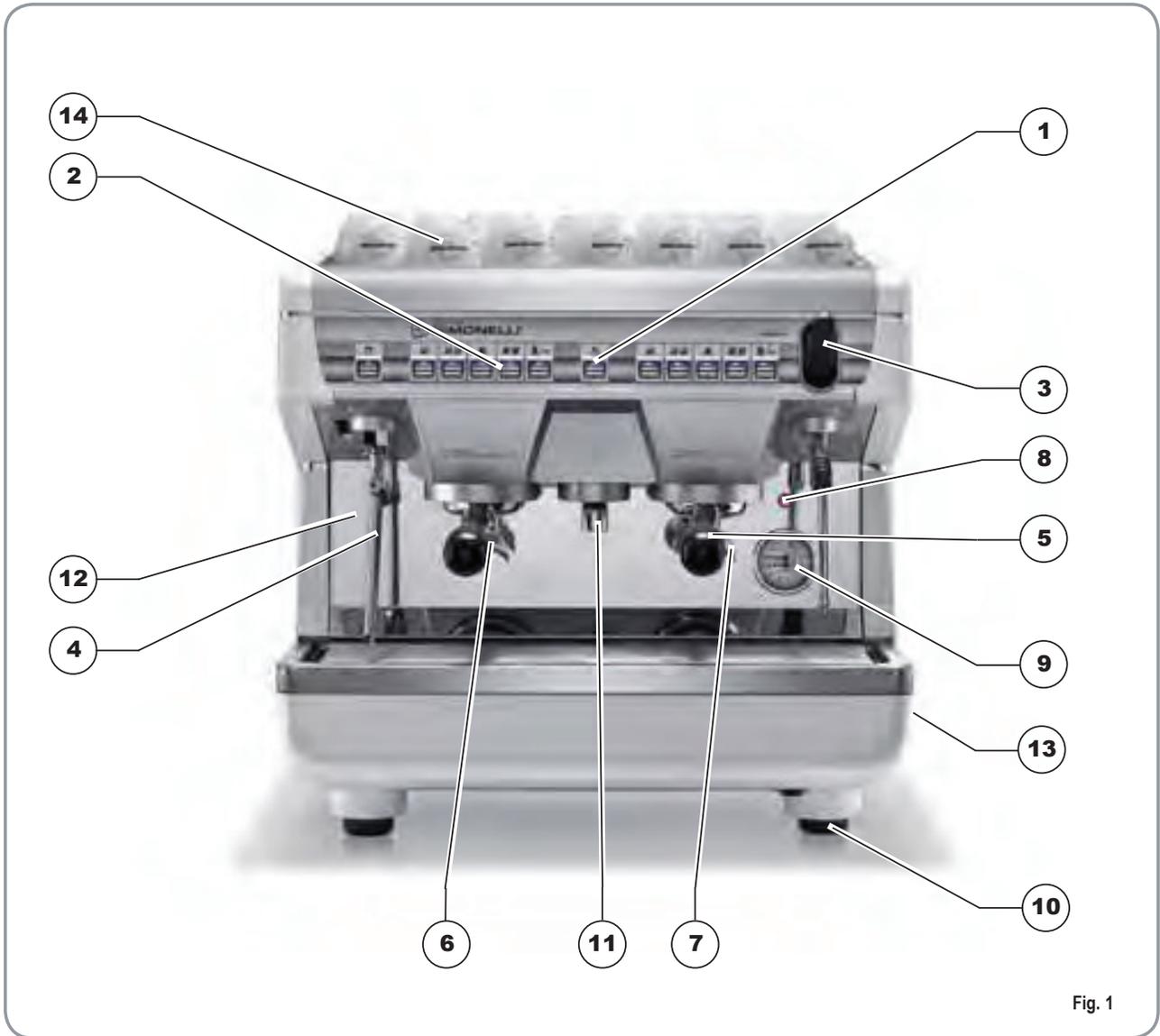


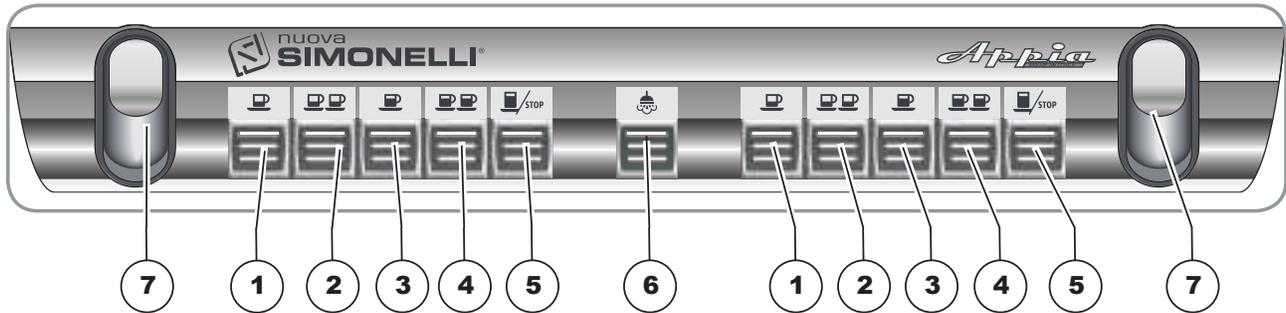
Fig. 1

## KEY

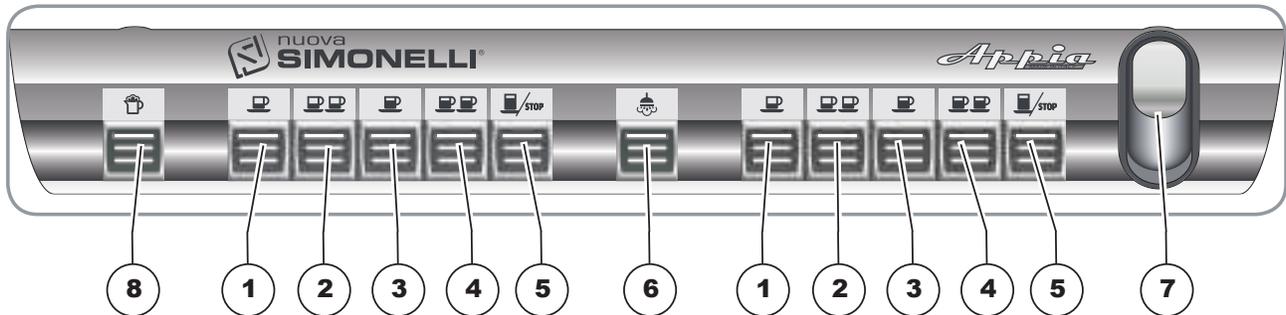
- |    |                       |    |                       |
|----|-----------------------|----|-----------------------|
| 1  | Select buttons        | 11 | Hot water nozzle      |
| 2  | Delivery buttons      | 12 | Rating plate          |
| 3  | Steam knob            | 13 | Main switch           |
| 4  | Steam nozzle          | 14 | Cup warmer (optional) |
| 5  | Filter holder         |    |                       |
| 6  | Single delivery spout |    |                       |
| 7  | Double delivery spout |    |                       |
| 8  | Optical level         |    |                       |
| 9  | Pressure gauge        |    |                       |
| 10 | Adjustable foot       |    |                       |

## 1.1 KEYPAD DESCRIPTION

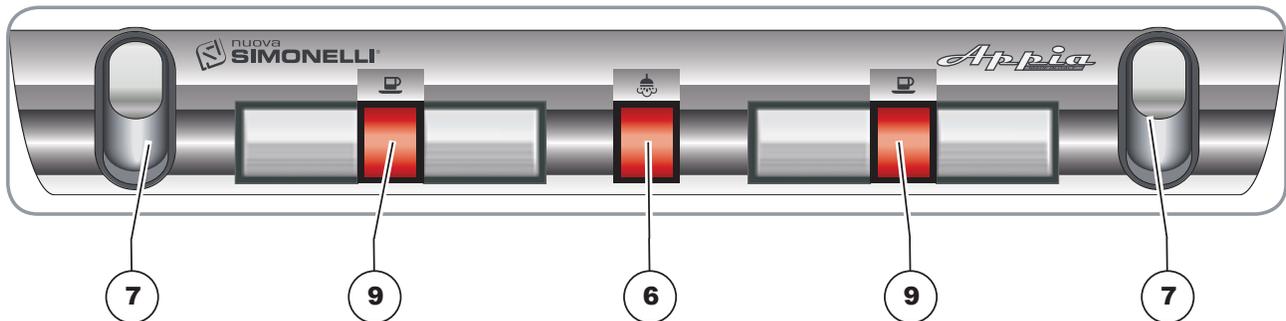
### VOLUMETRIC APPIA COMPACT



### VOLUMETRIC APPIA COMPACT AUTOSTEAM



### SEMI-AUTOMATIC APPIA COMPACT



#### KEY

- 1 1 Espresso key
- 2 2 Espressos key
- 3 1 Coffee key
- 4 2 Coffees key
- 5 Continuous coffee key
- 6 Hot water key
- 7 Steam knob
- 8 Autosteam / timed steam key
- 9 Coffee key

## 1.2 ACCESSORIES LIST

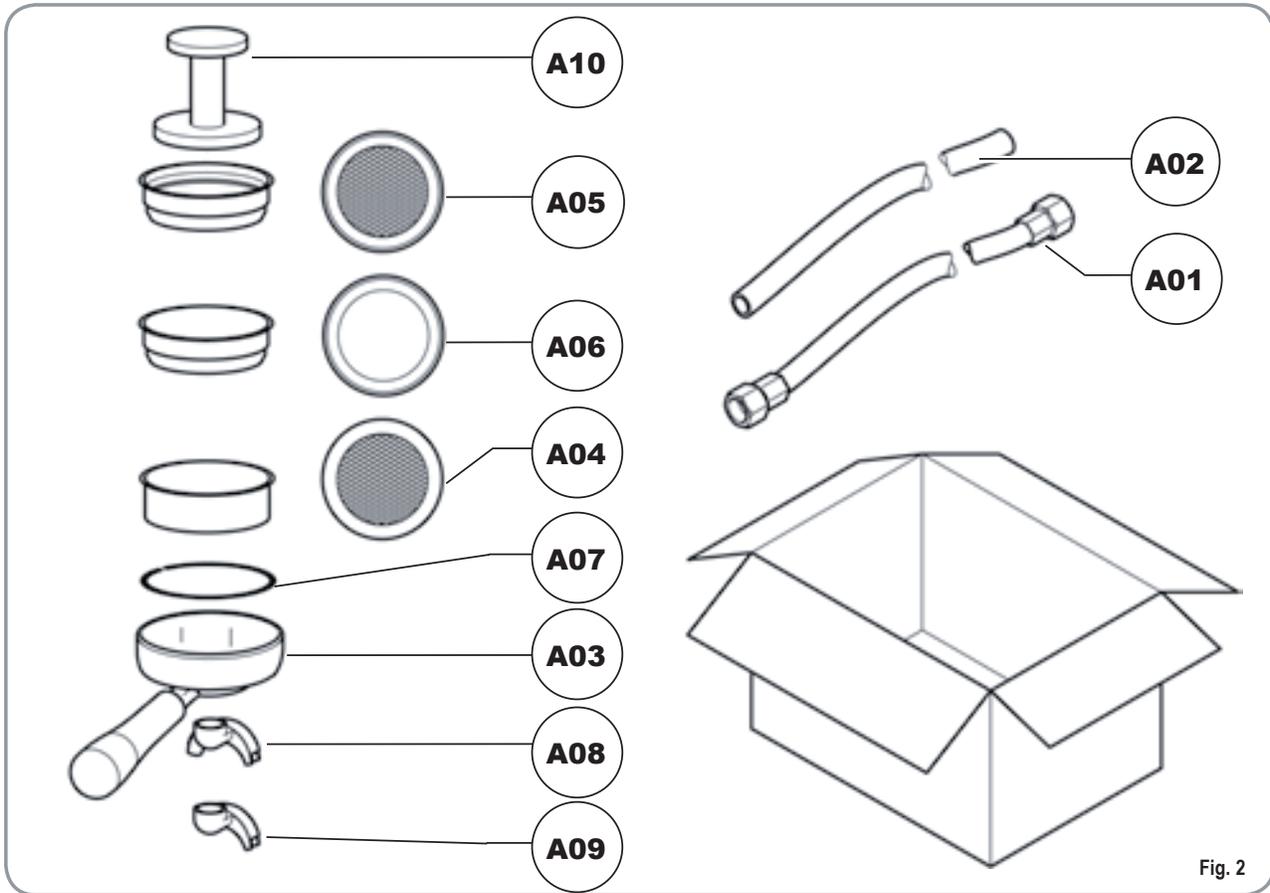


Fig. 2

CODE	DESCRIPTION	QUANTITY
A01	Filling tube C 3/8,	1
A02	Waste pipe Ø 25 mm - L. 150 cm + sleeve	1
A03	Filter-holder	3
A04	Double filter	2
A05	Single filter	1
A06	Blind filter	1
A07	Spring	3
A08	Double delivery spout	2
A09	Single delivery spout	1
A10	Coffee presser	1
A11	Plastics grill	3

## 2. SAFETY PRESCRIPTION

 This book is an integral and essential part of the product and must be given to the user. Read this book carefully. It provides important information concerning safety of installation, use and maintenance. Save it carefully for future reference.

 After unpacking, make sure the appliance is complete. In case of doubts, do not use the appliance, but consult a qualified technician. Packaging items which are potentially dangerous (plastic bags, polystyrene foam, nails, etc.) must be kept out of children's reach and must not be disposed of in the environment.

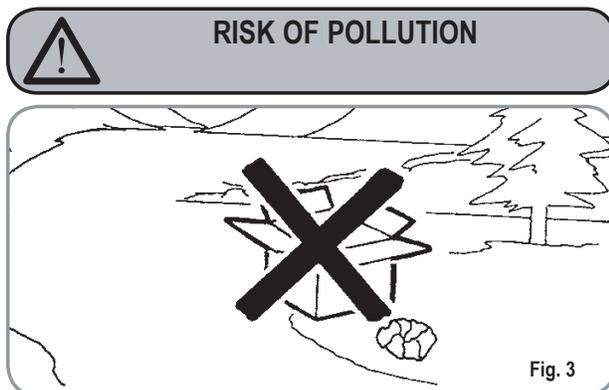


Fig. 3

 The machine is can be installed in staff kitchen areas in shops, offices and other working environments, farm houses by clients in hotels, motels and other residential type environments bed and breakfast type environments.

 Before connecting the appliance make sure the rating plate data correspond with the mains. This plate is on the front panel at the top right hand side of the appliance. The appliance must be installed by qualified technicians in accordance with current standards and manufacturer's instructions. The manufacturer is not liable for any damage caused due to failure to ground the system. For the electrical safety of the appliance, it is necessary to equip the system with the proper grounding. This must be carried out by a qualified electrician who must ensure that the electric power of the system is sufficient to absorb the maximum power input stated on the plate.



Fig. 4

 In particular you must ensure that the size of the wiring cables is sufficient to absorb power input.

The use of adapters, multiple sockets or extensions is strictly forbidden. If they prove necessary, call a fully qualified electrician.

 When installing the device, it is necessary to use the parts and materials supplied with the device itself. Should it be necessary to use other parts, the installation engineer needs to check their suitability for use in contact with water for human consumption.

 This machine must be installed according to the applicable federal, state, and local standards (codes) in force with regard to plumbing systems including backflow prevention devices.

For this reason, the plumbing connections must be carried out by a qualified technician.

 The device needs to be supplied with water that is suitable for human consumption and compliant with the regulations in force in the place of installation. The installation engineer needs confirmation from the owner/manager of the system that the water complies with the requirements and standards stated above.

 This appliance must only be used as described in this handbook. The manufacturer shall not be liable for any damage caused due to improper, incorrect and unreasonable use.

 This appliance is not suitable for use by children or persons with reduced physical, sensory or mental capabilities, or by persons with a lack of experience or knowledge, unless supervised or given instructions.

At the end of installation, the device is switched on and taken to rated operating conditions, leaving it in a state in which it is “ready for operation”. The device is then switched off and the whole hydraulic circuit is bled of the first lot of water in order to remove any initial impurities.

The device is then refilled and taken to rated operating conditions. After reaching the “ready for operation” condition, the following dispensing operations are carried out:

- 100% of the coffee circuit through the coffee dispenser (for more than one dispenser, this is divided equally);
  - 100% of the hot water circuit through the water dispenser (for more than one dispenser, this is divided equally);
  - opening of each steam outlet for 1 minute.
- At the end of installation, it is good practice to draw up a report of the operations.

The maximum and minimum storage temperatures must fall within a range of [-5, +50]°C.

The operating temperature must be within the range of [+5, +35]°C.

 **WARNING**

The power cord may only be replaced by a Qualified Electrician, using an Original Replacement fitted with special earth wire, which is available from Authorised Assistance Centres.

Basic rules must be observed when using any electric appliance.

In particular:

- do not touch the appliance when hands or feet are wet;

 **CAUTION**  
**RISK OF ELECTRIC SHOCK**

- do not use the appliance when bare-foot;
- do not use extensions in bath or shower rooms;
- do not pull the supply cord out of the socket to disconnect it from the mains;

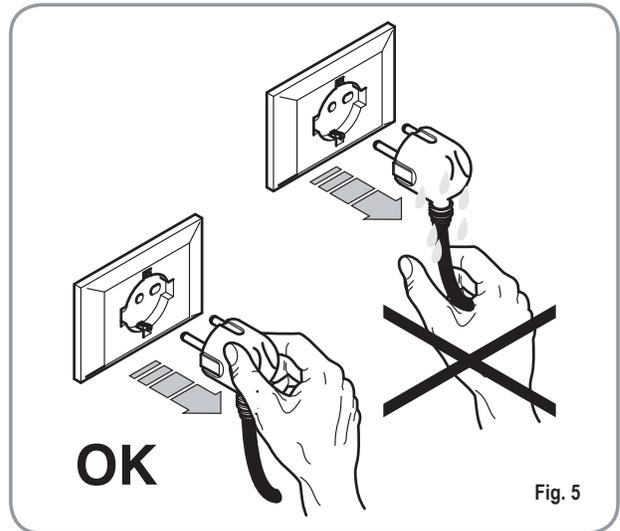


Fig. 5

- do not leave the appliance exposed to atmospheric agents (rain, sun, etc.);
- do not let the appliance be used by children, unauthorised staff or staff who have not read and fully understood the contents of this handbook.

Before servicing the appliance, the authorised technician must first switch off the appliance and remove the plug.

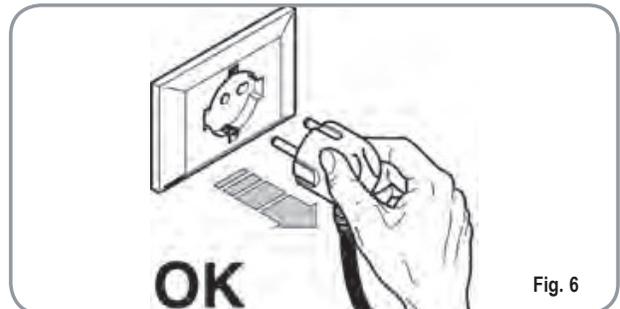


Fig. 6

To clean the appliance, set the machine to the “0” energy level, that is, “WITH THE MACHINE SWITCHED OFF AND THE PLUG REMOVED FROM THE MAINS” and follow the instructions in this handbook.

If the appliance breaks down or fails to work properly, switch it off. Any intervention is strictly forbidden. Contact qualified experts only.

Repairs should only be made by the manufacturer or authorized service centres. Only original spare parts must be used. Failure to observe the above, could make the appliance unsafe.

For installation, the qualified electrician must fit an omnipolar switch in accordance with the safety regulations in force and with 3 (0,12) or more mm (in) between contacts.

 To avoid dangerous overheating, make sure the supply cord is fully uncoiled.

 Do not obstruct the extraction and/or dissipator grids, especially of the cup warmer.

 The user must not replace the appliance supply cord. If the cord is damaged, switch off the appliance and have a qualified technician change the cord.

 If no longer using the appliance, we recommend making it inoperative; after removing the plug from the mains electricity, cut the power supply cable.

 **CAUTION**  
RISK OF POLLUTION

 Do not dispose of the machine in the environment: to dispose of the machine, use an authorised centre, or contact the manufacturer for relative information.

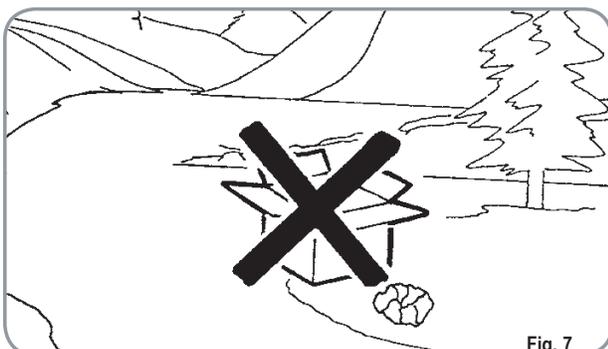
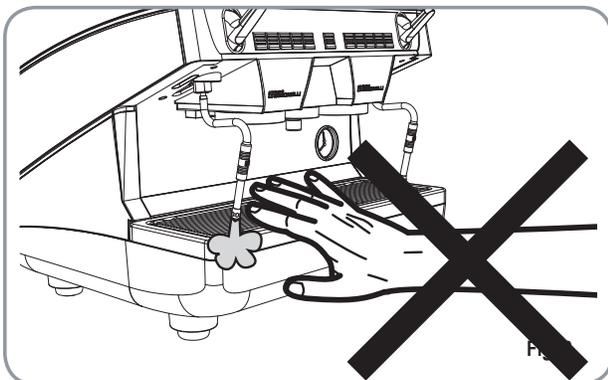


Fig. 7

 **CAUTION**  
RISK OF BURNS OR SCALDING

 Do not dispose of the machine in the environment: to dispose of the machine, use an authorised centre, or contact the manufacturer for relative information.



 **CAUTION**  
RISK OF BURNS OR SCALDING

 We remind you that before carrying out any installation, maintenance, unloading or adjustment operations, the qualified operator must put on work gloves and protective footwear.

 The maximum noise disturbance level is lower than 70db.

 If the pipe connecting to the mains water is replaced the old pipe must never be re-used.

 **CAUTION**



**INFORMATION TO THE USERS**  
Under the senses of art. 13 of Law Decree 25th July 2005, n. 151 "Implementation of the Directives/Guidelines 2002/95/CE, 2002/96/CE and 2003/108/CE, concerning the reduction of the use of dangerous substances in electric and electronic equipment, as well as the disposal of wastes".

The symbol of the crossed large rubbish container that is present on the machine points out that the product at the end of its life cycle must be collected separately from the other wastes. The user for this reason will have to give the equipment that got to its life cycle to the suitable separate waste collection centres of electronic and electrotechnical wastes, or to give it back to the seller or dealer when buying a new equipment of equivalent type, in terms of one to one. The suitable separate waste collection for the following sending of the disused equipment to recycling, the dealing or handling and compatible environment disposal contributes to avoid possible negative effects on the environment and on the people's health and helps the recycling of the materials the machine is composed of. The user's illegal disposal of the product implies the application of administrative fines as stated in Law Decree n.22/1997" (article 50 and followings of the Law Decree n.22/1997).

## 3. TRANSPORT AND HANDLING

### 3.1 MACHINE IDENTIFICATION

Always quote the machine serial number in all communications to the manufacturer, **Nuova Simonelli**.



### 3.2 TRANSPORT

The machine is transported on pallets which also contain other machines - all boxed and secured to the pallet with supports.

Prior to carrying out any transport or handling operation, the operator must:

- put on work gloves and protective footwear, as well as a set of overalls which must be elasticated at the wrists and ankles.

The pallet must be transported using a suitable means for lifting (e.g., forklift).

### 3.3 HANDLING



**CAUTION**  
RISK OF IMPACT  
OR CRASHING

During all handling operations, the operator must ensure that there are no persons, objects or property in the handling area.

The pallet must be slowly raised to a height of 30 cm (11,8 in) and moved to the loading area. After first ensuring that there are no persons, objects or property, loading operations can be carried out.

Upon arrival at the destination and after ensuring that there are no persons, objects or property in the unloading area, the proper lifting equipment (e.g. forklift) should be used to lower the pallet to the ground and then to move it (at approx. 30 cm (11,8 in) from ground level), to the storage area.



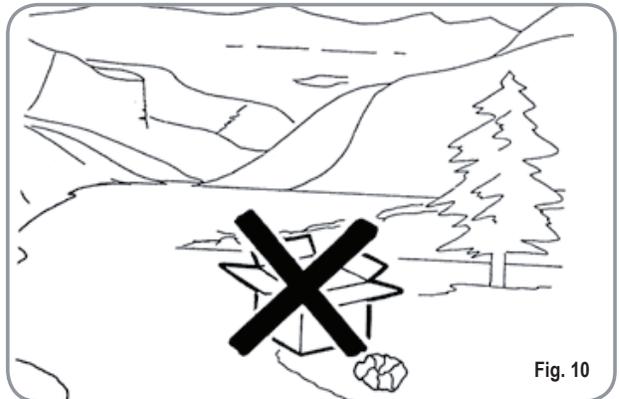
**CAUTION**  
RISK OF IMPACT  
OR CRASHING

Before carrying out the following operation, the load must be checked to ensure that it is in the correct position and that, when the supports are cut, it will not fall.

The operator, who must first put on work gloves and protective footwear, will proceed to cut the supports and to storing the product. To carry out this operation, the technical characteristics of the product must be consulted in order to know the weight of the machine and to store it accordingly.



**CAUTION**  
RISK OF POLLUTION



## 4. INSTALLATION AND PRELIMINARY OPERATIONS

Before carrying out any installation and adjustment operations you must read and fully understand the **SAFETY INSTRUCTIONS** of this handbook. The company cannot be held responsible for damage to things or injury to persons caused by failure to comply with the safety instructions and installation and maintenance instructions contained in this handbook.



**CAUTION**  
RISK OF POLLUTION

Do not dispose of packaging in the environment

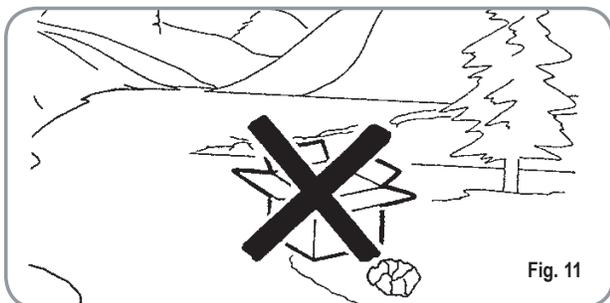


Fig. 11

After unpacking, assess that the machine and its accessories unit are complete, then proceed as follows:

- place the machine so that it is level on a flat surface;
- assemble its supporting feet by inserting the insert into the cylindrical unit;
- twist the rubber foot into the screw thread inside the unit;
- screw the whole assembled unit into the allotted setting for the machine's adjustable feet;
- level the machine by regulating the adjustable feet;

**NOTE:** the unit grooves have to face upwards, as shown in the following illustration.

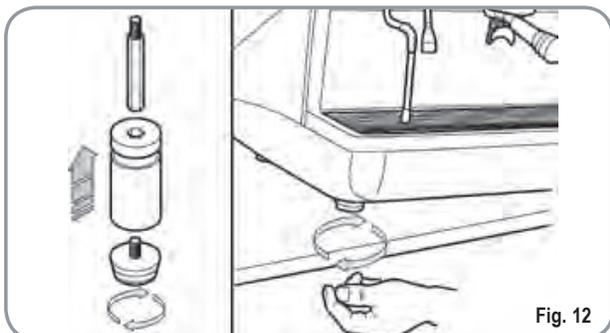


Fig. 12

It is advisable to install a softener (1) and then a mesh filter (2) on the external part of the plumbing system, during preliminaries and after levelling the machine.

In this way impurities like sand, particles of calcium, rust etc will not damage the delicate graphite surfaces and durability will be guaranteed.

Following these operations, connect the plumbing systems as illustrated in the following figure.



**WARNING**

Recommended mains pressure for the water is [2.3] bar.



**WARNING**

Avoid throttling in the connecting tubes. Assess that the drain pipe (3) is able to eliminate waste.

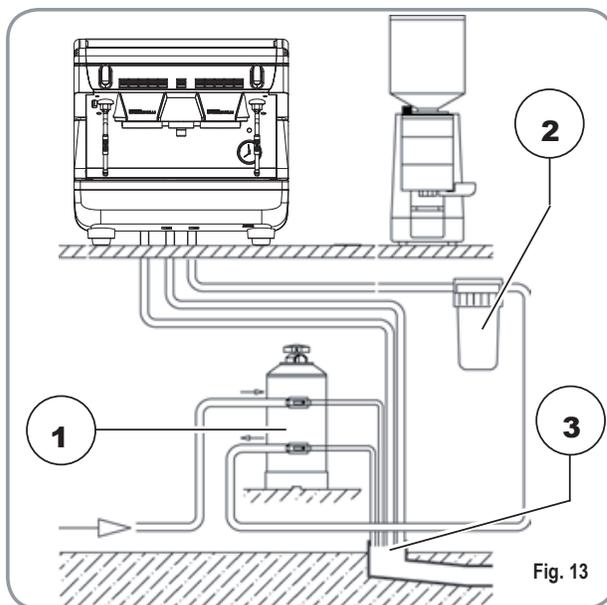


Fig. 13

### KEY

- 1 Softener
- 2 Mesh filter
- 3 Drain Ø 50 mm

**NOTE:** For a correct functioning of the machine the water works pressure must not exceed 4 bars.

Otherwise install a pressure reducer upstream of the softener; the internal diameter of water entrance tube must not be less than 6mm (3/8").



**CAUTION  
RISK OF SHORT CIRCUITS**

The machine must always be protected by an automatic omnipolar switch of suitable power with contact openings of equal distance or more than 3mm.

**Nuova Simonelli is not liable for any damage to people or objects due to not observing current security measures.**

Prior to connecting the machine to the electrical mains, assess that the voltage shown on the machine's data plate corresponds with that of the mains.

**NOTE:** At the start of the day's activities and in any case, if there are any pauses of more than 8 hours, then it is necessary to change 100% of the water in the circuits, using the relevant dispensers.

**NOTE:** In case of use where service is continuous, make the above changes at least once a week.

## 5. ADJUSTMENTS TO BE MADE BY A QUALIFIED TECHNICIAN ONLY



CAUTION

The adjustments listed here below must **ONLY** be performed by a Specialist Technical Engineer. Nuova Simonelli cannot be held liable for any damage to persons or property arising from failure to observe the safety instructions supplied in this manual.



CAUTION  
ELECTRIC SHOCK HAZARD

Before performing any operation, the specialist technical engineer must first switch off the main switch off and unplug the machine.

### 5.1 FILLING BOILER MANUALLY

All models **APPIA II COMPACT** are equipped with a level gauge to keep the water level inside the boiler constant.

When using the machine for the first time, it is advisable to fill the boiler by hand to avoid damaging the electrical resistor and turning on the electronic protection.

If this should happen, just turn the machine off and then start it up again to complete its loading procedure (see chapter "MACHINE FUNCTIONS MESSAGE – LEVEL ERROR").

To fill the boiler manually for the first time, proceed as follows:

- remove the worktop grid;
- remove the sheet metal guard by unscrewing the four screws at the sides (A), as illustrated in the following figure;

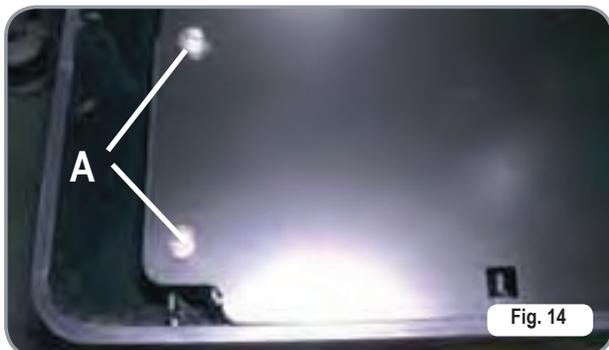


Fig. 14

- use the manual level valve to allow water to enter the boiler tank for about 20-30 secs.;



Fig. 15



Fig. 16

- 1: Operating position
- 2: Manual filling position

When the adjustments have been made, refit the sheet metal guard into its housing and fix it into place with the four side screws; refit the grid into the work surface.

### 5.2 SETTING THE BOILER TANK PRESSURE (Pressure switch adjustment)

To adjust the service pressure of the boiler, thus regulating the water temperature, according to the various functions and needs of the coffee desired, proceed as follows:

- unscrew the central screw in the upper panel (Fig. 17);

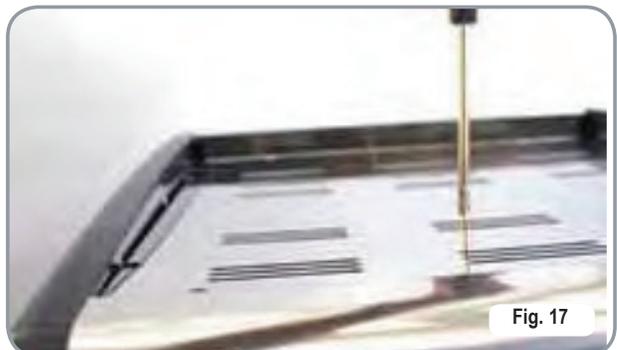


Fig. 17

- turn the pump registration screw, turning it clockwise to INCREASE and counter clock wise to DECREASE the pressure.

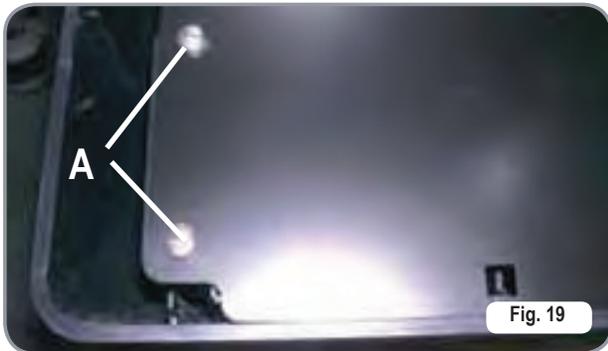


Advisable pressure: 1 - 1,4 bar  
(according to the kind of coffee).

### 5.3 SETTING THE PUMP PRESSURE

To set the pressure of the pump, proceed as follows:

- remove the grid from the work surface;
- remove the sheet metal guard by unscrewing the four screws at the sides (A), as illustrated in the following figure;



- turn the pump registration screw, turning it clockwise to INCREASE and counter clock wise to DECREASE the pressure.



Advisable pressure: 9 bar.

- The pressure set for the pump will be shown in the bottom section of the pressure gauge when coffee is being dispensed.



Once the adjustment operation has been completed, screw the protective metal sheet back into its setting and replace the worktop grid cover.

## 5.4 HOT WATER ECONOMISER ADJUSTMENT

All **APPRIA II** COMPACT models can be equipped with a warm water mixer which permits to adjust the water outlet temperature and to optimize system performance.

To adjust the hot water economiser, it is necessary to remove the top panel of the machine, proceeding as follows:

- unscrew the central screw in the upper panel (Fig. 22);

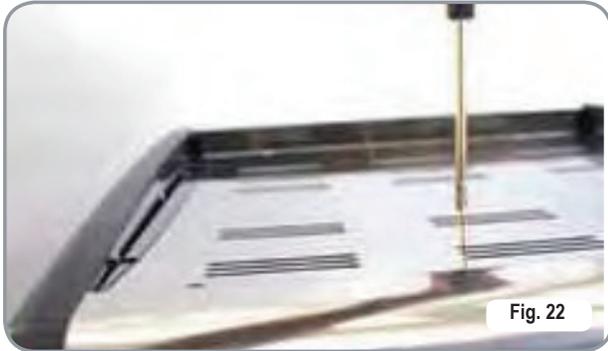


Fig. 22

- to adjust the temperature of the hot water delivered from the nozzle, turn the register knob **CLOCKWISE / ANTICLOCKWISE** to **INCREASE / REDUCE** the temperature;



Fig. 23

- at the end of this operation, refit the top panel on the machine.

## 6. USE

Before starting to use the appliance, the operator must be sure to have read and understood the safety prescriptions contained in this booklet.

### 6.1 SWITCHING THE MACHINE ON

- Plug the machine into the mains power socket.
- Set the main switch (n.xx, Fig 1) to "I".

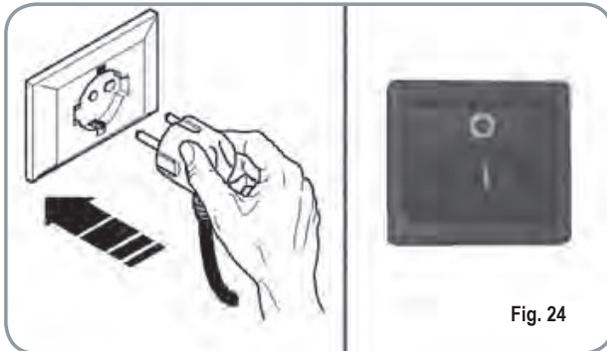


Fig. 24

### 6.2 SWITCHING THE MACHINE OFF

- Set the main switch (n. 13, Fig 1) to "O".
- Unplug the machine into the mains power socket.

## 6.3 MAKING COFFEE

Unhitch the filter-holder and fill it with one or two doses of ground coffee depending on the filter used.



Fig. 25

Press the coffee with the provided coffee presser, dust off any coffee residue from the rim of the filter (this way the rubber gasket will last longer). Insert the filter in its unit.

Insert the filter in its unit.

Press the desired coffee button:



1 small coffee



2 small coffees



1 long coffee



2 long coffees

By starting up the coffee brewing procedure the unit's pump is activated and the unit's solenoid valve is opened.

By pressing it, the button will turn on and signal the operation

**NOTE:** when in pause, leave the filter-holder inserted in the unit so that it will keep warm. To guarantee the utmost thermic stability during use, the delivery units are thermo-compensated with complete hot water circulation.

## 6.4 USING STEAM



**CAUTION**  
RISK OF BURNS OR SCALDING

While using the steam nozzle, you must pay attention to not place your hands beneath it or touch just after it has been used.

To use steam just pull or push the provided lever (Fig. 26).

By pulling it completely the lever will hold a position of maximum delivery; by pushing it, the lever will automatically give way.

The two steam nozzles are articulated to guarantee their easy use.

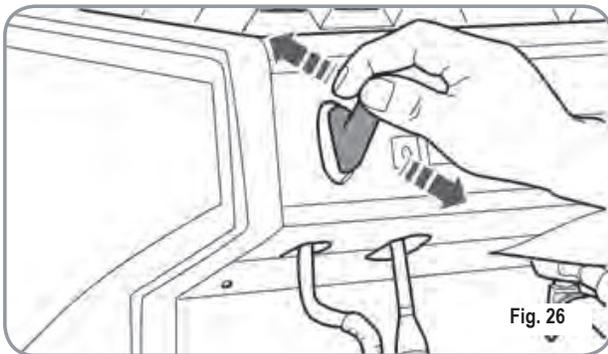


Fig. 26

**NOTE:** Before using the steam wand, always bleed out any condensation for at least 2 seconds or according to the manufacturer's instructions.

## 6.5 MAKING CAPPUCCINO

To obtain the typical cappuccino foam, immerse the nozzle all the way into a container 1/3 full of milk (preferably cone-shaped). Turn on the steam. Before the milk starts to boil, pull the nozzle slightly up and lightly move it vertically across the surface of the milk. When you have completed the procedure, clean the nozzle carefully with a soft cloth.

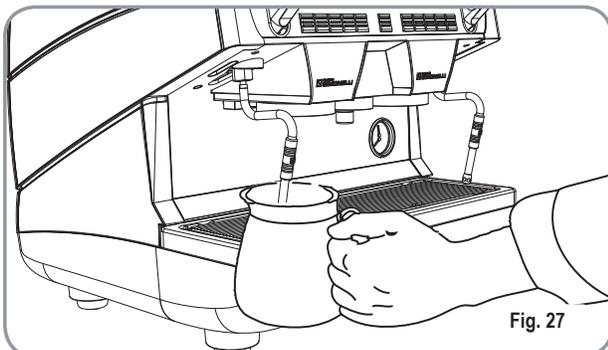


Fig. 27

## 6.6 HOT WATER SELECTION



**CAUTION**  
RISK OF BURNS OR SCALDING

While using the hot water nozzle, pay careful attention not to place your hands beneath it or touch it just after it has been used.

This nozzle delivers hot water to make tea or herb teas.

Place a container underneath the hot water nozzle and press the hot water select button  .

Make sure the button lights up.

Water will be delivered from the hot water nozzle for as long as the set time indicates.

**NOTE:** Hot water can be delivered at the same time as coffee.

## 6.7 TIMED STEAM SELECTION (Version with timed steam nozzle without temperature probe)



**WARNING**  
DANGER OF BURNS OR SCALDS

When using the steam nozzle always take great care never to place your hands underneath it or to touch it immediately after use.

This is used to dispense steam for milk-based beverages (e.g. cappuccino or latte).

Place a container with the liquid to be heated beneath the steam nozzle and press the steam button  .

Make sure that the button itself lights up.

The nozzle will dispense steam for the amount of time set in the programming function.

**NOTE:** Steam can be dispensed at the same time as coffee.

## 6.8 **AUTOSTEAM SELECTION (Version with Autosteam)**



**When using the steam nozzle always take great care never to place your hands underneath it or to touch it immediately after use.**

This is used to dispense steam for milk-based beverages (e.g. cappuccino or latte).

Place a container with the liquid to be heated beneath the steam nozzle and press the steam button  .

Make sure that the button itself lights up. The nozzle will continue to dispense steam until the heated liquid reaches the set temperature.

**NOTE:** Steam can be dispensed at the same time as coffee.

## 7. PROGRAMMING

### 7.1 PROGRAMMING DOSES

To access the programming units, proceed as follows:

**NOTE:** the procedure can be carried out with the machine on.

- To enter the programming function for each group, it is necessary to hold down the continued delivery key  for 5 seconds.
- The delivery keys will begin to flash.
- Accessing the programming mode for the first group also enables the setting mode for the machine's operating parameters.

### 7.2 PROGRAMMING COFFEE DOSES

To programme the amount of water for each of the delivery keys, proceed as follows:

- fill the filter holder with the right amount of coffee (the double or single filter holder can be used, according to the key to be programmed).
- Place the filter holder in the group.
- Press one of the delivery keys:



- The machine will begin to dispense and once the required quantity has been delivered, press the continued key .
- Delivery will cease and the selected dose key will switch off (the other keys will continue to flash).
- Press the continued key  to exit the programming function or to continue programming other dose keys

**NOTE:** This procedure can be used for all groups on the machine, although it must be performed on one group at a time; the other groups will continue to operate as normal.

### 7.3 SETTING THE TIMED STEAM FUNCTION (Version with timed steam nozzle without temperature probe)

- Follow the standard procedure to enter the programming function;
- Place the steam nozzle inside the liquid to be heated;
- Press the steam select key ,
- The nozzle will begin to dispense steam;
- Press the steam key  again when a sufficient amount of steam has been dispensed. The machine will store this dispensing time to memory.
- Press the continuous key  to quit the programming function or to go on to program other selection keys.

### 7.4 SETTING THE AUTOSTEAM FUNCTION (Version with Autosteam)

- Follow the standard procedure to enter the programming function;
- Place the steam nozzle complete with temperature probe inside the liquid to be heated;
- Press the steam select key ,
- The nozzle will begin to dispense steam;
- Press the steam key  again when the liquid has reached the required temperature. The machine will store this temperature setting to memory;
- Press the continuous key  to quit the programming function or to go on to program other selection keys.

### 7.5 PROGRAMMING HOT WATER

- Use the relevant procedure to enter the programming function.
- Press the hot water selection key .
- Hot water delivery will begin.
- Decide the required amount of hot water and then press the key  again.
- Press the continued key  to exit the programming function or to continue programming other selection keys.

## 7.6 PROGRAMMING STANDARD DOSES

- It is possible to enter pre-set values for the 4 group doses and water (steam).

To do this, it is necessary to press the key  and hold it down for at least 10 seconds until the flashing keys switch off.

The doses are:

<b>1CN</b>	<b>2CN</b>	<b>1CL</b>	<b>2CL</b>
40 cc	60 cc	50 cc	85 cc

<b>WATER</b>	<b>STEAM</b>	<b>STEAM</b>	<b>TEMP.</b>
9 sec.	0 sec.		50°C

**NOTE:** A time setting of 0 seconds for steam and water means this function will work continually.

## 7.7 COPIATURA DOSI

It is possible to copy the doses stored to memory for group 1 to the doses for group 2.

This operation is performed by pressing the continuous key  for group 2 and holding it down for at least 10 seconds until the flashing keys switch off.

## 7.8 PROGRAMMING OPERATING PARAMETERS



The adjustments listed here below must **ONLY** be performed by a **Specialist Technical Engineer**.

If you hold down the  key of the second group, after first entering the programming mode for the first group, this will access the machine parameters setting mode; this is signalled by the continuous key  or the second group, which will switch on

- Enabling the pump if the level is enabled.
- Enabling the software block to enter the dose programming function.
- Adjusting keypad brightness.
- Enabling the hot water pump (on machines

fitted with economiser).

- Disabling the cup warmer
- Restoring default settings.

### 1. Enabling the pump during levelling.

Use the espresso key  to set pump enabling during levelling:

if the key  is lit, the pump is enabled together with the level; if it is switched off, the pump is not enabled with the level function.

### 2. Enabling the software block to enter the dose programming function.

Use the long coffee key  to enable a software block to programme doses (key lit) or to de-activate the block (key off).

### 3. Adjusting keypad brightness.

The 2 long coffees key  of the second group is used to choose the key brightness setting from 5 pre-set levels.

Use the  key, which will flash, to change the level, lowering it to minimum or returning it to maximum.

### 4. Enabling the hot water pump (machines fitted with economiser only).

Use the hot water key  to set the pump to switch on while hot water is being delivered.

If the  key is lit, the pump will switch on while hot water is being delivered; if it is switched off, the pump will not switch on.

### 5. Starting the pump with steam (only for machine models with timed steam or autosteam functions).

The steam key  is used to set the pump to start while steam is being dispensed.

If the key  is lit, the pump will start while steam is being dispensed; if the key is not switched on, then the pump will not start.

## 7.9 AUTOMATIC GROUP CLEANING CYCLE

To start the automatic cleaning mode, the machine must first be switched off and then back on again while holding down the hot water  and one low coffee from group 2  during the initial Lamp-test.

At the end of the Flash-test, the  and  keys and the single long coffee key  of all groups will begin to flash.

Press the  key to start the washing cycle for the relevant group.

Once the washing cycle has been completed, it is possible to perform a rinse cycle for the same group by pressing the  key again.

To perform the rinse cycle at a later time, switch off the machine and the card will store any cleaning cycles that need to be completed in its memory. In fact, the next time that the machine is switched on, the machine card will automatically open the group cleaning status without it being necessary to press the  and  keys.

Hold down the  and  keys for 2 seconds to exit the cleaning mode in the event that there are no cycles to be completed. For incomplete cycles, the  keys of the groups that require rinsing will continue to flash.

Hold down the  and  keys for 2 seconds more to force exit from the cleaning mode, resetting all information about rinse cycles still to be completed.

When a cleaning cycle is complete, the  key for the group will switch off.

If there are no more rinse cycles to be performed, the card will exit the cleaning mode.

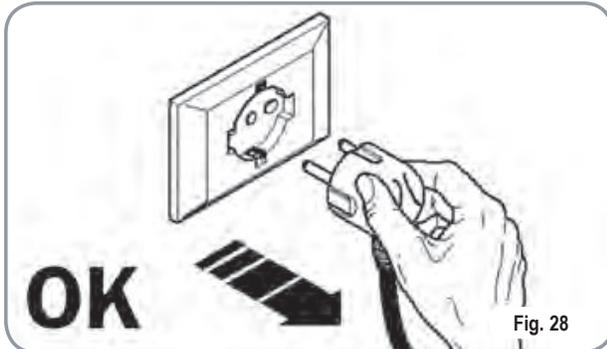
## 8. CLEANING AND MAINTENANCE

During maintenance/repairs, the parts used must be able to guarantee compliance with the safety and hygiene requirements envisaged for the device.

Original replacement parts can offer this guarantee. After repairs to/replacement of a part that comes into contact with foods or water, it is necessary to carry out a washing procedure or to follow the steps indicated by the manufacturer.

### 8.1 CLEANING THE OUTSIDE OF THE MACHINE

The machine must be set to "0" power (switch off and disconnector open) before any cleaning operations are performed.



Do not use solvents, chlorine-based products or abrasives.



It is not possible to clean the machine using water jets or standing it in water.

**Cleaning the work area:** remove the worktop, lifting it up from the front and sliding it out. Remove the water collection dish underneath and clean everything with hot water and cleansers.

**Cleaning the bottom:** To clean all the chromium-plated areas, use a soft, damp cloth.

### 8.2 CLEANING THE STAINLESS COFFEE-HOLDERS

The stainless coffee-holders are situated under the delivery units, as shown in figure.



- NOTE:** To clean proceed as follows:
- Turn the screw placed in the centre of the coffee-holder.
  - Slide the coffee-holder out and check that its holes are not obstructed but clean.
  - If obstructed, clean as described (Paragraph "CLEANING FILTERS AND FILTER-HOLDERS")
- We recommend cleaning the coffee-holder once a week.

### 8.3 CLEANING THE UNIT WITH THE AID OF THE BLIND FILTER

The machine is pre-set for cleaning the delivery unit with a specific washing powder.

We recommend carrying out a washing cycle at least once a day with special cleansers.



**Once the filter-holder has been removed, repeat delivery operations a few times to eliminate any cleanser residues.**

To carry out the washing procedure, proceed as follows:

- 1) Substitute the filter with the delivery unit blind filter.
- 2) Fill it with two spoonfuls of special cleanser powder and insert it into the unit filter-holder.
- 3) Press one of the coffee keys and halt it after 10 seconds.
- 4) Repeat the procedure several times.
- 5) Remove the filter-holder and carry out a few deliveries.

## 8.4 CLEANING FILTERS AND FILTER-HOLDERS

Place two spoonfuls of special cleanser in half a litre of hot water and immerse filter and filter-holder (without its handle) in it leaving them to soak for at least half an hour. Then rinse abundantly with running water.

## 8.5 RESIN AND SOFTENER REGENERATION

To avoid scaling deposits in the boiler and in the heating exchangers, the softener must always be kept efficient. Therefore, the ionic resins must be regularly regenerated.

Regeneration times are established according to the quantity of coffee delivered daily and the hardness of the water utilised.

As an indication, regeneration times can be calculated on the basis diagram illustrated in Fig. 30.

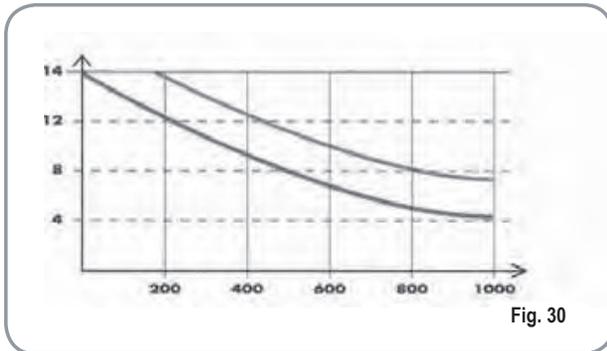


Fig. 30

Regeneration procedures are as follows:

1) 1) Turn the machine off and place a container large enough to contain at least 5 litres under tube E (Fig. 31).

Turn levers C and D from left to right; take the cap off by unscrewing knob and fill with 1 Kg normal kitchen salt (Fig. 32).

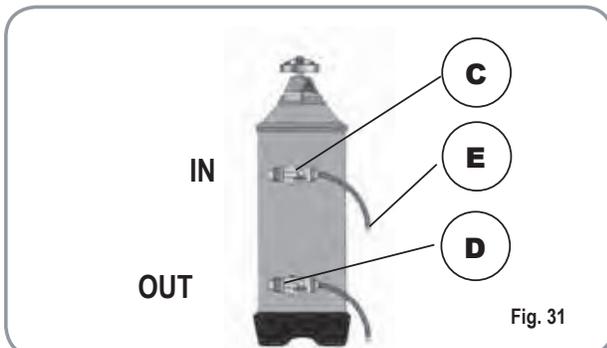


Fig. 31

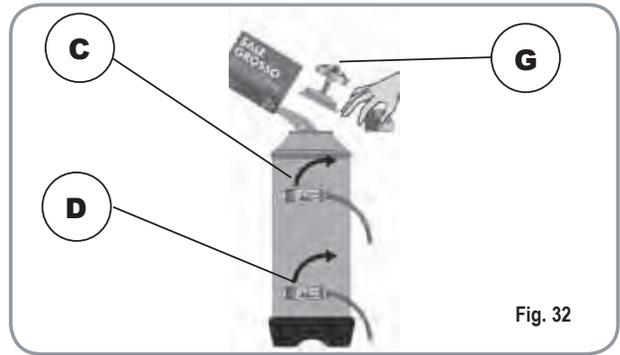


Fig. 32

2) Put the cap back on and reposition lever C moving it towards the left (Fig. 33), and allowing tube F to discharge the salty water until it has been eliminated and the water becomes fresh again (about half an hour).



Fig. 33

3) Reposition lever D towards the left (Fig. 34).

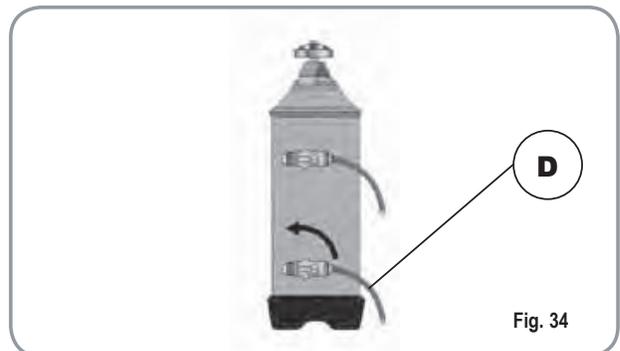


Fig. 34

## 9. MACHINE ERROR MESSAGES

DISPLAY AND KEY INDICATIONS	CAUSE	EFFECT	SOLUTION	NOTES
<p>DOSAGE ERROR                      Continuous key  flashing and dispensing key  lit without flashing.</p>	<p>If the doser doesn't send out its set commands within the first three seconds from delivery onset.</p>	<p>If the delivery isn't manually halted, the maximum time limit (120 sec) will be blocked.</p>	<p>Interrupt delivery.</p>	
<p>LEVEL ERROR                      Continuous key  flashing on both groups.</p>	<p>If within 90 sec. from onset, with pump inserted during the levelling, at 180 sec., if the level has not been re-established.</p>	<p>The pump, the resistor and all the functions will be halted.</p>	<p>Turn the machine off for at least 5 sec. and then switch it on again.</p>	

## 7.6 PROGRAMMATION DOSES STANDARD

- Il est possible de programmer des valeurs prédéterminées pour les 4 doses du groupe, pour l'eau (vapeur).

Pour cela, il suffit d'appuyer sur la touche  pendant au moins 10 secondes jusqu'à ce que les touches clignotantes s'éteignent.

Les doses sont:

1CN	2CN	1CL	2CL
40 cc	60 cc	50 cc	85 cc

EAU	VAPEUR	TEMP.	VAPEUR
9 sec.	0 sec.	50°C	

**NOTE:** Un temps de 0 secondes pour l'eau et pour la vapeur ne détermine pas le fonctionnement en modalité continue.

## 7.7 COPIAGE DOSES

Il est possible de copier les doses mémorisées pour le groupe 1 dans les doses du groupe 2.

Cette opération se fait en frappant la touche continue  du groupe 2 pendant au moins 10 secondes jusqu'à ce que les touches clignotantes s'éteignent.

## 7.8 PROGRAMMATION PARAMETRES DE FONCTIONNEMENT



**Les réglages énumérés ci-dessous doivent être effectués UNIQUEMENT par un Technicien Spécialisé.**

En appuyant sur la touche  du deuxième groupe, après avoir accéder à la page de programmation du premier groupe, on accède à la programmation des paramètres de fonctionnement de la machine; situation indiquée par l'allumage de la touche continue du deuxième groupe .

1. Activation pompe si niveau activé.
2. Activation bloc logiciel pour accès à programmation doses.
3. Réglage luminosité clavier.

4. Activation pompe avec eau chaude (sur les machines avec économiseur).
5. Exclusion du chauffe-tasses.
6. Rétablissement paramètres de défaut.

### 1. Activation pompe pendant le niveau.

A l'aide de la touche café serré  u deuxième groupe, on programme l'activation de la pompe pendant le niveau:

Si la touche  est allumée, la pompe s'actionne avec le niveau, alors que si la touche est éteinte, la pompe ne s'actionne pas avec le niveau.

### 2. Activation bloc logiciel pour accès à programmation doses.

A l'aide de la touche café léger  on actionne le bloc logiciel pour la programmation des doses (touche allumée) ou on exclut le bloc (touche éteinte).

### 3. Réglage luminosité clavier.

La touche 2 cafés légers , du deuxième groupe est utilisée pour choisir la luminosité des touches parmi 5 degrés pré-établis.

En frappant la touche , qui clignote, on change le degré de luminosité, en baissant la valeur jusqu'au minimum pour retourner ensuite à la valeur maximum.

### 4. Activation pompe avec eau chaude (uniquement sur les machines avec économiseur).

A l'aide de la touche eau chaude , on programme l'activation de la pompe pendant la distribution de l'eau.

Si la touche  est allumée, la pompe s'actionne pendant la distribution d'eau chaude, alors que si la touche est éteinte, la pompe ne s'actionne pas.

### 5. Actionnement pompe avec vapeur (uniquement pour machines avec vapeur temporisée ou autosteam).

A l'aide de la touche vapeur  on programme l'actionnement de la pompe pendant la distribution de vapeur.

Si la touche  est allumée, la pompe s'actionne pendant la distribution de vapeur, alors que si la touche est éteinte, la pompe ne s'actionne pas.

## 7.9 CYCLE AUTOMATIQUE DE NETTOYAGE DES GROUPES

Pour accéder à la modalité de nettoyage automatique, il faut éteindre la machine et la rallumer en tenant les touches eau chaude  et 1 café serré 2° groupe  appuyées pendant le Lamp-test initial.

Au terme du Lamp-test, les touches  et  commencent à clignoter ainsi que les touches 1 café léger  de tous les groupes.

En frappant la touche , le cycle de lavage du groupe correspondant démarre.

Une fois le cycle de lavage terminé, il est possible d'effectuer un cycle de rinçage sur le même groupe, en frappant à nouveau la touche .

Si on désire effectuer le cycle de lavage dans un deuxième temps, il suffit d'éteindre la machine: la fiche maintient en mémoire les cycles de nettoyage à terminer. Lors de la mise en marche successive de la machine, la fiche se positionne automatiquement sur la modalité de nettoyage des groupes, sans devoir frapper les touches  et .

En appuyant sur les touches  et  pendant 2 secondes, on quitte la modalité de nettoyage s'il n'y a pas de cycles de rinçage à terminer, autrement les touches  continuent à clignoter pour les groupes qui n'ont pas achever leur cycle de rinçage.

En appuyant sur les touches  et  pendant 2 autres secondes, on force la sortie de la modalité de nettoyage en zéro tant l'information sur les rinçages à terminer.

Si le cycle de nettoyage est complété, la touche  du groupe s'éteint.

S'il n'y a pas d'autres cycles de rinçage à effectuer, la fiche quitte la modalité de nettoyage.

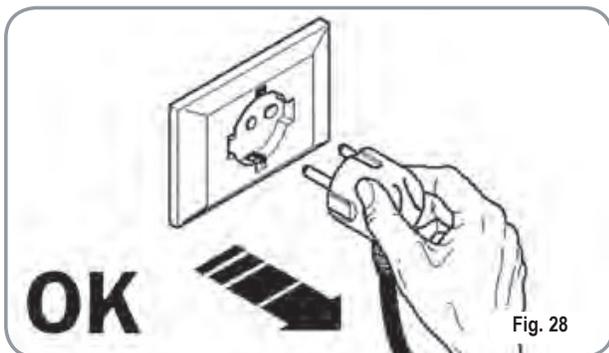
## 8. NETTOYAGE ET ENTRETIEN

Durant l'entretien/réparation, les composants utilisés doivent garantir le maintien des conditions d'hygiène et de sécurité prévues pour le dispositif. Les pièces de rechange originales fournissent cette garantie.

Après une réparation ou une substitution de composants qui concernent des parties qui sont en contact avec l'eau et les aliments, il faut effectuer la procédure de lavage ou suivre les procédures indiquées par le constructeur.

### 8.1 NETTOYAGE DE LA CARROSSERIE

Avant toute opération de nettoyage, il faut placer la machine à l'état énergétique "O" (c'est-à-dire interrupteur machine éteint et sectionneur ouvert).



**ATTENTION**

**Ne pas utiliser de solvants, de produits à base de chlore, ni d'abrasifs.**



**ATTENTION**

**Il n'est pas possible de nettoyer l'appareil avec un jet d'eau ou en le plongeant dans l'eau.**

**Nettoyage de la zone de travail:** extraire la grille du plan de travail en la soulevant vers le haut et en la faisant glisser; retirer le plateau de récupération de l'eau et nettoyer le tout avec de l'eau chaude et du détergent.

**Nettoyage carrosserie:** pour nettoyer toutes les parties chromées, utiliser un chiffon humide.

### 8.2 NETTOYAGE DES DOUCHES INOX

Les douches inox sont situées sous les groupes de distribution, comme illustré en fig. 29.



**NOTE:** Pour le nettoyage, procéder de la façon suivante:

- Dévisser la vis située au centre de la douche.
- Extraire la douche en la désenfilant et vérifier que les trous ne soient pas bouchés.
- En cas d'obstruction, nettoyer selon les indications du paragraphe "NETTOYAGE DES FILTRES ET DES SUPPORTS A FILTRES".

Il est recommandé d'effectuer le nettoyage des douches toutes les semaines.

### 8.3 NETTOYAGE DU GROUPE AVEC L'AIDE DU FILTRE BORGNE

La machine est prédisposée pour le nettoyage du groupe de distribution à l'aide d'un produit détergent spécifique en poudre.

Il est conseillé d'effectuer le lavage au moins une fois par jour en utilisant les produits détergents adéquats.



**ATTENTION  
RISQUE D'INTOXICATION**

**Une fois que le support à filtre a été retiré, effectuer quelques distributions pour éliminer les éventuels résidus de détergent.**

Pour exécuter la procédure de lavage, procéder de la façon suivante:

- 1) Remplacer le filtre avec le filtre borgne du groupe de distribution.
- 2) Le remplir avec deux cuillères de détergent spécial en poudre et emboîter le support à filtre sur le groupe.
- 3) Frapper l'une des touches café et interrompre après 10 secondes.
- 4) Répéter l'opération plusieurs fois.
- 5) Retirer le support à filtre et effectuer quelques distributions.

## 8.4 NETTOYAGE DES FILTRES ET DES SUPPORTS A FILTRES

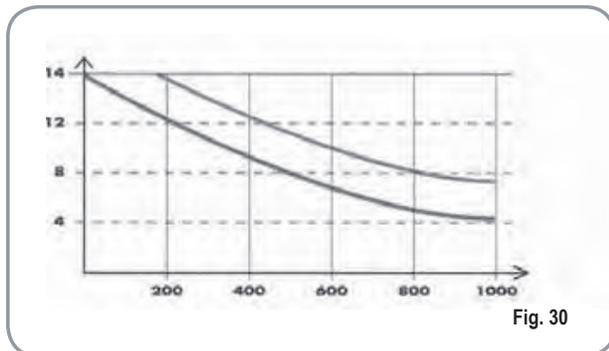
Mettre deux cuillères de détergent spécial en poudre dans un demi litre d'eau chaude et y plonger le filtre et le support à filtre (sauf le manche) pendant une demie heure au moins.

Rincer ensuite abondamment sous le robinet d'eau.

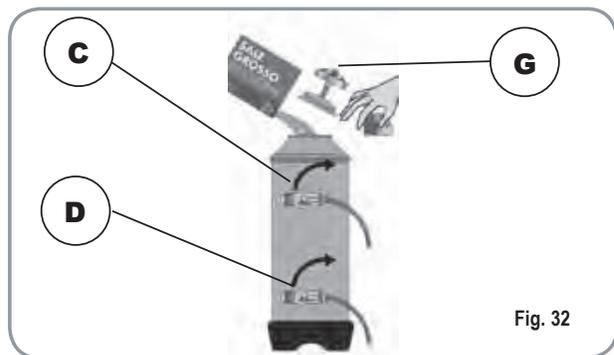
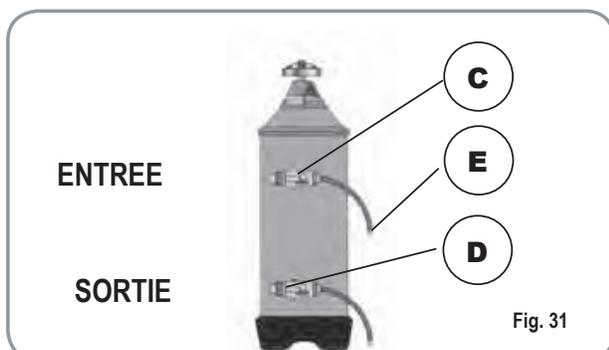
## 8.5 REVIVIFICATION DES RESINES DE L'ADOUCCISSEUR

Afin d'éviter la formation de dépôts calcaires à l'intérieur de la chaudière et des échangeurs de chaleur, il est nécessaire que l'adoucisseur soit toujours parfaitement efficace. Il faut pour cela effectuer régulièrement la revivification des résines ioniques. Les temps de revivification doivent être établis en fonction du nombre de café distribués quotidiennement et de la dureté de l'eau utilisée.

Ils peuvent être déduits, à titre indicatif, du diagramme reporté en Fig. 30.



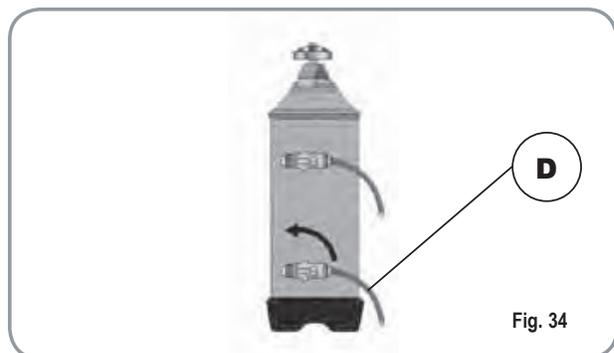
Les procédures de revivification sont les suivantes:  
 1) Eteindre la machine et placer un récipient d'une capacité d'au moins 5 litres sous le tube E (Fig. 31). Tourner les leviers C et D de gauche à droite; retirer le bouchon en dévissant la poignée G et introduire 1 Kg de gros sel de cuisine (Fig. 32).



2) Remettre le bouchon et repositionner le levier C vers la gauche (Fig. 33), en faisant évacuer l'eau salée du tube F jusqu'à ce qu'elle soit à nouveau douce (1/2 heure environ).



3) Repositionner alors le levier D vers la gauche (Fig. 34).

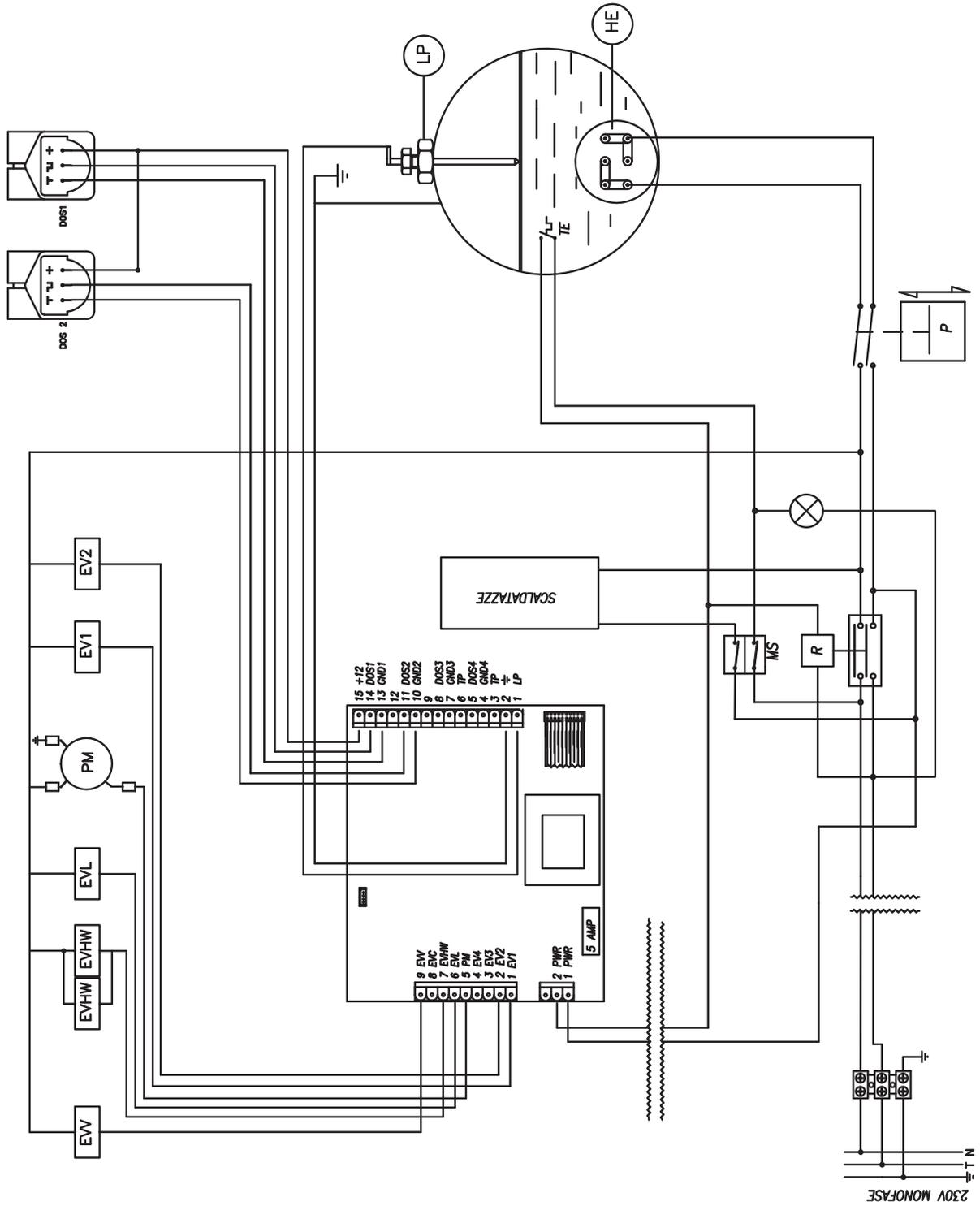


## 9. MESSAGES ERREURS MACHINE

INDICATIONS AFFICHAGE ET TOUCHES	CAUSES	EFFET	SOLUTION	NOTE
<b>ERREUR DOSAGE</b> Touche continue  clignotante et touche distribution  fixe.	Si, dans les 3 premières secondes suivant le début de la distribution, le doseur n'a pas envoyé les impulsions programmées.	Si, dans les 3 premières secondes suivant le début de la distribution, le doseur n'a pas envoyé les impulsions programmées.	Interrompre la distribution.	
<b>ERREUR NIVEAU</b> Touche continue  clignotante sur les deux groupes	Lorsque, 90 secondes après le commencement, si la pompe est insérée lors de la mise à niveau haut, et après 180 secondes si elle est exclue, le niveau n'a pas été rétabli.	La pompe est désactivée et la résistance ainsi que toutes les fonctions sont exclues.	Eteindre la machine pendant au moins 5 secondes, puis la rallumer.	



IMPIANTO ELETTRICO / ELECTRICAL SYSTEM / INSTALLATION ELECTRIQUE



# IMPIANTO ELETTRICO / ELECTRICAL SYSTEM / INSTALLATION ELECTRIQUE

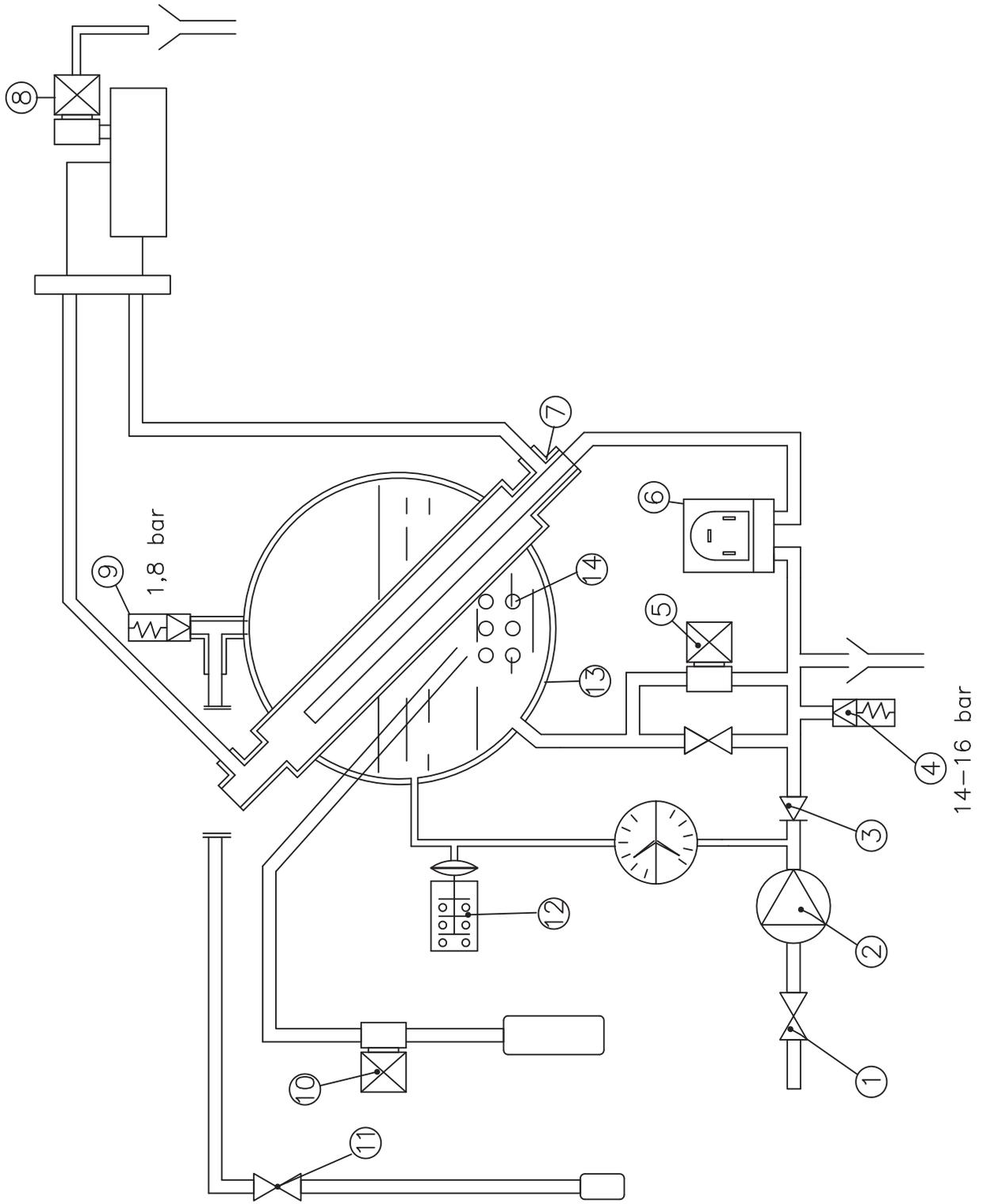
## LEGENDA

## KEY

## LÉGENDE

MS	Interruttore	MS	Switch	MS	Interrupteur général
R	Relè.	R	Relay.	R	Relais.
P	Pressostato	P	Pressostat	P	Pressostat
PM	Motore pompa	PM	Pump motor	PM	Moteur pompe
HE	Resistenza boiler	HE	Boiler heating elem.	HE	Résistance
LP	Sonda livello	LP	Level probe	LP	Sonde niveau
EV1	Elettrovalvola gruppo 1	EV1	Electrovalve group 1	EV1	Electrovanne de groupe
EV2	Elettrovalvola gruppo 2	EV2	Electrovalve group 2	EV2	Electrovanne de groupe 2
TP	Sonda temperatura	TP	Temperature probe	TP	lampe témoin
TE	Termostato	TE	Thermostat	TE	Thermostat
EV3	Elettrovalvola gruppo 3	EV3	Electrovalve group 3	EV3	Electrovanne de groupe 3
EV4	Elettrovalvola gruppo 4	EV4	Electrovalve group 4	EV4	Electrovanne de groupe 4
EVHW	Elettrovalvola miscelatore	EVHW	Mixer electrovalve	EVHW	Electrovanne
EVC	Elettrovalvola scaldatazze	EVC	Cupwarmr electrovalve	EVC	Electrovanne
EVL	Elettrovalvola livello	EVL	Water level elec.	EVL	chauffé-tasses
					Electrovanne de niveau

**IMPIANTO IDRAULICO / PLUMBING SYSTEM / INSTALLATION HYDRAULIQUE**



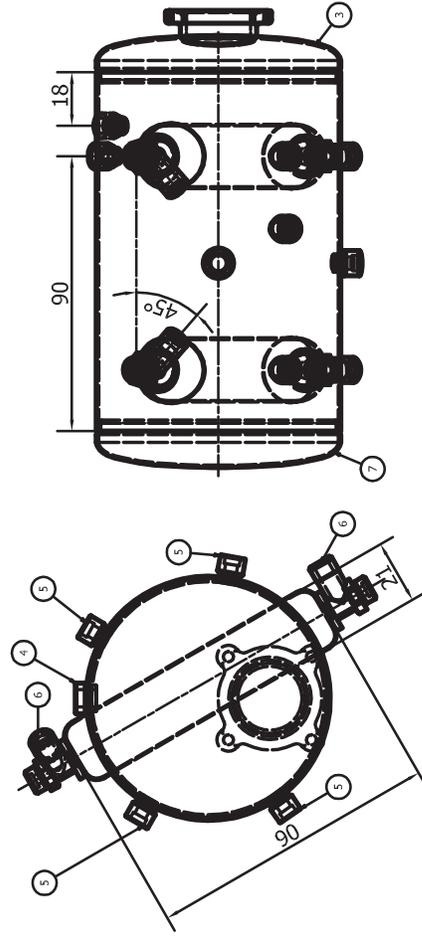
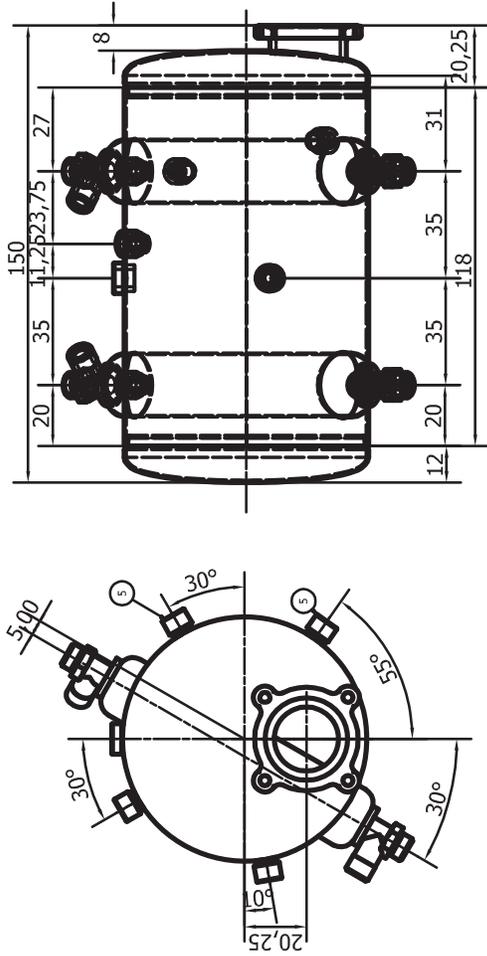
# IMPIANTO IDRAULICO / PLUMBING SYSTEM / INSTALLATION HYDRAULIQUE

## LEGENDA

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Rubinetto generale	Pompa.	Valvola di ritegno	Valvola di espansione	Elettrovalvola di livello	Dosatore volumetrico	Scambiatore di calore	Elettroval. erogazione	Valvola di sicurezza	Elettroval. acqua calda	Rubinetto vapore	Pressostato	Caldaia	Resistenza
1	2	3	4	5	6	7	8	9	10	11	12	13	14
General tap	Pump	Retaining valve	Expansion valve	Refill electrovalve	Flowmeter	Heater exchange	Delivery electrovalve	Safety valve	Hot water electrovalve	Steam tap	Pressostat	Boiler	Heating element
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Rubinetto generale	Pompe	Soupape d'arrêt	Soupape d'expansion	Electrovanne de niveau	Doseur volumétrique	Echangeur de chaleur	Electrovanne de distribu-	tion	Soupape de sûreté	Electrovanne eau chaud	Robinet vapeur	Pressostat	Chaudière
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Rubinetto generale	Pompe	Soupape d'arrêt	Soupape d'expansion	Electrovanne de niveau	Doseur volumétrique	Echangeur de chaleur	Electrovanne de distribu-	tion	Soupape de sûreté	Electrovanne eau chaud	Robinet vapeur	Pressostat	Chaudière
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Rubinetto generale	Pompe	Soupape d'arrêt	Soupape d'expansion	Electrovanne de niveau	Doseur volumétrique	Echangeur de chaleur	Electrovanne de distribu-	tion	Soupape de sûreté	Electrovanne eau chaud	Robinet vapeur	Pressostat	Chaudière
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Rubinetto generale	Pompe	Soupape d'arrêt	Soupape d'expansion	Electrovanne de niveau	Doseur volumétrique	Echangeur de chaleur	Electrovanne de distribu-	tion	Soupape de sûreté	Electrovanne eau chaud	Robinet vapeur	Pressostat	Chaudière

## LÉGENDE

# SCHEMA CALDAIA / BOILER DIAGRAM / SCHÉMA DE CHAUDIERE



Elenco parti		List of Parts		Liste des composants	
ELEMENTO	QTA	NUMERO PARTE	DESCRIZIONE	MATERIALE	
ELEMENT	QTE	PART.NO	DESCRIPTION	MATERIAL	
ELEMENT	QTE	NUM.COMPOSANT	DESCRIPTION	MATERIAU	
1	1	00015140	Corpo caldaia D.160 SP1.2 Boiler body D.160 SP1.2 Corps chaudière D.160 SP1.2	CU DHP 99.9	
2	2	00160650	Tubo scambiatore D42 SP 1.5 Exchange pipe D42 SP 1.5 Tube échangeur D42 SP 1.5	CU DHP 99.9	
3	1	00015150	Coppa D.160 PR Bevel gear D.160 PR Coupe D.160 PR	CU DHP 99.9	
4	6	00030271	Attacco G1/4" F passante Coupling G1/4" F bypass Prise G1/4" F pontage	OT57 CW510L	
5	4	00030251	Attacco 3/8" Maschio Coupling 3/8" Male Prise 3/8" Mâle	OT57 CW510L	
6	1	00061462	Raccordo T scambiatore Appia Exchange fitting T Appia Raccord en T échangeur Appia	OT57 CW510L	
7	1	00010221	Coppa D.160 leB Bevel gear D.160 leB Coupe D.160 leB	CU DHP 99.9	
8	1	00063130	Flangia Resistenza 4 fori 2013 Heater El. Flange 4 holes 2013 Flasque Resistance 4 trous	OT57 CW510L	

Materiale Material Materiau	Scala Scale Echelle	Tolleranza Tolerance Tolérance	Media Average Moyenne	A2
Trattamento Treatment Traitement	Decapaggio Decapage Moyenne	Data		
Descrizione Description Description		15/05/2013		
Caldia Boiler Chaudiere D.180 2 Gr 2013		Codice code		
Nuova Simonelli		90014750		

DATI PROGETTO DIRETTIVA PED 97/23/CE PROJECT DATA FOR DIRECTIVE PED 97/23 CE DONNEES PROJECT DIRECTIVE PED 97/23 CE	
VOLUME	9.5 LT
TS	130.5° C
P.V.S.	1.8 Bar
PT	2.7 Bar
FLUIDO FLUIDE FLUID	H2O

